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The BEAC Central Bank and Wealth Creation in Cameroon Economy

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ABSTRACT: The purpose of this paper was to assess the impact of BEAC's financing on wealth creation in the Cameroon economy. BEAC is a central bank of the six States of the Central Africa. They are Cameroon, Central Africa Republic, Congo-Brazzaville, Chad, Equatorial Guinea and Gabon. The recovery of the Cameroon economy after the economic crisis of years 1980 and 1990 led to question the role played by BEAC central bank in that attainment. The data used in the study were secondary and were collected from Franc currency zone annual reports of 'Banque de France' on Cameroon from the year 1990 to 2011. OLS regression equations, means and variances were used to explain this impact. The descriptive results revealed large variations of standard deviation values from the means. The OLS results in return showed that BEAC's financings affect negatively wealth creation in the Cameroon economy. In other words, wealth creation is significantly negatively affected by BEAC's financings to the banking system for the physical and financial wealth, while negatively affected by BEAC's financings to the government for the financial and human wealth. In order for BEAC to increase the wealth creation in Cameroon economy, it must provide productive loans directly to economic agents through their unions and long-term loans to commercial banks to finance the economy and boost consumption.

KEYWORDS: BEAC's financings, Cameroon government, banking system, Central bank, physical wealth, financial wealth, human wealth.

1 INTRODUCTION

Many scholars and policymakers diverge on the role of central banks in an economy. This is because of different operations carried by these institutions and their genesis. Central banks exercise many operations namely issuance of the country's bank notes, acting as the government bank, acting as the commercial banks' bank, serving as a lender of last resort to the banking and even the financial system as a whole, conducting monetary policy to manage the foreign exchanges and the price level. Other activities have been added to this list: setting of the monetary policy, allocating of credit to promote national goals, setting of banking policy, supervising of secondary banks, publishing of financial information and advising of government on economic policies. There are other roles that need to be associated with central banks. These are the distributive, political and allocative roles of central banks. All these operations undermine activities in the society.

Central banks' policies affect individuals, households, enterprises and the government. This is the distributive role of the central bank. The political role deals with the independence of this financial institution, while the allocative role focuses on the provision of credit to industries ([1]). According to reference [2], the historical role of central banks is to grant resources to government. This role has evolved over time. It goes back to the establishment of the Bank of England in 1964. Today, the operations of central banks can be summarized in two main functions namely the macroeconomic function aiming to maintain price stability and the microeconomic function based on the stability of the banking system ([2]). This stability can be achieved by financing the economy. Central banks finance the economy directly or indirectly. Directly, they provide funds to economic agents without using any financial intermediary. This is the example of different provisions granted by central banks to States' treasuries. Indirectly, central banks use financial intermediaries like commercial banks to finance the economy. These two methods of financing are used by "Banque des Etats de l'Afrique Centrale" (BEAC) to finance Cameroon

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economy. So, the question is: How **do** the provisions of funds by BEAC affect wealth creation in Cameroon economy? There are many types of wealth. But this study limits itself to financial, human and physical wealth to generate these specific questions: How do BEAC's financings affect financial wealth creation in Cameroon economy? How BEAC's funding influences physical wealth creation in Cameroon economy? How BEAC's provision of funds impacts on human wealth creation in Cameroon economy?

The main objective of this study is to examine how financial resources provided by BEAC create wealth in the Cameroon economy. The specific objectives explain how BEAC's funding creates physical, financial and human wealth in the Cameroon economy. This study exploits secondary data from annual reports of Franc zone from "Banque de" France. The data are analyzed using means, variances and Ordinary Least Square (OLS) regressions. The paper is divided in sections. Section 2 looks at the relationship between central banks and wealth creation. Section 3 focuses on the methodology and section 4 gives the results. Section 5 generates concluding remarks.

2 CENTRAL BANKS AND WEALTH CREATION

Many definitions have been given to wealth. But this study uses the one of [3]. He defined wealth as capital. In classical economics, capital referred to durable physical assets such as machinery and buildings that increase the value of production. There are many types of capital: physical, human, financial, social, natural, cultural and intellectual. Each of these capitals is a type of wealth. According to their functions, central banks have two main roles in the process of wealth creation.

The first role is to create a stable macroeconomic environment consisted of a stable price level, low inflation and stable exchange rates. The environment enables the accumulation of net savings for wealth creation and facilitates economic growth. A stable macroeconomic environment facilitates to keep the cost of production low and reduces the speculation in the economy. It avoids the decrease of the value of the assets and the currency. A stable environment permits positive return for investments carried on in the economy. Central banks use general and selective instruments to maintain a stable macroeconomic environment.

The second role is microeconomic. Here, central banks regulate and supervise the banking system. Central banks must regulate and supervise secondary banks in order to allow them to play the functions of the existence of banks defined by [4]. These ones are the provision of credit to the economy, the provision of financial information, the setting and the management of the payment system and the transmission of the monetary policies in the economy. The microeconomic function enables central banks to provide finances to the economy through secondary banks. Central banks by the mechanism of discount rate refinance secondary banks at a rate lower than the market rate. Secondary banks use then the money received from central banks to finance enterprises, governments and households which are agents of wealth creation. Governments from money received create physical wealth like schools, roads, bridges, human wealth like engineers, skilled and high-tech citizens. Enterprises and households increase the volume of stock assets or capital formation, savings and value added in the economy.

Central banks also finance governments directly through the treasury. The treasury is the government bank. It takes care of payment of the government's expenses. The expenses generated allow governments to create physical, financial and human wealth in the economy. All these funds provided by central banks directly or indirectly to the economy increase the Gross Domestic Product (GDP) of countries. A strong economy has a high GDP and a strong currency. It is what BEAC aspires to for Cameroon.

BEAC is the central bank of six states of the central Africa zone. These are Cameroon, Central Africa Republic, Congo-Brazzaville, Chad, Equatorial Guinea and Gabon. BEAC was created on the 22nd November, 1972 ([5]). BEAC uses three instruments to fulfill its macroeconomic and microeconomic roles. The instruments are the year-refinancing objectives, interest rates, reserve requirements. The refinancing objectives are stated yearly for each state of the region and its banking system. BEAC does not go above the amounts of financing stated for each country at the beginning of the budgetary year. The interest rates provide the charges and returns granted by BEAC for various operations of reduction and increase of the quantity of money supply in the economy, buyouts and discounting of marketable securities (commercial papers) held by commercial banks or other monetary creation institutions. The operations of money supply take place on counter A and counter B. Counter A deals with short-term negotiable credits while counter B deals with medium and long-term non-negotiable credit. The reserve requirements permit BEAC to monitor and maintain the liquidity of the Cameroon banking system. The three instruments presented have been contributing to the recovery of Cameroon economy since the devaluation of the Franc CFA on the 11th January 1994 ([6]). From the above literature review, four research hypotheses are derived:

H_1: BEAC's financings to Cameroon government and to Cameroon banking system affect physical wealth in the Cameroon economy;

H_2: BEAC's financings to Cameroon government and to Cameroon banking system affect financial wealth in the Cameroon economy;

H_3: BEAC's financings to Cameroon government and to Cameroon banking system affect the human wealth in the Cameroon economy;

H_4: BEAC's total financings to Cameroon government and banking system affect the total wealth in the Cameroon economy.

The next lines present the methodological framework. It consists of methods and instruments of data collection and analysis.

3 METHODOLOGICAL FRAMEWORK

This study is explanatory and uses time series data. The data were collected from [6] from the year 1990 to 2011 of Cameroon national accounts. Data consisted of dependent and independent variables. The dependent variables were physical wealth (capital formation), financial wealth (net savings), the human wealth and the total wealth of the Cameroon economy. The independent variables were BEAC's financings used by Cameroon government and BEAC's financings used by the banking system. The expenditure approach was used to assess net savings and capital formation. This was done by doing total output produced in the economy minus non-labour cost. The income approach was used to generate human wealth based on income distribution done by Cameroon government for human capital development. In other words, the distribution is done by expenditures made by the State for human development. These expenditures generate wealth to economic agents through salaries, remittances and capital expenditures made by the government. The total wealth is made up of the sum of physical wealth (capital wealth), financial wealth (net savings) and human wealth.

Capital formation was utilized because it portrays in this research the volume of physical wealth produced in the economy. Net savings represented the volume of financial wealth generated in the economy. Income distributions resulting from government expenditures for human development were associated with human wealth, while the total wealth is made up of the sum of all wealth. BEAC financings to Cameroon government and BEAC financings to the banking system were provision of funds by BEAC central bank to the banking system and to the government. The total BEAC's financings were made up of the sum of BEAC's financings to the government and to the banking system. BEAC's financings variables enabled to measure the relationships with the independent variables.

The tools of data used to explain the relationships between dependent and independent variables were mean, variance and the multiple linear regression equations. The descriptive tools that is, the variances and the means were employed to facilitate the understanding of the variation of individual variables vis-à-vis their means. The ordinary multiple linear regression equations permitted to assess whether the relationships studied between the dependent and the independent variables were significant, the direction of the relationships, the significant variables that affected the relationships and the proportion of the variance of the dependent variables explained by the variation of the independent variables using the t-test. The relationships expected between the dependent and the independent variables are negative relationships. This is because less wealth is created when the economy is crisis. Governments and the banking systems make use of central banks' financings mostly in periods of crises; examples of the United States of America and the European Union in the financial crisis of 2008. Central banks' financings affect the economy when they are productive loans and are not used for liquidity financing. In addition, central banks financings to governments and to banking systems in periods of crisis are used primarily for liquidity problems, except when they are long-term debt or make for the recapitalization of banks; case for instance of European banks today. Furthermore, the real actors of wealth creation in the economy are secondary banks (Commercial, development and investment banks) ([7]). In other words, the relationships between BEAC's financings and physical wealth, financial wealth, human wealth and total wealth must be negative, and hence the coefficients of the dependent variables in the equation models must have negative signs. This is because a provision of funds to the economy by BEAC is likely to decrease wealth in the Cameroon economy. The regression models estimated were as follows:

$$W_1 = \beta_0 + \beta_1 Fing + \beta_2 Finb + \varepsilon \quad (1)$$

$$W_2 = \beta_0 + \beta_1 Fing + \beta_2 Finb + \varepsilon \quad (2)$$

$$W_3 = \beta_0 + \beta_1 Fing + \beta_2 Finb + \varepsilon \quad (3)$$

$W_4 = \beta_0 + \beta_1 Fint + \varepsilon$ (4)

W_1 is physical wealth (capital formation); W_2 is financial wealth (Net savings); W_3 is human wealth (social capital expenditures, remittances and government's salaries); W_4 is total wealth (physical + financial + human wealth); Fing is BEAC's financings to the Government; Finb is BEAC's financings to the banking system; Fint is total BEAC's financings. The next lines show the results.

4 RESULTS

This section presents the results. It explores also their interpretation and discussion.

4.1 PRESENTATION AND ANALYSIS OF RESULTS

The presentation of results is done in tables and the analysis describes and explains the results. We start by exploring descriptive results.

Table 1. Descriptive results of BEAC's financings and Wealth creation

Variables	Observations (Years)	Means	Standard deviations
BEAC's financings to the government	22	120267.9	79173.39
BEAC's financings to the banking system	22	45740.68	89921.67
Total BEAC's financings	22	164402.4	114227.9
Physical wealth	22	1667997	983663.3
Financial wealth	22	854953.3	854953.3
Human wealth	22	289111.7	289111.7
Total wealth	22	3845316	1231445

Source: Adapted from "Banque de" France Franc Zone Reports (1990 – 2011)

The descriptive results of the mean and the standard deviation are showing great variation of the standard deviation values from the mean values. This means that the difference between the various observation values is big. This is explained by the difference of financing of BEAC to the government and to the banking system between the years of recession and recovery of Cameroon economy. The data collected to explain the impact of BEAC on wealth creation (see Appendix) showed large amounts of financings of BEAC to the economy during the years of recession and small amount during the years of recovery of the Cameroon economy (see Appendix). In terms of wealth, high variations of the standard deviation values from mean values are explained by the fact that less wealth was produced during the years of recession and more wealth during the years of recovery and positive growth of the Cameroon economy. This gives then great discrepancies between years of recession and recovery and growth of the Cameroon economy (see Appendix). The next analysis focuses on OLS regression results.

Table 2. OLS regression results of BEAC's financings and Wealth creation in Cameroon economy

Independent Variables	Physical wealth	Financial wealth	Human wealth	Total wealth
BEAC's financings to government	- 2.583	- 3.204*	- 2.02***	/
BEAC's financings to the banking system	- 6.536***	- 6.35***	- 0.838	/
BEAC's total financings	5.73**	9.35***	5.03**	- 10.809***
F-test P-value	0.011	0.001	0.017	0.003
R^2	0.38	0.50	0.35	0.35
N	22	22	22	22
Hypotheses	H_1	H_2	H_3	H_4

Source: Adapted from "Banque de" France Franc Zone Reports (1990 – 2011)

The results of OLS regression equation of BEAC's financings and physical wealth (H_1) showed that the equation is significant at 5%. This means that BEAC's financings affect physical wealth creation (capital formation). R^2 showed that the variation of independent variables BEAC's financings to the government and BEAC's financings to the banking system leads to the variation of the dependent variable capital formation of 38%. The t-test showed that BEAC's financings to the banking system are the significant variable affecting the variation of capital formation in the Cameroon economy. The negative coefficient of BEAC's financings to the banking system revealed that they reduce the volume of investment done in Cameroon economy and hence the physical wealth produced by the economy.

The results of OLS regression equation of BEAC's financings and financial wealth (H_2) showed that the equation is significant at 1%. This means that BEAC's financings affect financial wealth creation (net savings). R^2 showed that the variation of independent variables BEAC's financings to the government and BEAC's financings to the banking system leads to the variation of the dependent variable financial wealth of 50%. The t-test showed that BEAC's financings to the banking system and BEAC's financings to the government are significant variables affecting the variation of financial wealth in the Cameroon economy. The negative coefficient of BEAC's financings to the banking system disclosed that they reduce the volume of financial wealth generated in the Cameroon economy.

The results of OLS regression equation of BEAC's financings and human wealth (H_3) explained that the equation is significant at 5%. This means that BEAC's financings influence human wealth creation. R^2 showed that the variation of independent variables BEAC's financings to the government and BEAC's financings to the banking system leads to the variation of the dependent variable human wealth of 35%. The t-test revealed that BEAC's financings to the government are the significant variable affecting the variation of human wealth in the Cameroon economy. The negative coefficient of BEAC's financings to the government divulged that they reduce the volume of human wealth created in the Cameroon economy.

The results of OLS regression equation of BEAC's financings and total wealth (H_4) showed that the equation is significant at 1%. This means that BEAC's financings affect total wealth creation in the Cameroon economy. R^2 showed that the variation of independent variables BEAC's financings to the government and BEAC's financings to the banking system leads to the variation of the dependent variable total wealth of 35%. The t-test showed that total BEAC's financings to the economy are the significant variable affecting the variation of total wealth produced in the Cameroon economy. The negative coefficient of total BEAC's financings disclosed that they reduce the volume of total wealth produced in the Cameroon economy. These results give the following OLS regression equations:

$$W_1 = 2277562 - 2.583Fing - 6.536*** Finb \quad (1)$$

$$W_2 = 2255346 - 3.204*Fing - 6.35***Finb \quad (2)$$

$$W_3 = 878902.8 - 2.02***Fing - 0.838Finb \quad (3)$$

$$W_4 = 5622368 - 10.801***Fint \quad (4)$$

The next lines interpret and discuss the results. The interpretation and discussion center on the results provided by the different OLS equation models, specifically the significant variables provided by the t-test and focus on the impact of the signs of coefficients of independent variables on wealth creation.

4.2 Interpretation and Discussion of Results

The results of H_1, H_2, H_3 and H_4 showed that BEAC's financings affect the variation of physical wealth, financial wealth, human wealth and total wealth. All the four hypotheses studied were significant (see Table 2). BEAC's financings to Cameroon government and to the banking system decrease physical, financial, human and total wealth creation in the Cameroon economy. The R^2 explains that BEAC's financings and wealth creation have an inverse relationship that is, when BEAC's financings decrease, wealth creation increases; vice-versa. The t-test revealed that BEAC's financings to the banking system are significant for the wealth creation for H_1 and H_2. The coefficients of these variables show that an increase of BEAC's financings to the banking system reduces physical and financial wealth creation, while their reduction increases this wealth in the economy. This result is explained by the fact that Cameroon banking system is over-liquid and use rarely BEAC's facilities to finance the economy. Most banks after the restructuration of the year 1990s and the setting of mechanisms of supervision by monetary authorities meet the solvency requirements and are over-liquid ([6]). The financing of the economy by the banking system from their own resources enable banks to avoid the strengthening of regulations on them by the monetary authorities. In other words, the use of the central bank's financings shows that the banking system has liquidity problems and cannot finance the economy, and hence less wealth is created. Thus a negative sign or relation between BEAC's financings to the banking system and physical and financial wealth is explained by the recession of the Cameroon economy. During that period, the banking system borrowed more from BEAC to meet its liquidity problems and could not

finance the economy, hence less wealth was created. In other words, wealth is created when secondary banks use their own resources to finance the economy. This can be justified by the years of recovery and growth of Cameroon economy. In this period of growth of Cameroon economy, BEAC provides smaller amounts of funds to the banking system comparing with amounts provided in the recession time (see the Appendix).These explanations also elucidate the results of the variation of financial and human wealth by the BEAC's financings to the government (H_2 and H_3). The data of the sample studied showed that Cameroon government borrowed large amounts of money from BEAC during the years of recession and smaller amounts and even zero amounts in the era of recovery and growth (see Appendix). During the years of recession, wealth creation could not be carried by the government because the government could generate itself finances. This then justifies the negative sign or relationship of BEAC's financings to the government and financial and human wealth (see Table 2). The OLS regression showed a negative relationship or sign between BEAC's total financings and total wealth (H_4) because BEAC's financings are not an instrument of wealth creation. The wealth creation is mainly affected positively by the secondary banks because they are the providers of liquidity to the economy and transmitters of the monetary policies ([4]).

5 CONCLUSION

The aim of this study was to assess the impact of BEAC's financings on wealth creation in the Cameroon economy. OLS regression equations, means and variances were used to explain this impact. The descriptive results showed large variations of standard deviations from mean values. This is explained by big discrepancies between the years of recession and recovery of the Cameroon economy.

The OLS results in return showed that BEAC's financings affect wealth creation (physical, financial, human and total) in the Cameroon economy. Wealth creation is significantly negatively affected by BEAC's financings to the banking system and to Cameroon government. In order for BEAC to increase the wealth creation in Cameroon economy, it must provide productive loans to economic agents directly through business syndicates and long-term loans to commercial banks to finance the economy.

REFERENCES

[1] G. Epstein, *Federal Reserve Politics and Monetary Instability*, in Alan Stone and Edward J. Harpham, eds., *The Political Economy of Public Policy*, Beverly Hills: Sage Publications, 1982.

[2] F. Capie, C. Goodhart, S. Fischer and N. Schnadt, "The Development of Central Banking," *The Future of Central Banking; The Tercentenary Symposium of the Bank of England,* Cambridge: Cambridge University Press, pp. 1-232, 1994.

[3] A. Marshall, *Principles of Economics*, London, Macmillan and Co, Ltd, 1890.

[4] E .G. Corrigan, *Are Banks Special?* Annual Report, Federal Reserve Bank of Minneapolis, pp. 2-4, 1982.

[5] BEAC*, Présentation de la BEAC,* Banque des Etats de l'Afrique Centrale, 2012. [Online] Available : www.beac.int (October 5, 2012).

[6] Banque de France (1990-2011), *Rapports Annuels de la Zone Franc*, Euro système, France, (1990-2011).

[7] E. S. Messomo, "A prospective Approach on the Role and Challenges of Traditional Banks in African Recovering Economies: A case study of Cameroon", *GERER & DECIDER*, Vol. 2 no. 2, pp. 35-53, 2008.

[8] National Institute of Statistics [NIS], *Literate population in Cameroon*, NSI, Yaoundé, 2010.

APPENDIX

Data of the study (in million Francs CFA) [1]

Years	BEAC's government financings	BEAC's banking system financings	Total BEAC's financings	Physical wealth (capital formation)	Financial wealth (Net savings)	Human wealth (Social expenditures)	Total wealth
1990	100471	273364	373835	416733	313335	501377	1231445
1991	101471	266274	367745	448100	324700	520100	1292900
1992	111692	254231	365923	492500	519400	429200	1441100
1993	112692	52053	164745	515000	526600	391500	1433100
1994	93254	27432	120686	533000	808600	291000	1632600
1995	107692	21716	129408	597500	869200	297500	1764200
1996	107692	4900	112592	789900	831300	269100	1890300
1997	100459	13671	114130	1028400	1126800	339900	2495100
1998	113709	25508	139217	1122200	1120400	358000	2600600
1999	144043	17174	161217	1217600	1433000	522100	3172700
2000	149321	4249	153570	1489300	1584300	542600	3616200
2001	220826	2623	223449	2054400	1700200	544700	4299300
2002	250054	595	250649	2286200	1883800	516400	4686400
2003	256732	11000	267732	2155200	1773500	574900	4503600
2004	252953	5170	258123	2167300	1886300	611600	4665200
2005	176348	484	176832	2297800	2074400	565600	4937800
2006	166054	685	166739	2385900	2306300	621200	5313400
2007	80431	705	81136	2620100	2452300	729900	5802300
2008	0	724	724	2678800	2842000	907200	6428000
2009	0	16295	16295	2908600	2586800	1229800	6725200
2010	0	1327	1327	3371500	2837000	1120800	7329300
2011	0	6115	6115	3119900	2950700	1265600	7336200

Source: "Banque de" France Reports Franc Zone (1990 – 2011)

[1] 655.957 F CFA = 1 euro