



Munich Personal RePEc Archive

Pro Growth Monetary Policy in Africa: Monetarist versus Keynesian Approach

NGUENA, Christian L.

University of yaounde 2 - CEREG

3 April 2012

Online at <https://mpra.ub.uni-muenchen.de/49410/>
MPRA Paper No. 49410, posted 31 Aug 2013 22:48 UTC

(Pro Growth Monetary Policy in Africa: Monetarist versus Keynesian Approach)¹

Christian Lambert NGUENA *

KEY MESSAGES:

The relative positive economic growth experienced by most African countries in the recent decade has come with insufficient demand stimulation. The concern of poverty at the forefront of economic policy, the need for inclusive growth and sustainable development, inter alia, brings forward the inevitable question of the monetary policy responsibility. Accordingly, the monetarist theory that focuses on price stability inherently neglects the demand stimulation aspect of economic prosperity.

Since the mid 1980s, the monetarist school driven by its central aim of fighting inflation and maintaining credibility in markets and economic agents has been priority for monetary authorities (especially in Africa). To this effect, while good results in terms of inflation targeting has been achieved in many African countries; economic growth has sometimes been low. Hence, in light of the above, using a statistical and theoretical debate method, the Credible Monetary Policy (CMP)ⁱ paradox is traceable to Africa. Accordingly, with the promising economic environment in Africa, we recommend the promotion of a monetary policy oriented toward improving economic growth under the constraint of price stability.

In light of the above view, there are some note worthy signs such the recent decision by the two CFA zone central banks to either maintain interest rates at a low level or reduce it despite tightening measures of monetary policy taken by the European Central Bank (ECB) earlier in the year. In the same vein, the central bank of South Africa has maintained its policy of low interest rates with an objective of economic expansion.

Since, the 2008 financial crisis, the consolidation of the Federal Reserve's declared final objective of lowering interest rates and making emergency loans is an eloquent example to reassure African central banks in the choice of the pro-growth monetary policy option.

Keywords: Pro growth monetary policy; CMP paradox; Financing enterprises; African central bank.

Classification JEL: C23; C33; E52; E58.

¹ ©2013.

* Researcher at the CERE (Centre of Study and Research in Economics and Management) [[✉ : clanguena@yahoo.fr](mailto:clanguena@yahoo.fr)]. I sincerely thank the AfDB (African Development Bank), AERC (African Economic Research Consortium), UNECA (United Nations-Economic Commission for Africa), REMA (Research in Applied Micro and Macroeconomics), LAREM (Laboratory for Analysis and Research in Mathematical Economics), and CERE who were actors and funders since we began research on the background of this paper in 2008. I also thank the anonymous referee, Carine Magne and Asongu S. for editorial comments. However, I remain solely responsible for errors that may exist in the text.

1) INTRODUCTION

The International Monetary Fund (IMF), the African Development Bank (AfDB) and the United Nations Economic Commission for Africa (UNECA) agree on the following: beyond effective good performance in terms of economic growth, African economies have a higher growth potential that can enable them to become a potential growth pole (UNECA, 2012; AfDB, 2013). Accordingly, with the involvement of authorities, this potential can easily be realized with respect to the Keynesian theory because total liberalism has been the source of destabilization and exposure to crises. Thus the aim of unleashing the economic potential of Africa can only be achieved with an optimal choice based on contextualization of cyclical interventions and taking into account a global environment characterized mainly by shocks and crises.

The latest financial and debt crises have led to the launching of several stimulus plans to rescue the global economy. Whereas Africa was virtually absent from the concert of world recovery plans, the majority of sub-regions in the continent have felt a pinch of the crises. The Economic and Monetary Community of Central African States (CEMAC) and Economic and Monetary Community of West African States (WAEMU) felt (albeit with a slight delay) and continue to feel the heavy effects of the crises.

Indeed, the relative disconnection between African banking and financial systems and the global financial markets (with the exception of a few countries like South Africa) and stabilization policies carried-out by monetary authorities since 1990s banking reorganizations, have initially put them out of heavy direct effects experienced by banks, insurance companies and other international financial centers in the world. However, African economies are not spared. Effects of the crisis are already felt by African countries and probably will continue in the long run.

Both effects can thus be identified: the effects affecting the financial sphere and the those affecting the real economy. At the financial sphere, the situation of expensive credit experienced for several years by African economies was exacerbated. Indeed, there is a paradox between the presence of abundant bank liquidity and the lack of funding on the one hand and the excessive cost of credit on the other hand (NDjanyou, 2001; Asongu, 2013 a,b,c; Nguena, 2013). This situation by improving enterprises finance issue tends to negatively impact investment and therefore economic growth. Furthermore, Nguena (2013) in a country-

level study finds that SMEs have more chance to get short term credit than long term credit. Thus these realities in Africa allow us to underline the monetary policy issue in Africa and rethink its implementation and final objectives which are important for economic growth.

Since the mid-80s, monetary policy is the main policy instrument used by most governments. The need to fight against inflation and maintaining credibility with markets and economic agents have thus led the authorities to give priority to this instrument. Indeed the current neoclassical school focuses on central bank credibility as an efficiency factor of its monetary policy from the perspective of achieving its ultimate objective of price stability. These developments which derive some of their sources from theoretical analyzes of monetary policy in terms of credibilityⁱⁱ could be the reason of good results in the fight against inflation in Africa with however a low economic growth. Yet as the first section of this paper will show, the CMP in the fight against inflation should theoretically have a positive influence on economic growth.

Hence, due to the poor performance of economic growth in African countries, monetary policy modeled on monetary theory can be challenged in favor of a Keynesian approach. In order to answer this question we will go through a theoretical and empirical literature review applied to the African context which first highlights the paradox of monetary policy in terms of its impact on economic growth and secondly propose a model of monetary policy for economic growth in Africa. For a robust and homogeneous analysis we will in the population of Africa consider the sample of sub-Saharan Africa countries with a particular focus on CEMAC zone countries. This analysis and debate is more interesting and justified since practically, several central banks in Africa have decided to not only focus on price stability as recommended by the monetarist school but also to stimulate economic growth by (for example) lowering interest rates.

2) Theoretical link between the CMP in terms of fight against inflation and economic growth.

The origin of theoretical analysis on the credibility and independence is Kydland and Prescott (1977) who highlighted the problem of time inconsistency and the ambition to solve this problem especially in the case of monetary policy. Thus they propose as solution a policy based on a rule.

The benefits of inflation come from the existence in their model of a non-vertical Phillips curve in the short term. This implies that unanticipated monetary expansion lowers the unemployment rate below the equilibrium rate and increase activity in real terms.

trade expansion and development in Africa, highlights the importance of monetary policy on development in Africa. It implicitly assumes that monetary policy affects real variables of the economy. However the theory is not unanimous about the reality of such a link:

- The long-term effects of monetary policy:

From a theoretical point of view, the effects of long-term monetary policy were first, according to Solow (1956), studied under the Neo classical growth model. The question was repeated with the development of endogenous growth models. The development of endogenous growth models has helped to clarify the mechanisms by which money creation and inflation expectations are likely to influence long term economic growth. Thus, most of these models emphasize the role played by the household savings rate. A monetary policy that would positively affect this variable could have a real effect on the growth rate.

- Skeptical theses for a limited relationship between Monetary Policy and Economic Growth:

Very old theses asserting a limited relationship are mainly shared by monetarists such as Friedman (1968) and by some prominent economists as Poole. According to them the only purpose of monetary policy is to ensure price stability, by preventing any counter-cyclical action which tends to disturb markets, as uncertainty weighs on action deadline of monetary policy. Authors have taken this view by affirming that according to Friedman, monetary policy affects only nominal variables such as nominal interest rates or price levels; Accordingly, the central bank cannot hope to be effective by targeting any value of real variable, because the impact on real variables such as GDP^{iv} or the unemployment rate are transient in nature and very random.

In order to resolve this theoretical debate, it is necessary to make a comparison with African reality instead of a simple implementation of what is fashionable elsewhere.

3-1) Confrontation of the monetary policy theory to the application context

The neoclassical orthodoxy argues in favor of money neutrality in the short and long term. This consensus based on life cycles theory orients the role of the monetary authority to the absolute pursuit of price stability over the medium and long term. It assumes that agents maximize their intertemporal utility by using the complete knowledge of the complex economy. Retaining the same analytical framework, the New Keynesian Economics propose a new synthesis which consists of introducing the assumption of sticky prices and wages. Under this review, price rigidity is the cause of distortions in consumption that cause the economy to

not realize its growth potential (Gali, 2002). For example, New Keynesian economics, rather than assuming that prices react to market imbalances, guess they are set optimally, so as to best serve the interests of firms that are supposed to fix them, (Woodford, 2003). Only then, an active monetary policy can correct distortions caused by the rational behavior of firms. This policy is for the Central Bank to follow a rule that the interest rate is adjusted to respond to the inflation differential and the output gap. In this context, money is not neutral.

In fact, the introduction of nominal rigidities in a model of real business cycle led to the reformulation of the Phillips curve, implying a lack of trade-off between inflation and product (Gali, 2002). So that, if the Central Bank is committed to price stability, it can achieve stability of output gap. Under this model, a change in monetary policy affects the product immediately when it is not possible that all prices and wages adjust themselves. Thus, the analysis of New Keynesian Economics shares with the analysis of the New Classical School the principle of a monetary policy dedicated only to the stability of general price level consistent with the search for neutrality. If we follow this analysis, in which prices are flexible, it is not necessary to conduct an active monetary policy to stabilize the economy. So it is only in a world characterized by fixed prices that we must refer to monetary policy. This is the case for most African countries. However it is in the U.S. that this policy is most active; In Africa it is never used for product and employment stimulation. There is an obvious contradiction here. Discretionary policies, especially monetary policies, are needed in the African continent where the performance in terms of price stability is well established, providing a possibility that monetary authorities could take advantage. Inflation is only the price to pay for economic stimulus. Moreover, the strict application of an inadequate rule, far from guaranteeing neutrality can only generate real distortions.

3-2) Which real goal for pro growth monetary policy in Africa?

According to Epstein G. (2005) in the last two decades, there has been a global sea change in the theory and practice of central banking policy. Actually and globally the dominant practice approach to monetary policy consists of the central bank independence with a focus on inflation fighting (including adopting formal inflation targeting) and the use of indirect methods of monetary policy like short-term interest rates as opposed to direct methods such as credit ceilings. It is with this framework that price stability and inflation targeting have been identified as priority objective assigned to the Central Bank in many African economies. South Africa and Ghana for example, clearly show the inflation targeting as an explicit

strategy of monetary policy. The contemporary economic analysis justifies this choice by its importance to the economic situation in the long run. This is an institutional framework within which the action of the Central Bank should be primarily oriented to price stability which means low and stable inflation. The Central Bank exercises control on the economy through its intervention on the interbank money market, as it is controlling the quantity or the price but not both variables simultaneously. They therefore can pursue only a single objective in the sense of Tinbergen (1954). Price growth is naturally selected because of the existence of a strong relationship between the quantity of money in circulation and the general price level (Friedman, 1968). In addition, the economic and social costs of inflation are the main motivations for the choice of price stability as an objective. More recent theoretical developments on expectations emphasize the credibility factor as guarantor of monetary policy effectiveness. The role and effectiveness of monetary policy is most often analyzed with reference to monetary rules whose general objective is to improve the wellbeing of people through the stabilization of the economy on its long-run equilibrium. It is assumed that this equilibrium is in no way affected by monetary policy and depends only on structural variables such as the natural rate of unemployment. In this perspective, the price stability objective is understandable. However, is it possible that this general point of view should be applied in Africa without contextualization?

Concerning this issue, by trying to see how central banks can become *agents of development*, Epstein G. (2005) argues that the neo-liberal and monetarist approach to monetary policy is highly idiosyncratic in that, as a package, it is dramatically different from the historically dominant theory and practice of central banking, not only in the developing world, but notably, in the now developed countries themselves. According to him more than the current monetary policy fashion which is to consider that the only roles central banks can play as agents of development is to create a context of “macroeconomic stability” including financial stability through financial regulations, central banks can do better. In our histories, we can see that for much of central banking history, many central banks have aspired to do much more than that, with a number of them even seeing themselves as “agents of development” in the self-aware meaning of the term. Indeed throughout the early and recent history of central banking in the U.S., England, Europe, and elsewhere, financing governments, managing exchange rates, and supporting economic sectors by using “direct methods” of intervention have been among the most important tasks of central banking and, in many cases, were among the reasons for their existence. Western central banks’ (UK, Europe, Japan, US) monetary

policy after the second war were oriented to financing and managing government debts accumulated during war in the short term and rebuilding national economies by providing social need often under government's direction in the long term. Central banks utilized a variety of credit allocation techniques to accomplish their economic growth goals. The neoliberal monetary policy package, then, is drastically out of step with the history and dominant practice of central banking throughout most of its history. At the end of this explanation we realize that the monetary policies based on monetarist theory have not been applied in other countries and continent without a contextualization. Focusing on inflation fighting and price stability only can reduce the growth potential of African economies.

A low inflation rate also has drawbacks. On the one hand, there is the risk of plunging the economy into a liquidity trap and a deflationary spiral. In this situation, higher real interest rates may not be unlimited (since nominal rates can not fall below zero) and the monetary authorities might lose control of the economy. On the other hand, inflation may be too low and cause a rise in unemployment because of the downward rigidity of nominal wages. Adjustments of real wages may be made necessary by regional or sectoral shocks. However, such adjustments are probably more difficult when inflation is very low or even zero. Recent pronouncements of the G3 for the activity under the context of financial crisis management have put into question the monetarist orthodoxy regarding the implementation of monetary policy (Goodfriend 2010). Good monetary policy is crucial to the functioning of the economy: monetary and credit offer vast opportunities to stimulate, stabilize or slow down a modern economy. With this in mind, these days, we can consider that the dominant model of monetary policy is no longer adapted to the new characteristics of the economies, as globalization has caused the disappearance of inflation risk. In this sense, a central bank could be a victim of its own success and face what we can call the paradox of credibility. From a global supply-demand equilibrium model point of view, there should be an alternative between demand policy and supply policy for an optimal equilibrium. In the case of most of African countries the best result in the fight against inflation should allow them relative possibility to follow this measure by supply policy.

Therefore, to determine the orientation of monetary policy by tackling only inflation would have two possible consequences. On one hand, the credibility of the commitment of central banks to strengthen the fight against inflation and other structural factors likely to contain inflationary pressures. On the other hand, while inflation expectations in the long run are

better anchored around the target of the central banks, an unsustainable expansionary phase could be reflected with a delay in an acceleration of inflation (Mésonnier, 2004). On this view, credible monetary policies that focused exclusively on price stability may have contributed to the development of macro-financial imbalances in the late 1990s during the advent of information and communication technology. However it was not the case. It would be inappropriate to contemporary opened economies, interdependent, with high international mobility of goods, capital and labor. The theory of divine coincidence which argues that by only stabilizing inflation as an objective, the monetary authority also stabilizes the economy does not seem to be applicable in practice (Bordes, 2007). A theoretical contribution of Blanchard and Gali (2005), shows that this divine coincidence only come from the fact that, in the models used, a number of imperfections (for example the real wage rigidities) that exist in the economy are ignored. If they are taken into account, the divine coincidence disappears. So it would be better for African Central Banks to target principally economic growth under the constraint of a low inflation objective.

4) PARADOX OF CMP IN AFRICA: From mixed empirical results to concrete State reaction examples.

Bernard (2000) addresses the question of the impact of monetary policy on economic growth, with a purely Keynesian and panel data approach, without focusing on the credibility aspect. The results appear disappointing in the case of low-level economic and financial development, but very encouraging for countries that have a high income level. Before him, Kone (2000) had analyzed the relative effectiveness of monetary and fiscal policies through their actions on economic activity of the WAEMU^v member countries in real and nominal terms. In the short- and long-term, using an error correction model, it highlights the real and nominal effects to emphasize the indirect effect of inflation whose control is a key objective of monetary policy (Unlike Bernard (2000), it performs an empirical investigation in time series). Ndiaye C. T. (2009) evaluates the relative effectiveness of monetary and fiscal policies in Senegal and concludes that the relative effectiveness of monetary and fiscal policies remains subject to sources of uncertainty related to unpredictable shocks from outside due to the weakness of automatic stabilizers.

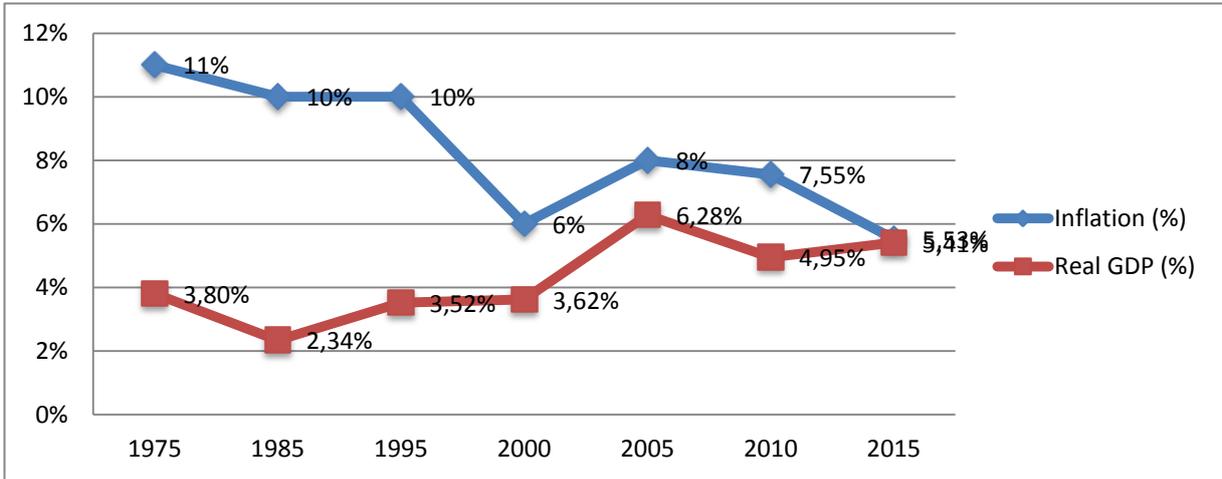
By focusing again on the effectiveness of monetary policy in sub-Saharan Saxegaard (2006) shows that the excess liquidity would have a negative effect, by the weakening of the transmission mechanisms of economic policy, thereby reducing monetary authorities power to

influence demand conditions in the economy. By studying the empirical link between the CMP and economic growth in Africa in general and in the CEMAC zone in particular using econometric panel data methodology, Nguena C. L. (2009, 2012) found that the CMP in terms of the fight against inflation has a significant and negative impact on economic growth of states in the sub region and for Africa countries.

In sum, the empirical analyzes conducted on this subject have the advantage to suggest less ambiguous conclusions than work that attaches directly to quantify the impact of monetary policy on real activity.

A parallel observation of statistics on inflation and economic growth evolution in Africa could be rich in learning about achievements in terms of the growth of monetary policies in Africa. By observing the figure below (performance corresponding to the two extreme dates (1975 and 2015.), implicitly belonging to two different periods of previously applied Keynesian policies and recent policies inspired by monetarist theories), we find a decrease of inflation (from 11% to 5.53%: decrease of 5.47%) higher than the increase in economic growth rate (from 3.80% to 5.41%: increase 1.61%). Moreover, African economies are different from Western economies in that they are in majority developing countries synonymous of higher potential uses of resources however relatively limited by the monetary policy objective of price stability. Keynesian policies would be most welcome in this environment. Since the growth cost is inflation, the flexibility afforded by an environment of low inflation rate would become useful to monetary authorities. There are countless examples where such policies have been used successfully in the past in the Asian countries including a latest decision to forget policy rules and choice of intervention policy to save the European and American economies from financial and debt crises.

Figure: Sub Saharan Africa’s inflation rate and economic growth evolution.



Source: Author calculation based on World Bank data base (2008) and International Monetary Fund data base (2010 estimation).

The Federal Reserve with declared final objective which is a sustainable economic growth may be cited as an example. Since the beginning of crisis in 2007, the Federal Reserve embarked on a massive effort to stimulate growth by lowering interest rates to zero since December 2008 and by financing the government debt for more than U.S. \$ 2 billion. Indeed Bloomberg Journal report of November 2011 shows that the Central bank has made emergency loans, purchased assets and other aid totaling more than \$ 7.5 billion U.S.

In July 1998 the emphasis of the recession led the Malaysian authorities to review their economic policies in deciding to opt for Keynesian anti-cyclical policies (low interest rates, increase money supply) aimed to reverse the recessionary trend (Bouzonville N. et al., 2006). Malaysia has moved from a liberal-inspired IMF^{vi} program to more Keynesian policies from the summer of 1998 by globally insulating its economy from the instability in the region by imposing strict controls on capital to protect its liquidity asset and continue to fund the economic recovery.

According to UNECA^{vii} (2012) The two central banks in the CFA^{viii} zone, for example maintained interest rates at a low level in 2011 despite the tightening measures of monetary policy taken by the European Central Bank early that year. Lastly, first providing a predictable slowdown in economic activity in the CEMAC zone in 2013 in conjunction with the decline in oil production and in public investment and; secondly, noting that growth is mainly driven by the non-oil sector (agriculture, manufacturing and service industries), the BEAC^{ix} decided to implement the recommendation of this paper which is monetary policy with a direct objective of economic growth. Indeed, noting a slower growth cohabiting with relatively controlled inflationary pressures and based on a study of various factors influencing monetary and financial stability in the short term, the BEAC through its Monetary Policy Committee (CPM) of July 2013 decided to drop by 50 basis points the interest rate (TIAO) applied to banks from 4% to 3.5%. This recommendation is especially justified by the fact that the expected maximum pressure on the price is 2.7%, which is indeed below the community standard.

Based on similar findings and in order to support economic activity in the WAEMU^x sub region, the Monetary Policy Committee (CPM) of the BCEAO^{xi} in June 2013 decided to keep interest rates unchanged at their current low levels. The minimum interest rate for submission

to calls for application operations for liquidity injection and interest rate of the marginal lending desk remains fixed respectively between 2.75% and 3.75%. Similarly, the Central Bank of South Africa has maintained its policy of low interest rates during 2011 for most part with an objective of economic expansion. These practical examples of initiatives are to encourage as well as set an example for other African countries with relative good results in terms of price stability.

5) CONCLUSION AND ECONOMIC POLICY RECOMMENDATIONS

According to statistics, the CMP in terms of the price stability objective paradox is fully verified in Africa. With this reality, deep institutional changes are necessary. Highlights on what should be the explicit objective of monetary policy to play its full part in the development process. While it seems to be a consensus in developed economies to limit the mission of monetary policy to price stability, however it appears difficult for poor countries with low inflation, to not tailor the policy towards economic development. The success of African economies therefore requires the adoption by the central bank a mandate that combines the priority objectives of activity to the price stability; this assuming a comprehensive reform of the ongoing monetary policy framework.

Empirical works mentioned above that have shown a negative impact of price stability on economic growth in Africa would find an explanation in the fact that the objectives of price stability and economic growth are opposed according to Keynesians. Indeed we could establish a policy that would lead them simultaneously since improving one can drive down the other. Therefore, instead of continuing to work towards achieving the objective of price stability, we must make this objective relative in view of the evolution of real variables in the sub-region including economic growth which is very low. In the same view, the fact that the financial crises have recently pushed most Northern countries to opt for regulation in response, thus making the independence and credibility of their central banks relative, should be an example to African countries. In addition (to strengthening this conclusion), as a result of post-crisis Bretton Woods instructions, the fiscal instrument was found to have relatively limited scope for growth in African countries. In light of the above, we are poised to recommend the promotion of monetary policy oriented primarily towards the improvement of economic growth in African countries through temporarily Keynesian cyclical policies.

As mentioned in the paper, several central banks such as the BEAC, the BCEAO, the Central Bank of South Africa...etc. are currently applying measure based on this recommendation by not only focusing on price stability but also maintaining interest rates at a low level to sustain

economic growth. These practical actions should be encouraged in relation to the results of our analysis and serve as an example for other central banks which have focused primarily on price stability with good results in Africa.

REFERENCES:

1. AfDB (2013), Annual Development Effectiveness Review: “Towards Sustainable Growth for Africa”. <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/ADER%20Annual%20Development%20Effectiveness%20Review%202013.pdf>
2. Asongu, S. A., (2013a), “Fighting consumer price inflation in Africa. What do dynamics in money, credit, efficiency and size tell us?”, *Journal of Financial Economic Policy*, 5(1).
3. Asongu, S. A., (2013b), “A Short-run Schumpeterian Trip to Embryonic African Monetary Zones”, *Economics Bulletin*, 33(1), pp. 859-873.
4. Asongu, S. A., (2013c), “How has politico-economic liberalization affected financial allocation efficiency? Fresh African Evidence”, *Economics Bulletin*, 33(1), pp. 663-676.
5. Bernard Eric (2000): « *Développement financier, politique monétaire et croissance économique : validation empiriques en données de panel* », Laboratoire d’Economie d’Orléans.
6. Blanchar, O., & J. Gali, (2005), “*Real wage rigidities and the new Keynesian model*”, FRB/JMCB Conference on Quantitive evidence on Price Determination, Washington.
7. Bouzonville N. et al. (2006), « *Le contrôle de capitaux en Malaisie* », Reims Management school ; <http://anthonypierre.perso.neuf.fr/documents/Ecomalaisie.pdf>
8. Comité de Politique Monétaire (CPM) de la BEAC « *Communiqué de presse* », Séance du 19 juillet 2013 ; https://www.beac.int/download/cpm_juillet2013.pdf.
9. Comité de Politique Monétaire (CPM) de la BCEAO « *Communiqué de presse* » Séance du 3 juin 2013 ; <http://www.bceao.int/Communique-de-presse-de-la-reunion,2666.html>
10. Epstein, G. (2006), « *Central banks as agents of economic development* », UNU-WIDER, Research paper N° 2006/54, May 2006
11. Friedman, M. (1968), « *Le rôle de la politique monétaire* », *The American Economic Review*.
12. Gali, J. (2002), ‘New Perspectives on Monetary Policy, Inflation, and the Business Cycle’, *National Bureau of Economic Research*, Working paper 8767.
13. Goodfriend (2010), « *Financial stability, deflation and monetary policy* », *Monetary and Economic Studies*, Bank of Japan, Special Edition, February.
14. Kone (2000), « *L’impact des politiques monétaires et budgétaires sur la croissance économique dans les Pays de l’UEMOA* », BCEAO Working Paper.
15. Mésonnier (2004), « *Le paradoxe de la crédibilité en question* », Direction des Études économiques et de la Recherche, Bulletin de la Banque de France - N° 122 – Février 2004.
16. Ndiaye, C. (2009) « *Analyse de l’efficacité relative des politiques monétaire et budgétaire au Sénégal* ». http://www.univ-orleans.fr/leo/semmar9/sem_doctorants/ndiaye.pdf

17. Ndjanyou, L. (2001), « *Risque, incertitude et financement bancaire des PME Camerounaises : l'exigence d'une logique spécifique de l'analyse du risque* », S/D Tsapi V., édition clé, pp. 327-343.
18. Nguena, C. L. (2009), “*Credible Monetary Policy in CEMAC zone and Economic Growth: a Panel Data Approach*”, African Economic Research Consortium (AERC).
<http://www.aercafrica.org/documents/rethinkingworkshoppapers/NguenaPolitique.pdf>
19. Nguena, C. L. (2012), “*Fight against inflation and economic growth in Africa: the need of alternative*”; UNECA-UNDP Seminar Series.
20. Nguena, C. L. (2013), “Financing of SMEs in Cameroon in the context of financial crisis”, CIEA-FR Rapport de recherche final. www.trustafrica.org/icbe
21. Saxegaard, M., (2006). “*Excess liquidity and effectiveness of monetary policy: evidence from sub-saharan africa*”, Working Paper n° 115, IMF, P1-52.
22. Tinbergen (1954), “*On the Theory of Economic Policy*”. Revue économique; Vol. 5.
23. UNECA (2012), “*Unleashing Africa’s Potential as a Pole of Global Growth*”;
http://www.uneca.org/eca_resources/Publications/books/era2012/front.pdf
24. UNECA (2012), « *Vue d’ensemble de la situation économique et sociale en Afrique en 2011* », Réunion du Comité d’experts Addis-Abeba (Éthiopie) 22-25 mars 2012.
<http://www.uneca.org/cfm/2012/documents/French/COM12-OverviewEconomic-andSocialConditions-inAfricaFR.pdf>
25. Woodford (2003). “*Interest and Prices, Foundations of a Theory of Monetary Policy*”, Princeton University Press.

ⁱ Credible Monetary Policy in terms of price stability objective.

ⁱⁱ In this work, we consider that a monetary policy is credible when it guarantees the continuity of Central Bank action in pursuing its objective of price stability, and managed to stop monetary funding of budget deficits.

ⁱⁱⁱ This chart was deduced from that presented in the article of Mésonnier (2004).

^{iv} Gross Domestic Product.

^v West African Economic and Monetary Union.

^{vi} International Monetary Fund.

^{vii} United Nations - Economic Commission for Africa.

^{viii} African Financial Community.

^{ix} Central Bank of Central African States including 6 African countries: Cameroon, Congo, Gabon, Equatorial Guinea, Chad, and Central African Republic.

^x West African Economic and Monetary Union.

^{xi} Central Bank for West African Countries including 8 African countries: Ivory Coast, Guinea Bissau, Mali, Niger, Senegal, Togo, Benin and Burkina Faso.