ISSN: 2658-8455
Volume 5, Issue 9 (2024), pp. 44-59.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

The influence of microcredit financing conditions on the financial performance of microenterprises in Burkina Faso

Pascal BOUGSSERE, *(PhD, Assistant Professor)*
Virtual University, Burkina Faso

Mamadou TOE, *(PhD, Professor)*
University Thomas SANKARA, Burkina Faso

Wend-kuuni Raïssa YERBANGA, *(PhD, MA)*
University Thomas SANKARA, Burkina Faso

Lawan tan Daouda TOE, *(PhD, Assistant Professor)*
University Thomas SANKARA, Burkina Faso

Correspondence address :	Virtual University Burkina Faso BP: 64 Ouagadougou Cité AN II Tel: +22671027778
Disclosure Statement :	Authors are not aware of any findings that might be perceived as affecting the objectivity of this study and they are responsible for any plagiarism in this paper.
Conflict of Interest :	The authors report no conflicts of interest.
Cite this article :	BOUGSSERE, P., TOE, M., YERBANGA, W.- kuuni R., & TOE, L. tan D. (2024). The influence of microcredit financing conditions on the financial performance of microenterprises in Burkina Faso. *International Journal of Accounting, Finance, Auditing, Management and Economics*, *5*(9), 44-59. https://doi.org/10.5281/zenodo.13622970
License	**This is an open access article under the CC BY-NC-ND license**

Received: July 25, 2024 *Accepted: August 31, 2024*

The influence of microcredit financing conditions on the financial performance of microenterprises in Burkina Faso

Abstract

This article examines the influence of microcredit financing conditions on the financial performance of microenterprises in Burkina Faso. To this end, an analysis was carried out using a linear model for a sample of 129 microenterprises based on panel data from 2017 to 2019. The results obtained using the Feasible Generalized Least Squares (FGLS) method show that the amount of microcredit and the repayment period have a positive impact on the financial performance of microenterprises. In contrast, the interest rate, proximity to microfinance institutions (MFIs) and the gender of the business owner negatively affect this performance. These results emphasize that in the Burkinabe context, proximity to MFIs does not guarantee the profitability of microenterprises, but rather benefits MFIs in repaying loans and expanding their portfolio. They also indicate that women-led micro-enterprises are less profitable because they have difficulties accessing credit, particularly due to a lack of collateral. Conversely, businesses run by educated owners have better financial performance.

Keywords: Financing conditions, microcredit, microenterprise, financial performance
JEL classifications: G32, G21, J54, L25
Paper type: Empirical research

ISSN: 2658-8455
Volume 5, Issue 9 (2024), pp. 44-59.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

1. Introduction

As part of its economic and social development policy, the government of Burkina Faso has prioritized the self-reliance of its population, particularly its youth, by promoting private initiative and participatory development. To achieve this goal, micro-enterprises have been identified as a key driver of development due to their significant impact on job creation across the economy.

However, micro-enterprises, like small and medium-sized enterprises (SMEs), have difficulties in accessing finance for their business development, despite the existence of microfinance institutions (MFIs). In Burkina Faso, there are currently around 135 MFIs throughout the country. These institutions aim to provide credit to borrowers who are excluded from the traditional financial market, especially micro-enterprises, and should therefore facilitate access to finance for these companies.

The difficulties that micro-enterprises have in accessing microcredit are mainly due to the financing conditions. Studies show that these businesses are faced with increasingly complex financing conditions imposed by MFIs, which they find difficult to meet (Kaoutoing et al., 2017). In particular, research suggests that microenterprises lack adequate collateral to secure microloans (Ciguino & Paul, 2016). They also face high interest rates (Acclassato, 2008), low microloan amounts (Koloma, 2010; Lelart, 2006) and short repayment periods (Koloma, 2010; Ngendahayo, 2008; Simen & Diouf, 2014). These conditions pose significant constraints for microenterprises, which are often unable to meet these requirements (Awunyo-Vitor et al., 2014; Jaffee & Russell, 1976).

Some authors such as Zaman, (2000), Honlonkou et al, (2001), Lelart, (2006), Ciguino & Paul, (2016) consider that the financing conditions for microcredit can have a significant impact on the profitability of microenterprises. As emphasized by Fouillet et al (2007), these constraints related to microcredit financing conditions can even lead to a deterioration of the financial situation, a significant pressure on cash flow and even the disappearance of microenterprises. According to Petersen & Rajan (1994), poor financing conditions for microcredit hinder the growth of microenterprises. However, very few studies have focused primarily on analyzing the impact of microcredit financing conditions on the financial performance of microenterprises. In fact, most studies focus on the relationship between access to microcredit and microenterprise performance Koloma (2010). To our knowledge, microcredit financing conditions have been little studied by researchers, although this research is essential for understanding the influence of these conditions on microenterprise performance and growth difficulties.

The objective of this research is to analyze the influence of microcredit financing conditions on the financial performance of microenterprises in Burkina Faso. Our research contributes to the literature in two ways: First, our study focuses on the financing conditions of microcredit, an area that has received little attention from researchers. Since financing conditions affect firm growth, analyzing their impact on microenterprise performance allows us to examine the relationship between financing conditions and firm profitability. Second, our study focuses on microenterprises in Burkina Faso. To our knowledge, there are no studies that relate these two concepts in the Burkinabè context. Examining the relationship between microcredit conditions and microenterprise performance could allow microfinance institutions and regulators to better understand the impact of microcredit conditions on microenterprise profitability, as financing microenterprises in Burkina Faso remains difficult and appropriate solutions need to be found. In addition, the study can show which microcredit financing conditions are conducive to microenterprise performance. It also helps to identify the conditions of microcredit financing that are conducive to microenterprise performance. This can help MFIs and policy makers develop more effective strategies and programs to support microenterprise development.

To better understand how microcredit financing conditions affect the financial performance of microenterprises, this study draws on the theory of asymmetric information. The theory examines the dynamics between the lender (MFI) and the microenterprises that agree to repay the loan and pay interest according to the terms of a previously signed contract. Financial institutions often tighten financing terms due to significant information asymmetry, which poses a risk when lending to high-risk borrowers, also known as "bad borrowers".
This study examines the influence of microcredit financing conditions on the financial performance of microenterprises. A linear panel data model estimated using the feasible generalized least squares (FGLS) method was used to analyze data from 2017-2019.
The article is divided into three sections. First, we provide an overview of the existing literature on the relationship between microcredit financing conditions and the financial performance of microenterprises. Second, we describe the methodology used. Finally, we present the results obtained.

2. Literature review

The financing of micro-enterprises is linked to various conditions. Empirical studies show the connection between the financing conditions, such as the geographical proximity between the microenterprise and the lending IMF, the amount of the microloan, the repayment periods, the interest rates and the financial performance of microenterprises. The theory of asymmetric information can explain this relationship.

2.1. Theory of asymmetric information and tightening of microcredit financing conditions

In the microcredit market, microfinance institutions (MFIs) are confronted with an information asymmetry, i.e. they have insufficient knowledge of the risks associated with the loans, while borrowers are better able to assess the prospects of success of their microenterprises. This discrepancy leads to a situation in which the MFIs are uncertain about the risks. As a precautionary measure, they may therefore tighten financing conditions to protect themselves from the risk associated with borrowers who are considered unreliable and commonly referred to as "bad borrowers". However, this approach may also deter "good borrowers" who deserve more favorable financing terms.
Since the demand for loans from risky borrowers is less sensitive to interest rate fluctuations, financial institutions unintentionally select the riskiest borrowers. This forces them to tighten their financing conditions and raise interest rates. However, there is a threshold beyond which the increase in risk outweighs the impact of an interest rate increase. Under these circumstances, institutions prefer not to raise interest rates and instead tighten financing conditions, leading to a rationing of available microcredit (Stiglitz & Weiss, 1981).
Moreover, managers of micro-enterprises often tend to conceal the true state of their results in order to minimize their repayment obligations. This tendency leads lenders to set up control or monitoring mechanisms to verify and ensure the accuracy of financial statements and the financial strength to recover the borrowed funds if necessary. Given this information asymmetry and the risk of opportunism on the part of micro-enterprises, MFIs generally resort to stricter financing conditions. The lack of trust resulting from the low reliability and opacity of accounting information systems, centralized management by the owner-manager and high monitoring costs (especially for micro-enterprises) in the event of disputes are among the main factors that lead MFIs to adopt a demanding approach. This situation leads MFI managers to tighten financing conditions for microcredit and limit microenterprises' access to available microcredit.

ISSN: 2658-8455
Volume 5, Issue 9 (2024), pp. 44-59.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

2.2. Relationship between microcredit agents' proximity and microenterprises financial performance

The concept of "proximity" is fundamental to microfinance and is often referred to by researchers as "proximity finance". Originally, proximity was introduced in the field of microfinance as a strategy to reduce the risk associated with asymmetric information (Lelart, 2008; Mayoukou, 2000). However, a study conducted by Essomba et al. (2013) found that loan officers also consider field visits to be essential. During the repayment phase of the microloan, loan officers conduct visits tailored to the perceived risk. The purpose of these visits is to verify that the funds are being used for the intended purpose, i.e. to finance the microenterprise's working capital needs and support its growth.

Certain microenterprise activities may require commercial support. Microcredit intermediaries can offer marketing advice. Honlonkou et al. (2006) also describe personalized advice, referred to as dynamic incentives, which may include advice on the manager's family life and business development. Bekolo & Onomo (2008) argue that sharing common values that reflect cultural closeness strengthens relationships and promotes trust between the parties. The authors also emphasize that microcredit officer visits are not limited to meeting repayment deadlines, but also include ongoing management training to increase microenterprise profitability. These visits enable the microcredit officers to monitor the financed projects and train the owners in a timely manner to improve the financial performance of their microenterprises.

The analyzes show that the environmental changes have prompted microcredit intermediaries to expand their role beyond lending. Previously, their role was limited to mitigating the risks of adverse selection and moral hazard between MFIs and micro-enterprises. Now, however, they contribute to the success of micro-enterprises by closely monitoring their post-loan activities. Moreover, if the performance indicators do not point to favorable growth prospects for the enterprise, the microcredit officer becomes more involved. Compliance with the contractual obligations under the microcredit depends on the performance of the microenterprise (Essomba et al., 2013). According to Eniola & Entebang (2015), the distance between the borrower and the bank determines the transaction costs. They explain that when a bank and borrower are geographically close, it encourages more frequent face-to-face interactions, which in turn strengthens the relationship between them. Di Maggio & Yao (2021) document that the lack of relationship with borrowers in automated lending processes can lead to moral hazard, prompting lenders to raise interest rates. According to Kirschenmann (2016) strong lender-borrower relationships play a crucial role in mitigating credit rationing for small and opaque firms. Therefore, a shorter distance between the lender and borrower allows for the collection of a greater amount of soft information needed for effective client screening and credit monitoring (Mori & Ng'urah, 2020) which can improve the borrower's financial performance. We posit the following hypothesis:

H1: The proximity of microenterprises to the MFI has a positive influence on their financial performance

2.3. Relationship between microcredit amount and financial performance of microenterprises

The profitability of microenterprises is influenced by the amount of credit granted. Koloma, (2010) argues that the amount of microcredit is not sufficient to generate high revenues needed to sustainably improve financial performance. Lelart, (2006) notes that microcredit recipients usually receive only modest amounts, which can make it difficult for them to engage in production or processing activities that would significantly improve the financial performance of their microenterprises. Research has shown that there is a minimum microcredit threshold that must be met for a microenterprise to be successful. A study conducted by Zaman (2000) in

Bangladesh found that microenterprises that received a loan of more than 10,000 taka (about 200 dollars) showed a more significant improvement in their performance and profitability than those that did not meet this threshold. This observation was confirmed by a study conducted by Koloma (2010) in Mali, which found a sudden or gradual emergence of negative effects of loan size on the performance of borrowing firms. The study suggests that a credit threshold must be reached for the impact on microenterprise performance to be significant.

In general, the limited amount of microcredit available hampers the ability of microenterprises to make profitable investments that can improve their financial performance. The modest loan amounts are often used for consumption rather than investment. In order to have a significant impact on the financial performance of microenterprises, a certain threshold in terms of the amount of microcredit must be reached.

Previous studies have documented a positive relationship between microenterprise performance and the amount of microcredit. Moussa (2020) showed that the amount of microcredit has a positive and significant impact on the turnover and net profit of Lebanese SMEs. Ramli & Zain (2023), Ciguino & Paul (2023), Novignon, (2023) and Semegn & Bishnoi, (2021) confirm these results for microenterprises from Malaysia, Haiti, Jamaica and Ethiopia. Based on these analyzes, we formulate the following hypothesis:

H2: The amount of microcredit has a positive influence on the financial performance of microenterprises

2.4. Relationship between microcredit repayment periods and financial performance

Microfinance institutions (MFIs) impose short repayment periods and high payment frequencies on microenterprises (Ngendahayo, 2008). These repayment periods offer several advantages to MFIs. First, they enable early identification of potential problems among borrowers and encourage timely intervention before the project is jeopardized. They also improve the MFI's liquidity and confirm that the borrower has alternative sources of income besides the project. In addition, the automatic repayment immediately after approval of the microloan helps to ensure that the funds are not misused. This process also enables the early identification of defaulting borrowers, who notify the lender.

However, microenterprises face major challenges in accessing microcredit without a grace period. Microenterprises that do not generate sufficient profits from their activities, whose income is subject to strong seasonal fluctuations and where repayment is often delayed, have to contend with considerable costs (Ngendahayo, 2008). Field et al. (2013), based on field experiments in India in a context similar to sub-Saharan Africa, characterized by a dominant informal sector, compared the impact of a conventional contract that provided for immediate repayment of the microcredit after disbursement with a contract that provided for a two-month grace period. The study found that the grace period contract stimulated investment activity and improved the financial performance of microenterprises receiving microloans. Furthermore, the results suggest that contracts that require early repayment discourage investment and thus limit the potential impact of microcredit on the financial performance of microenterprises.

Ciguino & Paul (2016) investigated the correlation between the repayment period of microloans and the financial performance of microenterprises. The study focused on 62 microenterprises in the West Department of Haiti and found that restrictions related to microcreditthe repayment periods of microcredit hinder the operation of microenterprises and thus affect their financial performance. In a more recent study, Ciguino & Paul (2023) examined microfinance conditions and financial literacy in financial performance in Haiti based on an area-wide sample of 544 micro, small and medium enterprises (MSMEs) in thirteen municipalities in Haiti. Their study shows a positive and significant impact of repayment duration on financial performance. Banerjee et al. (2015) recommend that microcredit institutions should be more innovative in

ISSN: 2658-8455
Volume 5, Issue 9 (2024), pp. 44-59.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

supporting beneficiary microenterprises by offering loan models with repayment periods that are better aligned with borrowers' cash flows. Beaman et al. (2013) also point out that the inclusion of grace periods in loans leads to an increase in investment and revenue for microenterprises, helping to improve their financial performance.

After conducting these analyzes, it is evident that loan programs that offer shorter repayment periods and reduce a portion of the amount lent increase the cost-effectiveness of loans for MFIs. This is because the net amount lent is lower than the amount used to calculate interest payments. However, for micro-enterprises, these lending schemes lead to an increase in the effective interest rate. Based on these results, we formulate the following hypothesis:

H3: The repayment periods of the microcredit have a positive influence on the financial performance of microenterprises

2.5 Relationship between microcredit interest rates and financial performance of microenterprises

Empirical studies have examined the relationship between microcredit interest rates and the financial health of microenterprises. Koloma (2010) notes that the goal of MFIs is to recover the loan funds quickly while covering the risks associated with the loan. For micro-enterprises, high interest rates lead to financial pressure on those who are struggling, which hinders investment and financial performance.

Morduch (1999) argues, however, that the cost of loans rationed by MFIs is less significant. He assumes that the demand for loans for population groups that were previously rationed is not very sensitive to the interest rate. Under these circumstances, the demand for credit is no longer determined solely by the high cost of credit in the form of the effective interest rate. This observation can be partly explained by the persistent demand for high-cost loans within MFIs. It is normal for the high risks associated with micro-enterprises and the costs associated with small loan amounts to be offset by high interest rates. Acclassato (2008) agrees and points out that access to credit remains the biggest problem for micro-enterprises. In other words, the interest rate seems to be acceptable to the beneficiaries because this group has not had access to finance for a long time. Moreover, it is in the interest of micro-enterprises to continue paying high interest rates in order to continue benefiting from long-term loans.

In contrast to the aforementioned authors, some studies have shown that the banking practices of MFIs do not respect usury limits (Montalieu, 2002; Ouattara, 2003). Therefore, researchers have relativized the impact of microcredit on the financial performance of microenterprises in developing countries (Buckley, 1997; Rogaly, 1996). Microenterprises continue to struggle with financial difficulties even after they have received loans from MFIs for several years.

According to the theory of financial leverage, the financial health of a company depends on sufficient profitability to exceed the cost of capital. There is a positive impact on profitability when the return on financed investments exceeds the cost of financing. Conversely, profitability decreases if the financing costs exceed the return. It is important to note that flexible and appropriate financing conditions can improve the financial performance of a microenterprise. However, if these conditions tighten, they can weaken the company's solvency and jeopardize its operational continuity.

Previous studies have found mixed results on the relationship between interest rates and the financial performance of microenterprises. Some authors have found a negative relationship (Amsi et al., 2017; Beldine et al., 2021), while others show a positive or no influence (Ciguino & Paul, 2016; Longo, 2023) between these two variables. In line with financial leverage theory and given the higher interest rates faced by microenterprises in our context, we hypothesize that

H4: The microcredit interest rate has a negative influence on the financial performance of microenterprises

3. Methodology

This study examines the relationship between the financing conditions for microcredit and the financial performance of microenterprises. The sample consists of companies in Burkina Faso with less than ten employees and a turnover of no more than fifteen million (15,000,000) CFA francs, according to the definition of a microenterprise in the SME.

3.1. Study data

Our empirical study is based on data from 129 microenterprise borrowers observed between 2017 and 2019. The data were extracted from the business files kept by the microfinance institutions when the microcredit was granted. The files come from MFIs operating in Burkina Faso that responded positively to our request for information. The business file contains information about the microenterprise receiving the loan and the conditions of the loan.
We examined 129 loan files from MFIs. The microenterprises took out consecutive loans between 2017 and 2019, which matured every year. However, we were not able to extend our observation beyond this reference period. This is because it is rare for microenterprises to take out consecutive loans beyond these three years when collecting information from company files.

3.2. Model variables

The empirical model comprises three types of variables: dependent, independent and control variables.

3.2.1. Dependent variable

The dependent variable in our model is financial performance (PERF), which we evaluate using two main measures: the net profit at the end of the loan cycle (NP) and the microenterprise's Return on Equity (ROE). The selection of net profit as an indicator is based on its ability to assess the operational efficiency of the company. This is done by comparing total revenues with expenses, which include cost of goods sold, administrative costs and interest. To provide a more comprehensive assessment of financial performance, we also use return on equity, a relative measure. This approach provides a comprehensive perspective on the financial performance of the microenterprise by considering both overall profitability and return on equity.

3.2.2. Independent variables

The variables of interest in the model are the amount of the loan, the repayment period, the interest rate and the proximity of the MFI to the microenterprise.
The Level of the Loan Amount (LLA): For most microfinance institutions in Burkina Faso, this is between 25,000 and 2,000,000 CFA francs for the first loan. The term of the loan, the perceived risk and the type of activity of the microenterprise are all factors that affect the loan variations. Previous research shows that the amount of microcredit has a positive impact on microenterprise performance (Amsi et al., 2017; Ciguino & Paul, 2016; Semegn & Bishnoi, 2021).
Repayment period (RP): it refers to the time given to fully repay the loan, which can range from 4 to 20 months. Previous studies have shown that a longer repayment period has a positive effect on the financial performance of borrowing microenterprises (Ciguino & Paul, 2016; Field et al., 2013).
The interest rate (INT): it determines the return on the capital lent to microenterprises. It is a monthly rate applied to the current loan amount. The interest rate is an indicator that has a negative impact on the financial performance of microenterprises (Amsi et al., 2017). Higher interest rates lead to higher interest charges on loans, reducing the profitability of microenterprises.

ISSN: 2658-8455
Volume 5, Issue 9 (2024), pp. 44-59.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

Proximity (PROX): the distance between the MFI and the microenterprise is used as a measure. A microenterprise is considered close to the MFI if it is less than three (03) kilometers away. Proximity is assessed using a binary variable that takes the value 1 if the microenterprise is close to the MFI and 0 otherwise. This mechanism allows MFI agents to support the microenterprises to improve their financial performance (Lelart, 2008). We expected a positive correlation between proximity and the microenterprise's financial performance.

3.2.3. Control variables

Human capital (HC): human capital is measured by the level of education of the owner/manager of the microenterprise. This variable takes the value 0 for non-literate owner-managers and 1 for literate owner-managers. An owner-manager is considered literate if he/she can read and write. We expect a positive correlation between human capital and financial performance. According to human capital theory (Becker, 1964; Schultz, 1961), micro-entrepreneurs with a higher level of education are more likely to be successful and increase their profits.

Gender (GD): GD indicates the gender of the owner/manager of the microenterprise, with a value of 1 for female and 0 for male. There are contradictory results in the literature regarding the relationship between the gender of the owner and the financial performance of the microenterprise. Rahman (1999) suggests that women, as managers of their households, are better able to effectively manage the microenterprises they run. However, Robb (2002) argues that women-managed businesses generally perform worse than those managed by men. Therefore, it is difficult to assume a priori that women-led microenterprises consistently perform better than male-led ones and vice versa. As a result, the influence of gender on the financial performance of microenterprises must be determined in the context of this study.

3.3. The analysis model

We build on previous research by Ba (2010), Ciguino & Paul (2016), adopting the following model of analysis for our study:

$$PERF_{it} = \beta_0 + X_{it}\beta + Z_{it}\lambda + \varepsilon_{it} \quad (1)$$

In this model, PERF represents the financial performance of the microenterprise, X represents the vector of independent variables that represent the microcredit financing conditions, Z represents the vector of control variables, β and λ represent the correlation coefficients, and Ɛ represents the error term. The following sections present all the variables of the empirical model.

The model to be estimated is a linear panel model written as follows:

$$ln\,(NP_{it+1}) = \beta_0 + \beta_1 ln\,(LLA_{it}) + \beta_2 RP_{it} + \beta_3 INT_{it} + \beta_4 PROX_{it} + \lambda_1 HC_{it} + \lambda_2 GD_{it} + \varepsilon_{it} \quad (2)$$

$$ROE_{it+1} = \beta_0 + \beta_1 ln\,(LLA_{it}) + \beta_2 RP_{it} + \beta_3 INT_{it} + \beta_4 PROX_{it} + \lambda_1 HC_{it} + \lambda_2 GD_{it} + \varepsilon_{it} \quad (3)$$

To estimate these two models, we used Parks' (1967) feasible generalized least squares (FGLS) method. This method enables us to address autocorrelation and heteroscedasticity of the errors simultaneously.

4. Results and discussion

4.1. Descriptive statistics

The descriptive data presented in Table 1 show that the average net profit of the microenterprises in the sample was FCFA 225,782 in the period 2017-2019. In addition, the average repayment period for microloans was 8 months, with a standard deviation of 2.54. This result suggests that MFIs provide microenterprises with a limited time to utilize the borrowed

funds before repayment is due. It is also important to note that interest rates for microloans are generally higher than those of conventional banks, with an average interest rate of 13.91% for an average microloan amount of 363,630 CFA francs.
Of the 129 micro-entrepreneurs in the sample, 40.31% can read and write, 67.44% of whom are women. In addition, 61.24% of the microenterprises are located in close proximity to the lending MFI.

Table 1: ***Descriptive statistics for the explanatory variables in the empirical model***

Variables	**Average**	**Standard deviations**	**Minimum**	**Maximum**
Net profit	225,782.3	407,011.9	12,500	3,710,000
Repayment period (month)	8.074935	2.548405	4	20
Interest rates	13.91214	4.034506	8	20
Level of credit amount	363,630.5	418,229.3	25,000	5,000,000
Educational level of the owner-manager of the microenterprise	Literate (%)		Non-literate (%)	
	40.31		59.69	
Gender of the owner-manager of the micro-business	Men (%)		Women (%)	
	32.56		67.44	
Proximity	Yes		No	
	61.24		38.76	

This table presents descriptive statistics for the variables of interest and controls on a sample of 129 micro-businesses from the 2017-2019 period.

Source: Authors

4.2. Mean comparison test

Table 2 shows the results of the mean comparison tests. It is clear that micro-enterprises run by literate owners achieved significantly higher net profits on average in the three reference years than enterprises run by non-literate owners.

Table 2: Comparative analysis of average net profit according to owner-manager's level of education

Years	Literate owner-managers *N=52	Non-literate owner-managers *N=77	t	Pr(T> t)
2017	332,953	50,000	-7.8327	0.0000
2018	647,753.5	62,735.71	-6.7318	0.0000
2019	401,971.7	88,283.12	-6.7634	0.0000

This table shows the results of the comparison tests of the average net profit according to the level of education of the owner-manager over the period 2017-2019.
**N = Number of observations*

Source: Authors

Gender can influence the performance of microenterprises. The results of the mean comparison in Table 3 show that the amounts of microloans granted to female owners are significantly lower than the amounts granted to men from 2017 to 2019. In 2019, male owners received an average of 533,333.3 FCFA, while female owners received an average of 263,793.1 FCFA.
Furthermore, the data shows that micro-enterprises owned and managed by men were more profitable than those owned and managed by women during the three-year period observed.

Table 3: Comparison of average microcredit amounts and net profit by owner-manager gender

Years	Microcredit amount				Net profit			
	Men *N = 42	Women *N = 87	t	Pr(T>t)	Men *N = 42	Women *N = 87	t	Pr(T>t)
2017	226,785.7	164,942.5	2.3581	0.0199	242,885.7	126,004.4	2.6040	0.0103
2018	422,023.8	213,672.4	4.0669	0.0001	572,263.1	166,422.8	4.0724	0.0001
2019	533,333.3	263,793.1	4.4667	0.0000	387,662.6	131,247.1	4.2870	0.0000

This table presents the results of tests comparing the amount of microcredit and net profit based on the gender of the owner-manager from 2017 to 2019.
**N = Number of observations*

Source: Authors

ISSN: 2658-8455
Volume 5, Issue 9 (2024), pp. 44-59.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

4.3. Regression results

The results of the econometric model show that the financial performance of microenterprises in Burkina Faso is significantly explained by the amount of the microloan, the repayment period, the interest rate and the proximity to MFIs.

The study found that there is a positive correlation between the amount of microcredit received by the owner-manager and the financial performance of the microenterprise, particularly in terms of net profit and return on equity. The results were statistically significant at the 1% threshold. In other words, a 1% increase in the amount of microcredit leads to a 0.684% increase in the microenterprise's net profit and a 0.189% increase in its return on equity. The results indicate that a higher amount of microcredit makes it easier for microenterprises to make necessary investments, which leads to improved profitability.

Table 4: Estimation Results for Models 1 and 2

FGLS Estimator	Coefficients and Z-statistics	
	Model 1: Log (NP_{it+1})	**Model 2: ROE_{it+1}**
Log credit level	0.684*** (44.10)	0.189*** (10.24)
Repayment period	0.0346*** (4.19)	0.0341*** (3.94)
Interest rates	-0.0407*** (-10.15)	-0.0305*** (-6.24)
Proximity	-0.0488* (-1.73)	-0.107*** (-3.77)
Human capital of the owner-manager	1.325*** (13.14)	0.0650* (1.81)
Gender of owner-manager	-0.239*** (-5.52)	-0.124*** (-4.26)
Constant	2.951*** (17.45)	3.186*** (14.58)
Number of observations	387	387
Wald chi2 statistic	5,457.73	264.75
Prob > chi2	0.0000	0.0000

*This table presents the results of the estimation tests for the models that explain the influence of microcredit financing conditions on the financial performance of microenterprises from 2017 to 2019. Log (NPit+1) represents the neperian logarithm of the net profit of company i in year n+1, and ROE represents the return on equity. of company i in year n+1. * and ***, significance at 10% and 1% respectively.*

Source: Authors

In addition, the duration of microloan repayment has a positive and significant impact on the financial performance of microenterprises. In particular, there is a positive correlation of 0.0346 and 0.0341 between the loan repayment duration and the microenterprise's net profit and return on equity, respectively. The results indicate that extending the repayment period of microloans leads to an improvement in the financial performance of microenterprises. In other words, microenterprises can achieve a higher return on borrowed capital over a longer period of time.

The interest rate of microloans, unlike the repayment period, has a negative and significant impact on the profitability of microenterprises. This means that higher interest rates lead to lower profitability of these micro-enterprises. The profitability achieved through microcredit is lower than its cost, which has an unfavorable impact on the results of microenterprises.

Similarly, the microenterprise's net profit and return on equity are negatively affected by proximity to the MFI, with a negative correlation of 0.107 at the 1% threshold. This indicates that the profitability of the microenterprise decreases with increasing proximity to the MFI. This result is in contrast to our expectations, as proximity to the MFI should lead to an improvement in the profitability of the microenterprise.

The financial performance of microenterprises in Burkina Faso is significantly explained by the control variables. In particular, the gender of the owner/manager has a negative influence on the financial performance of the microenterprise, as shown by the model estimates, which show a negative correlation of 0.239 and 0.124 with the net profit and return on equity of the microenterprise at the 1% threshold. Accordingly, microenterprises run by women with access to microcredit are less profitable than those run by men.

Regarding the educational level of the microenterprise owner, the results show that it has a positive influence on the profitability of microenterprises. The estimates show a positive correlation of 1.325 and 0.0650 with net profit and return on equity respectively at 1% threshold. This indicates that educated owner-managers manage their microenterprises more effectively, leading to improved profitability.

To summarize, the amount of the microloan, the repayment period and the education level of the business owner have a positive and significant impact on the profitability of microenterprises as measured by net profit and return on equity. On the other hand, interest rate, proximity to the MFI and gender of the business owner had a negative and significant effect on the profitability of microenterprises in Burkina Faso. These results could be explained by the high interest rates, the short repayment periods and the difficulties in accessing finance for women. In Burkina Faso, the rationing of credit means that micro-enterprises attach little importance to the interest rate, even though it affects their profitability. The high effective global interest rates for microcredit thus reduce the profitability of microenterprises. In addition, rationing leads to the funds being used for other purposes, which is detrimental to the microenterprises' profitability goals. Added to this is the short repayment period of eight (08) months on average, which forces owners to repay the loan in full before they have even had a chance to make it profitable, especially if it is a seasonal business. In addition, lack of material and financial collateral and gender stereotypes make it difficult for women to access finance and grow their businesses.

4.4. Discussion

The results show a positive correlation between the amount of microloans and net profit and return on equity. This finding confirms the results of previous studies by Honlonkou et al, (2001), Zaman (2000), Hofmann & Kamala, (2003), Lelart (2006), Amsi et al, (2017) and Semegn & Bishnoi (2021), which indicate that higher amounts of microcredit enable microenterprises to make their activities more profitable. The relationship between microcredit and the financial performance of microenterprises can be explained by the amount of credit granted. Larger amounts of microcredit enable microenterprises to finance the activities for which the loan was requested, which leads to an improvement in financial performance. Conversely, smaller amounts of microcredit can encourage consumption or the diversion of funds for other purposes, leading to a decrease in financial performance due to the additional costs incurred (Koloma, 2010).

The repayment period for microcredit plays a stimulating role in increasing the profitability of microenterprises in Burkina Faso. This finding is in line with previous studies by Field et al, (2013), Karlan & Valdivia (2011), Banerjee et al, (2015), Beaman et al, (2013), Ciguino & Paul (2016), which have shown that the introduction of a grace period or the extension of repayment periods can facilitate income generation of beneficiaries. Microenterprises can increase their profits and repay loans more easily with the help of extended repayment periods.

The results of the study on interest rates confirm the findings of Amsi et al, (2017), Montalieu, (2002), Buckley, (1997) and Rogaly (1996), which show that high interest rates negatively affect the performance of microenterprises. Angoue Engozogo (2011) and Koloma, (2010) have conducted studies in Gabon and Mali respectively that confirm this. Interest rates on microcredit

ISSN: 2658-8455
Volume 5, Issue 9 (2024), pp. 44-59.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

are high and generate costs that exceed the profitability of investments made with microcredit. This leads to a decline in financial profitability.

The results of the study indicate that the proximity of micro-enterprises to the MFI has a negative impact on their net profit. This is in contrast to the findings of Bekolo & Onomo (2008) and Essomba et al. (2013), who found that microenterprises make more profit when they are in close proximity to MFIs. Although proximity should normally allow microenterprise owners to benefit from MFI advice and monitoring to improve their performance, it has a negative effect in our context. Aggressive canvassing can lead to microenterprises getting into debt without having a clear plan for loan utilization. Some MFIs use public relations to expand their loan portfolio by actively seeking new clients. Furthermore, proximity to MFIs is not necessarily a guarantee of support in managing and advising microenterprise projects. In summary, MFIs use their proximity to microenterprises to prevent the misappropriation of borrowed funds, ensure the repayment of microloans and sometimes even encourage new borrowing.

As far as the control variables are concerned, our results on the educational level of owner-managers are in line with our expectations. As expected, the level of education of owner-managers of microenterprises has a positive and significant impact on their financial performance. Schultz (1961) and Becker (1964) developed the human capital theory, which states that an owner-manager with education can manage his business better than one without. It can therefore be assumed that an educated owner-manager has a more profitable company than an uneducated one.

The results regarding the gender of owner-managers contradict those of Rahman (1999), who found that women in Bangladesh run businesses better than men, which should logically lead to more profitable businesses. However, our results are consistent with those of Robb (2002), who found in a sample of American companies that companies run by men performed better than those run by women. The results can be explained by the fact that in the Burkinabe context, women have less access to finance than men due to a lack of collateral.

5. Conclusion

This study examines the influence of microcredit financing conditions on the financial performance of microenterprises in Burkina Faso. It joins the ranks of empirical studies that deal with the topic of SME financing in general and specifically with the financing conditions of micro-enterprises. It is one of the few empirical studies that have looked at the conditions for microcredit financing for microenterprises in Burkina Faso. This study contributes to the scientific literature on the role of microcredit financing for the development of microenterprises and thus also for the socio-economic development of the beneficiary population groups.

In this study, linear models are applied to panel data and estimates are made using the generalized least squares (FGLS) method for the period 2017-2019. The study shows that various factors significantly influence the financial performance of microenterprises in Burkina Faso. These factors include the amount of the microloan, the repayment period of the microloan, the interest rate, the proximity to MFIs, the level of education and the gender of the owner/manager of the microenterprise.

By making the financing conditions for microcredit more flexible, microfinance institutions (MFIs) could improve the financial performance of microenterprises. To achieve this, MFIs can receive support from relevant government structures, such as microenterprise guarantee funds and microenterprise financing support and advisory structures. This support can take the form of microcredit sponsorship or technical assistance for risk management provided to MFIs by an independent structure. Our study is limited to the context of Burkina Faso. Future work could focus on a larger sample at the sub-regional level to illustrate the similarities and differences in financing conditions in sub-Saharan Africa.

References

(1). Acclassato, D. H. (2008). Les plafonnements de taux d'intérêt en microfinance servent-ils réellement les pauvres et petits opérateurs économiques ? Mondes En Developpement, 36(1), 93–106. https://doi.org/10.3917/med.141.0093

(2). Amsi, F., Ngare, P., Imo, P., & Gachie, M. (2017). Effect of microfinance credit on SMEs financial performance in Kenya. Journal of Emerging Trends in Economics and Management Sciences, 8(1), 48–61.

(3). Angoue Engozogo, G. R. (2011). L'impact de la microfinance sur les femmes au sud du Gabon : l'expérience de Tchibanga. In Marché et organisations: Vol. N° 14 (Issue 2). https://doi.org/10.3917/maorg.014.0215

(4). Awunyo-Vitor, D., Al-Hassan, R. M., & Sarpong, D. B. (2014). Impact of Formal Financial Market Participation on Farm Size and Expenditure on Variable Farm Inputs: The Case of Maize Farmers in Ghana. ISRN Economics, 2014, 1–9. https://doi.org/10.1155/2014/329674

(5). Ba, A. (2010). Impact du microcrédit sur la rentabilité économique des micro-entreprises : Focus sur le programme de GAMIFI.

(6). Banerjee, A., Karlan, D., & Zinman, J. (2015). Six randomized evaluations of microcredit: Introduction and further steps. American Economic Journal: Applied Economics, 7(1), 1–21. https://doi.org/10.1257/app.20140287

(7). Beaman, L., Karlan, D., Thuysbaert, B., & Udry, C. (2013). Profitability of fertilizer: Experimental evidence from female rice farmers in Mali. American Economic Review, 103(3), 381–386. https://doi.org/10.1257/aer.103.3.381

(8). Becker, G. S. (1964). Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education. In Press of National Bureau of Economic Research. National Bureau of Economic Research. https://doi.org/10.1001/archneur.1986.00520010054022

(9). Bekolo, C., & Onomo, C. (2008). Proximité marketing et Offre de crédit dans les institutions de microfinance : Un essai d'explication du rationnement du crédit aux microentrepreneurs. Gestion 2000, 25(5), 49–66.

(10). Beldine, S., Beatrice, O., Anyuki, K., & Akinyi, G. (2021). The Effects of Lending Interest Rates on Performance of SMES in Kenya. European Journal of Business and Management, 13(8), 170–176. https://doi.org/10.7176/ejbm/13-8-15

(11). Buckley, G. (1997). Microfinance in Africa: Is it Either the Problem or the Solution? World Development, 25(7), 1081–1093. https://doi.org/10.1016/S0305-750X(97)00022-3

(12). Ciguino, H., & Paul, B. (2016). Microfinance et performance financière des microentreprises en Haïti. Etudes Caraïbéennes, 1–35, 1–13. https://doi.org/https://doi.org/10.4000/etudescaribeennes.10381

(13). Ciguino, H., & Paul, B. (2023). Conditions de microfinancement et littératie financière dans la performance financière des MPME en Haïti. Revue Française d'Economie et de Gestion, 4(1), 82–109. https://doi.org/10.5281/zenodo.7535540

(14). Di Maggio, M., & Yao, V. (2021). Fintech Borrowers: Lax Screening or Cream-Skimming? Review of Financial Studies, 34(10), 4565–4618. https://doi.org/10.1093/rfs/hhaa142

(15). Eniola, A. A., & Entebang, H. (2015). SME Firm Performance-Financial Innovation and Challenges. Procedia - Social and Behavioral Sciences, 195, 334–342. https://doi.org/10.1016/j.sbspro.2015.06.361

(16). Essomba, A., Nocheh, D., & Teuguia, G. (2013). No TitleRisque de crédit et gouvernance par le proximité : cas des micro crédits octroyés aux TPE camerounaises.

ISSN: 2658-8455
Volume 5, Issue 9 (2024), pp. 44-59.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

Colloque International En Micro Finance,Douala 12-13 Septembre 2013.

(17). Field, E., Pande, R., Papp, J., & Rigol, N. (2013). Does the classic microfinance model discourage entrepreneurship among the poor? Experimental evidence from India. American Economic Review, 103(6), 2196–2226. https://doi.org/10.1257/aer.103.6.2196

(18). Fouillet, C., Guérin, I., Morvant-Roux, S., Roesch, M., & Servet, J. M. (2007). Le microcrédit au péril du néolibéralisme et de marchands d'illusions. Manifeste pour une inclusion fnancière socialement responsable. Revue Du MAUSS, 29(1), 329–350. https://doi.org/10.3917/rdm.029.0329

(19). Hofmann, E., & Kamala, M.-G. (2003). Le microcrédit pour les femmes pauvres – Solution miracle ou cheval de Troie de la mondialisation? Bisilliat J. (Dir.)Regards de Femmes Sur La Globalisation : Approches Critiques Sur La Mondialisation, 215–238.

(20). Honlonkou, A. N., Acclassato, D. H., & Quenum, C. V. C. (2001). Problématique de remboursement des crédits dans les systèmes financiers décentralisés et garantie de prêts aux petits opérateurs économiques au Bénin. http://www.oit.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_125543.pdf

(21). Honlonkou, A. N., Acclassato, D. H., & Quenum, C. V. C. (2006). Determinants of reimbursement performance in microfinance institutions in Benin. Annals of Public and Cooperative Economics, 77(1), 53–81. https://doi.org/10.1111/j.1370-4788.2006.00297.x

(22). Jaffee, D. M., & Russell, T. (1976). Imperfect Information, Uncertainty, and Credit Rationing. The Quarterly Journal of Economics, 90(4), 651–666.

(23). Karlan, D., & Valdivia, M. (2011). Teaching entrepreneurship : Impact of business training on microfinance clients and institutions. The Review of Economics and Statistics, 93(2), 510–527.

(24). Kirschenmann, K. (2016). Credit rationing in small firm-bank relationships. Journal of Financial Intermediation, 26, 68–99. https://doi.org/10.1016/J.JFI.2015.11.001

(25). Koloma, Y. (2010). Effets de seuil dans la relation entre l'accès au microcrédit et l'amélioration du bien-être des bénéficiaires. Mondes En Développement, n° 152(4), 13–30. https://doi.org/10.3917/med.152.0013

(26). Lelart, M. (2006). De la finance informelle ` a la microfinance Michel LELART De la finance informelle à la microfinance Agence Universitaire de la Francophonie. AUF et Editions et Archives Contemporaines, 125(1), 1–60.

(27). Lelart, M. (2008). Risque et proximité dans la microfinance. Revue de Gestion, 5, 37–48.

(28). Longo, L. (2023). Effects of Microcredit on Micro, Small and Medium Enterprises Performance in Tanzania with Reference to Selected MSMEs in Iringa Municipality. International Journal of Finance and Accounting, 2(1), 47–61. https://doi.org/10.37284/ijfa.2.1.1487

(29). Mayoukou, C. (2000). La microfinance en Afrique Centrale: état des lieux et perspectives de dévekoppement. Techniques Financières et Développement, 59–60, 26–33.

(30). Montalieu, T. (2002). Les institutions de micro-crédit : entre promesses et doutes Quelles pratiques bancaires pour quels effets? Mondes En Developpement, 30(119), 21–32. https://doi.org/10.3917/med.119.0021

(31). Morduch, J. (1999). The role of subsidies in microfinance: Evidence from the Grameen Bank. Journal of Development Economics, 60(1), 229–248. https://doi.org/10.1016/S0304-3878(99)00042-5

(32). Mori, N., & Ng'urah, G. (2020). The Influence of Relationship Lending on SMEs Loan

Repayment Performance. Emerging Economy Studies, 6(2), 166–178. https://doi.org/10.1177/2394901520977461

(33). Moussa, F. (2020). Impact of microfinance loans on the performance of smes: The case of Lebanon. Business: Theory and Practice, 21(2), 769–779. https://doi.org/10.3846/btp.2020.11110

(34). Ngendahayo, E. (2008). Microcrédit et théorie financière : trois contributions à la compréhension des déterminants de la performance des institutions de microcrédit. Université de Lille 2.

(35). Novignon, J. (2023). Improving microcredit and firm performance in Jamaica: a case study of the development bank of Jamaica. Journal of Development Effectiveness, 15(2), 223–239. https://doi.org/10.1080/19439342.2022.2078859

(36). Ouattara, K. (2003). Microfinance Regulation in Benin: Implications of the PARMEC Law for Development and Performance of the Industry (Issue 50).

(37). Petersen, M. A., & Rajan, R. G. (1994). The Benefits of Lending Relationships: Evidence from Small Business Data. The Journal of Finance, 49(1), 3–37. https://doi.org/10.1111/j.1540-6261.1994.tb04418.x

(38). Rahman, A. (1999). Micro-credit initiatives for equitable and sustainable development: Who pays? World Development, 27(1), 67–82. https://doi.org/10.1016/S0305-750X(98)00105-3

(39). Robb, A. M. (2002). Entrepreneurial performance by women and minorities: The case of new firms. Journal of Developmental Entrepreneurship, 7(4), 383–397.

(40). Rogaly, B. (1996). Micro-finance evangelism, 'destitute women', and the hard selling of a new anti-poverty formula. Development in Practice, 6(2), 100–112.

(41). Schultz, T. W. (1961). Intvestment in Human Capital. The American Economic Review, 51(1), 1–17. http://www.jstor.org/stable/1818907 .

(42). Semegn, A. A., & Bishnoi, N. K. (2021). Analysis of Effect of Microfinance on the Performance of MSEs in Amhara National Regional State, Ethiopia. The Journal of Entrepreneurship, 30(1), 153–178. https://doi.org/10.1177/0971355720974822

(43). Simen, S., & Diouf, I. D. (2014). Entreprenariat féminin au Sénégal : vers un modèle entrepreneurial de « nécessité » dans les pays en développement. Revue Ouest Africaine de Sciences Économiques et de Gestion, 7(2), 31–57.

(44). Stiglitz, J. E., & Weiss, A. (1981). Credit Rationing in Markets with Imperfect Information. The American Economic Review, 71(3), 393–410. http:/links.jstor.org

(45). Zaman, H. (2000). Assessing the Poverty and Vulnerability Impact of Micro-Credit in Bangladesh: A case study of BRAC Background paper prepared for WDR. In World Bank, Washington. http://www.microfinancegateway.org/library/assessing-poverty-and-vulnerability-impact-micro-credit-bangladesh-case-study-brac