

Bank Resources, Interest Margin and Long-Term Bank Financing in Franc Zone

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ABSTRACT: The aim of this study is to determine the impact of bank resources and interest margin on the long-term bank lending in the countries of the franc zone over the period 2006-2016. We adopted a static panel data model and the random effects estimator. We used a static panel data model with random effects and the generalized least squares (GLS) estimation method. Our results show that basic bank capitalization and long-term savings positively and significantly impact the supply of long-term bank loans within this area. Only equity negatively and significantly affects the granting of long-term bank loans. We also find that the bank interest margin negatively and significantly influences the granting of long-term bank loans.

KEYWORDS: Bank resources, Bank capitalization, Equity, Long-term savings, Bank interest margin, Long-term bank financing.

1. INTRODUCTION

The concern linked to the financing of investment projects and the expansion of productivity is of pronounced interest in developing countries in search of strong and sustainable economic growth. Within the franc¹ zone in particular, there is, through regional economic programs, the desire of the countries in this area to increase their basic infrastructure, stimulate the industrial fabric, diversify their economies, strengthen their growth and to reduce poverty and unemployment (Economic and Monetary Community of Central Africa, 2012; ECOWAS Regional Economic Program, 2017).

This need for financing is further accentuated in an unfavorable international economic and financial context marked by numerous crises. Indeed, over the last decade, the world economy has suffered the full brunt of a financial crisis which has led to a scarcity of global savings, a reduction in investments and a decline in the rate of global growth (Lorenzi and Navaux 2012). Beyond this crisis, several countries in the franc zone are currently facing an economic crisis due in particular to the fall in commodity prices and the Corona virus (COVID-19) pandemic. Furthermore, the financial sector in this space has not escaped the consequences of this fall in world prices of several raw materials. On the one hand, they are faced with a fall in bank liquidity which is more marked in countries

heavily dependent on oil revenues or other basic products. On the other hand, this situation leads to a restriction of the credit offer.

The importance of the financial requirements expressed in the countries of the franc zone is also noted through the weakness of their productive investments. For example, gross domestic investments within this area stood at 22.9% of GDP in 2016 (Regional Economic Outlook, 2017). The observation we make is that these levels remain lower than what other countries experience, such as those in emerging and developing Asia. Indeed, for this block of countries, investments were 39.7% of GDP in 2016 (World Economic Outlook, 2016). These figures show that investments in the franc sub-region are not yet sufficiently supported by local financial systems and that the need for long-term financing is acute. In the franc zone, the financial systems are dominated by the banking sector and banks are the major player in the financing process within the countries of this space. Despite this preponderance of banks, their contribution to the long-term financing of the economies of this zone has always been and remains very low. Between 2014 and 2016, for example, the level of supply of this particular type of credit was on average around 4.32%. In other countries with financial structures with a strong predominance of the banking sector, such as France and Germany, this

¹ Franc Zone is mainly composed by West African Economic and Monetary Union (WAEMU) countries and Economic and

Monetary Community of Central Africa (EMCCA) countries. Those countries have in common the use of Franc.

proportion is much higher. Indeed, in these two countries in December 2019, the percentage of long-term credits granted only to non-financial companies stood at 67.11% and 68.01% respectively for France and Germany (European Central Bank, *Statistic Bulletin*, 2020). For the entire Euro zone, this share is 58.68%. It is clear that there is a gap between these figures and those observed in the franc zone.

These facts that we have just mentioned indicate the weakness of banking intermediation in the franc zone in the area of long-term financing. According to Duport et al. (2010), such a lack of long-term financing can be at the origin of the insufficient level of productive investments in an economy. According to Namur (2012) such a deficit is linked “to the paradox of a weak transformation of excess savings into productive or innovative investments”. And yet, according to banking theory, banks are recognized as having the ability to invest over a long horizon due to their ability to transform maturities (Bencivenga and Smith, 1991; Glachant et al., 2010; Scialom, 2013). This maturity transformation activity that banks constantly carry out consists of offering medium-term (maturity between 1 and 5 years) and long-term (maturity greater than 5 years) credits based on mostly short-term deposits. This theoretical approach to the role that should in principle played the banks in the economy is very far from the reality of the offer of long bank credits within the franc area. In addition, this lesser transformation of savings into long-term loans reflect the strong privilege that banks grant to short-term loans. For Landau (2013), Huther et al. (2015), it is not easy to encourage long-term finance due to the reluctance of investors to allocate resources over a long horizon and the difficulties in assessing the default risks relating to illiquid investments. Such a situation often leads certain entrepreneurs to resort to several short or medium-term loans in order to initiate certain investments. And unlike States and large companies for whom financial markets are an alternative source of financing in the long term, small and medium-sized businesses almost always turn to the external source of financing that is bank credit (Duport et al., 2010).

It therefore seems appropriate to us to focus on the explanatory factors of the supply of long-term bank financing in the countries of the franc zone. Numerous works have focused on the study of the determinants of the supply of bank credit and the analysis of its evolution and its structure. For this study, we are interested in specific banking factors. These internal bank factors are all the operating conditions and constraints relating to management procedures specific to banks or prudential standards issued by regulatory authorities. In addition, these factors are mainly linked to activities relating to the bank's balance sheet. The ability of banks to ensure effective management of their activities plays a crucial role in the design

and implementation of all of their decisions regarding the provision of financing.

One of their activities in which we are interested is the collection of banking resources. In the franc zone in 2016, these resources, mainly made up of equity and similar resources and deposits collected from customers, stood at 73.95% of the balance sheet total (franc zone report, 2017). This percentage often varies slightly up or down over the years. According to certain authors like Huther et al. (2015), the structure of banks' financial liabilities is important in the exercise of credit activity. The dimension of profitability is also decisive in the exercise of activities carried out by banking establishments. Ho and Saunders (1981), Wong (1997), Demirgüç-Kunt and Huizinga (1999) and other economists following them, noted this in their studies. In the franc zone, the net margin rate, namely the share of net profit in net banking income, stood at 14.2% in 2015, 15.55% in 2016 and 19.3% in 2017 (franc zone report, 2017). Thus, banking profitability in this space is still there. Permanent consideration of this factor is inherent to banks and determining in their investment decision-making.

In light of the above, we ask ourselves the question of what is the impact banking organizational factors and in particular banking resources and margin bank interest on the supply of long-term bank credit in the franc zone?

This study is structured around four points. The first point is devoted to literature. The second highlights the methodological framework. The third is dedicated to the presentation and discussion of the results. And the last point is reserved for the conclusion.

2. LITERATURE REVIEW

Numerous works have focused on the study of the explanatory factors of the supply of credit by favoring the roles played by internal characteristics of banks and relating to their balance.

2.1. Banking resources and credit supply

The ability of banks to ensure effective management of their own or borrowed resources plays a crucial role in the design and implementation of all of their decisions regarding the provision of financing. In this sense, Huther et al. (2015) believe that the structure of banks' financial liabilities is a crucial determinant in the exercise of banking activities and in particular that of credit.

Concerning equity and in particular bank capital as well as their regulation, several studies highlight their importance in the dynamic given by banks to intermediation activity and particularly to the supply of credits. Bank equity is the self-financing resources of banks whose minimum capital is the basis. On a theoretical level, some authors find that there is a positive link between the level of bank capital and the supply of credit (Bernanke and Lown, 1991; Rochet, 1992; Hellman et al, 2000; Francis and Osborne, 2009). Other authors like Bolton

and Freixas (2000), Van den Heuvel (2007), Vanhoose (2008), Kashyap et al. (2008), Pébureau (2015) rather find that this link is negative. Still others achieve results highlighting the mixed effects of bank capital on the supply of credit (Kishan and Opiela, 2000, 2006; Hancock et al, 1995).

Regarding the empirical effects of bank capital and resources on the supply of credit, some economists come to the conclusion of a positive impact. This is the case of Liu (2011), Berrospide and Edge (2010), Martin-Oliver et al. (2012), Labonne and Lamé (2014), Gozgor (2014) and Kapan and Minoiu (2018) who consider that the strengthening of bank capitalization due to more demanding regulatory conditions increases the incentive of banks to increase their risk-taking. So for them, the more banks are faced with very restrictive capital and equity regulations, the more they tend, despite the risks, to increase the supply of loans. Other authors, on the other hand, believe that a tightening of regulatory policy in terms of bank capital and reserves does not make it possible to stimulate the supply of bank credit (Diogap and Ngomsi, 2012; Malede, 2014; Aiyar et al., 2014; De Jonghe et al., 2016; Deli and Hasan, 2017; Del Prete et al., 2017; Fratzscher et al., 2016). Finally, Gambacorta and Mistrulli (2004), Francis and Osborne (2012), Carlson et al. (2013), Olszak et al. (2016), Meral (2015) find, for their part, that between the level of equity capital and particularly banking capital and the supply of credit the effects are mixed.

Beyond equity, savings collected by banks represent a significant part of their resources. This is the surplus income of financially surplus agents (headed by households) which remains in the economic circuit. According to Pagano (1993) and Levine (2005), it is the central element that must be oriented by the financial sector towards investment and economic growth. This perception is based on the theory of loanable funds. According to the latter, the increase in savings allows for an increase in loans, lower interest rates and greater access for firms to the funds necessary to make their investments. Lindner (2015) criticized this theory, because he believes that an increase in savings does not necessarily lead to an increase in the supply of credit. Beyond this crucial role that savings can play within banking institutions, many economists highlight in their work the need to allocate bank savings to long-term (or illiquid) investments by the transformation of deadlines or by the constitution of long-term resources (Bencivenga and Smith, 1991; Glachant et al, 2010; Augier and Soedarmono, 2012; Namur, 2012; Kessler, 2015). Empirically, Baoko et al. (2017), Imran and Nishat (2013). Kpodar and Gbenyo (2010) and Diogap and Ngomsi (2012) find in their studies that the volume of bank deposits positively influences the supply of credit. Conversely, Malede (2014), Park et al. (2015) finds that there is a negative link between bank deposits and credit supply.

2.2. Bank interest margin and bank credit supply

The dimension of profitability is also decisive in the exercise of the activities carried out by banking establishments. Profitability is the profit obtained from the exercise of an activity or any investment. The major part of this profitability often comes from the margin resulting from transactions with customers. This is why we place particular emphasis on it. The permanent consideration of this factor which is inherent to banks is decisive in their decision-making because they are driven by the permanent objective of maximizing their profits. According to Wong (1997), Demirgüç-Kunt and Huizinga (1999) banks have an interest in developing their intermediation and credit activities to the extent that they derive most of their income through the differential between the rate of debit interest and the credit interest rate. The conclusions of the studies by Hanweck and Ryu (2005), Nessibi (2016) also show that strengthening credit supply policies makes it possible to increase the level of banking profitability. In addition, Mansouri and Afroukh (2009) find that a credit policy well controlled by banks allows their interest margins to increase. This control requires maintaining a balance between the collection of deposits and the distribution of credits. Furthermore, the granting of credits being the main source of banking income, these authors believe that increasing them makes it possible to increase income and therefore interest margins. And in such a situation, credit activity would tend to develop.

In principle, banks should only commit to supporting investment projects from which they hope to make the most profit. In this sense, Duport et al. (2010) show in their work that the transformation activity is only profitable and therefore effective if the intermediation margin allows it, that is to say if the slope of the rate structure is sufficiently upward. For these authors, the further the credit horizon is, the greater the expected margins. Boutillier and Dérangère (1992), Boutillier et al. (2005) also believe that an increase in the slope of bank interest rates reduces the relative cost of resources, makes credit activity more profitable and encourages the granting of long-term loans. They believe that the supply of bank credit can be positively influenced by the improvement in the level of profitability and especially in the bank interest margin resulting from transactions with customers. Tanimoune (2003) finds on the contrary and in the context of sub-Saharan African countries that the increase in banking profitability sometimes coincides with the drop in the level of credit offered. Empirically, Kpodar and Gbenyo (2010), Duport et al. (2010), Vo (2018) find that bank profitability positively influences the supply of credit. Pham (2015) and Alkhazaleh (2017), on the other hand, note in other contexts that the effect of profitability on the supply of credit is harmful or even mixed.

3. METHODOLOGY

In order to verify the impact of banking resources and the interest rate margin on the supply of long bank loans, we use a static panel data model like Francis and Osborne (2012), Carlson et al. (2013) and the random effects estimator obtained through the application of generalized least squares (GLS). Regarding the data used, these come from the databases of the World Bank (World Development Indicators), the Banking Commission of Central Africa, the Central Bank of West African States, the banking commission of West African Monetary Union, the Bank of Central African States, the Global Financial Development Database. Our sample is made up of the fourteen countries of the Franc zone and our data covers the period 2006-2016.

3.1. Model specification

Long-term bank financing (LTBANKFI) is the volume of outstanding long-term bank credits granted by banks to non-financial economic agents in need. This is the variable to be explained that we retain as part of our analysis. Within the economy, it is most often up to companies and the state to resort to this type of bank assistance due to the regular and significant nature of the expenses and investment projects that they must constantly face. The measure we take into account is the logarithm of the share of bank loans over 5 years granted by banks to non-financial agents. This form of financing that we consider is conducive and suitable for the realization of productive investment projects.

The explanatory variables used are of two orders. First of all we have the explanatory variables of interest which are basic bank capitalization, equity and long-term savings. Then we have the control variables which include the economic growth rate and foreign direct investment.

Bank resources which represent a group of factors linked to the liabilities of the bank balance sheet are likely to influence the supply of credit. In this work, we consider the level of core bank capital, equity and term savings.

Regarding basic bank capitalization (BANKCAP), these are own resources initials that the bank establishes with a view to obtaining the accreditation necessary for the exercise of banking activity. This must reflect the regulatory requirements in this area. But not all banks always meet these minimum capital requirements imposed by the regulator. Thus, depending on the current measure of bank capital, some banks are relatively well capitalized while others are less so. And depending on their level of capitalization, banks are more or less willing to increase the supply of bank loans. As part of this work, we capture this factor denoted BANKCAP through the ratio between the level of bank capitalization and total assets. In this study, this measure is aggregated and therefore concerns all banks in the banking sector of each of the countries included in the sample. Olszak et al. (2016), Meral (2015), Deli and

Hasan (2017), Del Prete et al. (2017), Fratzscher et al. (2016), De Jonghe et al. (2016) considered in their studies this explanatory factor of the evolution of the supply of bank credits. The lesson from this work is that the more banks increase their level of bank capitalization due to more restrictive bank capital regulations, the more they are reluctant to grant more loans than they already do. Conversely, other authors come to the observation that the increase in the level of bank capitalization favors the supply of credit (Furlong and Keeley, 1989; Liu, 2011; Kapan and Minoiu, 2018). We therefore expect a positive sign from this factor.

Equity capital (BANKEQUI) is the compartment of the bank balance sheet which brings together all of the bank's own and sustainable resources. It is essentially composed of bank capital and the various reserves and provisions built up over the years. A considerable increase in these equity capital is a sign of the financial solidity of the bank. If this increase allows the latter to gain in size and credibility, this could have a positive impact on the provision of credit. However, an improvement in equity capital may not benefit credit policy if its voluntary or compulsory creation is done for the sole purpose of complying with the regulatory standards to which banks are subject. For Diogap and Ngomsi (2012), when the level of bank capital increases, the supply of credit is positively affected. Olokoyo (2011), Malede (2014) on the other hand find that equity and in particular the level of cash reserves, provisions for non-performing loans as well as a low level of capitalization negatively influence the supply of bank loans in general and long term, especially when the banks are small. For this study, we expect a positive sign of this variable on the granting of long-term bank loans.

Long-term savings (LTBANKSAV) is another organizational variable synonymous with long-term banking resources. Baoko et al. (2017), Imran and Nishat (2013), find in their studies that the volume of deposits has a positive influence on the credit supply and its evolution. Kpodar and Gbenyo (2010) and Diogap and Ngomsi (2012) also arrive at this result with regard specifically to the link between long-term savings and long-term bank financing. Thus, the more the share of long-term savings improves, the more this can constitute an incentive for the supply of long-term credits. Lindner (2015) nevertheless criticizes this vision, arguing that an increase in savings does not necessarily promote the offering of new bank loans. Empirically, Imran and Nishat (2013), Malede (2014), Park et al. (2015) find that there is a negative link between bank deposits and credit supply. For this study, we expect a positive sign from this factor.

Bank profitability that we understand in this work by the bank interest margin (BANKINTM) or interest rate differential appears in several empirical works. Some of them have reached the conclusion that bank profitability positively influences the

supply of bank credit or its evolution (Mansouri and Afroukh, 2009; Kpodar and Gbenyo, 2010; Dupont et al., 2010; Vo, 2018), On the other hand, Pham (2015), finds that this indicator can lead to an opposite effect on the credit supply. Given the requirement for a quasi- permanent search for profitability from banking intermediation activity, its insufficiency or distant nature could prove unfavorable for the granting of loans in general and long-term loans in particular. We expect a positive effect of this factor on the supply of long- term bank credits.

The economic growth rate (EGROWTH) is the indicator that captures the level of change in a country's economic activity over a given period. An increase in this rate very often has a favorable effect on the supply of credit. As part of this work, we expect a positive sign. Finally, foreign direct investment (FDINVEST) is a variable that takes into account foreign investment or capital flows. It is measured by the percentage ratio of foreign direct funds to GDP. Improving its level often encourages banks to increase their loan offering. A positive sign is therefore expected.

Our specified model looks like this:

$$\begin{aligned}
 LTBANKFI_{i,t} = & \beta_0 + \beta_1 * BANKCAP_{i,t} \\
 & + \beta_2 * BANKEQUI_{i,t} + \beta_3 * LTBANKSAV_{i,t} \\
 & + \beta_4 * BANKINTM_{i,t} + \theta_k * X_{i,t} + \mu_i + \varepsilon_{i,t}
 \end{aligned}$$

Where LTBANKFI represents the dependent variable represented by the logarithm of the share of long-term credits offered by banks. BANKCAP, BANKEQUI, BANKINTM and LTBANKSAV represent respectively basic bank capitalization, overall equity, bank interest margin and long-term savings. X groups together the control factors (EGROWTH and FDINVEST). β_0 is the model constant. $\beta_{1,2,3,4}$ et θ_k are the different coefficients associated with the explanatory variables of interest and the control factors. Finally, the element μ represents the country-specific unobserved effect and the random effect, while ε is the error term. Finally, i and t are the country and time respectively.

3.2. Estimation technique

The process of estimating a static panel data model begins with the application of the OLS (Ordinary Least Squares) method. Subsequently, the static panel model is estimated using the random effects method in order to verify the presence or absence of random effects. This verification is done through the Lagrange multiplier test.

The Lagrange multiplier test (LM test) developed by Breusch and Pagan is carried out using the random effects model and based on the residuals of ordinary least squares. After the test is carried out, we check the probability associated with it. When this p-value is greater than 5%, we accept the null hypothesis which rejects the specification of random effects structures. In this case, we can limit ourselves to the consideration of a group or pool model and the use of the Hausman test is no longer judicious. Otherwise, the alternative hypothesis is confirmed that there is a random effects structure. In this case, carrying out the Hausman test is necessary to confirm this presence.

Also called a specification test, the Hausman test is used to check the orthogonality between the regressors and the random effects because the approach using the random effects model is likely to generate the problem of non-convergence due to correlation potential of the variables with respect to the random effect. But the best known role of this test is that it allows us to determine between the random effects model and the fixed effects model, which one would be most appropriate. The latter is based on the hypothesis of the existence of random effects within the model. If the probability associated with this test is less than the 5% threshold, then the null hypothesis is rejected and the fixed effects model is the most suitable. In the opposite case, the random effects model is best suited. And when this model is retained, performing autocorrelation and heteroscedasticity tests is not necessary. On the other hand, in the opposite case, namely where the use of the fixed effects model would be made, it is recommended to correct these two problems of loosening assumptions by estimating again this model with robustness through the use of the error correction vector.

4. RESULTS AND DISCUSSION

The table below presents the main results of estimating the random effects model adopted in this study. This model accommodates with a random effects structure due to the non-significance at the 5% p-value level compared to the Chi-2 associated with the Hausman test (0.1740). This model is overall significant if we refer to the significance at the 5% probability threshold probability threshold associated with the Chi2 test.

Table 1: Results of random effects model estimation

Independent Variables	Dependent Variable : Logarithm of Long-term Bank financing (LTBANKFI)		
	OLS	fixe effects	Random effects
BANKCAP	0.007 (0.054)	0.144 *** (0.037)	0.140 *** (0.043)
BANKEQUI	-1.688*** (0.039)	-0.08 * (0.048)	-0.195 *** (0.046)
BANKINTM	0.095 *** (0.024)	1.104 *** (0.165)	0.115 ** (0.052)
LTBANKSAV	0.068 *** (0.011)	0.0215 (0.013)	0.040*** (0.014)
EGROWTH	-0.049 *** (0.028)	-0.044 ** (0.018)	-0.045 ** (0.021)
FDINVEST	-0.033 *** (0.024)	0.006 (0.022)	-0.017 (0.024)
Constant	8.70 *** (0.754)	4.832*** (1.071)	8.779*** (0.927)
P-value > F (ou Chi2)	0.0000	0.0000	0.0000
Prob > Chibar2 (Test LM)	0.0000		
P-value > Chi2 test hausman	0.1740		

Note: values in parentheses are standard errors. ***, ** and * represent significance at 1%, 5% and 10% respectively.

The first variable whose effect we interpret on our dependent variable, namely the level of supply of long-term bank financing, is the level of initial bank capitalization (BANKCAP). In the estimated random effects model, the coefficient linked to this variable is positive and significant. This sign which goes in the direction of our theoretical prediction materializes the reinforcing effect that this factor exerts with respect to long-term bank financing. Thus, all things being equal, increasing the level of bank capitalization by one point leads to a significant increase at the 1% threshold in the supply of long-term bank financing of 0.14%. This analysis is in line with that made by Furlong and Keeley (1989), but invalidates that of other authors such as Kashyap et al. (2008), Gambacotta and Mistrulli (2004) and Pham (2015). This positive impact of bank capital demonstrates its non-binding nature with regard to the offer of long-term bank financing in the Franc zone. In this space, regulatory requirements in terms of banking capital force banks and people seeking approval to open a bank to constitute a minimum capital of around 10 billion francs. Some banks meet this standard and even go beyond, while others are still struggling to meet it. Thus, the other interpretation that this result inspires us is that despite the minimum bank capital requirements, the objective of which is to allow banks to exercise the banking profession and to strengthen their own basic financial base, this does not fundamentally prevent the latter from strengthening their credit

activity in general and the granting of long-term loans in particular.

The level of equity represented by the BANKEQUI factor emerges at the end of the estimation with a negative and significant coefficient. Thus, an increase of one unit in the equity ratio leads, all things being equal, to a significant reduction of 1% in the supply of long-term bank loans of 0.195%. This result highlights that a high level of equity (whether due to the need to comply with regulatory constraints in this area or to an internal need to strengthen financial liabilities) does not favor the development of long bank loans in the case of countries of the franc zone. This analysis aligns with that of Gambacotta and Mistrulli (2004) Meral (2015). Olszak et al. (2016) who found that equity does not always lead to an improvement in the supply of bank credits. For them, this harmful link only occurs when the costs of access to own resources with a view to increasing capital or sustainable funds are high for banks.

The bank interest margin (BANKINTM), which we capture by the interest rate differential, appears in the estimated model with a positive and significant coefficient. According to the results, an increase of one point in this margin induces, all things being equal, a substantial increase at the 5% threshold in the supply of long-term bank credits of around 0.11%. Therefore, improving the banking interest margin, which is essential and strongly favoured by banks, plays a vital role in driving the supply of long-term bank financing in our study area,

namely the Franc area. Thus, the strengthening of credit activity can be improved due to the increase in banking profits and, in particular, the margin resulting from the differential between the lending rate and the depositing rate. In this context, the development of operations with customers and especially of credit activity can be observed because it is through these operations that banks derive most of their income. As with any business, the primary and permanent objective of a bank is to make a profit and to be profitable and efficient. Moving in this direction, Duport et al (2010) reached a conclusion highlighting the importance of the intermediation margin with respect to banking transformation activity in the long term. For these authors, the normal structure of rates must be ascending because this configuration is necessary for banks to be able to properly carry out their intermediation mission. Thus, for them, banking establishments can only develop the maturity transformation activity if it is profitable for them and for it to be profitable, the intermediation margin must make it possible. Other authors have also reached the observation that there is a positive empirical link between bank profitability and the supply of bank credits (Boutillier and Dérangère. 1992; Boutillier et al. 2005; Kpodar and Gbenyo, 2010; Pham, 2015; Vo, 2018).

As for long-term savings (LTBANKSAV), the coefficient associated with it appears with a positive and significant sign at the end of the empirical estimation carried out. All things being equal, an increase of one point in long-term savings captured by the ratio between term and savings deposits and total bank deposits leads to a significant increase at the 1% threshold of the offer of long bank financing up to 0.04%. This result confirms the idea that an increase in the level of savings, and in particular long-term savings, favours the supply of long-term bank credits within the countries of the Franc area. This observation is in the same direction as that made by Kpodar and Gbenyo (2010), Diogap and Ngomsa (2012), Imran and Nishat (2013), Baoko et al. (2017) or Vo (2018). Indeed, according to their results, greater availability of savings in general and long-term savings in particular is decisive for strengthening and revitalizing the supply of bank loans. Conversely, this result goes against the analyses made by Malede (2014) and Lindner (2015).

The first control variable, the GDP growth rate (EGROWTH), appears at the end of our empirical analyses with a negative and significant coefficient in the estimated model. Thus, an increase of one point in this factor leads, all things being equal, to a significant reduction at the 5% threshold in the supply of bank credit to the tune of 0.045%. This result tells us that improving the economic situation of countries in the Franc area does not lead to an increase in the supply of long-term bank credit.

Finally, the foreign direct investment (FDINVEST) factor emerges at the end of the estimation with a negative but not significant coefficient of the estimated model. This manifests the harmful effect that FDINVEST exerts with regard to our dependent variable.

5. CONCLUSION AND RECOMMANDATIONS

In this study, we were interested in the relationship that exists between bank resources, interest margin and the supply of long-term bank credit in franc zone over the period 2006-2016. Two major lessons emerge from this analysis. First of all, we find that among the banking resources mobilized for this study, basic bank capitalization and long-term savings have a negative and significant impact on the supply of long-term bank credits within this zone. Only the level of equity negatively and significantly affects the granting of long-term bank loans. Then, we note that the bank interest margin negatively and significantly influences the granting of long-term bank credits in the area studied. Thus, most of the banking organizational variables used for this study have a positive impact on the specific provision of long-term financing. In the light of our empirical observations, we first recommend that public authorities in general and monetary authorities in particular constantly seek a balanced mix between the requirements of prudential standards and incentive provisions to strengthen the supply of credit. Secondly, we believe that banks must boost and diversify their credit offering activity in order to promote higher interest margins and encourage the design and implementation by banks of innovative long-term savings products.

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