



Received: 04-07-2026
Accepted: 14-08-2026

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

Effects of Microfinance on the Performance of Micro-Enterprises in the Republic of Congo

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DOI: <https://doi.org/10.62225/2583049X.2026.6.4.6786>

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Abstract

The overall objective of this work is to analyze the effects of microfinance on the performance of micro-enterprises in the Republic of Congo. Specifically, this study analyzes the effects of microfinance on the financial performance of micro-enterprises. To achieve this, we used data from 11,105 businesses, taken from the General Enterprise Census of Congo (REGECE), conducted by the National Institute of Statistics (INS) of the Republic of Congo in 2020 with financial support from the World Bank. The estimates are based on the Tobit model to truncate the turnover variable, which captures financial performance, in

order to determine the effects of microfinance on the financial performance of micro-enterprises. The results obtained reveal, on the one hand, that there is a positive and significant relationship between microfinance and the performance of micro-enterprises in the Republic of Congo. Furthermore, the variables of gender, age, education level, marital status of the business owner, telephone use, and internet use within the microenterprise are significant. In contrast, the nationality of the microenterprise owner is not significant. These results lead to recommendations for economic policy.

Keywords: Microfinance, Performance, Micro-Enterprise, Tobit Model, Republic of Congo

1. Introduction

In developing countries, microenterprises play a vital role in expanding and sustaining the economic and social fabric. Over the years, they have become significant players in the domestic economy (OECD, 2004). Although considered both the most dynamic and the most vulnerable businesses, they are essential for improving the well-being of populations, as they play a crucial role in human development, poverty reduction, and sustainable economic growth.

In the Republic of Congo, micro-enterprises represent more than 1.9% of GDP (World Bank, 2023) and employ nearly 55.2% of the working population; they account for almost 92.5% of all businesses in the country, whose role in development is crucial (National Institute of Statistics, 2021) ^[36]. They help reduce poverty, inequality, and unemployment, while also helping people meet their basic needs and supporting low-income households in both urban and rural areas. Furthermore, micro-enterprises benefit the national economy due to their potential for utilizing local resources, mobilizing local savings, providing opportunities for self-employment, and training semi-skilled workers through apprenticeships (Asare *et al.*, 2015) ^[9].

In this context, Congolese micro-enterprises play a vital role in the national economy, providing livelihoods for a large part of the population. However, despite their importance, they face numerous challenges that limit their growth and contribution to the country's economic development, including problems with the supply of raw materials, management issues, problems related to the business environment, and finally, problems accessing financing.

For a company, procurement involves purchasing the products and services necessary for its operation at the right time and at the best price, without interruption, in order to maintain its market position. In Congo, micro-enterprises face enormous difficulties in procuring goods and services, due to political instability and inefficient infrastructure, the poor condition of communication routes, and insufficient means of transport, which hinder the movement of goods throughout the national territory (INS, 2017).

Furthermore, effective management significantly reduces the number of incidents and their impact on operations, while poor management can be the primary cause of business failure. According to Stanley and Girlh (1971), 90% of business failures are due to management errors. Similarly, Altman (1983) states that managerial incompetence is the fundamental cause of business

failures. However, almost all Congolese micro-enterprises are plagued by managerial problems such as insufficient business management skills, a lack of strategic management, an inability to adequately anticipate changes in their environment, and a predominance of family-run businesses. According to the World Bank (2004), the contribution of businesses to society is largely determined by the investment climate. A favorable business climate provides businesses with opportunities to invest profitably, create jobs, and increase production, thereby boosting private investment and performance (World Bank, 2010). According to the Doing Business 2015 report, out of 185 countries, the Congo ranked 183rd in ease of doing business, 170th in starting a business, 170th in getting electricity, and 182nd in paying taxes; the Republic of the Congo achieved an overall ease of doing business score of 38.2% (World Bank, 2020). Such an environment raises questions about the performance of micro-enterprises in the Republic of the Congo.

Aside from these problems, the financing conditions for productive activities also explain the size and competitiveness of micro-enterprises. Microcredit is considered a source of working capital and equity, and acts as a bridge between the entrepreneur and the world of goods (Schumpeter, 1912; Hicks, 1974). According to an OECD study, more than 80% of the financing needs of European businesses are met by external financing. In Congo, however, 84% of businesses finance their activities with equity (World Bank, 2009), 81% with family funds, compared to only 3% obtaining microloans (National Institute of Statistics, 2017) ^[35]. According to the Doing Business 2015 report, out of 189 countries, Congo ranked 104th in terms of access to finance. Felix Mouko's statements, collected by the Central African News Agency (AIAC, 2015), indicate that 80% of micro-enterprises in Congo face obstacles to accessing financing. Banzouzi (2013) ^[12] notes that microfinance institutions have a limited presence in financing the numerous national micro-projects that are so prevalent in Congo. Difficulties in accessing finance for microenterprises limit their growth. Micro-entrepreneurs face a lack of capital that would facilitate the expansion of their entrepreneurial activities.

In this regard, bank financing constitutes the main obstacle to the growth of micro-enterprises. The challenges they face are related to their limited economies of scale, low levels of planning, poor location, lack of activity, and weak managerial and technical expertise (Worokinasih and Potipiroon, 2019) ^[67]. Other authors have noted that a majority of micro-enterprises have used their personal financing to produce low value-added goods, ultimately leading to their failure (Afaqi, Seth, and Saeed, 2009; Rabbani and Moossa, 2014) ^[3, 56]. Furthermore, according to several studies (IMF, 2004; Aryeetey, 1998 ^[8]), difficulties in accessing financing constitute the primary obstacle to the development of micro-enterprises in sub-Saharan Africa, far surpassing problems of corruption, inadequate infrastructure, or excessive taxation. These studies estimate that 80 to 90% of micro-enterprises in sub-Saharan Africa face significant financing constraints.

Lacking access to financing markets, micro-enterprises most often cover all their needs through personal resources and recourse to microfinance institutions (Aryeetey, 1998) ^[8]. Microfinance is a means of combating financial exclusion in developing countries (Adair *et al.*, 2010) ^[2]. Faced with

these financing difficulties, microfinance thus appears as a solution for the unfinanced and underfinanced, and contributes to poverty reduction by empowering women and vulnerable groups, by generating employment, and by strengthening micro-enterprises through the promotion of new start-ups (Ledgerwood, 1998) ^[39].

In light of these concerns, it is essential to analyze the effects of microfinance on the performance of micro-enterprises in the Republic of Congo. This research leads to a reflection centered around the following question: what are the effects of microfinance on the performance of micro-enterprises in the Republic of Congo?

In general, this study consists of analyzing the effects of microfinance on the performance of micro-enterprises in the Republic of Congo. So, in this work, we propose to validate the hypothesis that microfinance has positive effects on the performance of micro-enterprises in the Republic of Congo. The remainder of this work is organized as follows: section 2 presents the literature review, section 3 the methodology, section 4 the results and their discussion, and a final section concludes the work and proposes economic policy implications.

2. Literature Review

This research is part of a continuum of studies and aims for a meticulous and in-depth analysis, allowing for comparison of the results with those of other research. This review is structured in two parts: the theoretical review, which brings together the theoretical debates on the subject of study, and the empirical review, which presents work already carried out by other researchers along the same lines as the present study.

2.1 Theoretical Review

The issue of the relationship between microfinance and the performance of micro-enterprises reveals, in the economic literature, the existence of two approaches: the approach focused on perfect markets and the approach focused on imperfect markets.

The first approach is divided into two categories: on the one hand, access to microfinance is seen as a means of improving the performance of micro-enterprises by facilitating research and development of new ideas and technologies, which can lead to better long-term performance. On the other hand, business debt, particularly for micro-enterprises, hinders their performance: significant financial burdens can reduce their net profit margin and, if they become excessive, jeopardize their financial stability. This first approach is based on three theories: the pecking order theory, the financial intermediation theory, and the life-cycle theory.

2.1.1 The perfect markets approach: theories supporting the positive effects of microfinance on micro-enterprise performance

The hierarchy of financing theory supports the idea that growing firms are characterized by a need for financing and that debt appears to be the most appropriate source of funding. Developed by Donaldson (1961) and later by Myers and Majluf (1984), this theory remains committed to the idea that micro-enterprises have limited access to financial markets due to their constraints. The chosen financing order is justified by the classification of financing methods available to firms, according to their order of preference. This theory is based on the consideration of the

information and investment asymmetry that exists between internal actors within the firm (owners, managers) and its external actors (microcredit institutions and leasing companies). Business leaders adopt a financing method that minimizes the costs associated with information asymmetry and prefer internal financing to external financing methods (Adair *et al.*, 2011; Allini *et al.*, 2017; Cassar *et al.*, 2003; Ziane, 2004).

The theory of financial intermediation (or financial cycles) posits that an economy can finance itself through its own resources or by resorting to external funds. Developed by Gurley and Shaw (1960) ^[33], it shows that intermediation acts as a link between agents with a financing capacity (lenders) and agents with financing needs (borrowers). By extension, this theory tends to show that micro-enterprises do not have the necessary financial resources to boost their activities: resorting to borrowing is therefore a good way to bridge their financial gap, as it can have positive effects on their performance.

The business life cycle theory of Berger and Udell (1998) is based on the assumption that a company's financing method (internal or external) is chosen according to its stage of development. In the initial phase, the company consumes its own resources because it faces significant difficulties in obtaining microcredit due to information asymmetry. The increase in its activity necessitates a considerable increase in its financial needs, leading it to opt for another type of financing, facilitated by the production of more substantial collateral (La Rocca *et al.*, 2011).

2.1.2 The imperfect markets approach: theories supporting the negative effects of microfinance on micro-enterprise performance

The second approach relies on market imperfections, which can lead to credit rationing and result in discrimination against other loan applicants. This idea underpins three theories: information asymmetry theory, credit rationing theory, and contract theory.

Information asymmetry theory establishes a link between the financial behavior of firms, conceived as contractual entities within which agents do not always have equal access to information. It was first developed by Akerlof (1970) ^[5], who stipulated that the economic agent possessing information can use it to their advantage to manipulate the one lacking it. This concept also applies to the financial market, where financial intermediaries (microfinance institutions and banks) do not have the same information as borrowers (micro-enterprises). According to Roger (1988), information asymmetry can have two origins: either one partner has more information than the other, or the costs of obtaining information differ. For this reason, economists consider information asymmetry to be the root cause of credit rationing.

Credit rationing theory, developed by Stiglitz and Weiss (1981) ^[63], demonstrates that credit rationing occurs when borrowers are willing to accept the loan terms set by lenders, even if the lender has sufficient resources, and that some firms may nevertheless be denied loans (Hellman and Stiglitz, 2000). According to Baltensperger (1978), credit rationing is possible when some borrowers obtain loans while others do not, even if they are willing to pay high interest rates and provide more collateral. Jin and Zhang (2019) argue that credit rationing in microcredit markets results from the rational choices made by microfinance institutions seeking to maximize profit.

Contract theory, developed in the 1970s by Hart and Holmström (1987), highlights how the consideration of private information or unverifiable actions profoundly alters the rationality of economic actors and, consequently, their impact on society. It allows for a better understanding of the inherent imperfections in agreements between economic actors and their effects on society.

2.2 Empirical Review

From an empirical standpoint, studies relating to the effects of microfinance on the performance of micro-enterprises can be classified into two approaches.

2.2.1 Access to microfinance as a factor promoting the performance of micro-enterprises

Ciguino *et al.* (2023) ^[23] examined microfinance conditions and the financial literacy of SMEs in Haiti, using a multiple regression model. Their results show that microcredit financing conditions positively influence microenterprise performance. Taiwo (2023) ^[64] analyzed entrepreneurial financing options for women-owned microenterprises and microenterprise performance in Nigeria using descriptive statistics and regression analysis, showing that microfinance positively influences the performance of women-owned microenterprises. Bin *et al.* (2021) ^[15] studied the relationship between access to finance and SME sustainability in Cameroon using probit and linear regression models, and concluded that access to microcredit has positive impacts on SME sustainability.

Also in Cameroon, Nyaga (2020) analyzes the effects of microfinance services on SME performance using statistical analysis and a multiple regression model. The results show that access to microcredit increases the probability of improved SME performance, rising from 5.6/10 without access to financing to 7/10 with access. Kenmgni *et al.* (2021) study SME performance and the contribution of different financing methods in Cameroon, using logistic regression on data collected from 48 SMEs, and demonstrate that microcredit and rotating savings and credit associations (ROSCAs) have positive impacts on SME performance. Diamouténé (2018) ^[26] studies access to agricultural finance and agricultural performance in Nigeria using the Endogenous Method. Switching Regression (ESR), and shows that access to microfinance, particularly through savings and credit cooperatives, has positive effects on agricultural performance.

Anwas (2014) ^[7] examines the impact of microcredit disbursement on the performance of micro, small, and medium-sized enterprises (MSMEs) in India, using panel data, and shows that microcredit disbursement and production inputs have a positive and significant effect on SME performance. Gichuki *et al.* (2014) ^[32] analyze the performance of women-owned businesses accessing financing from village savings associations in Kenya, using a sample of 225 women entrepreneurs and a logit regression model: income, microcredit, and education level positively influence business performance.

Djimasra *et al.* (2013) ^[27] analyze the impacts of microcredit on SME performance in Chad, using both a descriptive and econometric approach, and show that microcredit contributes positively and significantly to the economic and social performance of Chadian businesses: a 1% increase in the amount of microcredit increases turnover by 0.75% and the number of employees by 0.54%. Finally, Silivestru (2012) ^[60] shows that Romanian SMEs with access to

microcredit had better social performance than those without.

2.2.2 Access to microfinance as a factor hindering the performance of micro-enterprises

Eton and Nkamusiima (2022) ^[28] studied access to finance and the development of women's entrepreneurship in the Kigezi sub-region of Uganda and demonstrated negative effects of access to microcredit on this development. Rajamani *et al.* (2022) ^[57] examined access to finance and the challenges faced by micro-enterprises and SMEs in India using a structural equation model and showed that access to financing through a microfinance institution has negative effects on micro-enterprise performance.

Following this same line of reasoning, Lekouka (2021) ^[40] studied access to microcredit for SMEs in the Republic of Congo, analyzing the determinants and effects on micro-enterprise performance using Heckman's two-stage selection model. His results reveal that access to microcredit has negative effects on SME performance, which can be explained by lending conditions (loan guarantee, high interest rates, repayment terms) that are unfavorable to some Congolese micro-enterprises, most of which operate in the service sector. Similarly, Fowowe (2017) ^[30], in a study of access to finance and the performance of 10,888 firms in 30 African countries, shows that access to microfinance has negative effects on the performance of African micro-enterprises. Anang *et al.* (2016) ^[6] studied the relationship between microcredit and rice productivity in Ghana, and found a negative relationship between microcredit and the performance of agricultural SMEs.

Mouatassim *et al.* (2015) analyze the effects of financial structure on the performance of micro-enterprises operating in the real estate and construction materials sectors, using panel data (2007-2013) and ordinary and generalized least squares methods: long-term debt has a negative impact on the financial performance of micro-enterprises. Tioumagneng (2011) ^[65], using random effects models and instrumental variables on data from 2001 to 2005, shows that indebtedness to microfinance institutions is detrimental to the performance of SMEs in Cameroon. Finally, Ndombi (2022) ^[47] analyzed the relationship between access to microcredit and SME performance in Congo using a multiple regression model; his results show that access to microcredit has no effect on SME performance.

From all of the above, the literature, both theoretical and empirical, on the effect of microfinance on the performance of micro-enterprises remains divided. The theoretical literature highlights contradictory debates between theories, which show, on the one hand, that microfinance is a favorable factor for the performance of micro-enterprises in the presence of a leverage effect and, on the other hand, that it is a detrimental factor in the presence of a negative impact effect.

In this work, we draw on the theory of financial intermediation, which explains how financial intermediaries can influence the supply of microcredit and, consequently, economic activity. Empirically, there is no consensus on the results obtained or the methodologies used. Our analysis of the link between the effects of microfinance and the performance of microenterprises in the Republic of Congo constitutes a contribution to this literature.

3. Methodology

This section successively presents the data used, the variables selected, and the econometric model employed.

3.1 Data Used

This study uses data from the 2020 General Business Census of Congo (REGEC), a survey conducted by the National Institute of Statistics (INS) with financial support from the World Bank. The main objective of REGEC is to contribute to the establishment of an integrated business statistics system. REGEC covered the entire national territory, and the sample used in this study comprises 11,105 observations.

3.2 Variables Used

The variables used in this work are turnover, the age of the micro-enterprise promoter, the sex of the promoter, the marital status of the promoter, the level of education of the promoter, the nationality of the promoter, telephone use, internet use and access to microfinance.

3.2.1 Dependent Variable

The dependent variable in this study is the financial performance of the micro-enterprise, captured by its turnover. This is a quantitative variable, expressed in CFA francs.

3.2.2 Independent Variables

The selected independent variables are presented and described below.

3.2.2.1 Age of the micro-enterprise promoter

This refers to the age, in years, of the micro-enterprise's promoter at the time of the survey. Age can influence the micro-enterprise's work capacity, productivity, and strategic decisions. It is assumed that advanced age may reduce performance, while middle age may be associated with better performance. The expected effect is positive or negative depending on the age threshold.

3.2.2.2 Gender of the micro-enterprise promoter

Binary variable: 1 if the promoter is male, 0 if female. Gender can influence access to microfinance and institutional support. The expected effect varies depending on the local context and gender inequalities.

3.2.2.3 Marital status of the micro-enterprise promoter

Binary variable: 1 if the promoter is married, 0 otherwise. A micro-enterprise run by a married person could be more economically successful and more committed to productivity to improve their standard of living. The expected effect is positive on financial performance.

3.2.2.4 Education level of the micro-enterprise promoter

Binary variable: 1 if the entrepreneur is literate, 0 otherwise. Education facilitates access to information, financial resource management, and the adoption of innovations. This result is consistent with the work of Fabre *et al.* (2006), who found that the higher the entrepreneur's level of education, the greater the chances of success and survival to the third or fifth year. Abdel *et al.* (2010) ^[1] explain this result by the fact that microenterprise entrepreneurs have a very basic understanding of financial and accounting information. The expected effect on financial performance is positive.

3.2.2.5 Access to Microfinance

Binary variable: 1 if the microenterprise is affiliated with a microfinance institution, 0 otherwise. This variable

measures whether or not the microenterprise benefits from microfinance services, particularly access to microcredit. The underlying assumption is that access to microcredit allows micro-entrepreneurs to invest in their business, which should improve their performance. The expected effect on performance is positive.

3.2.2.6 Nationality of the micro-enterprise promoter

Binary variable: 1 if the promoter is Congolese, 0 otherwise. This variable distinguishes micro-enterprises according to the origin of their owner and may reveal an influence related to cultural differences or the economic environment, including access to formal and informal networks, knowledge of the local market, or cultural management practices. The expected effect is ambiguous.

3.2.2.7 Telephone use in micro-enterprises

Binary variable: 1 if the micro-enterprise uses the telephone, 0 otherwise. The telephone can be used for communication, transactions, or other activities influencing productivity. The expected effect on performance is positive.

3.2.2.8 Internet use in micro-enterprises

Binary variable: 1 if the micro-enterprise uses the internet, 0 otherwise. This variable measures internet use for marketing, sales, and management. Internet access opens up opportunities for market expansion, acquiring new skills, and improving marketing strategies. The expected effect on performance is positive.

3.3 Econometric Model

This study seeks to determine the effect of microfinance on the performance of micro-enterprises in the Republic of Congo. It uses the Tobit model, based on the work of Tobin (1958), in which the dependent variable is continuous but observable only over a certain interval. This model is referred to as truncated or censored regression depending on

the type of sample. Since the dependent variable "financial performance" is censored, the censored Tobit regression model is used to account for the zero-censored data, which would bias linear estimates using ordinary least squares. The results of the Tobit model are preferable to those of classical ordinary least squares regression in this context.

The Tobit model is formally presented as follows:

$$Y_i^* = \beta X_i + \mu_i, \text{ with } Y_i = Y_i^* \text{ if } Y_i^* > 0, \text{ and } Y_i = 0 \text{ if } Y_i^* \leq 0$$

Where Y_i^* is the latent variable, Y_i the observed variable, X_i the set of explanatory variables, and μ_i a normally distributed error term with zero mean and variance σ^2 .

3.3.1 Model Specification

The specification adopted for this study is as follows:

$$\text{Turnover}_i = \beta_0 + \beta_1 \text{Access to microfinance}_i + \beta_2 \text{Gender}_i + \beta_3 \text{Age}_i + \beta_4 \text{Education level}_i + \beta_5 \text{Marital status}_i + \beta_6 \text{Nationality}_i + \beta_7 \text{Telephone}_i + \beta_8 \text{Internet}_i + \mu_i$$

The observation of turnover is defined by: Turnover_i = Turnover_i if Turnover_i* > 0, and 0 otherwise.*

4. Results and Discussion

This section presents the descriptive statistics, followed by the estimation results of the Tobit model and their discussion.

4.1 Descriptive Statistics

4.1.1 Descriptive statistics of qualitative variables

Table 1 presents the description of the qualitative variables, allowing for a better understanding of the characteristics of micro-enterprises depending on whether or not they have access to microfinance.

Table 1: Descriptive statistics of qualitative variables

Variables	Terms and conditions	Access to microfinance (Yes = 1, n = 9753)	No access to microfinance (No = 0, n = 1352)
Marital status of the promoter	Unmarried = 0 / Married = 1	4,969 / 4,784	723 / 629
Promoter's level of education	Uneducated = 0 / Educated = 1	4,370 / 5,383	425 / 927
Promoter's gender	Female = 0 / Male = 1	1983 / 7770	287 / 1065
Nationality of the promoter	Foreigner = 0 / Congolese = 1	4,212 / 5,541	377 / 975
Using the phone	No = 0 / Yes = 1	2040 / 7713	205 / 1147
Internet usage	No = 0 / Yes = 1	8021 / 1732	1218/134

Source: Author, based on REGEC data (2020).

Table 1 shows that, among micro-enterprise promoters with access to microfinance, 4,969 are unmarried compared to 4,784 who are married; among those without access to microfinance, 723 are unmarried compared to 629 who are married. Regarding education level, 4,370 promoters with access to microfinance are uneducated compared to 5,383 who are educated; among those without access, 425 are uneducated compared to 927 who are educated. Concerning gender, the high proportion of men among microfinance beneficiaries (7,770 compared to 1,983 women) can be explained by the fact that microfinance institutions consider men more dynamic, while the presence of women is limited by certain social factors, notably maternity leave and certain sectors of activity reserved for men. Regarding nationality, 5,541 Congolese entrepreneurs have access to microfinance, compared to 4,212 foreign entrepreneurs. Concerning telephone use, 7,713 micro-enterprises with access to microfinance use it, while 2,040 do not. Finally, regarding

internet access, only 1,732 micro-enterprises with access to microfinance use it, compared to 8,021 that do not.

4.1.2 Descriptive statistics of quantitative variables

Table 2: Descriptive statistics of quantitative variables

Variables	Average (Access = 1)	Min	Max	Average (Access = 0)	Min	Max
Revenue (FCFA)	405,821.9	0	1.00e+08	303,322.0	0	6,865,000
Promoter's age (years)	49.4	9	98	45.1	9	98

Source: Author, based on REGEC data (2020).

Table 2 shows that micro-enterprises with access to microfinance have an average turnover of 405,821.9 FCFA, compared to 303,322.0 FCFA for those without access. Regarding the age of the business owner, those with access

to microfinance are on average 49 years old, compared to 45 years old for those without access.

4.2 Tobit Model Estimation Results

Before estimation, a multicollinearity test (variance inflation factor, VIF) was performed on all explanatory variables. The mean VIF obtained was 1.17, with individual values ranging from 1.02 to 1.50, well below the generally accepted critical threshold of 10, thus ruling out any significant multicollinearity issues between the model variables.

Table 3: Tobit model estimation and marginal effects

Revenue	Coefficients	Probability
Access to microfinance	235,584.6	0.001
Promoter's gender	- 105,995.4	0.084
Age of the promoter	10,612.87	0.000
Promoter's level of education	- 194,635.8	0.000
marital status of the promoter	161,012.7	0.001
Nationality of the promoter	2,510.64	0.965
Using the phone	372,737.1	0.000
Internet usage	761,782.8	0.000
Constant	- 1,472,681	0.000

Source: Author, based on REGEC data (2020). Number of observations = 11,105; log-likelihood = -119,479.59; pseudo-R² = 0.0022.

The results of the Tobit model estimation (Table 3) show that the variables access to microfinance, gender, age, education level, marital status, telephone use, and internet use are significant. However, the variable nationality of the microenterprise promoter is not significant.

The variable "access to microfinance" has a positive coefficient of 235,584.6, significant at the 1% level, meaning that access to microfinance has a positive effect on turnover, and therefore on the performance of microenterprises in the Republic of Congo. This result confirms Gurley and Shaw's (1960) [33] theory of financial intermediation, according to which micro-enterprises lack the necessary financial resources to boost their activities, making borrowing a suitable way to bridge their financial gap. This finding aligns with the conclusions of Taiwo (2023) [64] and Gichuki *et al.* (2014) [32], who found that access to microfinance, particularly microcredit, has a positive effect on micro-enterprise performance.

The variables promoter's age, promoter's marital status, telephone use and internet use have positive and significant coefficients at the 1% level, which means that these factors have positive effects on the performance of microenterprises.

The variable "education level of the entrepreneur" has a negative coefficient, but one that is significant at the 1% level. This result can be explained by the fact that the microenterprise sector in the Republic of Congo is similar to the informal sector, where most entrepreneurs have a low level of education and a basic understanding of business management, while more educated entrepreneurs might undertake more ambitious projects that are less suited to the local market or repayment constraints, or be more risk-averse, opting for activities that generate little quick income. This result corroborates the work of Abdel *et al.* (2010) [1], which found that small business owners and managers have a very basic understanding of financial and accounting information and serious problems with financial planning

knowledge.

The gender variable of the promoter has a negative and significant coefficient at the 10% level, which can be explained by the fact that micro-enterprises led by women seem to show a moderate level of performance compared to that of their male counterparts (Lekouka, 2021) [40].

The marginal effects results confirm these findings: a change in access to microfinance leads to an increase of 235,584.6 FCFA in microenterprise revenue, demonstrating that improved access to microfinance is a positive factor for microenterprise performance. Similarly, changes in the entrepreneur's age, education level, marital status, telephone use, and internet use result in significant variations in microenterprise revenue.

5. Conclusion

Problems related to microenterprise performance are at the heart of debates worldwide, and particularly in the Republic of Congo. The overall objective of this study was to analyze the effects of microfinance on microenterprise performance in the Republic of Congo, focusing specifically on financial performance, as measured by turnover. Estimates, based on the Tobit model to account for the censoring of the turnover variable, reveal, firstly, a positive and significant relationship between microfinance and microenterprise performance in the Republic of Congo: for the surveyed microenterprises, microfinance remains a flexible financing method adapted to their context. Secondly, the variables of gender, age, education level, marital status of the business owner, telephone use, and internet use within the microenterprise are significant, while the nationality of the business owner is not.

In light of these findings, the following economic policy implications can be formulated: First, authorities should take further steps to make access to microfinance more conducive to the growth of microenterprises, while simultaneously strengthening their capacity and streamlining guarantee mechanisms and incentives for microfinance institutions to encourage the provision of microcredit. Second, they should identify and support microfinance institutions that develop innovative products likely to accelerate the performance of microenterprises. Third, microfinance institutions should offer financial literacy training so that micro-entrepreneurs can make better use of funds and identify opportunities.

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