

Ndombi Avouba, Fabrice-Gilles

Article

Effects of access to credit on the performance of SMEs in the Congo

The Journal of Entrepreneurial Finance (JEF)

Provided in Cooperation with:

The Academy of Entrepreneurial Finance (AEF), Los Angeles, CA, USA

Suggested Citation: Ndombi Avouba, Fabrice-Gilles (2022) : Effects of access to credit on the performance of SMEs in the Congo, The Journal of Entrepreneurial Finance (JEF), ISSN 1551-9570, The Academy of Entrepreneurial Finance (AEF), Los Angeles, CA, Vol. 24, Iss. 3, pp. 1-15,
<https://digitalcommons.pepperdine.edu/jef/vol24/iss3/4>

This Version is available at:

<https://hdl.handle.net/10419/264438>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc/4.0/>

5-2022

Effects of Access to Credit on the Performance of SMEs in the Congo

Fabrice-Gilles Ndombi Avouba
Marien Ngouabi University, Brazzaville

Follow this and additional works at: <https://digitalcommons.pepperdine.edu/jef>



Part of the [Entrepreneurial and Small Business Operations Commons](#)

Recommended Citation

Ndombi Avouba, Fabrice-Gilles (2022) "Effects of Access to Credit on the Performance of SMEs in the Congo," *The Journal of Entrepreneurial Finance*: Vol. 24: Iss. 3, pp. 48-64.

Available at: <https://digitalcommons.pepperdine.edu/jef/vol24/iss3/4>

This Article is brought to you for free and open access by the Graziadio School of Business and Management at Pepperdine Digital Commons. It has been accepted for inclusion in The Journal of Entrepreneurial Finance by an authorized editor of Pepperdine Digital Commons. For more information, please contact bailey.berry@pepperdine.edu.

EFFECTS OF ACCESS TO CREDIT ON THE PERFORMANCE OF SMES IN THE CONGO

Fabrice-Gilles NDOMBI AVOUBA

Marien Ngouabi University, Brazzaville

Abstract

This paper proposes to analyze the effects of access to credit on the performance of SMEs in Congo. To this end, we used the theoretical model developed by Stiglitz and Weiss (1981). From an econometric point of view, we estimated a multiple linear regression model using the ordinary least square technique due to the absence of endogeneity. This application, as well as the statistical and econometric analyses that followed, were carried out using microeconomic data from the survey of very small, small, medium-sized enterprises and artisans in the Congo, which was carried out thanks to the multiple contributions of the managers of the National Institute of Statistics (INS). As a result, it was found that access to credit is neutral with respect to the performance of SMEs. This result led to an economic policy implication.

Keywords: Credit, Performance, Congo, Multiple linear regression model

Introduction

In most regions of the world, small and medium-sized enterprises (SMEs) play an important role in the wealth and employment creation process. Indeed, they generate more than 55% of GDP and more than 65% of total employment in high-income countries, more than 60% of GDP and more than 70% of total employment in low-income countries and about 70% of GDP and more than 95% of total employment in middle-income countries (OECD, 2004). This contribution of SMEs to economic activity is not without origin. In the sense that it represents only the visible face of the optimization of the organization of the company, which according to the World Bank (WB, 2018) corresponds on the one hand to the improvement of its processes and the quality of its internal functioning and on the other hand to the mobilization of staff so that all employees focus their energy to achieve the objectives.

In Congo, the performance of SMEs is a problem. Regardless of their branch of activity, they have a high mortality rate for new businesses on the one hand and a low rate of reduction in the time required for formalities on the other (PND, 2012-2016). Numerous writings show that several internal factors (the management system, financial results, business functions, human potential, etc.) and external factors (the state of demand, the state of competition, tax legislation, etc.) contribute to explaining the performance of SMEs. But in the context of financial development, in this case in Sub-Saharan African countries (Gelbard and Leite 1999 and Gulde et al., 2006), one of them, namely "credit", has attracted the attention of many researchers (Hifive, 2015; Ciguino, 2016 and Diamoutene, 2019), since access to credit increases the competitiveness and profits of the firm (Obora, 2014).

In economics, the relationship between credit and performance is the focus of theoretical and empirical debate. On the theoretical level, the theory of financial intermediation (Gurley and Shaw, 1960) and the theory of hierarchical order (Myers, 1984) reveal the positive effects of credit on performance in that it increases output and promotes growth. While the theories of information asymmetry (Akerlof, 1970) and credit rationing (Keiding, 2015) reveal that credits have a negative effect on performance in that they lead to overindebtedness. Empirically we have, on the one hand, the group of authors who believe that the relationship between these quantities is positive (Kibet et al., 2015). Access to credit allows for an increase in turnover and the supply of raw materials (Bwisa and Wanambisi 2013). And on the other hand, the group of authors (Seder, 2002 and Tioumagneng 2012) who believe that the relationship between these variables is negative or the debt of firms impinges on their performance.

From the above, it is clear that two groups of theories are opposed on the theoretical level. Also, on the empirical level, the results obtained are divergent. This controversy can be explained by the diversity of the data and the estimation techniques used. As a result, the debate on the relationship between credit and performance is not over. In other words, an application of this topic to the Congo may help us validate one or the other of these theories and/or empirical works. But unlike most of the work we have exploited, we are interested in the case of firms that operate solely in the service sector. This is because the breakdown of the units surveyed by sector of activity reveals a high concentration of units surveyed in the service sector. The latter concentrates about 94% of the units (RTPPMEA, 2017).

The choice of this theme is justified by the multiplicity of technical and financial support programs for SMEs envisaged by the State and the existence of an institutional and legal framework for access to financing. Indeed, according to PND (2009-2016), the Ministry of SMEs had planned the creation of a fund of impulse, guarantee and accompaniment of the

SMEs and the craft industry. But this project has been realized only up to 20%. In the same sense, it also provided for other projects such as the creation of a business house of the Congo, which will be a support structure and accompaniment to the creators of companies and to the holders of business projects; the e-government or the networking of all the administrative structures of the ministry and the support to the female entrepreneurship. Several laws govern the institutional and legal framework for access to financing in Congo. But two of them, namely: law n-33/72 of August 29, 1972, and law n-019/86 of July 31, 1986, deal respectively with the creation of a guarantee fund to facilitate access to credit for SMEs/SMIs and with guidelines on SME development policy by instituting measures to encourage the creation, promotion and development of SMEs.

In addition, two points can be made about the relationship between credit and performance in Congo. First, according to the ranking of the Doing business report, the Congo is ranked 180th out of 190 countries worldwide. This ranking reflects the difficulties of economic agents in general and SMEs in particular to operate on Congolese territory. Under these conditions, one wonders if credit can influence performance. Secondly, in Congo, several companies and/or SMEs are facing problems of access to credit. For example, in 2015 and through the SOFIDE/SME convention, only 19 SMEs benefited from short-term credit. This raises the question of whether credit can explain the performance of SMEs.

These concerns lead us to the following central question : Does access to credit explain the performance of SMEs in Congo? Specifically, we have: does access to credit explain the turnover of SMEs? The objective of our work is to analyze the effects of access to credit on the performance of SMEs. Specifically, it is to analyze the effect of access to credit on the turnover of SMEs. The central hypothesis is that access to credit improves the performance of SMEs. The specific hypothesis that follows is that access to credit improves the turnover of SMEs.

The rest of the work is structured around (i) literature review, (ii) methodology, and (iii) results.

1. Review of the literature

1.1 Theoretical review

Here we present two groups of theories. These are the group of theories that focus on the positive link between credit and performance and the group of theories that focus on the negative link between credit and performance.

With regard to the first group, two theories are put forward: the theory of financial intermediation and the theory of hierarchical order. Developed by Gurley and Shaw (1960), the theory of financial intermediation stipulates that an economy can finance itself by its own means, or it can also resort to external funds. Thus, financial intermediaries interpose themselves between agents with financing capacity (lenders) and agents with financing needs (borrowers). This theory, which is widely used in the political and economic spheres, can be adapted to the situation of SMEs, insofar as not all SMEs have the financial resources necessary to boost their activities. Therefore, they can resort to the financial market, which is composed of several agents with a financing capacity, to fill their financial resources gap.

Following this pattern, one can expect that SMEs can be more efficient, especially if the borrowed resources (credits) are used rationally.

In the same vein, the pecking order theory of Myers (1984) shows that firms resort to the financial market to take on debt in the event of financial difficulties. Except that this approach is not automatic. In the sense that these companies, the SMEs in our case, start first by self-financing, and it is only when this financing proves insufficient that these SMEs will resort to external financing. The idea here is that at the beginning, companies prefer to finance their activities through self-financing because this allows an increase in capital. Therefore these companies will be less indebted (Fama and French, 2000). By taking on debt, however, SMEs may have more means to improve their performance, but they run the risk of seeing their activity decline because of the burden of debt repayment, especially if it does not promote a return on investment.

We have the asymmetric information theory and the credit rationing theory in the second group. The first theory is based on the fact that the lender finds it difficult to assess the borrower's project and to control his behaviour. Note that this theory originated in Akerlof's (1970) article entitled (the market of lemons). Let us recall that in this article, the author highlights a situation of unequal information. Since the economic agent (sellers, buyers, lenders, borrowers) who has information can use it to his advantage to manipulate the one who does not have it. This concept is also valid for the financial market, where the financial intermediaries (banks) do not have the same information as the borrowers (SMEs). This is to say that if instead of granting credit to an SME that seeks credit to finance its main activity, the bank grants credit to an SME that plans to finance its other activities, we can expect a negative effect of credit on the performance of SMEs especially if the economic situation is not good.

For the theory of credit rationing, Keiding (2015) states that financial institutions are especially private entities guided by the objective of profit maximization. On the other hand, Baltensperger (1978) considers credit rationing as a situation of rejection of project financing requests even if the borrower is willing to pay high-interest rates and provide substantial collateral. Thus, an increase in interest rates shifts the borrowers' option to riskier projects, again jeopardizing the repayment of these loans (Stiglitz and Hellman, 2000). This means that whatever the level of the interest rate, firms may be denied loans, and this may have a negative impact on their performance. Moreover, credit rationing is one of the recurrent difficulties in SME financing. In addition, when credit granted for investment is devoted to consumption, for example, this can lead to a negative result, and also, if banks think that companies have a high repayment capacity, they may grant loans repayable in the short term; this can push companies into debt. However, misallocation of loans and indebtedness can have a negative effect on the performance of these SMEs.

1.2 Empirical Review

This review includes, on the one hand, works that reveal the existence of a positive relationship and, on the other hand, works that reveal the existence of a negative relationship between access to credit and the performance of SMEs.

At the first group level, Norhaziah, and Shariff (2001) proved that credit could help a firm to revitalize its business. Using data on 309 respondents from TEKEN Nasional clients in Malaysia, the model used is multinomial logit regression. The use of external financing allows

a company to maintain its equipment in good condition, acquire equipment, and consequently, good productivity, which have a positive effect on the turnover.

Gulde and Pattillo (2006) focus on sub-Saharan African countries. Using structural equation modelling and hierarchical regression, their results reveal that credit positively influences performance as well as data from the IMF and the World Bank. For these authors, the lack of credit hinders growth, lowers living standards, and hinders the fight against poverty. Limited access to credit for new and growing businesses becomes a major obstacle for microentrepreneurs to start and expand their businesses.

Similarly, Djimasraa et al (2013) have shown that bank credit contributes positively and significantly to the economic and social performance of Chadian firms. In their work, the data used came from a collection of production units in five regions. To achieve this result, the authors estimated a multiple linear regression model using the instrumental variables method.

On his part, Anwas (2014) in India examined the effect of credit disbursement on the performance of MSMEs. Through the technique of analyzing data presented in a panel format, he found that disbursement and production inputs have a positive and significant effect on the performance of MSMEs.

Finally, Haguma, et al. (2019) in the Democratic Republic of Congo collected data from 232 firms located in Bukavu. These data were used for structural equation estimations and hierarchical regression. The results obtained show that credit positively influences performance which is concretized by a good identification of entrepreneurial opportunities.

As for the second group, i.e. those who think that access to credit has negative effects on performance, Belouard, and Seder (2002) conducted a study on 93 Algerian SMEs over the period 2001-2002 and found that there is a negative correlation between the indebtedness of firms and their performance as measured by profitability. This justifies that SMEs prefer to self-finance in Algeria to avoid transaction costs and interest rates that are often high.

Tioumagneng (2011) observes that debts are unfavourable to the performance of SMEs in Cameroon. Long-term bank credits have several disadvantages on the growth of SMEs. The data used are for 2001-2005, and the estimated model is a fixed-effects panel model.

Authors Fred and Timothy (2013) believe that credit to the SME position does not necessarily lead to good performance and that SME characteristics such as type of business, size of business operations and expenses, cost of accessing credit, and amount of credit should also well support the chicken's access to credit from lending institutions.

Biswas (2014) in India believes that lack of adequate and timely credit, high cost of credit, collateral requirements etc. are considered as various financial constraints faced by MSMEs. Banks also find it difficult to lend to MSMEs due to a lack of adequate balance sheets. To arrive at this result, the author did only a descriptive analysis of data collected through personal interviews using a questionnaire from a sample of 85 MSMEs.

In sum, this literature review shows that the relationship under study is documented both theoretically and empirically.

On the theoretical level, it appears that not all theories converge since there are theories that show that there is a positive relationship between credit and business performance and theories that show that credit has a negative effect on performance. To this end, one might

expect either of these theories to fit the situation of Congolese SMEs. But because of the improvement in the institutional framework of banks in the CEMAC zone in general and in Congo in particular, we support the theory of financial intermediation in this work.

Similarly, on the empirical level, the results obtained by the authors are not convergent. On the one hand, there are positive results, and on the other, negative results. However, if the hierarchical regression model seems to be the most used by the authors, the controversy recently noted can nevertheless be explained by the diversity of the data and the estimation techniques used. However, in this work, we opt for a multiple linear regression model with instrumental variables to explain the relationship between credit and SME performance in Congo.

2. Methodology

The theoretical model here is by Stiglitz and Weiss (1981). It accounts for the behaviour of SMEs in terms of performance when they resort to credit. Thus, on the basis of risk aversion, the utility of the SME derived from profit is given by : $U(\pi_i)$ or $U'(\pi_i) > 0$ and $U''(\pi_i) < 0$. Let θ be the risk preference rate of SMEs, their expected utility can be written as follows : $E(1/(1 + \theta)U(\pi_i))$ is equal to the difference between revenues and expenses. Mathematically we have :

$\pi_i(p, q) = R(p, q) - C(p, q)$. With P the price, q the quantity, R the revenues, and C the expenses. In an environment where SMEs may be exposed to uncertainty, this uncertainty may have the following inverse function: $P(q) = \bar{P}(q) + \varepsilon$. On the other hand, if the expenses of the SME depend on the credit; their profit will be equal to the difference between the receipts and payments of the credit $(1+r) \cdot B_i$ as well as the demand of this same credit $c(A)$. Where B_i is the total amount. From then on we can have the following mathematical writing : $\pi_i(R, r) = \max \{R - (1+r)B_i - K\}$. With r the interest rate and K the guarantee, which by hypothesis can be equal to zero. Similarly, this approach is valid for the case where profit is assimilated to turnover.

As variables to make the modelling, we have :

- The level of education of the SME promoter : this is a variable that represents human capital. It has four modalities : 0 (no level), 1 (primary), 2 (secondary) and 3 (higher). The question Q41 of the questionnaire of the census of very small, small, medium enterprises, and artisans in Congo 2017, allowed us to create it. It is found in the work of Atandi and Wabwoba (2013).
- Competition: this is an explanatory variable that was captured from question Q58 of the same questionnaire. Unlike the previous variable, it is binary. Its modalities are : 0 (has no competitors) and 1 (has competitors). Its importance is based on the notion of market power or the possibility of having a large customer base.
- Credit: it plays the role of variable of interest in the model we are going to estimate. Qualitative in nature in general and binary in particular, these modalities are : 0 (the

SME does not have access to credit) and 1 (the SME has access to credit). Question Q60 of the questionnaire helped us to understand this.

- Turnover: This is a quantitative variable that effectively allows us to evaluate the performance of the enterprise. It was retained from question Q32 of the questionnaire; it is an explained variable in our work. The work of Issor (2017) shows us that performance consisted of achieving the profitability desired by the shareholders with the turnover and market share that preserved the sustainability of the company.
- The number of employees: captured from question Q33; this is a quantitative variable. It represents the labour force that an SME combines with other factors of production to produce either goods or services. As in the work of Makaya (2018), we retain it as an explanatory variable.
- The gender of the head of the company: it is a qualitative variable that has two modalities which are: 0 (the head of the company is a man) and 1 (the head of the company is a woman). It is part of the group of explanatory variables and was selected from question Q38 of the questionnaire. Authors such as Atandi and Wabwoba (2013) also used it in their work.
- The number of activities of the SME: this is a qualitative variable that determines the diversification of activities and areas of sale of products and or services of the companies in our SME (Fahey, 1997). These modalities are: 1 the SME has more than one activity, 0 the SME has only one activity. Question Q18 was used to capture it, and it plays the role of an explanatory variable.
- NICTs: We approached them by the fact of using or not the computer tool within the company, in our case the SME. Question Q46 shows that these two modalities are: 1 (yes) and 0 after transformation of modality 2 (no). This variable is present in the work of Jorgensen and Stroh (2000), Oliner and Sichel (2000), etc.

The equation to be estimated is : Turnover = f (Access to credit, level of education, competition, ICT, gender, number of activities, number of employees).

2.1 Data source

The data we use in this work are primary in nature, from the NSI and dated 2017. Our sample size is 11,105 production units. By the way, this database was created with the aim of consolidating a database of Congolese companies (so far non-existent). Among the databases we have explored, this is one of the few that obey two principles: the representativeness of SMEs in our field of study and the availability of variables that can facilitate the exercise of studying the efficiency of these same units.

2.2 Description of variables

In the table below, the weights evaluated as a percentage of the modalities are reported, as well as the central tendency and dispersion characteristics of some of the variables that we have retained for the application.

Table 1: Descriptive statistics

<i>Variables and modalities</i>	<i>Frequency (%)</i>
Crédit	
- Has access to credit	46,60
- Does not have access to credit	53,40
Level of education	
- No level	20,39
- Primary	5,83
- Secondary	16,50
- Higher education	57,28
Competition	
- has competitors	97,09
- has'nt competitors	2,91
NTIC	
- Uses the computer tool	12,62
-Don't use the computer tool	87,38
Number of activity	
- The SME has more than one activity	20,39
- The SME has only one activity	79,61
	Mean : 7,980
	Type of deviation: 10,082
	Min : 0
	Max : 62
Number of employees	
	Mean : 17.372,83
	Type of deviation : 27019,6
	Min : 1
	Max : 162.571
Turnover	

Source: Author from RTPPPMEA

The table below shows that in Congo, there are more SMEs owned by men (85.44%) than by women (14.56%), a gap of 70.88%. This gap, which is larger than the one observed in 2011 (50.9%), indirectly confirms the idea that gender differences are a reality in Congo. Indeed, according to the 2015 National Human Development Report : "A comparison of Congo's GII with that of countries with average human development shows that Congo's performance is below that of the group of countries with average human development. Compared to Namibia and Swaziland, Congo only performs well in terms of female labour force participation and the proportion of women with secondary or higher education. Regarding credit, it appears that the proportions of SMEs that have access and those that do not are 46.60% and 53.40% respectively. Therefore more SMEs that do not have access to credit than the reverse. This

reality can be explained through one point, namely the irregularities in the constitution of financing files. According to the AfDB (2009), many SME promoters in the Congo present files that lead banks to doubt the veracity of the data presented because their financing requests are often prepared either by themselves or with the possible help of a consultant who knows the outline of a business plan but is not very familiar with the technical characteristics of the operation and is ill-equipped to prepare a business plan of the operation and ill-equipped to establish sales forecasts.

We note here that more than half of the SMEs have managers with a higher level of education, i.e. 57.28%. This means that the qualification of the head of the company can play a significant role in its performance. The percentages of those with primary and secondary education are 5.83% and 16.50%, respectively. While the percentage of managers with no level is 20.39%. This means that in order to run a small business, it is not necessary to have any qualifications since more and more potential entrepreneurs are self-taught. As an example, in 2008, about 13% of French companies were created by self-taught people (Evaluation report on the support systems for business creation, 2012). With regard to the competition variable, almost all SMEs have competitors, i.e. 97.09% compared to 2.91% of those who do not; this is sufficient proof that the SME market, whatever the sector of activity, is characterized by concentration. This can be explained by the multiplicity of entrepreneurs (national and foreign) because, with the drop in the price of oil, more and more agents are entering sectors of activity other than those related to oil

Congolese SMEs are still behind in terms of new information and communication technologies. For we have only 12.62% of SMEs that use the computer tool against 87.38% of those who are certainly still in the archaic methods. This situation poses the problem of the adoption of ICT by SMEs in Congo, which has already been addressed by Nkouka (2014). Number of activities: in Congo, 20.39% of SMEs have more than one activity against 79.61% of those who have only one activity; this means that Congolese SMEs have difficulty diversifying their activities. The number of employees: we find that in Congo SMEs employ a maximum of 62 workers and a minimum of 0 (no workers) and that on average, these SMEs employ 7 people. According to Tidjani (2011), the SME employs 5 to 19 employees registered with the CNSS for the small business and 20 to 99 employees for the medium business. Turnover: On average, SMEs in the Congo have a turnover of 17,372; at a minimum, they have a turnover of 1 against a maximum of 162,571, this being expressed in thousands of francs. In fact, according to the Trustafrica report (contribution of SMEs to diversification) 10.71% of SMEs have achieved a turnover exceeding.

3. Results

The table below shows the results of the estimation of the turnover as a function of the explanatory variables presented above after the rejection of the endogeneity hypothesis.

Table 2: Results of credit-based performance estimation

<i>Variables of the model</i>	<i>Coef</i>	<i>Prob</i>
Crédit		
- Has access to credit	1,062	0,388
- Does not have access to credit (ref)		
Level of education		
- No level (ref)		
- Primary	7,200	0,001**
- Secondary	1,052	0,536
- Higher education	0,673	0,663
Number of activity		
- The SME has more than one activity	-1,337	0,338
- The SME has one activity (ref)		
NTIC		
- Uses the computer tool	3,610	0,001**
- Don't use the computer tool (ref)		
Competitio		
- Has competitors (ref)		
- Has not competitors	3,538	0,005**
L (employees)	0,506	0,549
L (age)	-0,572	0,263
Constant	1,965	0,450
F-stat : 5,58 (coef) ; 0,000 (prob)		
R² : 15%		
RAMSEY test: 0,25 (F-stat) ; 0,860 (Prob)		
Test of endogeneity of the variable Credit, using the option « endog » : 0,513 (coef) ; 0,4737 (Chi-sq(1), P-val)		

Source: Author from RTPPPMEA

The main lesson of the results of this work is the following: the performance of SMEs in Congo is a phenomenon independent of credit. Three points can justify this. These are management problems, the economic situation and the nature of the credit offered.

Concerning the first point, authors such as Stanley and Girth (1971) affirm that the performance of an SME depends more on the way the company is managed than on credit; since according to them, 90% of SME failures are due to management errors. In the same sense, Altman (1983) mentions that the fundamental cause of business failures is the incompetence of managers. This would mean that in the presence or absence of credit, the bad management of the SME can affect its performance.

In Congo, COBAC at its June 27, 2013 sessions, requested the withdrawal of approval of certain MFIs. These include Horty Service, Congolaise de Caution Mutuelle (COCAM), Caisse pour le Commerce et le développement (CCD), Mutuelle d'assistance aux commerçants et aux malades (MUDACOM) and the Caisse Féminine de Développement Agricole et commerciale. All of these closures are the result of poor management by the managers of these SMEs. This argument is based on the fact that for Olekalo (2011): "the Congolese leader is a person who, in some cases, begins his or her career directly as a leader; these are, in particular, entrepreneurs who have no professional experience, apart from that acquired in the exercise of his or her profession. In other cases, the Congolese manager is one who has professional experience, however short but acquired before becoming a company manager. He spends most of his career as an accountant, a financier, a technician, a marketing man, a human resources manager, but also as a teacher; only, he does not naturally manage the companies in the branch of activity where he acquired his professional experience, before becoming a manager of any company". In this case, the head of the SME can, for example, take dividends instead of using them for investment. Hence the problem of dividend policy in SMEs was raised by authors such as Simon and Joffre (1997).

For the second point, it appears that SMEs in the Congo evolve in an environment that is not favourable to private initiatives. To illustrate, beyond the effects of the Dutch disease, which has limited the development of the Congolese productive sector for a few decades now, many other situations testify to the weaknesses of the business climate that currently prevail in the country and which can therefore make it impossible for credit to have any effect on the activity of SMEs. We can quote :

- the Pool crisis, which brought the Congo Ocean Railway Company (CFCO) to a halt by interrupting rail transport between Pointe-Noire and Brazzaville;
- the quality of governance (on a scale of 100, the values of the Ibrahim Index of African Governance (IIAG), which takes into account the areas of security, economy, inclusion, human development and the rule of law, obtained by the Congo during the current decade are only 40);
- external and domestic debt; according to the IMF (2020), "the country had accumulated \$181 million in official bilateral external arrears, adding to the stock of unstructured pre-HIPC arrears. But Congo also accumulated significant external commercial arrears to oil traders, as well as domestic arrears. Total public debt at end-September 2019 was estimated at 87.8 percent of GDP, with external public debt at 62.3 percent of GDP, of which about 20 percent of GDP was in arrears.

In summary, all of the situations mentioned above are likely to reduce consumer demand for goods and services and the ability of SMEs to grow, and thus to repay the credit, they obtain from the government or microfinance institutions (MFIs). Thus, with or without credit, the performance of an SME may be affected by its market power or its small customer base.

With regard to the third point, Artus (2005) indicates that most banks in the world prefer to offer short-term loans to firms rather than long-term loans because of the problem of borrowers' portfolio risk; whereas in the literature, it is rather the long-term loans that are more likely to promote the growth of firms. Thus, in relation to the constraints linked to the repayment periods of short-term loans, an SME may or may not see the result of its financial year modified, despite the presence of credit. This behaviour is visible in the CEMAC zone in general and in Congo in particular, since for Tioumagneng (2011): "the supply of long-term bank credits in the CEMAC zone decreased between 2004 and 2006, from 518 billion CFA francs in 2004 to 514 in 2005 and 493 in 2006 (COBAC, 2006). Over the same period, there was an increase in the outstanding supply of short-term bank loans, from CFAF 392 billion in 2004 to 476 in 2005 and 512 in 2006. According to the BEAC (2007), between 2006 and 2007, short-term bank loans to the economy of CEMAC countries increased by 11.2%; long-term loans decreased by 2.3%.

Conclusion

In the Republic of Congo, as in other sub-Saharan African countries, the private sector plays a strategic role in the country's march towards economic and social progress. To date, it employs several households/persons, provides the State with tax revenues, and is one of its lenders; since the internal debt in the Congo is a reality and currently amounts to 12,627,697.468 FCFA. An examination of this strategic sector shows that it is composed of a diversity of companies that can be divided into categories according to size. In our case, we will focus on SMEs. Thus, the objective pursued in this work consists in analyzing the effect of credit on the performance. Two points justify the choice of our subject, namely the development of the banking landscape, the multiplicity of technical support programs, and the existence of an institutional and legal framework for access to financing.

In addition, the subject treated is of theoretical and empirical interest because several authors have contrary opinions on the relationship between credit and performance. On the theoretical point, we have the group of theories that inform on the existence of a positive relationship between credit and performance, it is about : the theory of financial intermediation, developed by Gurley and Shaw (1960) and that of the hierarchical order stated by Myers (1984) on the one hand and on the other hand the group of theories that informs about the existence of a negative relationship between credit and performance namely: the theory of information asymmetry, developed by Akerlof (1970) and that of credit rationing, stated by Keding (2015). On the empirical point, we also have two groups of works; those that reveal a positive relationship between credit and performance; as an illustration, we can cite the works of Gulde et al, (2006); Hifive (2015), and those that reveal a negative relationship between credit and performance; as an example, we can cite the works of Sedeer (2002) and those of Tioumagneng (2012).

In sum, it appears from this literature that the relationship under study is documented both theoretically and empirically. The discussion of this topic has allowed us to address the case

of the Congo with the particularity of the situation of SMEs in the service sector. As a result, obtained through the estimation of the multiple linear regression model of credit, we have: access to credit does not explain the performance of SMEs. Unlike the theories we cited at the beginning, this result validates the thesis of neutrality developed by (Modigliani and Miller, 1958). In relation to this result, we believe that future analyses on the same subject in Congo could focus on the types of credit (agricultural credit, bank credit, etc.) and the performance of SMEs. As a recommendation, the government, and banks should prioritize long-term credit.

Bibliography

- Akerlof, G.A., (1970), The market for "lemons": Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics*, 488–500.
- Anwar, M. (2014), Impact of credit disbursement on performance of MSMEs in India: An empirical analysis. *Asian Journal of Research in Business Economics and Management*, 4(3), 1-17.
- Atandi, F.G. & Wabwoba, T.B. (2013), Effect of credit of micro and small enterprises performance in Kitale town. *International Journal of Academic Research Business and Social Sciences*, 3(9), 570-583.
- Biswas, A. (2014). Bank lending to MSMEs in India. *IRCS International Journal of Multidisciplinary Research in Social & Management Sciences*, 2(3), 44- 49.
- Ciguino, H. et Paul, B. (2016). Microfinance et performance financière des Microentreprises en Haïti, Études caribéennes [En ligne], 35 | Décembre <http://etudescaribeennes.revues.org/10381>
- Das, B. & Kandarpa, B. (2013). A study of micro-enterprises in hajo development block, Kamrup (ASSAM), *Journal of Rural Development*, 32(3), 321-332.
- Djimasra et al (2013). Crédit bancaire et performance des PME Tchadiennes à l'ère Pétrolière. *Rapport de recherche du FR-(IEAN°74/13)*.
- Fama, E. F., & French, K. R. (2000). Forecasting profitability and earnings. *The Journal of Business*, 73(2), 161–175..
- Gelbard E. et Leite S. P. (1999), « Measuring Financial Development in Sub-Saharan Africa », International Monetary Fund, *Working Paper*, n° 99/105.
- Gulde A.-M., Patillo C. et Christensen J. (2006), « Sub-Saharan Africa: Financial Sector Challenges », International Monetary Fund.
- Gurley, J. G., & Shaw, E. S. (1960). *Money in a Theory of Finance*. Washington, DC: Brookings Institution.
- Hifive-USAID (2014). *Études sur la microfinance en Haïti*, Port-au-Prince, USAID.

- Hellmann, T., & Stiglitz, J. (2000). Credit and equity rationing in markets with adverse selection. *European Economic Review*, 44(2), 281–304.
- Mungiru J. & Njeru A. (2015). Effects of informal finance on the performance of small and medium enterprises in Kiambu country. *International Journal of Scientific and Research Publications*, 5(11), 338-362.
- Notat. N. N. (2007), “une question centrale Acteurs de l’Économie dossier spécial performance, octobre 2007, p. 72
- Montebello, M. H. (1976). Efficacité de l’entreprise : *analyse et perspectives*, thèse de doctorat.
- Cross, K et Lynch, R (1989). Accounting for competitive performance. *Journal of cost Management*, 3(1), pp. 20-28.
- Tioumagneng, A. T. (2011), Maturité des crédits bancaires et performance des entreprises : cas du Cameroun, De Boeck Université, *monde en développement*, 153, 71-86.
- Myers. S. C. et Magluf N. S., (1984), “corporate financing and investment » decisions when firms have information that investors do not have”, *journal of Financial Economics*, juin, vol. 13 n°2 p 187-200.
- Kibet K.D., Achesa K. et Omwono Gedion (2015), « Effects of Microfinance Credit on the Performance of Small and Medium Enterprise in Gishu County », *International Journal of Small Business and Entrepreneurship Research*, vol. 3, n° 7, p. 57-78.
- Diamoutene, Accès au crédit agricole et performance agricole dans la zone offre du Niger : cas de la culture du riz, 2018, annales de l’UMN/ISSN : 1855-4433.
- Bwisa H. M. et wanambisi A. N. (2013), « effets of microfinance lending on Business Performance “, *International Journal of Academic Research in Business on social sciences*, vol. 3, n°7, p. 56-67.
- Stiglitz J.E. & Weiss A. (1981), “Credit Rationing in Markets with Imperfect Information”, *American Economic Review*, vol. 71 n°3, pp. 393 – 410
- Haguma et al.,(2019), « Relation entre la microfinance et la performance des PME: Role Médiateur et Modérateur de l’Opportunité Entrepreneurial et de la prise de risque » *Finance, contrôle, stratégie* en ligne, 22-4. Editeur : Association FCS.
- Belouard N. A. et Seder S. (2002) « Structure du capital et de la performance des PME Algériennes » université de Boumerdès et Ecole supérieur de commerce d’Alger.
- Baltenperger E. (1978), « Crédit Rationing : Issues and Questions », *Journal of Money, Credit and Banking* vol 10, issue 2, p. 170-83.
- Artus P. (2002), “comment réagir à un rationnement du crédit bancaire”, *Revue économique*, vol.53. N°1, p.63-82.

Norhaziah N. et Sharrif M. N. M. (2012), Factors affecting repayment performance in microfinance programs in Malaysia. *Procedia social and Behavioral sciences* vol.62 ; p. 806-811.

Ikiémi S. (2006), Les facteurs indicateurs de la croissance du secteur bancaire privé en Angola et au Congo. *Revue Congolaise de gestion* 2013/2 n°18 p. 45-86.

Alibert J. (1987), « le guide bancaire du Congo », Paris, EDITM, p.22.

Djimasra N. et al., crédit bancaire et performance des PME Tchadiennes à l'ère pétrolière. *Rapport de Recherche du FR-(IEAN°74/13*.

Oborah N. (2014), The Effet of Lending by Microfinance institutions on the Financial Performance of Small and Medium Entreprises in Nairobi country, University of Nairobi.

Oliner S., Sichel D., 2000, "The Resurgence of Growth in the Late 1990's: Is Information Technology the Story?", *Journal of Economic Perspectives*

Nkouka (2014) Déterminants de l'adoption des technologies de l'information et de la communication (TIC), Vol. 27, N°2, 2014, p. 115–133, <https://id.erudit.org/iderudit/1026070ar>

Issor. Z., (2017), Projectics, proyéctica, projectique : La performance de l'entreprise un concept complexe aux multiples dimensions. N°17. *Edition : Boeck supérieur*, 2008 à 2017.

Jorgensen et Stiroh (2000) Jorgensen W.D, Stiroh K.J, 2001, "Raising the Speed Limit: US Economic Growth in the Information Age", *Brookings Papers on Economic Activity*, 1, 125-211.

Nkouka (2014), « Déterminants de l'adoption des technologies de l'information et de la Communication (TIC) », Volume 27, Numéro 2, 2014, p. 115–133, <https://id.erudit.org/iderudit/1026070ar>

Modigliani F. et Miller M., (1958), « The Cost of Capital, Corporate Finance and Theory of Investment », *American Economic Review*, Vol 48, N°3, p261-297.

Modigliani F. et Miller M.H., (1963), «Corporate Income Taxes and the Cost of Capital : a Correction », *American Economic Review*, 53 (June 1963), 433-443.

Stanley, D.T. et Girth, M. (1971), "Bankruptcy: Problem, Process, Reform", *Brookings*