Dollarization and Foreign Exchange Reserve: Debate on the Effectiveness of Monetary Policy in Democratic Republic of Congo

Christian P. PINSHI
Economics Department, Faculty of Economics and Business
University of Kinshasa, Congo
christian.pinshi@unikin.ac.cd

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Abstract:

The high degree of dollarization combined with low foreign exchange reserves obstruct the management of monetary policy. The debate is launched on the effectiveness of monetary policy in this context of dollarization and meager reserves. To restore the effectiveness of monetary policy in the Democratic Republic of Congo, we advocate for fiscal discipline (that is to say, eradicate fiscal dominance) that is constant and sustainable, a guarantee of sustainable macroeconomic stability. Monetary targeting should remain the adopted strategy until proven otherwise and the choice of a floating exchange rate regime is better for good macroeconomic management in the case of the Democratic Republic of Congo. However, changes in the nominal exchange rate should be implicitly included in the implementation of monetary policy.

Keywords: monetary policy; dollarization; foreign exchange reserve.

JEL Classification: E42; E51; E52; F31.

Introduction

The debate over monetary policy conduct and effectiveness is at the heart of macroeconomic and political analysis; evidence has shown that over time, monetary policy remains one of the most powerful and influential instruments according to which, macroeconomic and financial systems can be easily manipulated (Blackburn and Christensen 1989, Leeper *et al.* 1996; Imoisi *et al.* 2014). Soundly designed monetary policy could contribute to healthier economic and financial systems, but monetary policy based on reckless decision-making could have a counterproductive effect (Khan *et al.* 2003, Cömert 2013, Raghuram 2015). The effectiveness of monetary policy depends on its ability to meet its mandate through its strategy and tactics (Goodhart and Viñals 1994, Goodfriend 2007).

Underdeveloped countries experience several variables that undermine and threaten the effectiveness of monetary policy and it depends heavily on these variables, including the high degree of dollarization combined with meager international reserves. The phenomenon of dollarization in Underdeveloped economies has aroused great interest among policy makers and researchers over time (Ortiz 1983, Melvin 1985, Reinhart *et al.* 2003). Dollarization is the intensive use of foreign currency both as a means of payment and a store of value. Dollarization impedes control of the money supply and severely hinders attempts at disinflation and price stability. At the same time, high inflation is by no means the only factor influencing the dollarization process in underdeveloped economies. Other factors include fluctuations in the exchange rate; the institutional dynamics linked to the priority development of certain sectors of the economy as well as the political uncertainties which influence the preferences of the population. Several studies bear witness to the relationship between the decline in foreign exchange reserves, the depreciation of exchange rates, dollarization and the high and volatile inflation which characterizes the ineffectiveness of monetary policy in developing economies (Bergstrand and Bundt 1990, Calvo and Végh 1996, Brodsky 2002, Alper 2008).

Therefore, in order to analyze the prospects for economic policies in underdeveloped countries, it is essential to study the behavior of economic policy, more particularly monetary policy, taking into account all these phenomena – in particular dollarization and weakness of foreign exchange reserves, undermining the effectiveness of this policy.

Central banks as guardians of the monetary policy temple are concerned with the issue of the effectiveness of monetary policy in a context of dollarization and low international reserves. The main reason a central bank is concerned about dollarization and low international reserves is to preserve the stability monetary and financial system (Driessen 2006). Four major risks are involved:

- *Liquidity risk*: frictions on deposits in foreign currencies are certainly different from those on deposits in national currency. For domestic currency deposits, the central bank may act as the insurer of last resort, as it has the power to create money. For foreign currency deposits, generally limited foreign exchange reserves are the only mattress that exists to mitigate a liquidity crisis. Thus, banking transactions carried out on foreign currency deposits have much more serious consequences.
- *Solvency risk*. Strong exchange rate depreciations can affect the solvency of financial institutions, as well as that of their clients.
- *Monetary risk*. The constitution of international reserves obeys a reason for prudence on the part of a central bank, in principle making it possible to intervene in the foreign exchange market and therefore avoid currency crises.
- *Risk of ineffective pass-through of central bank policy rates*. Generally, a monetary policy affects the economy in national currency, dollarization makes these monetary mechanisms inefficient.

Like the majority of underdeveloped countries, the economy of the Democratic Republic of the Congo (DRC) is prone to strong structural dollarization coupled with low foreign exchange reserves. This high degree of dollarization (86% on average from 2011 to 2017) of the Congolese economy exerts an influence on the current macroeconomic situation and should certainly be taken into account in the decision-making as regards the development of monetary policy.

The recent shock in commodity prices (the effects of which persist decline in exports of goods, drastic drop in reserves, excessive depreciation of the exchange rate, price instability, widening of the twin deficit, fall in the economic growth rate, etc.) in difficulty the State to reconstitute its budgetary receipts dependent on exports. Faced with this situation, a large part of government spending is covered by the monetization of the deficit, that is to say monetary financing, which has adverse effects on macroeconomic stability. This increases inflationary expectations and expectations about the exchange rate depreciation, although the Central Bank of Congo (BCC) has monetized by financing in foreign currency, the effects are only sporadic and the consequence is heard in the deterioration of foreign exchange reserves and the preference of the population for the dollar, in fine it is a vicious circle.

In view of this situation, it is essential to ask the question about the effectiveness of monetary policy in a context of continued dollarization and weak foreign exchange reserves. The structure of this paper is as follows: an overview of monetary policy, dollarization and foreign exchange reserves; a first question on the effectiveness of monetary policy in this context of instability; a second question on the conduct of monetary policy, then the analysis of monetary policy according to the monetary approach of the balance of payments and finally a conclusion and perspective.

1. Monetary Policy, Dollarization and Foreign Exchange Reserves: An Overview

The episodes of hyperinflation and high inflation of the 1990s, caused in large part by fiscal dominance stemming from macroeconomic and financial mismanagement, was one of the main events that gave rise to the appetite of the Congolese population for the dollar. A policy of disinflation led to stabilize prices from 2012 until 2015, with an average of 1.42%. This action to give credibility to the central bank during this period, the stability on the foreign exchange market slightly improved the preference for the Congolese franc (Cdf) although this improvement was insignificant given the persistence of dollarization during this period. Typically, dollarization is a response to the decline in the value of the national currency and the depreciation of the exchange rate. In addition, the fall in commodity prices exposed the volatility of inflation, which exploded to reach 54.7% in 2017, largely influenced by the depreciation of the exchange rate by 23%, this shock exacerbated the decline in foreign exchange reserves. The persistence of dollarization has amplified further and will exert a far-reaching influence on the conduct of monetary policy (Table 1).

Foreign exchange reserves experienced a break in growth in 2013 and symptoms of the decline appeared. Since 2014, there has been a drastic drop in reserves, reaching 844 million USD in 2017. This jeopardizes the room for maneuver for the central bank to intervene in the constantly deteriorating foreign exchange market and makes monetary policy increasingly ineffective. This behavior influences people's expectations and will result in increased dollarization and the inability of monetary policy to use its operational framework.

Table 1. Macroeconomic and financial variables

	Foreign exchange	Nominal exchange	Inflation, end	Financial Dollarization
2010	1,297.00	915.13	9.838	62.2
2011	1,394.00	910.65	8.654	89.3
2012	1,645.00	915.17	2.769	86.9
2013	1,745.10	925.50	1.074	85.8
2014	1,644.46	924.51	1.030	85.6
2015	1,403.60	926.76	0.815	83.1
2016	845.40	1,215.00	11.236	84.8
2017	844.00	1,592.00	54.709	89.4

Source: BCC, Annual reports; IMF, World economic outlook (October 2018)

Central bank could try to blame the government for insisting on financing its deficit. Either way, seeking refuge in a foreign currency is a rational reaction to episodes of macroeconomic instability. Thus, the economic structure of the DRC characterized on the one hand by a subservience of monetary policy to fiscal policy and on the other hand by a high degree of external vulnerability, consequently the understanding and management of monetary policy prompts researchers to rethink the effectiveness and conduct of monetary policy.

2. Foreign Exchange Reserves and Monetary Policy: Monetary Approach to the Balance of Payments

The effectiveness of monetary policy depends on the precise nature of the monetary mechanism. Knowledge and control of monetary variables are seen as the prerequisite for the development of an appropriate monetary policy. The balance of payments is a monetary phenomenon and is determined by the internal monetary imbalance.

The monetary approach to the balance of payments postulates that in a small open economy, monetary equilibrium in the balance of payments can be achieved through changes in monetary base and / or broad money. If money supply created exceeds the growth of domestic credit, this excess supply forces individuals to readjust their portfolios by purchasing goods and services to return to equilibrium. If residents demand goods, services and foreign currency to restore balance, foreign currency flows out of the country and thus reduces the money supply until monetary equilibrium is restored. We can therefore conclude that balance of payments is a monetary phenomenon. Thus, the deterioration of reserves may result from changes in domestic credit, especially net claims on central government. Congolese economy is characterized by this phenomenon, monetary financing, which includes a large part of domestic credit, varies at a rate greater than that of monetary growth. This leads to low foreign exchange reserves and affects the movement of the exchange rate, which amplifies macroeconomic instability and contributes to the persistence of dollarization. This will take us back to the discussions in our following sections on the effectiveness of monetary policy.

Thus, the monetary approach of the Balance of Payments is a useful analytical tool for the purposes of monetary policy. The approach clearly prevents the source of the imbalance and shows that poorly framed expansionary monetary policy leads to a depreciation of the national currency and a deficit in the balance of payments. Therefore, responsible strategies are needed to avoid any erosion of foreign exchange reserves. Otherwise, foreign exchange reserves will continue to decline and put the conduct of monetary policy in difficulty.

3. How Effective for Monetary Policy?

The effectiveness of monetary policy depends to a large extent on the credibility of the central bank. Circulation as a substitute for foreign currency, whether as a means of payment or as a store of value, can only affect the conduct of monetary policy and, ultimately, the ultimate goal of price stability. Economic theory does not offer a clear answer as to how dollarization can affect monetary policy. However, economists generally believe that dollarization makes monetary policy more complex and less efficient, as dollarization would risk increasing the volatility of demand for money due to the reduction in the costs of transferring currency holdings to avoid losses. effects of inflation. A side effect of this is that dollarization is also expected to increase exchange rate instability, which will prompt the central bank to intervene to smooth out these exchange rate fluctuations. In a context of a drastic decline in the foreign exchange reserve as is the case in the DRC, monetary policy is proving even less effective in operating. Increased exchange rate volatility also results from the fact that dollarization makes the exchange rate more responsive to changes in the money supply (Calvo and Veg 1996, Pinshi and Sungani 2018).

Monetary expansion driven by changes in net claims on the government is one of the causes of the depreciation of the exchange rate and inflation. The persistence of dollarization can be expected to be more sensitive to monetary expansion or to a change in the exchange rate. Pinshi and Sungani (2018) found that the elasticity of the inflation rate to an exchange rate depreciation caused by domestic credit growth increases significantly as dollarization strengthens. However, he stresses that there may still be room for maneuver for monetary policy. In fact, a healthy response to monetary policy would imply a reduction in the rate of money supply growth, *i.e.* a decline in the pace of domestic credit would have a stabilizing effect.

In addition, another aspect is that monetary transmission is weaker in the DRC, due to the strong dollarization of the economy. This is because the BCC cannot directly influence the foreign currency component of broad money. Thus, broad money is not determined by the monetary authority but by the behavior of agents holding assets in foreign currencies and national currency. This should obviously complicate the BCC's ability to curb inflation.

Regarding the control of monetary aggregates, the BCC is obviously not in a position to directly influence broad money, but it might be able to manage the monetary base and the minimum reserve ratio of commercial banks. Unfortunately, partially dollarized financial intermediation is often limited and carried out largely in foreign currency. It is therefore very difficult for the BCC to control the monetary base very tightly.

4. How to Conduct Monetary Policy?

The conduct of monetary policy in a context of dollarization and weak foreign exchange reserves leads to revisiting the choice of strategy or intermediate objectives of monetary policy. Traditionally, monetary policy targeting has involved a pre-announced exchange rate rule or a target on a monetary aggregate. History has shown that explicit exchange rate targeting is very limited. Central banks, especially under flexible exchange rate regimes, intervene sporadically in the foreign exchange market to smooth out fluctuations in the exchange rate. Several central banks have adopted monetary targeting, aimed at targeting a monetary aggregate strongly correlated with inflation. This targeting has appeared ineffective for a few countries due to the non-robustness and instability of the short-term relationship between money supply and inflation.

Recently, more and more countries have started to adopt explicit inflation targeting as a strategy for conducting monetary policy. This involves:

- a public announcement of a quantified inflation target;
- an institutional commitment by the central bank to make price stability its main objective;
- information on the combination of instruments chosen to achieve it;
- increased communication with the public on monetary policy strategy;
- and a great responsibility of the monetary authority for price stability.

Monetary policy decisions are then made on the basis of the deviation of future inflation forecasts from the stated target. In other words, forecasting inflation is essentially the intermediate objective of monetary policy. The majority of central banks in underdeveloped countries, in particular the BCC, have as a strategy, whether explicitly expressed or implicitly expressed, monetary targeting.

We examine the implications of the combined dollarization of a decline in foreign exchange reserves for the conduct of monetary policy. The problems vary depending on the monetary policy strategy chosen. In the case of a monetary aggregate anchor, an important question is whether the currency assets should be included in the targeted monetary aggregate. If the main criterion for choosing the monetary aggregate to target is its influence on the price level through the demand for a monetary transaction, dollarization would justify monetary assets denominated in foreign currency to be included in this definition. At the same time, the accumulation of foreign exchange reserves would be a very important variable for monetary policy.

Along the same lines, Berg and Borensztein (2000) examine the experience of several dollarized countries and seek to know which monetary aggregates appear to have the strongest connection to future inflation. They find that the link between the target and inflation is stronger when the broad money supply includes foreign currency deposits.

Unlike currency targeting, inflation targeting does not require a stable relationship between money and inflation. However, dollar savings have a number of drawbacks that can compromise the achievement of inflation targeting and the achievement of the inflation target. The important disadvantage is the high degree of the pass-through effect of the exchange rate (the relatively higher transmission of prices by the change in the exchange rate) which will further reduce the bank's control of inflation. central with a floating exchange rate. Targeting inflation will prove disruptive and costly.

Conclusion

The implementation of a sound monetary policy requires an understanding of this phenomenon and the contextualization of the macroeconomic behavior of the country. The central bank's action to deal with this situation would require taking into account the financial system in the development of measures and policies to be carried out. Prudential regulation should aim to limit the possibility of agents mistakenly anticipating different risks due to dollarization. Prudential regulations should discourage financial institutions that grant foreign currency loans to agents who cannot generate foreign currency income but are attracted to a lower cost of financing. While this measure is reasonable in terms of financial stability, it should be noted that it can discourage the holding of monetary assets in foreign currency and reduce dollarization.

The institutional structure of the central bank as well as its strategy should aim to reduce uncertainties about the value of the local currency. This obviously implies that the mandate of price stability is respected and perpetuated. This would require real dependence on the BCC in order to increase credibility, transparency and accountability.

The high degree of dollarization could complicate the choice of monetary policy regime by introducing a foreign currency component into the money supply. The relevance of a target that includes or excludes foreign currencies depends on the target's relationship to inflation, which is essentially an empirical question. However, it is possible that no reliable aggregate can be found. This problem, which is not limited to dollarized economies, calls into question the policy of monetary targeting and opens the door to the use of a wider set of indicators with a strong link to prices. While this issue is beyond the scope of this paper, there are good reasons to believe that dollar-denominated assets should be included in all relevant indicators of monetary policy, regardless of the approach taken.

Given the continued decline in foreign exchange reserves and the high level of dollarization, general considerations regarding the choice of exchange rate regime tend to strengthen the argument for a fixed exchange rate regime. Such a mechanism would protect the economy from the effects of a currency crisis to the detriment of a loss of monetary policy independence. This option is good but contains several risks, on the one hand, the appearance of first- and second-generation crises and on the other hand, the disorder of the underdeveloped countries as regards the monetization of the budget deficit as the source of the imbalance affecting foreign exchange reserves, dollarization and the conduct of monetary policy according to the monetary approach of the balance of payments. Hence, the floating exchange rate regime remains the best for easy macroeconomic and monetary management.

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