Advances in Politics and Economic
ISSN 2576-1382 (Print) ISSN 2576-1390 (Online)
Vol. 1, No. 2, 2018
www.scholink.org/ojs/index.php/ape

Original Paper

Bank Excess Liquidity and Economic Growth in Waemu Countries: A Panel Data Approach

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Received: October 10, 2018 Accepted: October 30, 2018 Online Published: November 6, 2018

doi:10.22158/ape.v1n2p141 URL: http://dx.doi.org/10.22158/ape.v1n2p141

Abstract

This paper provides an empirical assessment of the relationship between banking, liquidity, investment, terms of trade, bank solvency ratio, financial development and economic growth in the WAEMU zone. The analysis focuses on 7 countries of the West African Economic and Monetary Union (WAEMU) and covers the period 1994-2015. Using the panel data approach, we show that economic growth is positively related with banking on liquidity. In addition, the results highlight the impact of bank liquidity on economic growth but mitigate when it is associated with the investment.

Keywords

bank, excess liquidity, economic growth, West Africa

1. Introduction

Since the work of McKinnon (1973) and Shaw (1973), the relationship between financial development and economic growth has gained renewed interest. Empirically, the meaning and/or magnitude of the relationship between financial development and growth may depend on income level (Deida & Fattouth, 2002) or financial development (Shen & Lee, 2006). Huang and Lin (2009) find an insignificant correlation between financial development and economic growth in low-income countries, while this relationship is positive and robust in the case of high-income countries. A World Bank study has shown that despite the low level of development of the banking sector in African countries, it is excessively liquid (Honohan & Beck, 2007). But if a bank's performance stems from its liquidity situation (Goldstein & Pauzner, 2005), it is possible to assume that the bank's performance factors are those of bank over liquidity. This one can be defined as an excess of bank cash held beyond what is needed to cope with

withdrawals of economic agents (Saxegaard, 2006). According to Doumbia (2011), the excess liquidity of WAEMU banks can be explained by three main factors, namely the constraints related to the defense of parity of the CFA franc (Note 1), the inflow of capital and the high level of interest rate. This excess liquidity of banks results in insufficient loans. In the WAEMU zone, on average, during the period 1991 to 2006, the banking sectors of the different countries held excess liquidity ranging from 0.8% to more than 3.7% as a proportion of GDP.

In a context of an embryonic (Note 2) financial market where there are no compartments for very small and medium-sized companies. These companies are the most rationed in terms of credit (Miesel & Mvogo, 2007). But over the last decade, WAEMU countries have recorded relatively high growth rates. According to the report of the Banque de France (2015), the real GDP growth rate in the zone is 6% in 2013 compared to 3% for the world, 6.5% in 2014 and 7% in 2015. The result is that the good macroeconomic performance of the zone contrasts with the weak bank financing of the activity. The economic growth of the countries of the Union is therefore achieved in a context of bank excess liquidity. This raises the question of what is the impact of bank over-liquidity on the economic growth of WAEMU Member States? Therefore, the general objective of this study is to analyze the impact of bank over-liquidity on the economic growth of the countries of the Union. We assume that bank over-liquidity has a positive impact on economic growth in WAEMU countries. In addition, financial development is beneficial to economic growth.

Methodologically, we apply a panel error correction model with an interactive variable. This article contributes to the empirical literature on finance and growth by studying the relationship between bank over-liquidity and economic growth in WAEMU countries over the period 1994-2015. The results obtained suggest a positive correlation between bank over-liquidity and economic growth. However, the association between bank over-liquidity and investment has a negative impact on economic growth.

This article is organized as follows: Section 2 is devoted to reviewing the literature on the contribution of the banking sector to economic growth. Section 3 will introduce the methodology of the study. Section 4 will discuss the empirical results, particularly the econometric analysis of the relationship between bank excess liquidity and economic growth.

2. Literature Review

In this section, we successively address the review of theoretical literature and the review of empirical literature.

2.1 The Theoretical Literature Review

Since the pioneering studies of Bagehot (1873) and Schumpeter (1911), financial intermediation has been seen as a factor in draining funds into productive investments (Gurley & Shaw, 1955; Goldsmith, 1969). In his work on Britain, Goldsmith (1969) concludes that there is a positive relationship between the financial sector and the level of economic development over the period 1860-1963. Inspired by the theory of endogenous growth, King and Levine (1993) emphasize the importance of financial sector-led

innovation, through the pace of capital accumulation and factor productivity. According to these authors, financial systems make it possible to channel savings towards more productive uses on the one hand and to diversify the various risks associated with productive activity on the other. Through the various services it provides, the financial sector plays an indispensable role in economic growth by contributing to the improvement of productivity under the influence of financial innovation (Eschenbach, 2004). But financial liberalization policies that were supposed to allow developing countries to finance their development have led to financial underdevelopment characterized by a situation of over liquidity in the financial and banking sector (Hugon, 2007). If excessive liquidity holding by financial intermediaries is aimed at reducing two major risks of microeconomic crisis linked to their activity, namely: a liquidity crisis and a solvency crisis, however, it hinders the economic circuit (Doumbia, 2011). The link between the development of the banking sector and economic growth could be the result of bank optimization behavior in a risky context. Indeed, in a general context of information asymmetry, risk is the main concern of the bank which has an imperfect readability of its customers. Thus, risk is the most studied factor in the banking sector and credit risk is the most important for a bank. The lower a bank's own funds are compared to its customer receivables, the greater the credit risk and the greater the probability that the bank will not be over-liquid or efficient (Greuning & Bratanovic, 2004) in so far as the own funds would not be able to support any unpaid debts.

2.2 The Empirical Literature Review

Empirically, several studies have focused on the determinants of bank excess liquidity. They can be grouped into two categories: the first insisting on the voluntary holding of excess liquidity and the second on exogenous causes in the banking sector.

Regarding the first, Ouédraogo (2011), indicates that a liquidity level of 1% (compared to the deposit) is accompanied by a decrease of 1.75% of the supply of credit and 2.24% % of loans to the private sector in WAEMU, highlighting a crowding out effect. In addition, banks tend to overestimate the risk associated with the financing of a large proportion of companies, which results in insufficient lending vis-à-vis deposits and, therefore, increased liquidity. Beyond the required threshold (Doumbia, 2011). Based on a modified Klein model (1971), from a sample of eight developing countries, khemraj (2008) attributes the causes of excess liquidity to the oligopolistic structure of the banking system. The high levels of interest rates on loans could be explained by the oligopolistic structure of the banking system.

On the second, the causes of excess liquidity are perceived as the result of the reluctance of commercial banks in a context marked by the respect of regulatory prudential standards. In the case of the Central African Economic Community (CEMAC), Beguy (2014) identifies as causes of bank excess liquidity, the precaution of commercial banks and other exogenous factors, including soaring oil prices. Using Vector Autoreg Ression (*VAR*) model and a bootstrap technique, Kamgna and Ndambendia (2008) indicate in the case of CEMAC, a heterogeneity of the causes of bank over-liquidity. In addition to the non-significance of certain factors, the factors behind the excess liquidity in the CEMAC differ from one country to another. Only credit to the private sector reduces excess liquidity, the cost of credit, credit to

government and paid deposits are certainly significant, but do not have the expected sign.

In terms of the implications of bank excess liquidity on the real economy and monetary policy, studies are not lacking. Agénor and El Aynaoui (2009) studied the implications of bank excess liquidity on the effectiveness of monetary policy in a simple model with imperfections in the credit market. They show that in situations of bank over-liquidity, the effectiveness of monetary policy is diminished. Barik et al. (2012) analyze the causes of excess liquidity in the Indonesian banking sector and its impact on monetary policy. Adopting a T-VAR modeling approach over the period 2000-2010, they conclude that the excess liquidity of banks in Indonesia is justified by precautionary grounds. Indeed, the volatility of deposits and that of growth as well as the cost of resources for banks, explain the excessive holding of liquidity. In addition, they show that in excess liquidity, the effectiveness of monetary policy in controlling inflation is reduced. Using Vector Autoregression (*VAR*) *model* over the period 2000 to 2012, Jayaraman et al. (2012) examine the effects of excess liquidity on interest rates on loans, the share of loans in GDP, the exchange rate and the general price level in the Fiji Islands. The results indicate a negative relationship between excess bank liquidity and loan rates. A positive shock to liquidity strengthens the level of lending and causes a depreciation of the local currency. However, the excess bank liquidity does not significantly explain the level of inflation, especially in the short and medium term.

3. Methodology and Data

In this section, we present the specification of the model and the methodology of the research.

3.1 Model Specification

In econometric form, the regression model is as follows:

$$TCPIB_{it} = \alpha_{it} + \beta_1 RALI_{it} + \beta_2 INV_{it} + \beta_3 (RALI \times INV)_{it} + \beta_4 TE_{it} + \beta_5 (FP/ENG)_{it} + \beta_6 IDF_{it} + \varepsilon_{it} \quad (1)$$

Where TCPIB is the gross domestic product growth rate, RALI the excess liquidity ratio (RALI) proposed by Wanda (2007), INV, gross fixed capital formation as a ratio of GDP, TE, terms of trade, $\frac{FP}{ENG}$, solvency ratio and IDF, a financial development index and RALIxINV, a multiplicative variable to capture the conditioning effect of private investment on bank excess liquidity and economic activity. The variables are summarized in the table below.

Table 1. Summary of Study Variables and Expected Signs

Endogenous variable: TCPIB: GDP growth rate		
Exogenous variables	Description of variables	Expected signs
RALI	Over-liquidity ratio	+
INV	Private investment	+
RALI×INV	Interaction variable	+
IDF	Financial development index	+
TE	Terms of the Exchange	-
FP/ENG	Solvency ratio	+

Source: Author's presentation.

3.2 The Panel Estimation

Our study was performed using the panel data, under their double dimensions, including an individual dimension and temporal dimension. The panel data, by this feature, proved so particularly suited whenever you want to estimate models and test underlying theories (Nerlove & Balestra, 1995). Therefore, the model (1) can be again specified as follows:

$$TCPIB_{it} = \alpha_{it} + \beta_1 RALI_{it} + \beta_2 INV_{it} + \beta_3 (RALI \times INV)_{it} + \beta_4 TE_{it} + \beta_5 (FP / ENG)_{it} + \beta_6 IDF_{it} + \varepsilon_{it} \quad (2)$$

With i = 1, ...*T*, t = 1, ...22; x1it, the value of the *j*-ième variable for I-ième unit to the period t, j = 1, ... 7. K is the number of explanatory variables model and αit, βi, the coefficients of exogenous variables for the individual i. finally, μit is the term errors for the individual *i* on the datet.

This model assumes that each individual has a specific behavior, which is differentiated from one period to another. Denuded of any economic interest, the model becomes interesting once it imposes identifying restrictions, which correspond to the different hypotheses that one wishes to test. The economic literature most often uses three hypotheses that we present in our study.

First the homogeneous model. This type of model assumes the presence of uniform behavior between individuals. Estimating model returns to be applied simply the Ordinary Least Squares (OLS) on all the data set end-to-end without worrying their specific nature or that of hazard and. in this model, all coefficients are identical. In this case we can write:

$$H1: \begin{cases} \alpha_{it} = \alpha \\ \beta_{kit} = \beta_k \end{cases} et H2: \mu_{it} = IN(0, \sigma^2)$$

It follows that our model is given by:

$$TCPIB_{it} = \alpha + \beta_1 RALI_{it} + \beta_2 INV_{it} + \beta_3 (RALIxINV)_{it} + \beta_4 TE_{it} + \beta_5 (FP / ENG)_{it} + \beta_6 IDF_{it} + u_{it} \quad (3)$$

If one assumes the existence of difference of behavior between individuals, then this model is no more suitable. Then, the individual effect model which assumes that the individual estimates differ only in the constant. We distinguish in this case the fixed-effect model where the individual effect is constant over time and the random-effect model where the constant term is a random variable.

Concerning the fixed effects model, it takes into account the heterogeneity of the behaviors of the individuals composing the sample by considering that the equations that govern the relations the explained variable and the explanatory variables, stand out, from an individual to another by a constant. Therefore, the method of estimating the parameters depends on the structure of the error terms. If the errors are homoscedastic, not auto correlated in the temporal dimension and in the individual dimension, the MCO method on the dummy variables (LSDV = Least Square Dummy Variable) or the within estimators is used. On the other hand, if the errors are heteroscedastic and/or auto correlated in the temporal dimension but independent in the individual dimension, we use the Generalized Least Squares (GCM) method on the dummy variables (LSDV) or the Within estimators. In the case where the systematic effects are represented by the ordinates at the origin α_i for each individual one can write the hypotheses in the following way:

$$H1: \begin{cases} \alpha_{it} = \alpha_i \\ \beta_{kit} = \beta_k \end{cases} et H2: \mu_{it} = iiN(0, \sigma^2)$$

The equation is also given by:

$$TCPIB_{it} = \alpha_i + \beta_1 RALI_{it} + \beta_2 INV_{it} + \beta_3 (RALI \times INV)_{it} + \beta_4 TE_{it} + \beta_5 (FP/ENC)_{it} + \beta_6 IDF_{it} + u_{it} \quad (4)$$

In the absence of structural specificity of the endogenous variable that differs according to individuals, it is possible to retain another hypothesis: that of the random effect. The random effect model assumes that the relationship between the variable to be explained and the explanatory variables are no longer fixed but random. The individual effect (constant) is no longer a fixed but random parameter. This model can be written as follows:

$$H1: \begin{cases} \alpha_{it} = \alpha \\ \beta_{kit} = \beta_k \end{cases} et H2: \mu_{it} = \alpha_i + \varepsilon_{it}$$

The equation is also given by:

$$TCPIB_{it} = \alpha + \beta_1 RALI_{it} + \beta_2 INV_{it} + \beta_3 (RALI \times INV)_{it} + \beta_4 TE_{it} + \beta_5 (FP/ENC)_{it} + \beta_6 IDF_{it} + u_{it} \quad (5)$$

The Hausman test is a specification test that determines whether the coefficients of the two estimates (fixed and random) are statistically different. The statistic of this test is a chi-square with k degree of freedom. If the probability of the test is less than 5%, then the within estimators are unbiased. In the opposite case, we will retain the MCG estimators or the random effect model.

3.3 Stationarity and Co-Integration Test

The robustness of the results depend on the compliance with the characteristics stochastic series. To do this, should be applied the stationarity tests and if any, co-integration test.

i) study of the stationarity

There is stationarity of the variables if the characteristics (expectancy and variance) are not modified over time. It is difficult, if not impossible, to clearly identify the stochastic characteristics of a series if it is not stationary. In panel, the most widely used test to analyze the stationarity of the variables is that of Im-Pesaran and Shin (2003) (when the intertemporal dimension is weak) and Levin Lin and Chu (2002).

ii) The co-integration test

Co-integration makes it possible to identify the true relationship between two variables by searching for the existence of a co-integrating vector and eliminating its effect, if any. Co-integration tests can detect the presence of a long-term relationship between variables. However, it is very interesting to know the evolution in the short and medium term of this relationship. The tool required for this purpose is the Error Correction Model (ECM). This type of model makes it possible to highlight how the short-term dynamics of the variables of the system is influenced by the long-term equilibrium. Thus, when the series are co-integrated, their relationship has to be estimated through an error correction model. For the co-integration test we adopt the tests proposed by Westerlund (2007) to test the long-term

relationship between private investment and bank excess liquidity. Indeed, Westerlund (2007) developed four co-integration tests that are based on the structural dynamics of relationships and not on residuals. This is to test the null hypothesis of non-co-integration by checking whether the error correction term in the error correction model constructed for this purpose is significantly equal to zero. The first two tests (Gt and Ga) test the existence alternative of at least one individual for which the variables are co-integrated. The last two tests (Pt and Pa) test the null hypothesis of no co-integration against the alternative hypothesis that the panel as a whole is co-integrated.

3.4 Data and Descriptive

In this sub-section, we first present the source of the data and, secondly, the different statistical characteristics of our study variables

i) Data sources

Our study will be conducted from a panel of seven WAEMU countries over the period (1994-2015) and the choice of this period is related to the availability of data. Togo is excluded from the study for reasons of lack of data. Data from the study come mainly from the World Bank (WDI), the International Monetary Fund (IMF data base) and the Central Bank of West African States (BCEAO) which publishes information on the rate member countries and financial data on states and financial institutions. Thus, panel data will be processed according to the usual panel data methodology that is, stationarity analysis, co-integration, application of the presence of specific effects test and the Hausman test to discriminate between the fixed effects model and the random effects model.

ii) Descriptive statistics

Table 2 below gives us the statistical description of the variables used in the realization of our study. The analysis in the table shows that the average growth rate of GDP is at a low level, around 4% over the study period, far below the 7% required to achieve the Sustainable Development Goals. Private investment as a percentage of Gross Domestic Product (GDP) does not exceed 20%, averaging 18.65%. This level of investment is below the level set by ECA and recently by the Clarke (2013) study which is 25%. On average, the banks of the Union are strong in terms of compliance with prudential standards, the ratio Cooke (1.054), exceeding 8% of Basel 1. On the other hand the financial depth remains low with an average of 0.17. On average, however, WAEMU banks are liquid with a liquidity ratio of around 1.3483 on average over the study period.

Table 2. Description of Variables

Variables	Observations	Average	Standar deviation	Minimum	Maximum
INV	154	18.6467	7.8029	4.0072	38.8954
RALI	154	1.3483	0.6465	0.8409	4.8218
IDF	154	0.1795	0.0549	0.0486	0.3587
FP/ENG	154	1.0547	0.3974	0.3817	2.2728
TE	154	114.5149	24.9872	65.9527	193.8547
TCPIB	154	3.9211	4.5364	-28.0999	14.6612

Source: Author's estimation.

The terms of trade, at 114.51 on average, are typical of most developing economies, indicating that economies are highly foreign, making it vulnerable to external shocks.

4. Empirical Results

The purpose of this section will be to present the results of the different econometric tests as well as the results of the estimation of our model, then their statistical and economic interpretations.

4.1 Results of Stationary Test and Co-Integration

The results of the tests developed by Levin Lin and Chu (2002) and those of Im Pesaran and Shin (2003) are given in Table 5.

Table 5. Results of Unit Root Tests in Panel

Variables	IPS		LLC	
	Coef	P-value	Coef	P-value
TCPIB	-6.1988	0.0000	-3.4806	0.0003
RALI	-3.4204	0.0003	-3.9213	0.0000
INV	0.2705	0.6066	-0.3080	0.3790
TE	-0.8471	0.1985	-1.9441	0.0259
IDF	1.0802	0.4237	-0.9100	0.1814
FP/ENG	-2.4720	0.0067	-2.4926	0.0063
RALI×INV				
DTCPIB	-8.1663	0,000	-8.0813	0.0000
DRALI	-6.8197	0,0000	-6.6697	0.0000
DINV	-6.7676	0.0000	-3.8117	0.0001
DRALI×DINV				
DTE	-6.1455	0.0000	-6.1111	0.0000
DFP/ENG	-6.9208	0.0000	-7.7176	0.0000
DIDF	-6.4275	0,0000	-4.6839	0.0000

Source: Author's estimation.

As a result, the RALI, TCPIB and FP/ENG variables are stationary in level according to the results of the LLC and IPS test. As for the TE variable, the two tests indicate contradictory results. Indeed, TE is level stationary according to the LLC test, while the IPS test indicates a contrary result. The variables INV and IDF are not stationary according to the two tests. In first difference, the unit root hypothesis is rejected by the two tests for all the analysis variables. It follows that all the panel series are integrated of order 1 according to the tests of Levin Lin and Chu (2002) and Im Pesaran and Shin. For the co-integration test, as mentioned above, we adopt the test proposed by Westerlund (2007) and the results obtained are recorded in Table 6.

Table 6. Panel Co-Integration Test Result (Westerlund, 2007)

Tests	TCPIB et TE		TCPIB et FP/ENG		TCPIB et IDF	
	Coef	P-value	Coef	P-value	Coef	P-value
Gt	-7.164	0.000	-5.218	0.000	-7.641	0.000
Ga	-26.412	0.000	-29.820	0.000	-25.549	0.000
Pt	-6.504	0.005	-8.579	0.000	-8.886	0.000

Pa	-24.256	0.000	-34.262	0.000	-25.097	0.000

	TCPIB et RALI		TCPIB et INV		TCPIB et RALI×INV	
Tests	coef	p-value	Coef	p-value	Coef	p-value
Gt	-6.188	0.000	-5.742	0.000	-5.563	0.000
Ga	-17.316	0.000	-23.193	0.000	-11.572	0.024
Pt	-13.106	0.000	-7.949	0.000	-12.354	0.000
Pa	-28.136	0.000	-25.893	0.000	-9.237	0.005

Source: Author's estimation.

The results indicate that the non-co-integration hypothesis can be rejected at the 1% threshold for all the variables of the panel, taken as a whole, with regard to the statistics Pt and Pa. Which means the variables admit a dynamic specification of type error correction. In addition, the hypothesis of the existence of a long-term relationship between the series is validated. Therefore, the error correction model can be adopted for the entire panel.

4.2 Specification Tests of Individual Effects

We first test the homogeneous or heterogeneous specification of the data generating process. It will be a question of testing the equality of the coefficients of the studied model in the individual dimension. This amounts to determining from the specification tests, if one is entitled to assume that the theoretical model studied is perfectly identical for all individuals. The rejection of the null hypothesis of no individual effects (Prob > F = 0.0002) in this study leads to the Hausman test to discriminate between the fixed and the random effects model. Table 7.

Table 7. Result of the Specific Effect Test and the Housman Test

Specific effect test	Prob > F = 0.0002
Hausman Test	**Prob > chi2 = 0.3812**

Source: Author's estimation.

Indicates that the results obtained lead to accept the null hypothesis, therefore to the estimation of the random effects model. Now we can estimate our 2-step panel error correction model. The first step is to estimate the short-term relationship while the second step is dedicated to long-term dynamics.

4.3 Analysis and Interpretation of Results

Here we proceed to analyzes and interpretations of the results of the estimation of the short-term relationship and the long-term one.

Concerning the short-term dynamics, the results of the MCE estimation of the short-term relationship between economic growth and excess liquidity are summarized in Table 3.

Table 8. Results of the Short-Term Relationship between Economic Growth and Bank Excess Liquidity

Endogenous variables growth rate (TCPIB)		
Esplanatory Variables	Coefficients	P-value
DTE	-0.00255	0.918
DFPENG	-1.43312	0.161
DIDF	-3.17799	0.753
DRALI	0.29829	0.082
DINV	0.16564	0.090
DINV×RALI	-0.24438	0.082
CONSTANTE	0.70765	0.716

Source: Author's estimation.

It follows that in the short term, only three explanatory variables are significant. Bank excess liquidity is statistically significant at the 10% level with a positive coefficient as well as private investment. The multiplicative variable has a negative and significant coefficient at the 10% threshold. As a result, bank excess liquidity has a positive effect on economic growth but is reduced when private investment is taken into account. Regarding the long-term dynamics, the results are shown in Table 4.

Table 4. Results of the Long-Term Relationship between Economic Growth and Bank Excess Liquidity

Endogenous variables: Growth rate (TCPIB)		
Explanatory variable	Coefficients	P-value
TE	-0.00112	0.943
FPENG	-0.98861	0.296
IDF	15.82892	0.037
RALI	0.17667	0.864
INV	0.05502	0.655
INV*d RALI	0.00583	0.951
CONSTANTE	0.70765	0.716

Source: Author's estimation.

In the long term, it follows that the financial development (IDF) measured by the liquidity rate of the economy, is the only variable of the model which presents a statistical significance at the threshold of 5%.

4.4 Verification of Assumptions and Economic Implications

At this stage of the study, it is good to invalidate or validate the hypotheses postulated. The study found a positive effect of bank over-liquidity on economic growth even though private investments reduce this positive impact in the short term. As a result, our first hypothesis is verified. The study also concludes that our financial development indicator exerts a statistically significant influence at the 5% threshold on long-term economic growth, confirming our second hypothesis.

But in the long run there is no relationship between economic growth and bank over-liquidity. As a result, our hypothesis 1 is verified.

5. Conclusion and Implications of Economic Policies

The objective of this study was to analyze the impact of bank over-liquidity on the economic growth of the WAEMU countries. On panel data from seven countries over the period from 1994 to 2015, the results indicate that bank excess liquidity has a positive impact on economic growth. Considering bank excess liquidity as an indicator of banking performance, it follows that the more efficient they are, the more the economy benefits. The positive influence of bank excess liquidity on the economic growth of countries could also be explained by the recycling of banking resources through the underwriting of government securities. Indeed, to guard against credit risk, commercial banks have a strong preference for public securities in WAEMU. In doing so, the state with more resources undertakes investments in infrastructure which increases the overall demand and production. However, the positive impact of banking performance on economic growth is thwarted by the relationship between bank excess liquidity and investment. By equating investment with gross fixed capital formation, it follows that only long-term financing is profitable for capital accumulation. In the WAEMU zone, however, banks prefer to finance the trade and wholesale sector (import-export, etc.) mainly by granting short-term and low-value credits. As a result, there is a need to loosen credit risk constraints. Establishing credit bureaus, improving the institutional and macroeconomic framework could reduce banks' aversion to credit risk. To this must be added the improvement of the institutional framework to promote a policy of capital accumulation. In the long run, it should also be noted that the liquidity of the economy positively influences economic growth. A policy of making available and managing monetary resources is necessary to stimulate economic growth.

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Notes

Note 1. The CFA franc is the currency of the eight countries in the WAEMU zone, namely Côte d'Ivoire, Togo, Burkina faso, Mali, Sénégal, Benin and Guinée-Bissau.

Note 2. Financial markets in sub-Saharan African countries are embryonic, with bond markets dominated by sovereign bond issuance, private bond markets and stock markets reserved for a few large companies.