

Overview of Monetary Policy Arrangements and Exchange Rate Regime Classification in AEE

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ABSTRACT

The Egyptian central bank pegged the Egyptian pound to the US dollar from October 1991-December 2000, after which a horizontal band system was introduced. The country's monetary authority allowed the currency to float till January 2003. The pound exchange rate was also allowed to dangle between de facto pegs to the US dollar, based on the classification of Reinhart and Rogoff and managed float. In 2005, the Central Bank of Egypt was reported to abandon the monetary policy framework of money targeting regime in favour of inflation targeting regime, but full implementation is yet to see the light of the day. The Literature reveals that large and persistent capital inflows, particularly to emerging and developing countries, are often associated with the tendency of causing boom and bust patterns. These type of capital flows and their patterns are also directly associated with exchange rate volatility, inflation, and loss of monetary policy independence. When capital is allowed to move freely, the global financial cycle will limit countries' monetary policies' independence irrespective of their exchange rate regime. The level and composition of capital flows to Africa from capital flow data, which are drawn from the IMF's International Financial Statistics database and the World Bank's world development indicators, refer to net inflows—that is, gross inflows minus repatriation are characterized as follows: FDI if the investor acquires a lasting management interest (10% or more of the voting stock) in the foreign enterprise. Portfolio investment flows include portfolio debt flows (for example, domestic bonds purchased by foreign investors) and non-debt-creating portfolio equity flows (such as country funds, depository receipts, and direct purchases of shares by foreign investors). Despite the impact that capital flow and exchange rate volatility can cause a small open economy, one can conclude that there are few studies emanating from Africa.

Keywords: Monetary Policy, Arrangements, and Exchange Rate Regime

INTRODUCTION

[1] reveals that the Egyptian central bank pegged the Egyptian pound to the US dollar from October 1991-December 2000, after which a horizontal band system was introduced. The country's monetary authority allowed the currency to float till January 2003. The pound exchange rate was also allowed to dangle between de facto pegs to the US dollar, based on the classification of [2,3,4,5], and managed float. In 2005, the Central Bank of Egypt was reported to abandon the monetary policy framework of money targeting regime in favour of inflation targeting regime [6], but full implementation is yet to see the light of the day. In July 2013, the pound regime was categorised under stabilised arrangement but the conduct of their monetary policy is not explicit. [7], observe that the effectiveness of monetary

policy in the country is shielded by a lack of an explicit and sustainable nominal anchor, thus made it difficult to use the expectations channel by the central bank [8]. Though it is believed that the exchange rate has been the main nominal anchor in Egypt with long periods of nominal exchange rate stability followed by infrequent depreciations [9]. The South Africa Reserve Bank (SARB) operated several exchange rate regimes in the past, which were: a) the liquid asset ratio-based system with quantitative control of interest rate and credit was in place prior to 1980; b) thereafter, the country operated cash reserve-based with their definition of the role of the discount rate; c) it then modified monetary target range with abroad definition of (M3)); d) an eclectic set of indicators, in addition to the

monetary targets, which include exchange rate, assets prices, output gap, balance of payments, wages settlements credit growth and the fiscal stance were introduced in 1990; e) finally, the country adopted inflation targeting (IT) arrangement in 2000 [10]. In recent times, the [11] classified the South African currency under the free-floating category and reported the country's monetary policy framework under an inflation targeting regime. The Bank of Botswana started its exchange rate experience by

Monetary Policy Responses to Large Capital Flows

The Literature reveals that large and persistent capital inflows, particularly to emerging and developing countries, are often associated with the tendency of causing boom and bust patterns. These type of capital flows and their patterns are also directly associated with exchange rate volatility, inflation, and loss of monetary policy independence [14]. [15] observes that when capital is allowed to move freely, the global financial cycle will limit countries' monetary policies' independence irrespective of their exchange rate regime. The risk associated with this pattern of flows creates a strong motivation for policy responses. The 2007 financial crisis led researchers to measure the nature of policy responses of countries in order to mitigate the impact of large private capital flows episodes; thanks to the challenges posed by the crisis and to the fact that large capital flows can disrupt asset markets and financial intermediation. This demonstrates how crucial it is to continue with the debate so as to, particularly, improve the understanding of the relationship between capital flows component, macroeconomic balance and policy responses in developing countries. This is due to the fact that most of these countries (EME) are becoming important destinations for international capital, while some of them appeared to be lacking the appropriate financial competence to handle the inflows [16].

Handling the challenges posed by large capital inflows is a responsibility of central banks, which are to come up with policies that will either reduce the impact of large

pegging the country's currency Pula to Dollar after the collapse of Bretton-Wood system. In the 1990s they decided to change their system of exchange rate to basket of currency pegging. As observed by the [12], the most recent Botswana exchange rate regime crawling peg with a monetary policy framework of exchange rate anchor. The Moroccan exchange rate regime, as reported in [13], is a conventional pegged with a monetary policy framework of exchange rate anchor.

capital flows or prevent the associated risks from growing [17]. Central banks have the authority to conduct monetary policies, with a substantial degree of autonomy. The main objective of monetary policies in developing nations is to design direction and ensure price stability inter alia. In this regard, capital flows' tendency to cause a boom and bust pattern is clearly the policy makers' dilemma [18]. Intermittent policy interventions are utilised to mitigate the negative consequences of large inflows and strengthen their positive effect [19]. Studies show that policy intervention can be divided into four broad categories, which are fiscal retrenchment, exchange rate flexibility, controls of capital, and monetary sterilisation. Firstly, many countries use fiscal retrenchment to try and curtail the impact of large capital inflows; the framework of this policy intervention requires implementing contractionary fiscal policies that would have a negative impact on domestic liquidity in the event of massive capital inflows. Second, countries sometimes employ flexible exchange rates in the event of massive and persistence inflows to serve as a shock absorber, although studies such as [20,21,22] argue that flexible exchange rate is sometimes associated with negative repercussions on trade. This is because there is a clear tendency for countries to experience volatility when allowed to the impulses and notions of the market. Similarly, [23] admits that a flexible exchange rate is associated with significant volatility in the short run, but cast doubt on its ability to

have substantial effects on trade because of hedging. Third, capital control is the most direct way to avoid the adverse effect of large inflows, most especially short-term inflows with a speculative tendency. Additionally, capital controls can play a useful policy role in the case of excessive flows that are caused by push factors that are outside the control of domestic policy makers. Fourth, monetary sterilisation and regulations enable central banks to minimise the effect of capital flows – inflows or outflows – on the domestic money supply. This can be achieved through direct intervention into the foreign currency market to set an exchange rate vis-a-vis intervention in the money market to set interest rates. The magnitude of sterilisation by any country depends on the extent to which it is prepared to bear financial control and appropriate economic alterations [24]. Several types of research in recent times concentrate- inter alia- on the study of monetary policy responses to address the surge in capital flows in emerging market countries. This is because capital inflows positively affect domestic liquidity, which will lead to consequences such as inflation – to which the central bank must respond. However, monetary policy can be in the form of sterilisation or regulation. Sterilisation is the most popular policy response to capital flows in developing countries [25]. [26] discovers significant evidence of high sterilisation intensity without smoothing in the conduct of the Central Bank of Nigeria's (CBN) monetary policy to curb large flows. He confirms evidence that the

Overview of Stylised Facts

The level and composition of capital flows to Africa from capital flow data, which are drawn from the IMF's International Financial Statistics database and the World Bank's world development indicators, refer to net inflows that is, gross inflows minus repatriation are characterized as follows: FDI if the investor acquires a lasting management interest (10% or more of the voting stock) in the foreign enterprise. Portfolio investment flows include portfolio debt flows (for example, domestic bonds purchased by foreign investors) and non-debt-creating portfolio

bank is slacking sterilisation with time, which is expected to play a role in stabilising a well-defined financial system. The aim of monetary sterilisation is to insulate money supply for countries with aggregate money targeting regime (such as Botswana); or exchange rate for countries with floating and inflation targeting regime (such as South Africa), against the effect of capital flows. The main objective of this policy is to have more control over domestic money stock, curb inflationary pressures, and protect unnecessary real exchange rate fluctuations. Despite the expected benefit of this policy, it is not considered as a lasting solution to the problems associated with large capital flows. In some cases, sterilization can prevent interest rate differential from narrowing in the event a country raises its expected interest rate to attract investors, which may result in more capital flows. In line with this, [27] observes that sterilisation policy can result in a large increase in public debt capable of undermining the credibility of policy makers. The sterilisation policy is not limited to reducing money supply through selling bonds; the central bank has the liberty to use mechanisms such as increase bank reserve ratio or discount rate. [28] identify an increase in reserve requirements as an option used by Chile and Malaysia in an attempt to lower their banks' capacity to lend without the quasi-fiscal cost of sterilisation. In Nigeria, monetary sterilisation has been in place since 2004 as a standing norm of the country's large capital surge control tool.

equity flows (such as country funds, depository receipts, and direct purchases of shares by foreign investors). The African continent was the leading region among developing continents such as Asia and Latin America in terms of economic growth from the 1960s to the early 1970s. The region was engulfed with economic crises and political instability and by mid of the 1970s, these conditions deterred investors and trade partners away from the region. By the 1980s-1990s, the international economic community witnessed a series of capital flows, African

region inclusive. In the past decades, the region witnessed capital flows that were volatile in nature. These flows dried up in late 2001, but surged all the way through to 2006, prior to the period of the global financial crisis. Jose and Massa (2009) confirm this position when they maintain that net foreign direct investment (FDI) gradually increased from US\$13 billion in 2004 to around US\$33 billion in 2007, adding that portfolio equity flows also skyrocketed to about US\$15 billion in 2006 [29]. They also identify that the flow of bonds swiftly went up by US\$7.1 billion from 2006 to 2007. Further, the capital flows to the African region dropped drastically during the crisis period of 2007-2009. In the aftermath of the crisis, flows to the region surged. [30] observe that sub-Saharan African frontier markets benefited more from the surge in private capital flow after the crisis, with Ghana and Nigeria as the main beneficiaries. But this capital flows did not come without a price-tag, considering the nature of economic and financial development in the region. The main concern for the policy makers in the recipient economies is the volatile nature of the flows. These volatile flows created uncertainties in the economy, particularly with regards to the behaviour of macroeconomic variables, leading to the need for monetary authorities to mitigate the expected impact. However, with regards to the sample countries of this study, South Africa for example, from 1994-2002, FDI flow was fairly low compared to the flow of portfolio investments to the country. About 70% of the portfolio flow in the country was in equity form, despite the slowdown in equity inflows in the early 2000s, which was prompted by weak stock market performance in mature economies, equity flows to South Africa remained well above levels in other developing and emerging market countries. Thus, the composition of capital flows to South Africa appears to be quite the opposite of what it is on average for emerging markets. In addition, FDI inflows to South Africa were driven by a few large transactions. This indicates that South Africa is attracting more portfolio flows

consistently than other countries in the region [8]. Foreign Direct Investment (FDI) is the major capital inflow in Botswana, the general pattern of its inflows has been encouraging with a notable upward trend from the mid-1990s. Around 1994 the net FDI inflows to the country stands around \$10.5m, the country witnessed a tremendous increase in the flow of FDI from 1995-2004 with the net flow of about \$261m. The global credit crunch of 2007 affected the country's FDI flow, such drastically reduce the volume of capital inflow to the country. In 2010 the FDI inflow to the country reduce drastically to around the net total of \$136m. The flows surge occurred in 2011, 2012 and 2013, with net inflows of \$1.1b, \$1.4b and \$1.88 respectively (World Bank Data). In contrast, the portfolio flows to the country attained an all-time high in 2006 with \$19.176m and a record low in recent times, with \$-40.059 in 2016 (CEIC website). The portfolio capital flows to Egypt significantly started around early 1990s, the net flows average in the country within the sample data of this study is around \$-3.7m, with the all-time minimum of \$-3198.8 in 2007 and the maximum high of \$1724.4 million in 2010 (the global Economy website). IMF (2015) attributed the bad performance of portfolio investment flows of the country is related solely to the status of its economic fundamentals. The FDI investment in the country from the late 1990s to the early part of 2002 stood about \$2.848.8b. By 2006, in the space of three years, the country recoded the FDI inflows of \$10.429b. The country's FDI flow was not affected by the financial crisis of 2007 due to the fact that it recorded the second largest all time FDI flows in 2007 which amounted to \$11.053 and also, the all-time high in the succeeding year of \$13.236b. The FDI flows in the country reduced to a little above \$8b in 2009 but crashed to \$3.7b in 2013 [11]. Morocco, like Egypt, had a highly protected economy prior to 1990. In the early part of the 1990s, the country embarked on a series of economic reforms to attract Foreign Direct Investment (FDI) [13]. The significant amount of FDI inflows started from the

mid-1990s up until 2006, in 2007 the inflows decreased drastically. This study is concerned with not only the capital flow volatility but also with the nature of cyclical flows and how its attendant repercussions, like exchange rate volatility, lead authorities to develop

Despite the impact that capital flow and exchange rate volatility can cause a small open economy, one can conclude that

CONCLUSION

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monetary policies that can mitigate the impact of the flows. In line with this, this review will be streamlined along the major debates in the existing literature, with particular reference to the countries in question (Egypt, Botswana, Morocco and South Africa).

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