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## Colonial coinage and financial development

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**Abstract.** Until the 21st century, Africa remains the only region in the world where there are countries whose currency is derived from the colonial system. Very far from political and geostrategic considerations, the question has always been asked in order to know the effect of this lack of monetary sovereignty on the evolution of economic activity. Therefore, this study investigates the relationship between Colonial coinage and financial development by applying Generalised Method of Moments. The importance of this approach, is to deal with heterogeneity and endogeneity problems. The sample consist of 48 African countries data over 10 years. This study findings are like-minded with those of economic literature around the law, finance and endowment theory. They suggest that in sub-Saharan Africa, the quality of institutions has a very large influence on access to domestic credit. Moreover, the main enclave for the development of the financial system due to colonial coinage is the sluggish stability of the latter colonial coinage in Africa.

**Keywords.** Colonial coinage, Cliometrics, Financial development, Institutions.

JEL. E50, G20, K40.

### 1. Introduction

Although many economic studies focus themselves on the link between financial development and economic growth, there is still nowadays a controversy in the economic literature. Some economists do not consider financial system as an important tool for economic growth (Robinson, 1952; Lucas, 1988), while others like Bagehot (1873), Schumpeter (1911) and Dermiguc-Kunt & Maksimovic (1998) are convinced on the fact that financial development is an instrument for economic growth. Therefore, it's still necessary today to check country by country, for the positive or negative relation between financial development and economic growth. About that, a large economic literature has been focusing on the relationship between financial development and economic growth (Patrick, 1966; Levine, 1997; Kpodar *et al.*, 2004).

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There is another economic domain which attempts to explain the differences in financial development among countries or economies. In this domain, some authors have explained the level of financial development by that of financial liberalisation (Shaw, 1973; McKinnon, 1973; Kapur, 1976; Mathieson, 1980), and/or financial repression (Van Wijnbergen, 1983; Taylor, 1983). Since the eve of the 2000s, another innovative economic research field has been trying to explain the differences in financial development between countries by colonial legacy. Two main theories have been developed since then: the law and finance theory and the law and endowment theory (Laporta *et al.*, 1998; Beck *et al.*, 2003). These theories emphasise on the fact that the quality of institutions and laws settled during the colonisation of countries can explain the level of financial development of the former colonies, depending on whether or not they better protect private property, fight against corruption, and other institutional weaknesses (North & Weingast, 1989).

This paper base itself on these two theories to study some institutional determinants of financial development; especially how the history of developing countries with their settler can help to explain differences in financial development nowadays. However, it's important to highlight the fact some differences between the law and endowment theory and the law and finance theory, even if they focus on colonial inheritance and its impact on financial development. The law and finance theory focuses on legal tradition used by the colonial settlers and transmitted to the former colonies, thru the way these colonies have built their judicial system. The law and endowment theory emphasises on the type of long-lasting institutions built by colonial settlers, depending on the healthy environment they found in the colonies (Beck, Demirgüç-Kunt, & Levine, 2003). It's also important to note that countries with British common law system tend more to the protection of private property and therefore to financial development and economic growth, than countries using French civil law (La Porta, Lopez-de-Silanes, & Shleifer, 2008). In Africa, all countries still using colonial coinage nowadays are also from French civil law system. It therefore seems crucial to question the economic consequences of such a system.

Another important point to highlight is the fact that actually in the world, about one hundred and ninety-seven (197) independent states are using about one hundred and sixty-four (164) official currencies, but a little share of currencies is being used in dependent territories. If at individual level, it is necessary for everyone to manage his or her own income in order to improve his or her welfare, isn't also necessary at a country level? In this work, we use the cliometrics approach to answer this question by investigating the effects of colonial coinage on financial development, based on the law& finance theory and the law and endowment theory.

The contribution of this article might be situated at two points. The first point is related to the methodology, contributing to the building-up of knowledge, this is probably the first study that includes the colonial

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coinage variable in analysing the institutional determinants of financial development. The second point of this study's contribution is contextual, since it brings a scientific framework for a debate which has already started in Africa for some decades now. It's a debate between people, leaders and the overall society were they either stand for or against the use of colonial coinage in Africa, particularly in the XAF/XOF zones. This will probably be the first scientific paper on this issue.

### 2. Related literature

#### 2.1. Financial development and economic growth

The relation between financial development and economic growth has been subject to a large literature. One may consider the papers of Bagehot (1873) and Schumpeter (1911) as pioneer researches in the domain. In fact, studying the Britannic economy in the 1860s, Bagehot (1873) concluded that the brilliant success during that period was due to the performances of financial markets that permitted firms to borrow the long-term credits. Schumpeter (1911) on his part defends that financial services significantly contribute to the economic growth, since they lead to resource mobilisation in order to invest in new technologies. So, financial development can lead to economic growth through efficient allocation of resources. Tobin (1965) in what he called "The Monetary Theory of Growth" stood for the positive relation between financial development and economic growth. According to him, the investors are more satisfied when there are low interest rates that permit them to obtain credit in order to invest.

But some authors do not confirm this relation. Among them are Keynesian theorists like Robinson (1952) who clearly established that the relation is reversed, since economic growth leads to financial development.

Following the insufficiencies of Keynesian theory, some authors have been engaged in demonstrating the importance of financial development in economic growth. Among them are Patrick (1966), Hicks (1969), McKinnon (1973) and Shaw (1973). The two latter authors even argue that there is a need for financial liberalisation in the economies in order to accelerate economic growth. According to them, allowing the market forces to regulate the financial market leads to more efficient results on the economic growth. They will be followed in that way by Kapur (1976), Galbis (1977) and Mathieson (1980). Since then and most of the time, the debate lies on how to make more efficient the contribution of financial to economic development, since studies reveal a positive effect of well-functioning intermediaries and structured financial markets on the economic growth (Levine, 1997). Some empirical works like Kutznets (1955), Gurley & Shaw (1955) and Bencivenga & Smith (1991) conclude that banking sector development has a causal effect on economic growth. Bekolo (2002) goes further in showing that banking sector development has a positive and significant effect on total factor's productivity, while Levine (1997) emphasises on private saving accumulation, allocating these savings in

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productive investment McKinnon (1973). Zmire (2008) concludes that raising total factor productivity implies increase in economic growth. Therefore, the question to be asked might be why do some countries have well-functioning financial markets and intermediaries while others do not? In other terms, what determine financial development around the world (Beck, Demirgüç-Kunt, & Levine, 2003)? In this respect, in some African countries where financial markets are not well developed, it is economic growth that drives financial development, not inverse (Nzomo & Dombou, 2017). However, where a large range of researches focus on the contribution of financial development on economic growth, few of them interest themselves on the determinants of financial development.

### 2.2. Institutional determinants of financial development

Far from the debate on financial liberalisation and financial repression, the existing literature on the determinants of financial development suggests that the laws protecting private property and incentives are the main determinants of financial development (Laporta *et al.*, 1998; Beck *et al.*, 2003). This literature is based on a theory which suggests that the colonial legacy has a strong impact on the private property right and institutions' incentives in the former colonies, depending on the origin of the laws they've owned from their colonial masters. The two theories are: the law and endowment theory and the law and finance theory.

The first examines the strength of institutions owned from the colonial masters by the former colonies. This law emphasises on the fact that the strength of institutions depends on sickly environment the settlers found in their colonies. Therefore, in colonies with high mortality rate, the settler just implemented weak institutions, just to help them in extractive activities. While in colonies with low mortality rates, they've implemented long-lasting and strong institutions, ruled them by themselves before leaving after independence. Some empirical works have shown that in this second case, the institutions seems more incentive.

The law and finance theory emphasises on the fact that the legal origin of institutions has an impact on private property protection and on investment incentives. The pioneer research in this domain was done by Laporta *et al.*, (1998), even if some previous works were focussing on the advantages of using alternative legal rules on investors' rights (Bebchuk, 1994; Gromb, 1993; Harris & Raviv, 1988). According to Laporta *et al.* (1998), the law and finance theory is based on the three following assumptions: (i) the legal traditions attach different priorities on the protection of private property; (ii) the main legal traditions are originated from Europe, and have been spread in the world through imitation, colonisation and conquests and (iii) private property protection are at the base of any financial development. Using a sample of forty-nine countries, these authors found that the common Law Origin was leading to strong rules of private property rights, while the French civil law was leading to

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the worst property protection rights, this with German civil law and Scandinavian civil law being at the middle.

As one can realise, this paper focuses on rule of law and the institutions governing the financial environment in African economies. This paper goes further, but in the same way, in showing that the coinage and the laws that govern them might help explain the difference observed in financial development among African countries.

### 3. Methodology

#### 3.1. Estimation method

In order to get consistent results, this paper uses Generalised Method of Moments. It is an extension of the method of moments that has been criticized because of the inconsistency of its parameters (Greene, 2002). In his introductory work, Hansen (1982) conducted an empirical study on the application of GMMs endorsed by the 2SLS defended by Theil (1953) and Basmann (1957). To this end, the choice of using GMMs is justified in several respects: first, the idea of explaining the gap of financial development by the incorporation of the colonial coinage; then GMMs surpass other estimation techniques such as GLS, or 2SLS with the major advantage that they allow to correct the problem of heterogeneity linked to fixed effects in panel Hansen (1982). Most importantly, GMMs are famous for their ability to correct endogenous problems that typically arise between the model's explanatory variables (and, in particular, for the dynamic panels used in this paper).

Blundell & Bond's (1998) GMM estimator combines equations in first differences with level equations. The instruments in the first difference equation are expressed in level, and vice versa.

$$\begin{cases} \Delta y_{i,t} = \rho \Delta y_{i,t-1} + \Delta X_{i,t} \beta + \Delta \vartheta_t + \Delta e_{i,t} \\ y_{i,t} = \rho y_{i,t-1} + X_{i,t} \beta + \vartheta_t + e_{i,t} \end{cases} \quad (1)$$

So as to choose between the GMM in difference estimator and the system estimator, we test the existence of an individual effect. If the assumption of the existence of an individual effect is validated, the GMM system estimator is retained.

#### 3.2. Nature and sources of data

With the aim of reaching the objective of this paper, which is to study the impact of the colonial coinage on financial development, we have chosen a sample of 48 African countries. Annual data used in this paper are from secondary sources and cover the period starting from 2005 to 2016. The variables Foreign direct investment (in net value), External debt stock of GDP, GDP per capita in PPP current, Unemployment, Current account balance, Inflation consumer prices, are derived from the World Bank Database of 2017, while the variables Sound money, legal enforcement of contracts, freedom to own money are extracted from The Fraser Institute

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database (from 2016). In addition, the variables Colonial Money, French Coloniser, and British Coloniser are binary.

The construction of the Colonial Coinage variable is as follows: it takes the value 1 if the country in 2017 still uses a currency coming from the colonial system, and 0 otherwise. This belongs to the cliometric approach<sup>1</sup> of the paper. As for the French Colonizer variable, it takes the value 1 for any country that inherited from French legal system colonization, and 0 otherwise. The same procedure is applied for the British Colonizer variable where 1 is assigned to countries under the inheritance of the British legal system and 0 otherwise.

### 3.3. Econometric model specification

The overall objective of this work is to study the impact of the use of the colonial coinage on financial development. To do this we try to highlight a channel for transmitting the institutions' effects.

#### 3.3.1. Global specification

The model derived is that of Arellano & Bond (1991) given by:

$$y_{i,t} = \rho y_{i,t-1} + X_{i,t}\beta + \mu_i + \vartheta_t + e_{i,t} ; |\rho| < 1; i = 1, \dots, 48; t=2005, \dots, 2016 \quad (2)$$

Where  $y_{i,t}$  is the dependent variable, and  $y_{i,t-1}$  its delayed value by one period.  $X_{i,t}$  is the vector of the explanatory variables;  $\mu_i$  represents the individual or specific effect of the country;  $\vartheta_t$  the time effect;  $e_{i,t}$  the error term;  $i$  is the index of the country and  $t$  the time index.  $\rho$  and  $\beta$  are the parameters to be estimated.

#### *Dependent variable*

The dependent variable of this paper is financial development. Several variables are generally used in the literature to capture the level of financial development (see Levine, 1997). The main proxy that we use in this paper to capture the financial development is private access to domestic credit. However, for results robustness purposes, we will also use variables such as Broad money and stock market as dependent variables.

#### *Explanatory variables*

The list of explanatory variables is as follows: Colonial currency which is the variable of interest; French colonizer; British colonizer; Sound money; Foreign direct investment (in net value); External debt stock of GDP; GDP per capita in PPP; Unemployment; Current account balance; Inflation consumer prices; Real interest rate; Taxes on international trade & CPIA financial sector rating, legal enforcement of contracts, freedom to own currency.

It should be noted that four of these variables are institutional variables, notably CPIA financial sector rating variable, legal enforcement of contracts, freedom to own currency, Sound money. The latter will allow us

<sup>1</sup> This is an approach that relies on a historical description of the facts to defend an idea

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to control the effect of the colonial coinage on financial development through the institutions.

### *List of endogenous variables*

The variables suspected of being endogenous among the explanatory variables are the following: Current account balance, GDP per capita in PPP & Unemployment. These are variables that are supposed to depend on other variables omitted in the model, and therefore correlated to the error term of equation (2).

### *List of instrumental variables*

The following variables are used as potential instruments of the endogenous variables consequently taken with their delays of 2 periods: External balance goods and services, Time to import & deposit interest rate.

### 3.3.2. Interaction between Colonial coinage and institution

In order to detect an institutional channel through which the colonial coinage is likely to influence financial development, we will study the interaction between coinage and all the four institutional variables. Considering the variable sound money, the equation stipulating this approach, inspired from Ebeke *et al.*, (2015) is as follows.

$$\begin{aligned} \text{FinancialDevelopment}_{i,t} = & \\ \alpha_1 + \alpha_2 \text{Colonialoinage}_{i,t} + \alpha_3 \text{Colonialcoinage} \times \text{Soundmoney}_{i,t} + & \\ \alpha_4 \text{Soundmoney}_{i,t} + \alpha_5 X_{i,t} + \mu_{i,t} & \end{aligned} \quad (3)$$

in this equation, it will be question to test the significance of the coefficient  $\alpha_3$  associated with the interactive term  $\text{Colonialcoinage} \times \text{Soundmoney}^2$ .  $X_{i,t}$  represents the set of other independent variables of the study.

The same manipulation is done for the three other institutional variables that are notably CPIA financial sector rating variable, legal enforcement of contracts and freedom to own currency.

## 3.4. Statistical tests

The stationarity test is a preliminary unit root test based on the null hypothesis of the presence of a unit root. The most famous panel tests (which we use in this paper) are those of Levin & Lim (1997), Im Pesaran & Chin (1991), and Arellano & Bond (1995).

After looking at the stationarity of the variables, the paper will investigate for the validity of the instruments. Therefore, the Sargan (1958) test is carried out in order to ensure the validity of the instruments assigned to the various endogenous variables in the application of system GMM.

Then the paper will test for Heteroskedasticity. This test makes it possible to check whether the regression errors are homoscedastic, that is to

<sup>2</sup> We introduce this interactive term if the variable of interest coinage is not significant, and therefore look for the significance of this interactive term to establish the channel of the impact on financial development

test under the null hypothesis whether the error variance is constant over time.

Finally, the autocorrelation error test will be conducted. The Arellano and Bond test on autocorrelation will be used. The hypothesis tested is the absence of second-order autocorrelation of the residuals.

## 4. Results and discussion

4.1. The importance of institution channel in improving access to private credit

At first sight, as described in the table below, the use of colonial money in itself is not a problem. Indeed, the colonial coinage variable has no significant effect whatsoever on broad money or on domestic private credit. One might be tempted to think here, as neoclassicals, that money is only a veil.

Nevertheless, the table presents an important institutional outcome: The CPIA financial sector variable have a positive and significant influence on Private credit.

According to the World Bank, the Country Policy and Institutional Assessment of financial sector assesses the structure of the financial sector and the policies and regulations that affect it. Accordingly, higher scores can be attained by a country that, given its stage of development, has a policy and institutional framework that more strongly fosters growth and poverty reduction.

**Table 1.** Results of regression without interactive term

Independent variables	Dependant variable	
	Dynamic panel-data estimation, one-step system GMM	
	Domestic Private credit	Broad Money
Domestic Private credit (lag1)	-0.1762236 (0.533)	
Broad Monay (lag1)		-0.1194058 (0.183)
Colonial coinage	0.229219 (0.935)	-0.4876983 (0.813)
French colonizer	-2.312815 (0.478)	-0.0206524 (0.993)
British colonizer	-1.08577 (0.669)	-3.986921 (0.167)
GDP (per capita)	0.0006977 (0.867)	-0.0033573 (0.306)
CPIA financial sector	2.529202*** (0.007)	.1108032 (0.788)
Inflation consumer price	0.1987731 (0.214)	.0178035 (0.851)
Current account balance	.0252791 (0.770)	-.0306868 (0.405)
External debt stock	-0.027061 (0.477)	-.025152 (0.510)
Real Interest rate	0.1096266 (0.220)	.0957691 (0.377)
Unemployment	-0.5824448 (0.118)	-.3884704 (0.321)
Tax on international trade	-0.0018812 (0.994)	.1103895 (0.658)
Const.	2.418696 (0.320)	2.528407 (0.166)
F-Value	8.48	1.07
Prob.	0.000	0.000

**Notes:** P value are given in parentheses. \*\*\* Significant at the 1% level; \*\* Significant at the 5% level; \* Significant at the 10% level.

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Therefore, in sub-Saharan Africa, the quality of institutions that regulate the financial sector has a very large and positive influence on access to domestic credit. These results are consistent with Law and finance theory (Beck, Demirgüç-Kunt, & Levine, 2003). From the moment African institutional context makes it possible to better protect the rights of investors, the financial system can only improve. This is consistent with Laporta, Lopes-de-Silanes, Shleifer & Vishny (1998)'s thought.

### 4.2. Colonial coinage substantiality slow down financial development

Nevertheless, if colonial coinage is not intrinsically a problem, its characteristics can be. This is what we can observe in the table below:

**Table 2.** Results of regression with interactive term (colonial coinage×sound money)

Independent variables	Dependant variable	
	Dynamic panel-data estimation, one-step system GMM	
	Domestic Private credit	Broad Money
Domestic Private credit (lag1)	-0.3438814 (0.285)	
Broad Money (lag1)		-0.194679 (0.358)
Colonial coinage	-0.8613985 (0.447)	4.485142* (0.080)
colonial coinage×sound money	-0.9282074*** (0.008)	-1.430323*** (0.009)
Sound money	-0.8613985 (0.447)	1.048943 (0.375)
French colonizer	-4.982488** (0.044)	-8.041997** (0.014)
British colonizer	-0.6149244 (0.871)	-2.908478 (0.370)
GDP (per capita)	-0.0010031 (0.869)	-0.0054155 (0.219)
CPIA financial sector	2.707227* (0.059)	3.28658 (0.361)
Inflation consumer price	0.2477856 (0.176)	0.1130724 (0.172)
Current account balance	0.0411805 (0.671)	0.091119 (0.123)
External debt stock	-0.0044845 (0.933)	0.1038335 (0.103)
Real Interest rate	0.1773558* (0.081)	0.1275754* (0.090)
Unemployment	-0.4691691 (0.257)	-1.301129* (0.080)
Tax on international trade	0.0055115 (0.979)	-0.0139675 (0.950)
Const.	1.849926 (0.469)	1.77701 (0.402)
F-Value	12.70	3.00
Prob.	0.000	0.010

**Notes:** P-value are given in parentheses. \*\*\* Significant at the 1% level; \*\* Significant at the 5% level; \* Significant at the 10% level.

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This study considers colonial coinage as the variable related to the use of money inherited from the colonial system. The variable is binary and takes the value 1 if the country in 2017 still uses a currency from the colonial system. The approach here is cliometric. The results show that through sound money channel, the use of colonial money still negatively and significantly affects access to private credit.

According to the Heritage Foundation, sound money is essential to protect property rights and, thus, economic freedom. Inflation erodes the value of property held in monetary instruments. Therefore, in order to earn a high rating in this area, a country must follow policies and adopt institutions that lead to low and stable rates of inflation and avoid regulations that limit the ability to use alternative currencies.

One of the main features of colonial money in Africa is that it is in a fixed exchange rate. However, sound money is supposed to better promote coordination between economic agents. The results show here that the detrimental effect of the inertia of the colonial currency outweighs the beneficial effects of stability. In this regard, studies have shown the importance of volatility for the evolution of the economy, whether it is on trade openness (Levchenko & Di Giovanni, 2008) or on stock markets (Liu, Hua, & An, 2016).

**Table 3.** Results of regression with interactive term (colonial coinage×freedom to own currency)

Independent variables	Dependant variable	
	Dynamic panel-data estimation, one-step system	
	GMM	
	Domestic Private credit	Broad Money
Domestic Private credit (lag1)	-2.127961 (0.480)	
Broad Money (lag1)		0.0081027 (0.971)
Colonial coinage	1.677207 (0.403)	-1.102425 (0.638)
Freedom to own currency	.9838047 (0.261)	2.001375*** (0.010)
French colonizer	-2.896 (0.199)	-4.543454 (0.042)
British colonizer	-.6354026 (0.823)	-2.902313 (0.370)
GDP (per capita)	.0001071 (0.984)	-0.0034575 (0.374)
CPIA financial sector	3.375094 (0.093)	5.603222* (0.056)
Inflation consumer price	.2806787 (0.067)	.1746594 ** (0.046)
Current account balance	.0168511 (0.839)	0.055645 (0.473)
External debt stock	-.0632 (0.183)	0.0119741 (0.827)
Real Interest rate	.1353343 (0.133)	0.0479356 (0.406)
Unemployment	-.2724421 (0.476)	-0.8705823 (0.175)
Tax on international trade	-.1146849 (0.687)	-0.136794 (0.531)
Const.	-5.363369 (0.433)	-12.42199 ** (0.039)
F-Value	8.86	4.61
Prob.	0.000	0.000

**Notes:** P-value are given in parentheses. \*\*\* Significant at the 1% level; \*\* Significant at the 5% level; \* Significant at the 10% level.

This effect can be explained. Stuck on the former colonial power currencies, the actual colonial coinage does not fluctuate according to the evolution of its economy. But on the contrary, that of Western economies.

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This has the effect of decontextualizing the money of the real sector that is supposed to support it. Although too much fluctuation could be an inconvenience for the weak African economies, a great deal of inertia is more so. As a matter of fact, flexible exchange rates can be considered as automatic stabilizers.

The colonial coinage, thru sound money, significantly reduces broad money levels as countries doesn't have direct control on their money emission (See Variable Freedom to own currency on Table 3). The effect can also spread to the stock market. Indeed, Nzomo & Dombou (2017) show that there is an interconnection between the interest rate, the money supply and the level of market capitalization in some African countries.

### 4.3. Origin of colonizer and financial development

The institutional economic theory would like the legal origin of former colonized countries' legal system to have a significant influence on the contemporary evolution of their financial systems. According to this view, French civil law countries have a lower probability of providing an efficiently flexible legal system than common (Beck, Demirgüç-Kunt, & Levine, 2003). The results of this study are very close to this scientific fact. There are presented in table 4.

**Table 4.** Results of GMM with interactive terms

Independent variables	Dependant variable		Dependant variable	
	Domestic Private credit	Domestic Private credit	Broad Money	Broad Money
Domestic Private credit (lag1)	-0.187631*	-0.3438814		
	(0.077)	(0.285)		
Broad Money (lag1)			-0.194679	-.1949954
			(0.358)	(0.310)
Colonial coinage	-7.30123	-0.8613985	4.485142*	-2.803934
	(0.415)	(0.447)	(0.080)	(0.622)
colonial coinage×legal enforcement	2.636923	-0.9282074***		
	(0.244)	(0.008)		
Legal enforcement	-.774331	-0.8613985		
	(0.626)	(0.447)		
colonial coinage×Sound money			-1.4303***	1.479952
			(0.009)	(0.238)
Sound money			1.048943	-0.34819
			(0.375)	(0.733)
French colonizer	-4.94923*	-4.982488**	-8.04199**	-8.430638
	(0.079)	(0.044)	(0.014)	(0.030)
British colonizer	.9415889	-0.6149244	-2.908478	-2.259143
	(0.734)	(0.871)	(0.370)	(0.250)
GDP (per capita)	-.0030407	-0.0010031	-0.0054155	-0.012591**
	(0.578)	(0.869)	(0.219)	(0.014)
CPIA financial sector	2.244484	2.707227*	3.28658	2.686752
	(0.12)	(0.059)	(0.361)	(0.462)
Inflation consumer price	.1767914***	0.2477856	0.1130724	0.0177766
	(0.010)	(0.176)	(0.172)	(0.824)
Current account balance	.1100813	0.0411805	0.091119	0.106896
	(0.270)	(0.671)	(0.123)	(0.137)

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External debt stock	.0538367 (0.423)	-0.0044845 (0.933)	0.1038335 (0.103)	0.1350638* (0.066)
Real Interest rate	.1553813* (062)	0.1773558* (0.081)	0.1275754* (0.090)	0.0721842 (0.279)
Unemployment	-.5391415 (0.152)	-0.4691691 (0.257)	-1.301129* (0.080)	-0.9938881 (0.197)
Tax on international trade	-.0120516 (0.921)	0.0055115 (0.979)	-0.0139675 (0.950)	0.1164016 (-0.3811929)
Const.	-.3961198 (0.882)	1.849926 (0.469)	1.77701 (0.402)	3.846321 (0.402)
F-Value	9.13	12.70	3.00	11.64
Prob.	0.000	0.000	0.010	0.000

**Notes.** P-value are given in parentheses. \*\*\* Significant at the 1% level; \*\* Significant at the 5% level; \* Significant at the 10% level.

As the above results show, African countries that have been colonized by the French and achieved independence from the French tend to have weak financial systems. In fact, only 14 countries in Africa still use colonial coinage today. And all 14 countries are former French colonies. They were accompanied in the process of independence by France. The institutions that are there have for the most part been instituted by the former colonizer: Among them are colonial coinage.

The economic literature around this question is quite rich. In fact, Beck *et al.*, (2003) find that British common law countries have significantly better-developed financial intermediaries and markets and better property right protection than French civil law countries. With the same idea, Laporta *et al.*, (1998) have shown that the common-law countries and former British colonies have better property rights and more developed financial markets. Similarly, North *et al.*, (1998) argue that former British colonies prospered relative to former French.

## 5. Conclusion

The implementation of money into the economic system has made it possible to complete the debate on Solow-Swan models and growth theories. And that of Ramsey in a framework of inter-temporal choices (model of dynamic inefficiency). Taking into account money in Tobin's growth model gives prominence to the money's "non-neutrality" and its influence on macroeconomic aggregates.

From the foregoing, in order to show the extensions of the implications of money in the economic fabric, the objective of this article is to show that the characteristics of money itself has an impact on economic system and financial development. To this end, the present article is embedded in a dynamic according to which, the use of the colonial coinage (the CFA franc for example) constrains the emergence of former colonies' economies and therefore is harmful for their financial systems.

Using a sample of 48 sub-Saharan African countries, secondary data, and generalized method of moments (completed by fixed/random effects), our results suggest that the characteristics of colonial coinage has a

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negative impact on the well-being, on private credit. In addition, the quality of institutions is revealed as been a way to raise the level of credit into the economy. Using colonial coinage in a context of former French colonies, adversely constrains their financial development. This result is quite plausible as it is in line with the economic literature around this topic (The law and finance theory and the others). Despite this conclusion, financial development in any country positively increases the domestic per capita product confirming classical theories. In fact, apart from the previous results showing the inertia observed in the level of access to private credit, the crossing of the colonial coinage variable hampers the emergence of financial assets and therefore the development of financial markets.

As a matter of facts, the main enclave for the development of the financial system due to colonial coinage is the sluggish stability of the latter colonial coinage in Africa. This study suggests as an implication of economic policy, to examine and change the rules that govern the operation of colonial coinage. Otherwise, to abandon these old currencies unsuited to the economic contexts of the zone they deserve.

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