Financial Literacy and Financial Performance of Micro Enterprises in Developing Economies: The Mediating Role of Credit Access

Johnson Ssekakubo[1], Gideon Nkurunziza[2], Robert Muwanga[3],, Sulait Tumwine[4],

Abstract

The purpose of this paper is twofold: to establish the influence of financial literacy on the financial performance of micro-enterprises (MEs) in developing countries and establish the mediation role of credit access in the relationship between financial literacy and financial performance of micro-enterprises. The authors employed a cross-sectional and quantitative methods research design. Close-ended questionnaires were administered to the owner and or at least one focal staff member of the micro-enterprises which were selected from Nebbi district in Northwestern Uganda. Most studies on financial literacy, credit access and financial performance in Uganda have focussed on small and medium enterprises (SMEs) given their pivotal position in the economy of Uganda, leaving out the micro-enterprises (MEs), and yet MEs supplement SMEs with business linkages, partnerships and subcontracting, but also MEs have unique challenges. The study found that financial literacy in micro-enterprises in developing economies positively affects their financial performance. Further still, it has been established that credit access by micro-enterprises mediates the relationship between their financial literacy and financial performance. In this regard, owners of the micro-enterprises should endeavour to understand the procedures for obtaining credit from micro-finance institutions. They should also learn the terms associated with the acquisition of credit, such as; loan size, interest rate, repayment period, the amounts of the microloan they can apply, the interest rates as well as the repayment periods, this knowledge will enable them to access loans that meet their business needs much quicker for business growth.

Keywords: Financial Literacy, Credit Access, Financial Performance, Micro Enterprises, Developing Economies.

Introduction

Globally, organizations are striving to boost their financial performance to remain competitive. Micro-enterprises, in particular, are currently facing the effects of the economic downturn occasioned by the global challenge of the Covid-19 pandemic which forced many businesses to close, leaving few essential businesses in operation. This has greatly affected the economies of most countries in the world. As such, micro-enterprises are striving to improve their financial performance to mitigate the economic turbulence and ensure their survival post the Covid-19

[1] Makerere University Business School – Uganda
Email: jssekakubo@mubs.ac.ug
[2] Makerere University Business School – Uganda
[3] Makerere University Business School – Uganda
[4] Makerere University Business School – Uganda

lockdown era. Fiala (2018) noted that micro-enterprises in developing world contexts have great potential to supplement large enterprises through business linkages, partnerships and subcontracting and, as such, contributing to economic growth and employment, however, their financial performance has been deteriorating. In Uganda, despite there being several small business start-ups, 20% failed in the first year, which points poor financial performance (URSB, 2016). A 2018 report by the Uganda Revenue Authority also revealed that 66 micro-enterprises close every year on average. Specifically, in Nebbi District in the West Nile region of Uganda, a 2016 report by the District local government showed that approximately 31% of the micro-enterprises are less than 5 years old, and less than 10% have operated for more than 20 years. A 2016 report of the Agency for Accelerated Regional Development (AFARD) reveals that the levels of financial literacy among the youth micro-entrepreneurs in Nebbi district stand at not more than 48.5%, which affects the way micro-enterprises are operated and managed.

Despite the benefits of financial literacy, recent research shows that the majority of people still have a low degree of financial literacy (Hakim, Oktavianti, & Gunarta, 2018; Xu et al., 2020). It has been argued that lack of financial literacy, that is, the financial management skills, abilities and skills to manage their finances, is among the leading causes of the closure of small businesses. This is based on the fact that finance-related competencies are vital for sustainable competitive advantage, survival, and overall organizational financial performance (Adomako, Danso & Ofori Damoah, 2016; Fatoki, 2014; Neck, 1987). Although financial performance continues to baffle firms worldwide, consensus on what predicts financial performance from both global and local settings is yet to be achieved. Attention appears to be primarily focused on financial inclusion and accessibility, without considering the individual level aspects like financial literacy. However, financial challenges for micro-enterprises (MEs) are quite vast, extending beyond lack of financial inclusion and accessibility (Liu et al., 2022). Moreover, some scholars reveal that financial literacy influences the survival, growth, success or failure of MEs, especially the young ones (Ripain, Amirul & Mail, 2017). In fact, MEs' financial performance has conventionally been linked to the literacy levels of micro-enterprises (Mader & Sabrow, 2019). Although factors noted here are important in explaining financial performance, their influence on financial performance in micro-enterprises is not well explained. Also, the mediating role of credit access on the relationship between financial literacy and financial performance is superficial in developing economies.

Literature Review

Financial performance

The roles micro-enterprises play in developing economies are vast and cannot be overemphasized, including the contribution toward the achievement of many sustainable development goals (SDGs), especially SDGs 1 and 8 (Endris & Kassegn, 2022). However, their financial performance in most developing economies like Uganda has consistently remained poor, characterized by stagnation, decline, and at worst, closure before their first birthday. Poor performance can partly be attributed to the lack of financial literacy and lack of access to affordable credit to finance their business operations (Brixiová et al., 2020; Hakim et al., 2018). Whereas the concept of financial performance has attracted the attention of policymakers and researchers to explore its key drivers, the debate is inconclusive. Scholars such as Kefela (2010) and Xu et al. (2020) have indicated that financial literacy is a prerequisite for the financial well-being of a firm. It enables business owners and managers to make more educated decisions about the financial market, with the ultimate goal of financial success. It is also crucial to create incentives and conditions that encourage desired financial behaviours such as saving and prudent credit usage, thereby increasing the possibility of financial inclusion. Having such knowledge and access to financial products hugely impacts the firm's financial future, since these directly affect both the way money is earned and expensed (Asiedu et al., 2012; Lyons et al., 2017). According to the World Bank report (2014), financial education is a sure way to enhance small businesses' literacy and financial inclusion, which then would boost their performance. Though this suggestion appears logical, its legitimacy is contingent on the answers to the following questions: does financial literacy among MEs owners result in good financial performance? How does access to credit influence the performance of MEs? Unfortunately, direct evidence addressing these issues is not common and calls for more research to provide evidence-based policies and draw credible conclusions.

Financial literacy and financial performance

Financial literacy is described as the capacity to make proper judgment and well-informed decisions about managing and utilizing money (Nkundabanyanga et al., 2014; Ye & Kulathunga, 2019). Financial literacy manifests in financial knowledge and attitudes, which involve the awareness of basic money concepts, such as saving, investment, and borrowing (Garg & Singh, 2018). These aspects allow the acquisition of skills needed to make the right financial decisions (Bazinzi et al., 2013). Potrich, Kelmara, and Wesley (2016) argued that the right financial attitude combines information and emotions about learning, which results in the readiness to react favourably to financial issues. It also allows managers to develop the ability to obtain capital from external sources (financial skills) with minimum cost and payoff obligation (Sucuahi, 2013). Such skills include; budgeting, bill payment, debt acquisition and payment, management of consumer problems, and comparison shopping (Reich & Berman, 2015). Adomako *et al.* (2016) posit that there exists a strong positive association between financial literacy and financial outcomes.

Similarly, Sucuahi (2013) argued that a good financial foundation of entrepreneurs is a significant barometer of the success and growth of businesses in a competitive business environment. Financial literacy plays an essential role in the process of making financial decisions, as it represents a systematic effort aimed at the development of positive knowledge, behaviour and attitude (Potrich, Kelmara and Wesley, 2016). Entrepreneurs with higher levels of financial literacy show better business performance and sales (Bruhn & Zia, 2011) because they have a better capacity to deal with the issues of market accessibility, policy constraints and cultural barriers (Abubakar, 2015). On the other hand, a lack of financial literacy impacts negatively on the financial management of new ventures and leads to possible business failures (Fatoki, 2014). However, most entrepreneurs do not have the working knowledge of financial concepts they need to make financial decisions that are most advantageous to the performance of their firms. This state of affairs can affect the firm's day-to-day money management and ability to utilize funds for long-term goals such as investing in profitable ventures and activities (Adomako & Danso, 2014). The inability to keep proper records, separate business operations from personal operations, and manage cash flow and growth is likely to affect business performance (Kamunge, Njeru & Tirimba, 2014). Sucuahi (2013) observed that low financial skills might lead to an adverse impact on the future of the business.

Credit access and financial performance

Credit access refers to the choice of the maximum credit allowed to a potential borrower by a given formal or informal lender. It measures the extent to which both formal and informal lenders meet the credit needs of a potential borrower based on the availability and eligibility criteria of a given lender (Nkundabanyanga et al., 2014; Asiedu et al., 2012). Access to credit is particularly important in realizing business objectives such as growth and performance (Adomako & Danso, 2014). Adequate loan amounts, affordable interest rates and flexible repayment schedules help SMEs maintain enough finances to run their working capital activities. In turn, this helps these firms improve business performance because of the opportunity costs reinvested for further proceeds to generate more revenues, something that increases their return on capital employed (Madole, 2013). However, small businesses are credit constrained, especially in developing countries (Ahlin *et al*., 2020). Most formal banking institutions deem it an unattractive venture to do business with MEs because they are considered high-risk clients (Alhassan, Hoedoafia & Braimah, 2016). Numerous studies (Fiala, 2018; Karlan et al., 2012; Ngugi & Kerongo, 2014; Kisaka & Mwewa, 2014) found positive and significant relationships between access to credit and the financial performance of micro-enterprises, which in turn reflects on the economic growth of a country.

Credit has been attributed to enabling micro-entrepreneurs to build businesses and increase their income (Nor Azlina et al., 2015), and credit also improves on micro-enterprises' working capital, consequently increasing investment and profitability (Mpamizo, 2011; Quaye, 2011). In their study, Loca and Kola (2013) found that access to credit increased the average daily, monthly, and annual revenues of beneficiary SMEs in Albania. Interestingly, appropriate loan sizes for clients matching their needs, realistic interest rates, savings as a prerequisite, regular, short and immediate repayment periods and achieving scale can contribute to the sustainability of micro and small enterprises (Wanambisi & Bwisa, 2013). However, Oluyombo (2012) found that although the members of cooperatives have access to loans for their enterprise, this does not appear to contribute to making more profit than those without a loan opportunity. This implies that the ability to make more profit is likely to be a function of other factors, such as credit purchase at an interest-free rate from suppliers, bulk purchase of input and at wholesale price rather than access to a cooperative loan, leading to a reduction in the cost of trading. In the same vein, the general impact of credit access on investment in self-employed activities is likely to be positive but small (Meager, 2015). One plausible explanation for the lack of large effects is that the small businesses that households invest in have a low marginal product of capital (Crepon et al., 2015). Hence we hypothesize that:

i. H1*: Financial literacy is positively related to the financial performance of micro-enterprises.*
ii. H2: *Credit access mediates the relationship between financial literacy and financial performance of micro-enterprises.*

Methodology

The study adopted a cross-sectional research design that was quantitative in nature. This facilitated the assessment of the hypothesized relationships involving financial literacy in micro-enterprises, credit access and financial performance. The main goal was to establish whether financial literacy directly or indirectly influences financial performance through access to credit.

This research design was chosen because it is considered appropriate for quantitatively assessing relationships among study variables while focusing on phenomena at a particular point in time. The target population was 410 micro-enterprises profiled by the District Commercial Services Support Project in Nebbi (Nebbi District Local Government, MSME Development Database, 2016), from which a simple random sample of 196 was taken following the sample size determination formula of Krejcie and Morgan (1970). Micro-enterprises constitute firms with a turnover of less than UGX 5 million (UBOS, 2011). Two respondents, who constituted the unit of inquiry, included the manager and/or owner, who were purposively selected because of their positions and knowledge of the subject matter. In this regard, however, data from the unit of analysis was aggregated to the unit of analysis, which was the micro-enterprise. Close-ended questionnaires were used to collect data either by self-administering or interviewer-administering, depending on the literacy levels of the respondent. The variables on which primary data was collected include financial literacy, credit access and financial performance of micro-enterprises. The response rate was 75.5%, which accounted for 148 micro-enterprises from which substantially completed, and usable questionnaires were received. The micro-enterprises, which were largely dealing in wholesale and retail trade (43.2%), have been in existence for less than five years (58.8%), and they mostly employ up to three workers (58.8%). The background characteristics of the respondents were such that the majority were male (64.4%), aged 34 years and above (60.7%) and mostly with the Ordinary level academic qualification (31.9%). Further still, it was revealed that the majority of the respondents were owners of these enterprises (45.5%) who had operated them for less than 5 years (40.7%).

Measurement of the study variables

Scales for financial literacy were adopted from Bongomin et al., (2017) who measured it in terms of financial attitude, financial knowledge and financial skills. Financial Knowledge is defined as the awareness and appreciation of financial concepts, and procedures of financial dealings (Clark et al., 2017)). Financial attitude is a state of mind, opinion and assessment of finance. (Pankow, 2003, Ningsih & Ritah, 2010) and financial skills is the capability to employ one's financial knowledge to take decisions that result in solving financial problems (Scott, 2010). Credit access was operationalized using sub-constructs of loan size, interest rate and repayment period, as adopted from the study by Odongo (2014) and Nuwagaba and Nzewi, (2013). Loan size according to Asiedu et al. (2012) refers to the maximum amount of money that can be secured by a borrower given on fulfilment of terms such as availability of collateral and assessment of credit worthiness. Finally, the construct of financial performance was measured based on profitability, liquidity, and efficiency adopted from the research of Nkundabanyanga (2016). Profitability is the measure of economic success achieved by an organization in relation to capital invested, indicated by return on assets (ROA) and return on equity (ROE) (Primentel et al., 2005; Ware, 2015). Liquidity is the capacity to liquidate maturing short term debt (Shim & Siegel, 2000; Amihud & Mendelson, 2000). Efficiency is the ability to produce something without wasting materials, time or energy (Wilson et al., 2018) and Erlendsson (2002) similarly defines efficiency as the ability to perform well without wasted resources, including time, effort or money. The scale for all the study variables were tagged to a 5-point Likert scale ranging from 1-5, where 1 (strongly disagree), 2 (disagree), 3 (not sure), 4 (agree), and 5 (strongly disagree).

Study findings

The demographic characteristics of the micro-enterprises in Table 1 show that out of 196 micro-enterprises sampled, 148 of them responded, which puts the response rate at 75.5%, which rate is favourably high. Similar to the employees, most of the micro-enterprises (58.8%) had also been in existence for less than five years, while only 14.9% of them had operated for more than 15 years. This finding points to the characteristic of most micro-enterprises, which rarely survive to celebrate their fifth anniversary. In regard to the number of employees, most of the firms (58.8%) had 1 – 3 employees, which is typical of micro-enterprises. It was also established that the majority of these micro-enterprises (79.1%) have single-digit sales and profit margins.

Table 1: Characteristics of the Micro-enterprises

Variable	Category	Frequency (148)	Percent
Age of Business	Less than 5 years	87	58.8
	5 - 10 years	23	15.5
	11 - 15 years	16	10.8
	Over 15 years	22	14.9
Number of employees	1 - 3 employees	87	58.8
	4 - 6 employees	25	16.9
	7 - 9 employees	15	10.1
Firm's return on sales	Less than 3%	25	16.9
	3-6%	26	17.6
	3-6%	28	18.9
	9-12%	38	25.7
	above12%	31	20.9
	Total	148	100.0
	10 employees and Over	21	14.2
Firm's gross profit	Less than 3%	23	15.5
	3-6%	28	18.9
	3-6%	29	19.6
	9-12%	37	25.0
	above12%	31	20.9

Correlation, Regression and test for mediation analysis

Correlation analysis

We conducted a correlation analysis to establish the relationship between independent and dependent variables (Field, 2009). As such, bivariate-correlation analyses were performed, and Pearson correlation coefficients were generated to measure the magnitude and direction of the relationships. From Table 2, we note that there is a significant positive relationship between financial literacy and the financial performance of micro-enterprises. ($r = .424, p<.01$). This finding extends to the relationship between financial performance and all three dimensions of financial literacy, that is; Financial Knowledge ($r = .424, p<.01$), Financial Attitude ($r = .424, p<.01$) and Financial Skills ($r = .424, p<.01$). This result implies that there is direct covariance of financial performance and financial literacy in all of its three dimensions.

Further, table 2; reveals that financial performance is positively correlated with credit access ($r=.162, p<.01$). Notably, only one of the two dimensions of credit access, loan size ($r=.488$, p<.01), is significantly correlated with financial performance. As such, credit access, especially the size of the loan accessed, is directly associated with the performance of the micro-enterprises, in a way that the higher the amount the MEs can access, the better their financial performance.

Table 2: Correlation analysis

	1	2	3	4	5	6	7	8
Financial Literacy (1)	**1**							
Financial Knowledge (2)	.766**	1						
Financial Attitude (3)	.703**	.299**	1					
Financial Skills (4)	.741**	.295**	.365**	1				
Credit Access (5)	**.162****	**.224****	**-.032**	**.139***	**1**			
Loan size (6)	.437**	.508**	.164**	.267**	.682**	1		
Interest Rate (7)	-.185**	-.157**	-.203**	-.064	.728**	-.019	1	
Financial Performance (8)	**.424****	**.299****	**.238****	**.396****	**.313****	**.488****	**-.024**	**1**

Note: **. Significant at the 0.01 level, *. Significant at the 0.05 level
Source: primary data

Regression analysis

A hierarchical regression analysis was conducted to ascertain the effect of financial literacy and credit access on the financial performance of micro-enterprises. Three models were run, and in model 1, firm age and size were found to contribute 11.0% of the variance in financial performance. However, the standard beta (standardized $\beta = .287^{***}$, p<.001) is significant, and that of firm size is not (standardized $\beta = .105$, p>.05). In effect, the performance of small and micro enterprises improves with the length of time they take in operation and not with the increase in the number of people employed. Model II and III show that financial literacy and credit access predict the financial performance of MEs by 13.5 per cent and 5.3 per cent, respectively. Therefore, hypotheses HI and H2 are supported.

Table 3: Hierarchical regression analysis results

	Model 1	Model 2	Model 3
Constant	2.899***	1.409***	.745**
Firm Age	.287***	.179**	.156**
Firm size	0.105	0.058	0.065
Financial Literacy		.395***	.365***
Credit Access			0.235***
F Change	16.739***	50.246***	20.695***
R Square	0.11	0.249	0.302
R Square change	0.110	0.139	0.053
Durbin-Watson			1.824

Note: ***. Significant at the 0.001 level, *. Significant at the 0.05 level
Source: primary data

Test for mediation

In order to address the main objective of this study, this is to establish if credit access mediates the effect of financial literacy on financial performance, a test for mediation test according to Baron and Kenny (1986), Figure 1 shows that financial literacy has a positive effect on financial performance (standardized $\beta = .424^{***}$, p<.001) and when regressed on financial performance together with credit access the magnitude of the effect lowered albeit still significant, (standardized $\beta = .420^{***}$, p<.001), pointing to a partial mediation effect of credit access. Further still, the Sobel test for mediation shows that the mediating effect is significant ($Z = .2.351^{*}$, p<.05), implying that credit access has a partial mediation effect on the relationship between financial literacy and financial performance. The ratio of the indirect effect to the total effect (.094) implies that the indirect effect is 9.4%.

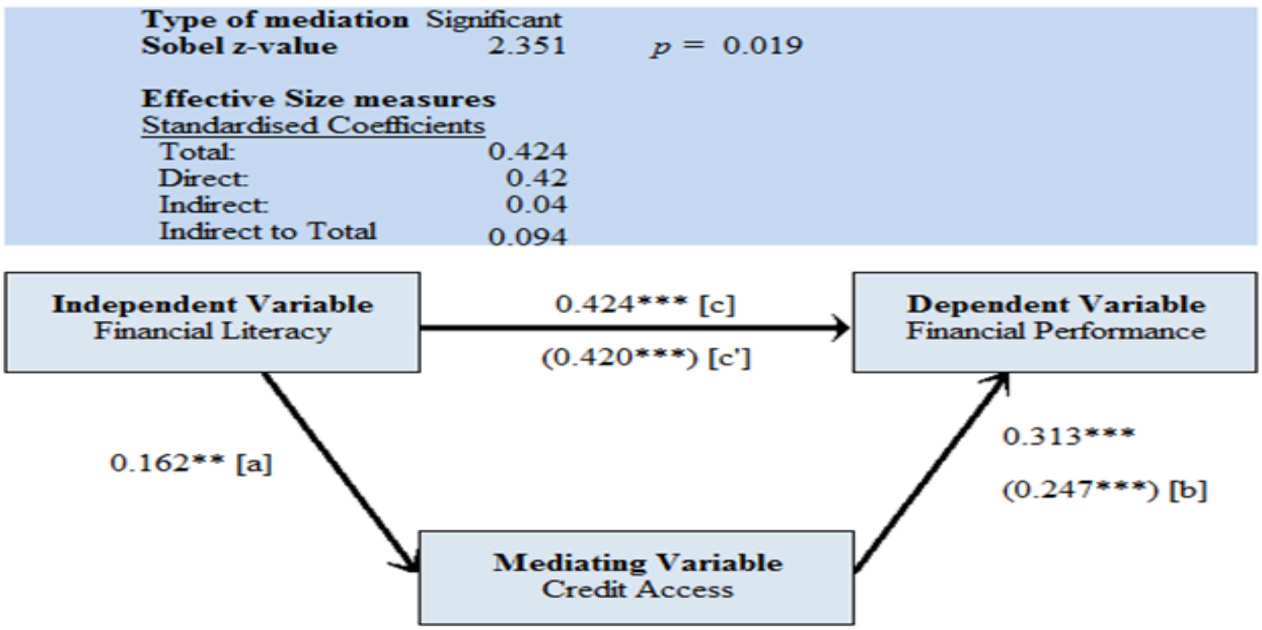

Figure 1: Mediation effect of credit access on the relationship between financial literacy and financial performance

Discussion of findings

Financial literacy and financial performance of Microenterprises

The study's findings show that there is a significant positive relationship between financial literacy and financial performance. This result also holds true for financial performance and all components of financial literacy, namely, financial knowledge, financial attitude and financial skills. This indicates that the level of financial literacy of micro-enterprises in terms of their knowledge, attitude and skills corresponds directly with the level of their financial performance. The finding implies that knowledge about the management of liquidity, credit access, and availability of financial services offers leverage, especially if this knowledge can be exploited. With such knowledge and the right financial attitude and skill, it becomes easier for owners and managers to make proper financial decisions necessary for improved financial performance. This is supported by Potrich, Kelmara and Wesley (2016), who posited that financial literacy has a significant role in decision-making regarding financial matters since Financial literacy represents a systematic effort aimed at the development of positive knowledge, behavior and attitude. Further, Umogbaimonica, Agwa and Asenge (2018) posited that a positive attitude regarding financial aspects such as, risk management, social influences, risk tolerance, and acquisition of financial skills, would lead to enhancement of the financial performance of micro and small enterprises, since such an attitude would lower costs and hence boost profitability. Additionally, Kamunge, Njeru and Tirimba (2014) argue that for these enterprises to reap the benefits of financial literacy, they should have the ability to keep proper records, separate business operations from personal operations, and manage cash flow and growth.

The mediating role of credit access on the effect of financial literacy on the financial performance of Micro-enterprises

The results indicated that credit access had a partial mediation effect on the relationship between financial literacy and financial performance. This result implies that part of the changes in financial performance arising from the changes in financial literacy is partly direct and partly indirect through credit access. The finding is in line with the proposition, that Adomako and Danso (2014) that possessing financial knowledge may not be adequate to translate into firm performance, and as such, the gap may be filled, according to Nahamya et al. (2013), by access to credit which serves to supplement income levels thereby enhancing profits. The findings indicate further that as the level of financial literacy of the micro-enterprises improves, the level of access to credit improves along, and in turn, the financial performance is enhanced. This finding tallies with Eniola and Entebang (2015, 2016, 2017), who noted that favourable credit terms are associated with positive attitudes of business managers to accessing that credit, thereby expanding the capital base and increasing business activity. Similarly, Mugori (2012) posits that favourable terms of accessing micro-credit, such as sizeable loan amounts and low-interest loans, are likely to push the financial performance of micro-enterprises upwards. In a nutshell, being financially literate in terms of knowledge, attitudes, and skills would enable the micro-enterprise to access credit, which will provide the capital needed to boost investment and ultimately boost profitability.

Conclusion and recommendations

Drawing the key lessons from the discussion section, we conclude that credit access is the conduit through which financial literacy partially improves financial performance. As an addition to the vast financial knowledge regarding micro-enterprises, this study brings out a new perspective on addressing the pending problems of limited access to financial resources by improving financial literacy. This would improve the creditworthiness and financial knowledge identified in this study as crucial for financial success. The level of financial literacy of the micro-enterprises and their level of access to credit were found to be key factors influencing their financial performance. Financial literacy is exhibited by the level of financial knowledge, attitudes and skills, and credit access is majorly underscored by the size of the loan. Therefore, if micro-enterprises are to register a boost in their profitability and an upsurge in their business activity, they should be encouraged to invest in practices that update them with financial knowledge, cultivate positive financial attitudes and develop their financial skills as well as position themselves to obtain credit. The micro-enterprises also ought to be meticulous regarding the loan amounts they acquire and ensure they use them for business purposes, bearing in mind the fact that these enterprises are usually sole proprietorships and as such, mixing personal matters with business matters is not a rarity.

Recommendation

This study highlights the key implications that form the basis of suggesting the important recommendations. The managers and owners of the micro-enterprises should endeavor to understand the procedures for obtaining credit from microfinance institutions, and they should be aware of the terms under which such loans are given. That is to say, the amount of microloan they can apply for, the interest rates charged as well as the repayment periods. This knowledge will enable them to access loans that meet their business needs much quicker for business growth. The managers and owners of the micro-enterprises should endeavor to work within their budget, as this would enable them to appropriately utilize their finances pertaining to daily operations and investment to improve business performance and achieve their targets in the long run. The owners of micro-enterprises should endeavor to prepare a budget to guide our operations and also be able to discuss money and financial matters which will refine their ability to make financial decisions which would translate into better financial performance. Since loan amounts were found to be key in terms of improving the financial performance of the micro-enterprises, the managers and or owners should acquire loan amounts that are adequate to expand and grow their micro-enterprise; however, they should also use the loan amounts according to the purposes for which they acquire them so that their business can grow.

References

Abubakar, H.A. (2015). Entrepreneurship development and Financial literacy in Africa. *World Journal of Entrepreneurship, Management & Sustainable Development, 11*(4), 281-294.

Adomako, S & Danso, A. (2014). Financial Literacy and Firm Performance: The Moderating Role of Financial Capital Availability and Resource Flexibility. *International Journal of Management and Organizational Studies, 3*(4), 1-5.

Adomako, S., Danso, A., & Ofori Damoah, J. (2016). The moderating influence of financial literacy on the relationship between access to finance and firm growth in Ghana. *Venture Capital, 18*(1), 43-61.

Agency for Accelerated Refional Development (AFARD), Audit report and funds accountability statement for the year ended 31, December 2016. Retrieved from https://www.afard.net/publications/annual-reports-and-audits/150-afard-audit-report-2016/file.

Ahlin, C., Gulesci, S., Madestam, A & Stryjan, M. (2020). Loan Contract Structure and Adverse Selection: Survey Evidence from Uganda, *Journal of Economic Behavior and Organization*, 172, 180–195.

Alhassan, E. A, Hoedoafia. M. A, Braimah, I. (2016), The Effects of Microcredit on Profitability and the Challenges on Women Owned SMEs: Evidence from Northern Ghana, *Journal of Entrepreneurship and Business Innovation*, 3(1), 29-47.

Amihud, Y., & Mendelson, H. (2000). The liquidity route to a lower cost of capital. *Journal of Applied Corporate Finance, 12*(4), 7-25.

Asiedu, E., Freeman, J. A., & Nti-Addae, A. (2012). Access to credit by small businesses: How relevant are race, ethnicity, and gender? *American Economic Review*, *102*(3), 532-37.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182.

Bazinzi, N., Nakabuye, Z., Akankunda, B., Agasha, E., & Kakande, A. R. (2013). Examining the levels of Financial Literacy and Outreach of Microfinance Institutions in Uganda. *Issues in Business Management and Economics 1* (7), 193-199.

Bongomin G.O.C., Munene J.C., Ntayi J.M., Malinga, C.A. (2017). Financial literacy in emerging economies: Do all components matter for financial inclusion of poor households in rural Uganda? *Managerial finance, 43*(12), 1310-1331.

Brixiová, Z. Kangoye, T. & Yogo, T. U. (2020). Access to finance among small and medium Sized enterprises and job creation in Africa, Structural Change and Economic Dynamics. IZA DP No. 13708.

Bruhn, M., & Zia, B. (2011). Stimulating managerial capital in emerging markets: the impact of business and financial literacy for young entrepreneurs. *World Bank Policy Research Working Paper*, (5642).

Clark, R.; Lusardi, A.; & Mitchell, O. S. (2017). Employee financial literacy and retirement plan behavior: a case study. *Economic Inquiry, 55*(1), 248–259.

Crepon, B., Devoto, F., Duo, E., & Pariente, W. (2015). Estimating the impact of credit on those who take it up: Evidence from a randomized experiment in morocco. *American Economic Journal: Applied Economics, 7*, 123-150.

District Commercial Support Services Project, Nebbi. (2016). Profiling Micro Small Medium Enterprises in Nebbi District FY 2015/2016.

Endris, E., & Kassegn, A (2022). The role of micro, small and medium enterprises (MSMEs) to the sustainable development of sub-Saharan Africa and its challenges: a systematic review of evidence from Ethiopia. *Journal of Innovation and Entrepreneurship*, *11*(1), 1-18.

Eniola, A. A., & Entebang, H. (2015). Government Policy and Performance of Small and Medium Business Management. *International Journal of Academic Research in Business and Social Sciences, 5*(2), 237-248.

Eniola, A., A., & Entebang, H. (2016). Financial Literacy and SME Firm Performance. *International Journal of Research Studies in Management, 5*(1), 31-43.

Eniola, A.A., & Entebang, H. (2017). SME Managers and Financial Literacy. *Global Business Review, 18*(3) 559-576.

Erlendsson, J. (2002). Value for money studies in higher education. retrieved May 19, 2022 from http://www.hi.is/w jones/eaps/wh vfmhe.htm.

Fatoki, O. (2014). The Financial Literacy of Microenterpreneurs in South Africa. *Journal of Social Science, 40*(2),151-158.

Fiala, N. (2018): "Returns to Microcredit, Cash Grants and Training for Male and Female Microentrepreneurs in Uganda," World Development, 105, 189–200.

Garg, N. & Singh, S. (2018). Financial literacy among youth. *International Journal of Social* Economics, 45(1), 173-186.

Hakim, M. S., Oktavianti, V., & Gunarta, I. K. (2018). Determining factors that contribute to financial literacy for small and medium enterprises. In *IOP Conference Series: Materials Science and Engineering*, *337*(1), 012064).

Kamunge, M. S., Njeru, A., & Tirimba, O. I. (2014). Factors Affecting the Performance of Small and Micro Enterprises in Limuru Town Market of Kiambu County, Kenya. *International Journal of Scientific and Research Publications (IJSRP), 4*, 1-20.

Karlan, D., Knight, R., & Udry, C. (2012). *Hoping to win, expected to lose: Theory and lessons on micro enterprise development* (No. w18325). National Bureau of Economic Research.

Kefela, G. T. (2010). Promoting access to finance by empowering consumers-Financial literacy in developing countries. *Educational research and reviews*, *5*(5), 205-212.

Kisaka, E. S. & Mwewa, M. N. (2014). Effects of access to credit, microsaving and training on growth of small and medium Enterprises in Kiambu County in Kenya. *Research journal of Finance and Accounting , 5* (7),1-8.

Krejcie, R.V., & Morgan, D.W. (1970). Determining Sample Size for Research Activities. *Education and Psychological Measurement, 30*, 607-610.

Liu, M., Hu, Y., Li, C., & Wang, S. (2022). The influence of financial knowledge on the credit behaviour of small and micro enterprises: the knowledge-based view. *Journal of Knowledge Management*, (ahead-of-print).

Loca, S. and Kola, F. (2013). Microfinance and Enterprises – Case of Albania. *European Scientific Journal, 9*(22), 122-143.

Lyons, A., Grable, J., & Zeng, T. (2017). Impacts of financial literacy on loan demand of financially excluded households in China. *Available at SSRN 3075003*.

Mader, P., & Sabrow, S. (2019). All myth and ceremony? Examining the causes and logic of the mission shift in microfinance from microenterprise credit to financial inclusion. In *Forum for social economics, 48*(1), 22-48. Routledge.

Madole, H. (2013). The Impact of Microfinance Credit on the Performance of SMEs in Tanzania: A Case Study of National Microfinance Bank- Morogoro. Master Thesis Submitted to Mzumbe University, Tanzania.

Meager, R. (2015). Understanding the impact of microcredit expansions: A bayesian hierarchical analysis of 7 randomized experiments. *arXiv preprint arXiv:1506.06669*.

Mpamizo, M. (2011). Credit and Sustainability of Micro-enterprises in Uganda: The Impact of Credit on Sustainability of Small and Micro-enterprises in Uganda, Kabarole District Paperback- May 2011.

Mugori, W. M. (2012). The Effects of Access to Microfinance on the Financial Performance of Small and Medium Enterprises owned by Youths in Nairobi. Master Thesis Submitted to the School of Business, University of Nairobi.

Nahamya, K. W., Ajanga, M., Omeke, M., Nasinyama, M., & Tumwine, N. (2013). The Impact of Microfinance Service Delivery on the Growth of SMEs in Uganda, International Journal of Economics, Commerce and Management, 3(5), 229-237.

Nebbi District Local Government. (2015). Development Plan Financial Year 2015/2016 – 2019/2020.

Neck, P. A. (1987). Small Enterprise Development: Policies and Programs, 2nd revised ed., Management Development Series No 14, International Labour Office, Geneva.

Ningsih, R. U. & Rita, M. R, (2010). Financial Attitudes and Family Communication on Pocket Money Spending: Judging from Gender Differences, Journal of Informatics & Business Institute, 8(2), 206-219.

Ngugi, V., W. & Kerongo, F. (2014). Effects of Micro-Financing on Growth of Small and Micro Enterprises in Mombasa County. *International Journal of Scientific Engineering and Research, 2*(4), 138-142

Nkundabanyanga, S. K., Kasozi, D., Nalukenge, I., & Tauringana, V. (2014). Lending terms, financial literacy and formal credit accessibility. *International Journal of Social Economics, 45*(1), 173-186.

Nkundabanyanga, S. K. (2016). Board governance, intellectual capital and firm performance: Importance of multiplicative effects. *Journal of Economic and Administrative Sciences, 32*(1), 20-45.

Nor Azlina, A., Salwana. H. & Jamiliah, S. (2015). Promoting Sustainability of Microfinance via Innovation Risks, Best Practices and Management Accounting Practices: International Accounting and Business Conference 2015. *Procedia Economics and Finance 31* (2015) 470-484.

Nuwagaba, A & Nzewi, H. (2013). Major Environmental Constraints on Growth of Micro and Small Enterprises in Uganda: A Survey of Selected Micro and Small Enterprises in Mbarara Municipality. *International Journal of Cooperative Studies 2*(1), 2013.

Odongo, J. (2014). Lending Terms and Financial Performance of Small Medium Enterprises in Uganda: Case of Soroti District. *Research Journal of Finance and Accounting, 5*(2),78-91.

Oluyombo, O.O. (2012). The Role of Cooperative Societies in Rural Finance: Evidence from Ogun State, Nigeria. PhD Thesis Submitted to the De Montfort University Leicester, UK.

Pankow, D (2003). Financial Values, attitudes and goals. North Dakota State University Extension, Publiccation FS-591.

Pimentel, R. C., Braga, R., & Casa Nova, S. P. C. (2005). Interação entre rentabilidade eliquidez: um estudo exploratório. Revista de Contabilidade do Mestrado em Ciências Contábeisda UERJ, *Rio de Janeiro – 10* (2), 83-98.

Potrich, A. C. G., Kelara, M. V., & Wesley, M.-D.-S. (2016). Development of a financial literacy model for university students. *Management Research Review, 39*(3), 356-376.

Quaye, D.N.O. (2011). The effect of micro finance institutions on the growth of small and medium scale enterprises (SMEs); A case study of selected SMEs in the Kumasi metropolis. A Master's thesis submitted to the Institute of Distance Learning, Kwame Nkrumah University of Science and Technology.

Reich, C. M., & Berman J., S. (2015). Do Financial Literacy Classes Help? An Experimental Assessment in a Low-income Population. *Journal of Social Service Research 41*, 193-203.

Ripain, N., Amirul, S. M., & Mail, R. (2017). Financial literacy and SMEs' potential entrepreneurs: The case of Malaysia. *Journal of Administrative and Business Studies, 3*(2) 60-68.

Scott, R.H., III (2010). Credit card ownership among American high school seniors: 1997-2008. *Journal of Family and Economic Issues, 31*(1), 151-160.

Shim, J. K. & Siegel, J. G. (2000) *Financial Management.*2nd edition; Barron's.

Sucuahi, W. (2013). Determinants of Financial Literacy of Micro Entrepreneurs in Davao City. *International Journal of Accounting Research, 1*(1), 45.

Uganda Bureau of Statistics. (2011). Report on the Census of Business Establishments, 2010/2011.

Umogbaimonica E., Agwa T. R. & Asenge L. E. (2018), Financial literacy and performance of small and medium scale enterprises in Benue state, Nigeria, *International Journal of Economics, Business and Management Research*. 2(4), 65-79.

URSB ANNUAL REPORT 2016-2017, https://ursb.go.ug/storage/publications/downloads/ursb-annual-report-2016-2017-1644252109.pdf

Wanambisi, N. A & Bwisa M. H (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. 3*(7), 56-67.

Ware, E. O. (2015), Liquidity Management and Its Effect on Profitability in a Tough Economy: (A Case of Companies Listed on the Ghana Stock Exchange). *International Journal of Research in Business Studies and Management, 2*(1), 34-66

Wilson, M., Wnuk, K., Silvander, J. & Gorscheck, T. (2018). A literature review on the Effectiveness and Effieciency of Business Modelling, *e-Informatics software engineering journal, 12*(1), 265-302.

World Bank (2014). *Global Financial Development Report 2014: Financial Inclusion,* Washington, DC., https://openknowledge.worldbank.org/handle/10986/16238.

Xu, N., Shi, J., Rong, Z., & Yuan, Y. (2020). Financial literacy and formal credit accessibility: Evidence from informal businesses in China. *Finance Research Letters*, *36*, 101327.

Ye, J., & Kulathunga, K. M. M. C. B. (2019). How does financial literacy promote sustainability in SMEs? A developing country perspective. *Sustainability*, *11*(10), 2990.