

# Do government support correlates enhance financial performance? Rural microenterprises perspectives

Journal of Money  
and Business

Isaac Nkote  
*Makerere University Business School, Kampala, Uganda, and*  
Christopher Jakweyo  
*Moi University, Eldoret, Kenya*

Received 9 October 2022  
Revised 31 March 2024  
Accepted 31 March 2024

## Abstract

**Purpose** – The purpose of this study was to examine the determinants of financial performance of the rural microenterprises, with microcredit access as the mediating variable.

**Design/methodology/approach** – A survey using a self-administered questionnaire to the managers/owners of the rural microenterprises was adopted. The data was collected on the three study variables; financial literacy, credit access and financial performance. A total of 148 fully completed and useable questionnaires were used in the analysis. The researchers performed factor analysis, correlations, regression and mediation analysis to test the hypotheses.

**Findings** – The study revealed the existence of a statistically significant and positive relationship between financial literacy and microcredit access, microcredit access and financial performance. On the other hand the financial literacy had a significant but negative impact on the financial performance of the rural microenterprises. In the final analysis, financial literacy is only effective in impacting financial performance when mediated by microcredit access. We conclude that policies that emphasize financial literacy are ineffective in fostering the financial performance and growth of the microenterprises.

**Originality/value** – The study is original as it addresses the combined effect of credit rationing and resource based view theories to explain the financial performance of informal rural microenterprises that are the key livelihood business undertaking in many developing countries.

**Keywords** Credit rationing, Financial performance, Financial literacy, Rural enterprises

**Paper type** Viewpoint

## 1. Introduction

Financial performance of microenterprises has attracted scholarly research work particularly in the wave of increasing attention to engaging the active poor in economic activities. It is at the center of the current global efforts to economically empower the active poor over the last 30 years and a great deal of research has examined financial performance in relation to achieving the economic goals of microenterprises. Financial performance measures the outcomes of a firm's operations in monetary terms, in addition to the overall financial health in a given period (Eniola and Entebang, 2017). The typical standard financial performance measures include return on assets, profit margin, return on equity and investment (Capon *et al.*, 1990). Further, financial performance is closely associated with the long-term survival, success and growth of the microenterprises. The motivation to study rural microenterprises in Uganda

© Isaac Nkote and Christopher Jakweyo. Published in *Journal of Money and Business*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licences/by/4.0/legalcode>



---

is because they are the mainstay of the country's economic activities in terms of employment and the provision of goods/services to the communities in the absence of large business operations. Further, the focus of government and development partners' interventions has been to support microenterprises owners to run successful businesses. The West Nile region of Uganda benefited from such interventions particularly to promote the opportunities in the cross-border business with large markets in neighboring countries of South Sudan and Democratic Republic Congo. Empirical evidence reveals that the West Nile region continues to register sizeable microenterprise start-ups, but approximately 31% of the microenterprises close within a few years of their operation, pointing to a high mortality rate above the national average of 25% (DICOSS Project Report, 2016). This trend is comparable to the 48.8% of the microenterprises covering just fixed costs and another 33.3% that fail to break even after two years of operations in northern Uganda (Eton *et al.*, 2017). The interventions of financial literacy and microcredit access fit in the conceptualization of this study as the independent variables to predict financial performance. The financial literacy model (Natoli, 2018) captures financial knowledge, attitude and behavior. Similarly (Garg and Singh, 2018) conceive financial literacy as the knowledge and understanding of financial concepts, risks, motivation and confidence to apply such knowledge and experience to make effective financial decisions. Moreover (Lusardi and Mitchell, 2014), bring in the cognitive skills set that create desirable attitudes and behaviors at the proprietor level but require external enabling factors as a precondition to achieve the financial objectives. In a nutshell, Neck (2009) opines that financial performance heavily depends on proprietors' abilities and skills to manage the microenterprise finances with the resultant inroads to sustainable survival. Indeed Sucuahi (2013) cautions that the lack of financial literacy may lead the microenterprises not to survive their first anniversary.

The success of microenterprises' business activities depends on access to credit, as is the case for big businesses that have adequate working capital (Ripain *et al.*, 2017). The importance of access to credit and more so at a reasonable cost was advanced by Gulesci *et al.* (2017) and concluded that it makes a substantial difference between successful and less successful small businesses in terms of financial performance. Therefore given the government and development partners' intervention to support the rural microenterprises through emphasis of business development and financial literacy, the findings still point to gaps in the impact and without sustainable access to credit the microenterprises' financial performance remains marginal and ultimately sustainability and growth of these rural microenterprises is hampered.

The next section presents the concepts in literature and develops hypotheses. Section three explains the methods used and data, followed by the study results in section four, while the discussion is in section five. The final section six provides implications, and limitations of the study.

## 2. Theories discussion and literature

### 2.1 The theoretical foundations

The credit rationing theory Jaffee and Russell (1976) and the resource-based view (Penrose, 1959) are the theoretical foundation for this study. The resource-based theory infers that a firm's resources are either tangible or intangible (Grant, 1991), and a resource is only valuable if it enhances the firms' ability to create an efficient, effective and ideal marketplace (Hunt and Derozier, 2004). Therefore when pursuing a value-creating strategy, firms possess bundles of resources vital to attaining a competitive advantage of value and rarity (Barney, 2001). According to Penrose (1959), the heterogeneity of the productive services available from its resources gives each firm its unique character to offer customers value. The management decisions come into play and include identifying, acquiring, controlling, developing and deploying the firms' critical productive resources (Hansen *et al.*, 2004). Applying knowledge-

---

based resources and transforming them into tangible input resources leads to sustainable performance (Penrose, 1959). Such rent-producing resources determine the firms' profit level, implying that those with superior resources exhibit superior performance (King and Zeithaml, 2001) while those with marginal resources can't breakeven, (Madhani, 2010). The theory's inherent shortcoming in relation to rural microenterprises, is how to define the resources hence the need to broaden the analysis to include other categories of resources, in addition to drawing a distinction between resource characteristics, the entrepreneur's perception of these resources and the resources' services. Recent literature refers to resource poverty associated with the micro-enterprises, which ultimately impacts their long term survival compared to the big firms that possess financial expertise to tap into the emerging business opportunities (Phillipson *et al.*, 2019). Therefore the study used the credit rationing theory, which assumes that credit is an enabler of investment since it resolves the deficit units' liquidity constraints because capital investments precede the venture's future returns. According to Hodgman (1960), the interest rate is a fundamental pillar of the theory; therefore, interest rate changes favorably or adversely affect the borrower's repayment ability. Jaffee and Modigliani (1969) advance credit rationing effects by differentiating loan contracts among the lenders, bearing in mind enterprise/firm size and risk. More so, Jaffee and Russell (1976) opine that credit rationing theory explicitly acknowledges the existence of asymmetric information between borrowers and lenders in regard to risk and interest rate. Accordingly, credit rationing makes assumptions in respect to honest borrowers associated with timely loan servicing and dishonest ones characterized by willful default behavior hence the justification for credit rationing practices by the financial institutions. Stiglitz and Weiss (1981) contend that lack of good credit leads to underinvestment due to type I credit rationing behavior (extending credit to the borrower but not to the extent they need it), type II using the interest rate and collateral to contain the borrower demands. Moreover, Stiglitz and Weiss (1981) introduce a multi-period model approach assuming that lenders will restructure the loan agreement when the borrower default, thereby creating moral hazard behavior. The loan agreement adjustments encourage the borrowers to engage in more risky enterprises, with the associated impact on the expected profits. Credit rationing serves as a dynamic incentive to skew borrowers towards less risky projects in such a multiperiod model. The theory's critical gap is the implicit assumption that accepting to pay the market interest rate constitutes sufficient demand for loans at that general level of interest rates. However, in reality, optimal loan amounts may not be granted due to market distortions, even though they are willing to pay higher interest rates (Jin and Zhang, 2019). Credit rationing theory applies to this study of rural microenterprises that have the potential to borrow but are credit-rationed, and therefore miss out on the socially desirable levels in an efficient credit market (Pavani, 2015). Further, Yang and Stanley (2012) asserts that it is difficult for microenterprises to obtain loans because of information asymmetry and high cost, therefore, they are more vulnerable to credit rationing than large and medium-sized enterprises (Gou and Huang, 2014). In a nutshell, financial literacy and access to finance are bundles of resources available to a firm essential for generating a competitive advantage. Financial literacy is an internal firm capability that complements finance access to achieve superior business growth outcomes (Danso and Adomako, 2014), hence use of the resource-based view and the credit rationing theories in this study of rural microenterprises' financial performance.

## *2.2 Financial literacy and financial performance*

Extant literature discourse on financial literacy is varied and extremely broad on the one hand and more specific on the other (Huhmann and McQuitty, 2009). The variations in the understanding of financial literacy range from knowledge of basic financial concepts to the ability to do simple calculations (Bucher-Koenen *et al.*, 2017), evaluating complex financial instruments, making informed judgments and being debt literate (Mandell and Klein, 2007).

---

All these views go back to the seminal work of Noctor *et al.* (1992), on making informed judgments on the use and management of money. When microenterprise operators are financially literate, they make well-intentioned decisions with respect to budgeting, spending, saving, using loans, investing and planning for the future. More so, Fatoki (2014) emphasizes the influence and importance of the proprietors' financial literacy on the microenterprises' growth outcomes, while Danso and Adomako (2014) opine that possession of financial management competencies guarantees small and medium enterprises' success and development. This idea supports the observation that financial literacy is a significant contributing barometer for enterprises' success and growth in competitive business environment (Sucuahi, 2013). Financial literacy is critical in the financial decision process; it represents a systematic effort to develop positive knowledge, behavior and attitude to produce a positive effect (Bruhn and Zia, 2013). Therefore, the financial knowledge, the positive attitude towards the future, risk management and social influences are likely to lead to informed decisions that mainly impact financial performance (Babiarz and Robb, 2014; Lusardi and Mitchell, 2014). However, it is common for microentrepreneurs to exhibit deficiencies in the working knowledge of financial concepts necessary to make financial decisions that enhance the performance. The outcome can adversely impact the ability to utilize funds for long-term investments in profitable microbusinesses (Sucuahi, 2013). Therefore, we hypothesises

*H1.* Financial literacy positively influences the financial performance of microenterprises.

### *2.3 Microcredit access and financial performance*

Scholars like Bayulgen (2015) find a positive impact of microcredit on economic development, while Morduch and Haley (2001) assert that microcredit leads to diversified income sources and increased assets base, thereby contributing to the owner's welfare. Further, the timely access to microcredit from the credit markets enhances investment and the benefiting microenterprises can efficiently use their factors of production to achieve optimal outputs. However, the crucial challenge is that microenterprises remain risky to the lenders, mainly because of their opaque information nature, making the lending process less favorable. Fiala (2018) establish a significant positive relationship between access to microcredit and microenterprises' financial performance. The argument is that microcredit is critical for microentrepreneurs' business growth and earning streams since appropriate loan sizes, realistic interest rates and better repayment plans contribute to enterprises' sustainability (Wanambisi and Bwisa, 2013). More so, (Oluyombo, 2018), finds no significant difference between the co-operatives' members with and without loan opportunities to achieving profit levels, implying that the ability to make more profit is explained by more than access to credit. However, the impact of microcredit access on investment in self-employed activities is positive but small (Meager, 2015). The lack of large effects is due to small businesses' low marginal product (Crépon *et al.*, 2015). Therefore, we hypothesize that:

*H2.* Microcredit access is positively associated with the financial performance of Microenterprises.

### *2.4 Financial literacy and microcredit access*

Accessing loans is based on fulfilling the lenders' terms; therefore, borrowers provide information as required by the lenders that minimize information asymmetry between the two parties. It necessitates borrowers having substantial knowledge of the credit market and can comprehend the proper assessment of the risks. Such knowledge leads to the optimal choice of loans most suitable to the business needs. The argument is that knowledgeable borrowers play a developmental and monitoring role by contributing to the credit suppliers' best practices to serve their clients. Literature shows that they exert pressure on financial

---

institutions to develop appropriate, well-priced and transparent credit services (Glaser and Walther, 2014). However, microcredit access requires understanding the degree of risk tolerance and the firm's acceptable debt and, above all, the interest rate dynamics (van Rooij *et al.*, 2011). In line with the preceding assertions (Eniola and Entebang, 2017), observed that financial sophistication is associated with higher literacy levels of borrowers that create active microenterprises on the credit market (Nunoo and Andoh, 2011). The contention is that low financial literacy levels can prevent understanding and accessing financial products from financial institutions. Therefore, the conclusion that high levels of financial knowledge are relevant in containing the hurdles of accessing and managing credit facilities. Notable is that most high-cost borrowers display deficiency levels of experience regarding basic financial concepts, affecting business performance (Lusardi and Scheresberg, 2013). More so, Eniola and Entebang (2017) argue that firms with better financial knowledge and keep detailed financial records tap into the competitive advantage in accessing external funding. The owners and managers of microenterprises with more financial skills have more access to institutional credit than those with less because of their ability to prepare the requirements for credit access (Fatoki, 2014). Irrespective of the microenterprise's nature, their decisions have financial consequences and therefore must grasp the financial concepts, the credit market and appreciate both the risks and opportunities (Van Rooij *et al.*, 2012). Therefore, we hypothesises

*H3.* Financial literacy positively influences microcredit access of the microenterprises.

#### *2.5 Mediating role of microcredit access in microenterprises*

Financial performance has various measurement lenses based on dynamic growth metrics. It captures increases in firm value, asset value, profits, market capitalization, economic value added and sales revenue (Garnsey and Leong, 2008). The profitable growth combines revenue growth and taking the total capital invested into account while incurring lower sales costs. However, this traditional way of studying financial performance has been questioned, especially in the context of microfirms (Walker and Brown, 2004). The overall effect is to raise income, widen the gap between incomes and expenditure, and reduce working capital and fixed capital requirements. Further, they increase earnings, reduce cash flow volatility and increase cash flow, thereby firm value (Day and Fahey, 1988). In this sense, financial literacy presents microenterprises as possessing the competencies necessary to perform the role required to manage the businesses. However, when discussing the mediating role, the microenterprises must approach credit as a comprehensive process that influences business success and financial performance. According to Danso and Adomako (2014), adequate financial knowledge may not necessarily translate into firm performance; if the financing resources are not within the firm. Indeed Reijonen and Komppula (2007), opine that competence, characteristics, attitudes and motivation of the enterprise owners/managers significantly impact the firm's success. Walker and Brown (2004) emphasize the importance of personal abilities and motivations as having a significant effect on whether the business owners want to grow the firms or maintain a smaller but more comfortable size. Consequently, financial gain is not always the primary and only source of motivation for a microentrepreneur. Indeed Eniola and Entebang (2017) note that, when credit terms are favorable, the owner/managers' attitudes to access credit tend to be positive and are likely to acquire the capital base to increase business activities. Therefore microenterprises with a high level of financial literacy have more chances to improve their financial performance by exploiting the available credit opportunities. For successful intermediation to occur, the supplier usually designs credit terms (credit duration, repayment, collateral requirement and additional service) that meet the microenterprises' demand aspirations. The actual accessibility happens if borrowers apply for a credit facility(s) based on the terms, closeness to the suppliers and minimizing the costs associated with microcredit. The demand

side can only meet their side of the bargain with high financial literacy levels, which results in good decision-making abilities. Microcredit access mediation is valuable if micro-enterprises have an interest in growing their businesses and experience. We hypothesize that:

*H4.* Microcredit access mediates the relationship between financial literacy and financial performance of microenterprises.

### 3. Data and Methods

#### 3.1 Sample and data collection

The rationale for selecting the Western Nile region was that two of the six districts had benefited from the financial literacy and microcredit programs of the development partners and government. Our study collected primary data using a survey questionnaire administered to the owners and managers of microenterprises over a two months period. The sample of 201 microenterprises corresponds to a population of 410, as determined by the sample determination table (Krejcie and Morgan, 1970) based on a list of registered microenterprises from the Micro Small Medium Enterprises (MSME) development database (2018). We used simple random sampling to get the microenterprises, followed by purposive selection of the owners/managers as respondents. Research assistants administered the survey instrument by identifying the selected microenterprises and, after gaining their consent, proceeded to administer the questionnaires. A total of 148 (79%) fully completed and useable questionnaires were obtained for the final analysis and Table 1 summarizes the demographic characteristics of the respondents and the microenterprises.

Most of the respondents were male, representing 64.4% and females 35.6% therefore the majority of the microenterprises are owned or managed by males, underscoring males' dominance in managing business activities in many developing countries. The respondents' age group shows that the majority is above 42 years (31.5%) followed by the 34–42 years (29.2%). Further, the findings reveal that respondents are typically well prepared to manage microenterprises basing on the educational level. Secondary school education constitute 39.1% response implying that they are least likely to gain formal employment in the private or public sectors, followed by diploma holders (20.3%). Slightly below the diploma holders are the degree holders (18.9%) and their engagement means better microenterprise management. An assessment of the microenterprises' leadership shows that most of the respondents are employers (54.7%) and owners (45.3%).

An analysis of the microenterprise characteristics in Table 1 shows that most microenterprises (58.8%) had operated for less than five years, between 5 and 10 years were (15.5%), while those that had operated for 10 years and above were (25.7%). This finding points to the fact that most microenterprises rarely celebrate their fifth anniversary in many developing countries and hence the high startup rates. Regarding the number of employees, most of the firms (58.8%) had 1–3 employees, typical of microenterprises. The next category was those with 4–6 employees (17%) compared to (10.1%) with between 7–9 employees. Surprisingly a sizeable number of microenterprises (14.2%) have a labor force of over ten employees.

For the third criteria of the business's nature, the findings show that the majority (46.6%) are in wholesale and retail businesses that provide merchandise to the communities. The least response of microenterprises' nature offers goods and services with low demand in communities such as restaurants (2.7%).

#### 3.2 Questionnaire design and measurement of variables

The questionnaire consisted of two parts, the demographic questions that included business type, the period of existence and employees and the respondents' characteristics. The second part of the questionnaires, had self-assessment questions that combined both the objective and subjective measures anchored on a five-point Likert scale "1 – strongly disagree" to "5 strongly agree".

Variable	Category	Frequency	Percent
Gender	Male	95	64.4
	Female	53	35.6
Total		148	100
Age group	18–25 years	18	15.3
	26–33 years	36	24.1
	34–41 years	43	29.2
	42 years and above	46	31.5
Total		148	100
Education	Basic/Primary	19	12.8
	High School/Elementary – Level	58	39.1
	Certificate	13	8.8
	Diploma	30	20.3
	Bachelor's Degree	28	18.9
Total		148	100
Years employed	Less than 5 years	60	40.5
	5–10 years	44	29.7
	11–15 years	20	13.5
	Over 15 years	24	16.3
Position	Owners	67	45.3
	Accountant/Manager/	81	54.7
Total		148	100
Duration of business	Less than 5 years	87	58.8
	5–10 years	23	15.5
	11–15 years	36	25.7
Total		148	100
Number of employees	1–3 employees	87	58.8
	4–6 employees	25	16.9
	7–9 employees	15	10.1
	Above 10 employees	21	14.2
Total		148	100
Type of business	Agro-Processing	8	5.4
	Retail/Wholesale stores	69	46.6
	Artisans	10	6.8
	Drugs retailers	9	6.1
	Mobile Money outlets	14	9.5
	Restaurant	4	2.7
	Beauty saloon	11	7.4
	Secretarial	9	6.1
Construction	14	9.5	
Total		148	100

**Source(s):** Primary data by the authors

**Table 1.**  
Demographics of  
respondents and  
microenterprises

According to [Atkinson and Messy \(2012\)](#), [Md.Shafik and Wan Ahmad \(2020\)](#), [Huston \(2010\)](#), financial literacy measures include items on individual's financial knowledge ([Lusardi and Scheresberg, 2013](#)), attitudes ([Klontz et al., 2011](#)) and skills ([Sabri and MacDonald, 2010](#)). Microcredit access measures were adopted from ([Madichie and Nkamnebe, 2010](#); [Levenson and Willard, 2000](#)) and consisted of items on loan size, interest rate, and repayment period. Financial performance measures included liquidity, efficiency and profitability ([Michaelas et al., 1999](#)). They appropriately fit in the microenterprises' setting given their simplistic nature.

### 3.3 Validity and reliability of instrument

To validate the instrument, we use seven academicians and practitioners experts to gauge if the instrument measures the variables ([Chin and Nor, 2016](#)). This evaluation is in terms of

length, design, content, operationalization of the constructs and understanding. The validity tests ensured that the construct from a theory measures what the theory says it does (Field, 2009; Nielsen, 2018). The results obtained indicate that the items' content validity index of 0.804, well above the threshold value of 0.7. Further, we perform the conventional Cronbach alpha ( $\alpha$  test) for reliability, which refers to the consistency, stability and repeatability of a data collection instrument (Hair *et al.*, 2010). The 10 items yield a coefficient of 0.856 for financial literacy, 0.738 for microcredit access and 0.821 for financial performance, which are high enough to conclude that the instrument is reliable and appropriate to use as it meets the threshold recommended by Nunnally (1967).

### 3.4 Data analysis

To analyze the relationship between financial literacy, microcredit access and financial performance, we use the Statistical Package for Social Scientists (SPSS) version 23. The data was assessed for completeness using simple frequencies to ensure suitability for further analysis. Factor analysis was used to identify the structure/dimensionality of data to reveal the underlying constructs that give rise to the observed phenomena. The eigenvalues measure how much of the variance of the observed variables factors explain, but discard those that does not meet the criteria. The results in Table 2 of the factor analysis reveal that three constructs of financial literacy accounted for 62.96% of the total variance with attitude accounting for 28.25% (Eigenvalue = 5.931), knowledge at 23.56% (Eigenvalue = 4.948) and skills at 11.18% (Eigenvalue = 2.341). The total variance for microcredit access was 63.67%, and the factor loadings were interest rate 26.06% (Eigen Value 4.26), loan volume 25.54% (Eigenvalue 4.432) while loaning period 13.1% (Eigenvalue 2.22). For financial performance the total variance is 70.73%, and liquidity accounting for the highest variance of 25.94% (Eigen Value 4.67), profitability accounted for 21.90% (Eigenvalue 2.85) and effectiveness 13.1% (Eigenvalue 1.68). All the eigenvalues for the variables were greater than 1, explaining more variance than a single observed variable.

## 4. Empirical analysis and results

### 4.1 Descriptive and correlations

Table 3 indicates results of the means and standard deviations. The use of spearman's correlation is to analyze the direction and strength of the associations among the study variables. The correlation analysis results Table 3 show a positive and statistically significant relationship between the variables each other ranging from  $r = 0.557$   $**p < 0.01$ , to  $r = 0.712$   $**p < 0.01$ .

### 4.2 Effect of financial literacy and microcredit access on financial performance

The study run regression, the mediated model and the results are presented in Table 4, Table 5 and Figure 1 respectively. The results of H1, reveal a negative and not statistically significant relationship between financial literacy and financial performance, and is not supported, implying that any increase of one unit in the financial literacy level results in a decline in the financial performance of  $\beta = -0.231$  ( $p < 0.001$ ). It means that even when managers/owners of microenterprises are financially literate; it does not transmit into better financial performance which is attributed to the simplistic nature of operations. The second hypothesis was supported and the findings indicate that microcredit access is positively and significantly related to the microenterprises' financial performance, the  $\beta = 0.716$  ( $p < 0.001$ ). Therefore, a unit increase in microcredit access level leads to an increase in microenterprises' financial performance in Uganda. The results for hypothesis H3 indicate  $\beta = 0.471$  ( $p < 0.005$ ) and it was supported; hence financial literacy impacts the microenterprise's access to microcredit. The more the microenterprises owners/managers are financially literate, the greater the opportunity to access additional resources required by the microenterprises to

Financial literacy	Attitude	Constructs	
		Knowledge	Skills
I work hard to make a profit	0.711		
It is important to establish financial targets/goals for the future	0.656		
It is vital to control monthly expenses	0.554		
It is vital to save money every month	0.734		
We always stay within our budget	0.732		
The way I manage business' money today will affect its future	0.650		
I find it essential to invest to achieve targets in the long-run regularly	0.528		
I am aware of the microloan amount offered to microenterprise		0.748	
I am aware of the interest charges on microloans		0.745	
I understand the repayment periods set for microloans		0.828	
I understand the procedures for obtaining credit from lenders		0.789	
I am capable of discussing money and financial issues of my microenterprise			0.686
I can obtain loans from lenders with minimum cost			0.614
I am capable of preparing financial plans to guide our operations			0.593
I compare the prices of goods before buying from a supplier			0.530
Eigen Values	5.931	4.948	2.341
Variance %	28.245	23.564	11.147
Cumulative %	28.245	51.809	62.956
Microcredit access Components	Interest	Constructs	
		Loans	Period
The lenders charge affordable loan interest rates	0.705		
The interest rate limits my business' access to microcredit	0.763		
The interest rate limits my ability to borrow money properly	0.822		
I secure the right loan size to meet my business growth needs		0.680	
The loan amount enables my business to get money for daily operations		0.695	
I have steadily increased the loan amounts for my microenterprise		0.712	
I have enough time to use the borrowed money			0.794
The loan repayment period meets my business long term financing needs			0.587
I repay the loan within the stipulated period			0.558
Eigen Values	4.261	4.342	2.221
Variance %	25.064	25.540	13.062
Cumulative %	25.064	50.604	63.666
Financial performance Components	Liquidity	Constructs	
		Profitability	Efficiency
I always have cash at hand to spend	0.664		
I always pay suppliers on time	0.756		
I ensure timely credit collections	0.719		
I forecast cash needs in my microenterprise	0.796		
My profits have increased for the last three years		0.880	
I often meet annual profit objectives/targets		0.747	
My sales have steadily increased every year		0.821	
We always aim at providing cheaper services			0.738
We normally emphasize optimal utilization of company assets			0.647
All the assets acquired by this microenterprise generate revenue			0.709
Eigen Values	4.672	2.847	1.676
Variance %	35.936	21.902	12.894
Cumulative %	35.936	57.838	70.732

**Source(s):** Primary data by the authors

**Table 2.**  
Factor loads matrix

operate optimally and attain more liquidity, minimize costs and profits. According to Figure 1, the model fitted well according to the different indicators analysis, [Root Mean Square Error Approximation (RMSEA) = 0.000 hence meeting the <0.8, while all the other indices Incremental Fit Index (IFI) 1.006, Tucker -Lewis Index (TLI) = 1.009, Competitive Fit Index (CFI) = 1.000, Normal Fit Index (NFI) = 0.961, Goodness of Fit Index (GFI) = 0.975, Adjusted Goodness of Fit Index (AGFI) = 0.755 meet the limits of acceptance (Hu and Bentler, 1999; Hair et al., 2010)]. The mediation effect hypothesis H4 was supported, hence microcredit access partially mediated the relationship between financial literacy and financial performance, the results are significant ( $\beta = 0.338, <0.05$ ) (Baron and Kenny, 1986). Therefore with an indirect effect on financial performance, the total effect becomes positive ( $\beta = 0.106$ ) when we aggregate the direct effect (-0.231) + indirect effect (0.338) Table 5. Through microcredit access as a mediator, the results indicate that financial literacy strongly impacts financial performance among the West Nile microenterprises in Uganda.

**5. Discussion**

The study examined the microenterprises' financial performance in the West Nile region of Uganda. The study findings contradicts the hypothesis that financial literacy conceptualized as attitude, knowledge and skills positively impacts financial performance measured as

**Table 3.**  
Descriptive and correlations

	Mean	SD	FL	MA	FP	Cronb. Alpha
Financial Literacy (FL)	3.261	0.995	1.000			0.856
Microcredit Access (MA)	3.123	0.858	0.557**	1.000		0.738
Financial Performance (FP)	3.254	0.944	0.629**	0.712**	1.000	0.821

**Note(s):** \*\* Correlation is significant at the 0.01 level (2-tailed)  
**Source(s):** Primary data by the authors

**Table 4.**  
Regression weights

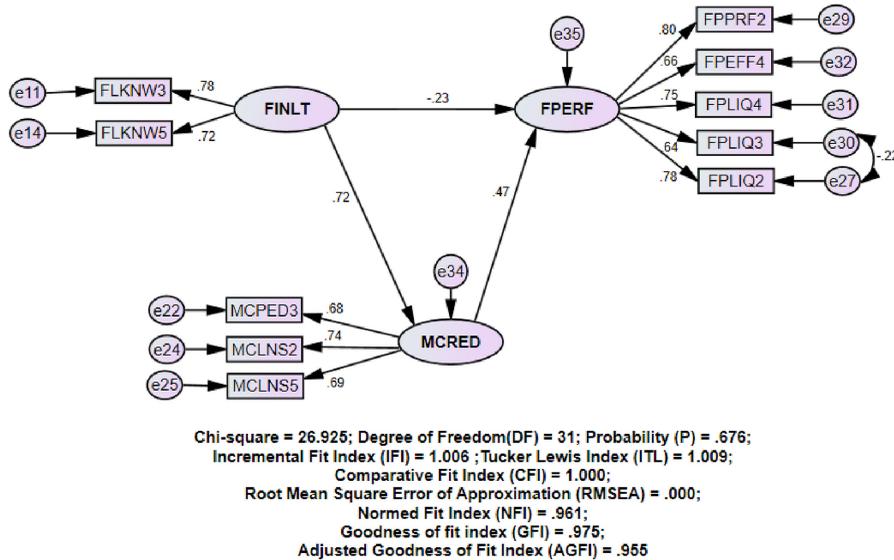
Relationship		Unstandardized coeff.	S.E.	C.R.	Standardized coeff.	<i>p</i>
Microcredit Access	← Financial Literacy	0.719	0.117	6.152	0.716	0.000
Financial Performance	← Financial Literacy	-0.289	0.203	-1.426	-0.231	0.154
Financial Performance	← Microcredit Access	0.586	0.207	2.830	0.471	0.005
<i>Direct Regression</i>						
Financial Performance	← Financial Literacy	0.139	0.122	1.137	0.104	0.256

**Note(s):** *p* (two tailed)  $p^{***} < 0.0001$   
**Source(s):** Primary data by the authors

**Table 5.**  
Hypothesis testing

Hypotheses	Direct effect	Direct effect	Total effect
H4: FinLit ← MicAcc. ← Fin Perf.	-0.231	0.338	0.106
Fin Lit ← MicAcc	0.716	-	0.716
Mic Acc ← Fin Perf.	0.471	-	0.471

**Source(s):** Primary data by the authors



**Figure 1.**  
Mediated model

liquidity, profitability and efficiency (Webb *et al.*, 2013). More so, (Noctor *et al.*, 1992) emphasize that financially literate managers possess the ability to make critical judgments on matters of management. However, this assertion does not resonate with our findings of the study of microenterprises in Uganda. The explanation is that the microenterprises businesses are simplistic and involve providing basic goods implying that microenterprises do not require sophisticated and complex skills to survive in their not-so-competitive market environment. Therefore financial literacy though widely considered essential to steer the microenterprises' financial performance, is not proved in our study setting. Further, the resource-based view theory proposition of pursuing a value-creating strategy, where firms possess bundles of resources vital to attaining competitive advantage is contradicted (Barney, 2001). More so, the aspect of having resources that gives firms unique attributes to offer value to customers (Penrose, 1959). Therefore the effort and focus on enhancing financial literacy do not change the way microenterprises operate. Moreover, the descriptive characteristics reveal that high levels of education of the managers/owners hardly produce any difference in results since; in general, all the studied microenterprises revealed financial performance challenges. Therefore, there is a limit to the emphasis on financial literacy (human capability) interventions for microenterprises in rural Uganda because they hardly make strategic decisions. Hence, the need to take the microenterprises' nature into account instead of emphasizing financial literacy policies universally. Microcredit access is positively and significantly related to the microenterprises' financial performance. The results reveal that those microenterprises in rural Uganda that readily access microcredit can achieve better financial performance. They can expand the business activities through product diversification, market outreach, building relationships and attaining economies of scale. Indeed, the findings resonate well with Mahmood and Rosli (2023) that microcredit is critical for the firm's capital base and financial performance. Similarly Agyemang *et al.* (2020) find a positive relationship between increased firm output and profitability, which supports the findings of microenterprise financial performance in rural Uganda. However Bayulgen (2015), Hulme and Mosley (1996) are critical as evidence shows that microloans negligibly improve business activities due to low returns of such businesses. This is because rural areas are

---

characterized by low income levels and low effective demand therefore even when a microenterprise ventures have adequate financial resources, they may not translate into more business transactions. Further, even when this study captures loan size as a construct, it is silent on the heterogeneity in the loan sizes disbursed to female and male managed microenterprises (Isoto and Kraybill, 2019). Therefore the impact on financial performance can differ greatly, thereby supporting the view that for microcredit access to have the desired impact on microenterprises' financial performance, obtaining the right loan size to match the business needs and conditions of the microenterprise is vital. The impact of microcredit access on financial performance hinges primarily on whether the microenterprises access the optimal credit, on better terms and at the right time, which is not the case in the real credit market. The results of hypothesis three indicate that financial literacy impacts the microenterprise's access to microcredit was supported. Therefore, understanding the intricacies of obtaining loans depends mainly on microenterprises owners/managers' financial literacy level, and is supported by the resource-based theory (Grant, 1991). Microenterprises with internal resources of managers/owners can organize, evaluate and obtain optimal loans and gain the ability to service the loans in line with the credit rationing theory. It reflects the differentiation of loan contracts bearing in mind the microenterprises' resources as advanced by Jaffee and Modigliani (1969). Moreover, acknowledging the prevalence of asymmetric information among the borrowers implies that financially literate owners/managers are honest borrowers and make timely loan repayments. The more financially literate the proprietors of microenterprises are, the greater the probability to continually qualify for loans whenever the need arises (Eniola and Entebang, 2017). The authors contend that financially knowledgeable microenterprises have a competitive advantage in accessing external funding. The fourth hypothesis was supported implying that the impact of financial literacy on financial performance through microcredit access mediation. Our findings support the position that financial literacy impacts financial performance better if it is mediated by microcredit access. The study shows that the knowledge and skills gained through financial literacy influence business performance more when it enables microenterprises to access microcredit to boost their business operations and hence resulting into better financial performance.

## 6. Implications and limitations

The present study suggests implications for microenterprise owners, managers and policymakers. The study concludes that financial literacy, a core government of Uganda and donor microenterprise strategic interventions, hardly contribute to superior financial performance. Those microenterprises owners/managers who through financial literacy acquire appropriate financial knowledge will easily access credit and in addition if well-utilized, leads to improvements in the microenterprises' financial position and long-term survival. However, the findings of this study highlight the deficiencies of this highly emphasized single strategy approach by the government of Uganda and donors. Therefore, simultaneously adopting financial literacy and credit accessibility interventions can greatly transform microenterprises into viable ventures and their role in the Ugandan economy. External interventions that are long term can help the microenterprises to be competitive in the market and contribute significantly to the economic empowering of the region. Further, this calls for interventions to be institutionalized to remove any politically and donor distortions and the associated suboptimal delivery approaches fostering microenterprises.

Like other research studies, this research experience constraints that future researchers should address. From a methodological perspective, cross-sectional studies may pertain to common method biases. We, therefore, suggest a qualitative approach with in-depth interviews with stakeholders to discover more insights pertinent to policy development.

---

We tested the mediating role of credit access between financial literacy and financial performance; however, other mediators such as the business environment would give it another perspective.

## References

- Agyemang, S.A., Ratinger, T. and Ahado, S. (2020), "Has microcredit boosted poultry production in Ghana?", *Agricultural Finance Review*, Vol. 80 No. 2, pp. 135-152.
- Atkinson, A. and Messy, F.A. (2012), "Measuring financial literacy: results of the OECD/international network on financial education (INFE) pilot study", *OECD Working Papers on Finance, Insurance and Private Pensions*. doi: [10.1787/5k9cfsf90fr4-en](https://doi.org/10.1787/5k9cfsf90fr4-en).
- Babiarz, P. and Robb, C.A. (2014), "Financial literacy and emergency saving", *Journal of Family and Economic Issues*. doi: [10.1007/s10834-013-9369-9](https://doi.org/10.1007/s10834-013-9369-9).
- Barney, J.B. (2001), "Is the resource-based 'view' a useful perspective for strategic management research? Yes", *Academy of Management Review*, Vol. 26 No. 1, pp. 41-56, doi: [10.2307/259393](https://doi.org/10.2307/259393).
- Baron, R.M. and Kenny, D.A. (1986), "The moderator-mediator variable distinction in social psychological research: concept, strategic and statistical considerations", *Journal of Personality and Social Psychology*, Vol. 51 No. 6, pp. 1173-1182, doi: [10.1037/0022-3514.51.6.1173](https://doi.org/10.1037/0022-3514.51.6.1173).
- Bayulgen, O. (2015), "Microcredit and political empowerment in Azerbaijan and Kazakhstan", *International Journal of Development Issues*, Vol. 14 No. 2, pp. 130-148, doi: [10.1108/ijdi-01-2015-0002](https://doi.org/10.1108/ijdi-01-2015-0002).
- Bruhn, M. and Zia, B. (2013), Stimulating managerial capital in emerging markets: the impact of business training for young entrepreneurs, *Journal of Development Effectiveness*, Vol. 5 No. 2, pp. 232-266.
- Bucher-Koenen, T., Lusardi, A., Alessie, R. and Van Rooij, M. (2017), "How financially literate are women? An overview and new insights", *Journal of Consumer Affairs*, Vol. 51 No. 2, pp. 255-283, doi: [10.1111/joca.12121](https://doi.org/10.1111/joca.12121).
- Capon, N., Farley, J.U. and Hoenig, S. (1990), "Determinants of financial performance: a metaanalysis", *Management Science*, Vol. 36 No. 10, pp. 1143-1159, doi: [10.1287/mnsc.36.10.1143](https://doi.org/10.1287/mnsc.36.10.1143).
- Chin, O. and Nor, M.M. (2016), "Does the micro financing term dictate the performance of micro enterprises?", *Procedia Economics and Finance*, Vol. 35, pp. 281-286, doi: [10.1016/s2212-5671\(16\)00035-6](https://doi.org/10.1016/s2212-5671(16)00035-6).
- Crépon, B., Devoto, F., Duflo, E. and Parienté, W. (2015), "Estimating the impact of microcredit on those who take it up: evidence from a randomized experiment in Morocco", *American Economic Journal: Applied Economics*, Vol. 7 No. 1, pp. 123-150, doi: [10.1257/app.20130535](https://doi.org/10.1257/app.20130535).
- Danso, A. and Adomako, S. (2014), "The financing behaviour of firms and financial crisis", *Managerial finance*, Vol. 40 No. 12, pp. 1159-1174, doi: [10.1108/ijse-09-2013-0206](https://doi.org/10.1108/ijse-09-2013-0206).
- Day, G. and Fahey, L. (1988), "Valuing market strategies", *Journal of Marketing*, Vol. 52 No. 3, pp. 45-57, doi: [10.2307/1251449](https://doi.org/10.2307/1251449).
- Eniola, A.A. and Entebang, H. (2017), "Financial literacy and SME firm performance", *Global Business Review*, Vol. 18 No. 3, pp. 559-576, doi: [10.1177/0972150917692063](https://doi.org/10.1177/0972150917692063).
- Eton, M., Mwosi, F., Mutesigensi, D. and Ebong, C.D. (2017), "Credit financing and performance of SMEs in Lira municipality, Uganda", *Research Journal of Finance and Accounting*, Vol. 8 No. 8, pp. 121-127.
- Fatoki, O. (2014), "The financial literacy of micro entrepreneurs in South Africa", *Journal of Social Sciences*, Vol. 40 No. 2, pp. 151-158, doi: [10.1080/09718923.2014.11893311](https://doi.org/10.1080/09718923.2014.11893311).
- Fiala, N. (2018), "Returns to microcredit, cash grants and training for male and female microentrepreneurs in Uganda", *World Development*, Vol. 105, pp. 189-200, doi: [10.1016/j.worlddev.2017.12.027](https://doi.org/10.1016/j.worlddev.2017.12.027).

- 
- Field, A. (2009), *Discovering Statistics using SPSS*, Sage Publications.
- Garg, N. and Singh, S. (2018), "Financial literacy among youth", *International Journal of Social Economics*, Vol. 45 No. 1, pp. 173-186, doi: [10.1108/ijse-11-2016-0303](https://doi.org/10.1108/ijse-11-2016-0303).
- Garnsey and Leong (2008), "Combining resource-based and evolutionary theory to explain the genesis of bio-networks", *Industry and Innovation*, Vol. 15 No. 6, pp. 669-686, doi: [10.1080/13662710802565271](https://doi.org/10.1080/13662710802565271).
- Glaser, M. and Walther, T. (2014), "Run, walk, or buy? Financial literacy, dual-process theory, and investment behavior", *Financial Literacy, Dual-Process Theory, and Investment Behavior*, (April 16 2014).
- Gou, Q. and Huang, Y. (2014), "Access to the determinants of credit rationing: evidence from Chinese firms", *Journal of Financial Research*, Vol. 8, pp. 1-17.
- Grant, R.M. (1991), "The resource-based theory of competitive advantage: implications for strategy formulation", *California Management Review*, Vol. 33 No. 3, pp. 114-135, doi: [10.2307/41166664](https://doi.org/10.2307/41166664).
- Gulesci, S., Madestam, A. and Stryjan, M. (2017), "Loan contract structure and adverse selection: Survey evidence from Uganda", *Journal of Economic Literature*, pp. 1-41.
- Hair, J.F., Anderson, R.E., Babin, B.J. and Black, W.C. (2010), *Multivariate Data Analysis: A Global Perspective*, Vol. 7, Pearson, Upper Saddle River, NJ.
- Hodgman, D.R. (1960), "Credit risk and credit rationing", *The Quarterly Journal of Economics*, Vol. 74 No. 2, pp. 258-278, doi: [10.2307/1884253](https://doi.org/10.2307/1884253).
- Hu, L.T. and Bentler, P.M. (1999), "Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives", *Structural Equation Modeling*, Vol. 6 No. 1, pp. 1-55, doi: [10.1080/10705519909540118](https://doi.org/10.1080/10705519909540118).
- Huhmann, B.A. and McQuitty, S. (2009), "A model of consumer financial numeracy", *International Journal of Bank Marketing*, Vol. 27 No. 4, pp. 270-293, doi: [10.1108/02652320910968359](https://doi.org/10.1108/02652320910968359).
- Hulme, D. and Mosley, P. (1996), "Why credit markets fail the poor. Finance against poverty", *Finance for the Poor or Poorest? Financial Innovation, Poverty and Vulnerability*, 1st ed., University of Reading, Department of Economics and Department of Agricultural Economics, Vol. 1, pp. 16-41.
- Hunt, S.D. and Derozier, C. (2004), "The normative imperatives of business and marketing strategy: grounding strategy in resource-advantage theory", *Journal of Business and Industrial Marketing*, Vol. 19 No. 1, pp. 5-22, doi: [10.1108/08858620410516709](https://doi.org/10.1108/08858620410516709).
- Huston, S.J. (2010), "Measuring financial literacy", *Journal of Consumer Affairs*, Vol. 44 No. 2, pp. 296-316, doi: [10.1111/j.1745-6606.2010.01170.x](https://doi.org/10.1111/j.1745-6606.2010.01170.x).
- Isoto, R.E. and Kraybill, D.S. (2019), "Gender disaggregated effects of microcredit on capital accumulation in rural households", *Agricultural Finance Review*, Vol. 79 No. 2, pp. 204-216, doi: [10.1108/af-05-2017-0034](https://doi.org/10.1108/af-05-2017-0034).
- Jaffee, D.M. and Modigliani, F. (1969), "A theory and test of credit rationing", *The American Economic Review*, Vol. 59 No. 5, pp. 850-872.
- Jaffee, D.M. and Russell, T. (1976), "Imperfect information, uncertainty and credit rationing", *Quarterly Journal of Economics*, Vol. 90, pp. 651-666.
- Jin, Y. and Zhang, S. (2019), "Credit rationing in small and micro enterprises: a theoretical analysis", *Sustainability*, Vol. 11 No. 5, p. 1330, doi: [10.3390/su11051330](https://doi.org/10.3390/su11051330).
- King, A.W. and Zeithaml, C.P. (2001), "Competencies and firm performance: examining the causal ambiguity paradox", *Strategic Management Journal*, Vol. 22 No. 1, pp. 75-99.
- Klontz, B., Britt, S.L., Mentzer, J. and Klontz, T. (2011), "Money beliefs and financial behaviors: development of the Klontz money script inventory", *Journal of Financial Therapy*, Vol. 2 No. 1, p. 1, doi: [10.4148/jft.v2i1.451](https://doi.org/10.4148/jft.v2i1.451).

- 
- Krejcie, R.V. and Morgan, D.W. (1970), "Determining sample size for research activities", *Educational and Psychological Measurement*, Vol. 30 No. 3, pp. 607-610, doi: [10.1177/001316447003000308](https://doi.org/10.1177/001316447003000308).
- Levenson, A.R. and Willard, K.L. (2000), "Do firms get the financing they want? Measuring credit rationing experienced by small businesses in the US", *Small Business Economics*, Vol. 14 No. 2, pp. 83-94, doi: [10.1023/a:1008196002780](https://doi.org/10.1023/a:1008196002780).
- Lusardi, A. and Mitchell, O.S. (2014), "The economic importance of financial literacy: theory and evidence", *Journal of Economic Literature*, Vol. 52 No. 1, pp. 5-44, doi: [10.1257/jel.52.1.5](https://doi.org/10.1257/jel.52.1.5).
- Lusardi, A. and Scheresberg, C.D.B. (2013), *Financial Literacy and High-Cost Borrowing in the United States*, No. w18969, National Bureau of Economic Research, pp. 1-42.
- Madhani, P.M. (2010), "Resource based view (RBV) of competitive advantage: an overview", *Resource Based View: concepts and Practices*.
- Madichie, N.O. and Nkamnebe, A.D. (2010), "Micro-credit for microenterprises?", *Gender in Management: An International Journal*, Vol. 25 No. 4, pp. 301-319, doi: [10.1108/17542411011048173](https://doi.org/10.1108/17542411011048173).
- Mandell, L. and Klein, L.S. (2007), "Motivation and financial literacy", *Financial Services Review*, Vol. 16 No. 2, p. 105.
- Md.Shafik, A.S. and Wan Ahmad, W.M. (2020), "Financial literacy among Malaysian Muslim undergraduates", *Journal of Islamic Accounting and Business Research*, Vol. 11 No. 8, pp. 1515-1529, doi: [10.1108/jiabr-10-2017-0149](https://doi.org/10.1108/jiabr-10-2017-0149).
- Meager, R. (2015), *Understanding the impact of microcredit expansions: a bayesian hierarchical analysis of randomised experiments*.
- Michaelas, N., Chittenden, F. and Poutziouris, P. (1999), "Financial policy and capital structure choice in UK SMEs: empirical evidence from company panel data", *Small Business Economics*, Vol. 12 No. 2, pp. 113-130, doi: [10.1023/a:1008010724051](https://doi.org/10.1023/a:1008010724051).
- Mahmood, R. and Rosli, M.M. (2013), "Microcredit position in micro and small enterprise performance: the Malaysian case", *Management Research Review*.
- Morduch, J. and Haley, B. (2001), "Analysis of the effects of microfinance on poverty reduction", NYU Wagner Working Paper, Vol. No. 1014.
- Natoli, R. (2018), "Factors contributing to financial literacy levels among a migrant group", *International Journal of Social Economics*, Vol. 45 No. 5, pp. 730-745, doi: [10.1108/ijse-11-2016-0341](https://doi.org/10.1108/ijse-11-2016-0341).
- Neck, P.A. (2009), *Small Enterprise Development: Policies and Programs*, 2nd ed., Management Development Series, International Labour Office, Geneva, Vol. 14.
- Nielsen, T. (2018), "The intrinsic and extrinsic motivation subscales of the Motivated Strategies for Learning Questionnaire: a Rasch-based construct validity study", *Cogent Education*, Vol. 5 No. 1, 1504485, doi: [10.1080/2331186x.2018.1504485](https://doi.org/10.1080/2331186x.2018.1504485).
- Noctor, M., Stoney, S. and Stradling, R. (1992), *Financial Literacy, a Report Prepared for the National Westminster Bank*, National Foundation for Educational Research, London.
- Nunnally, J. (1967), *Psychometric methods*.
- Nunoo, J. and Andoh, F.K. (2011), "Sustaining small and medium enterprises through financial service utilization: does financial literacy matter?", *AgEcon Search*, pp. 1-29.
- Olujobo, O.O. (2018), "Analysis of cooperative financial and enterprise financial crises", *African Journal of Management*, Vol. 3 No. 2, pp. 11-26.
- Pavani, U. (2015), "A study of non-performing assets at the AP mahesh Co-operative Urban bank LTD. EDU WORLD, p. 145.
- Penrose, E.T. (1959), *The Theory of the Growth of the Firm*, John Wiley, New York.

- 
- Phillipson, J., Tiwasing, P., Gorton, M., Maioli, S., Newbery, R. and Turner, R. (2019), "Shining a spotlight on small rural businesses: How does their performance compare with urban?", *Journal of Rural Studies*, Vol. 68, pp. 230-239.
- Reijonen, H. and Komppula, R. (2007), "Perception of success and its effect on small firm performance", *Journal of Small Business and Enterprise Development*, Vol. 14 No. 4, pp. 689-701, doi: [10.1108/14626000710832776](https://doi.org/10.1108/14626000710832776).
- Ripain, N., Amirul, S.M. and Mail, R. (2017), "Financial literacy and SMEs' potential entrepreneurs: the case of Malaysia", *Journal of Administrative and Business Studies*, Vol. 3 No. 2, pp. 60-68.
- Sabri, M.F. and MacDonald, M. (2010), "Savings behavior and financial problems among college students: the role of financial literacy in Malaysia", *Cross-Cultural Communication*, Vol. 6 No. 3, pp. 103-110.
- Stiglitz, J.E. and Weiss, A. (1981), "Credit rationing in markets with imperfect information", *The American Economic Review*, Vol. 71 No. 3, pp. 393-410.
- Sucuahi, W.T. (2013), "Determinants of financial literacy of micro entrepreneurs in Davao City", *International Journal of Accounting Research*, Vol. 42 No. 826, pp. 1-8, doi: [10.12816/0001127](https://doi.org/10.12816/0001127).
- Van Rooij, M., Lusardi, A. and Alessie, R. (2011), "Financial literacy and stock market participation", *Journal of Financial Economics*, Vol. 101 No. 2, pp. 449-472, doi: [10.1016/j.jfineco.2011.03.006](https://doi.org/10.1016/j.jfineco.2011.03.006).
- Van Rooij, M.C., Lusardi, A. and Alessie, R.J. (2012), "Financial literacy, retirement planning and household wealth", *The Economic Journal*, Vol. 122 No. 560, pp. 449-478, doi: [10.1111/j.1468-0297.2012.02501.x](https://doi.org/10.1111/j.1468-0297.2012.02501.x).
- Walker, E. and Brown, A. (2004), "What success factors are important to small business owners?", *International Small Business Journal*, Vol. 22 No. 6, pp. 577-594, doi: [10.1177/0266242604047411](https://doi.org/10.1177/0266242604047411).
- Wanambisi, A.N., Bwisa, H.M., Segal, D. and Sturm, R. (2013), "Effects of microfinance lending on business performance: a survey of micro and small enterprises in Kitale municipality, Kenya", *International Journal of Academic Research in Business and Social Sciences*, Vol. 3 No. 7, pp. 56-61, doi: [10.6007/ijarbss/v3-i7/9](https://doi.org/10.6007/ijarbss/v3-i7/9).
- Webb, J.W., Bruton, G.D., Tihanyi, L. and Ireland, R.D. (2013), "Research on entrepreneurship in the informal economy: framing a research agenda", *Journal of Business Venturing*, Vol. 28 No. 5, pp. 598-614, doi: [10.1016/j.jbusvent.2012.05.003](https://doi.org/10.1016/j.jbusvent.2012.05.003).
- Yang, M. and Stanley, T.D. (2012), *Micro-credit and Income: A Literature Review and Metaanalysis*, Hendrix College, Conway, AR, Vol. 27, 2013 (accessed August).

### Further reading

- Hansen, T. (2008), "Consumer values, the theory of planned behaviour and online grocery shopping", *International Journal of Consumer Studies*, Vol. 32 No. 2, pp. 128-137, doi: [10.1111/j.1470-6431.2007.00655.x](https://doi.org/10.1111/j.1470-6431.2007.00655.x).
- Henchoz, C. (2016), "Sociological perspective on financial literacy", in *International Handbook of Financial Literacy*, Springer, Singapore, pp. 97-112.

### Corresponding author

Isaac Nkote can be contacted at: [inkote@mubs.ac.ug](mailto:inkote@mubs.ac.ug)

---

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldgroupublishing.com/licensing/reprints.htm](http://www.emeraldgroupublishing.com/licensing/reprints.htm)

Or contact us for further details: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)