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Matthew Higgins and Thomas Klitgaard's reserve accumulation: Implications for Global Capital Flows and Financial Market; Current Issues in Economics and Finance: Federal Reserve Bank of New York, September/October 2004: a review.

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Matthew Higgins and Thomas Klitgaard: Reserve Accumulation: Implications for Global Capital Flows and Financial Market; Current Issues in Economics and Finance: Federal Reserve Bank of New York, September/October 2004

*A Review by Peter Izundu Nwaoba**

I. Introduction

The paper examines the accumulation of foreign currency reserve assets and explores its implications for monetary policy, global financial markets and the U.S. economy. It reveals an upward surge in central bank holdings of foreign currency assets or foreign exchange reserves in recent years, particularly in foreign government securities. The paper notes that most of the recent reserve purchases were made by Japan and other emerging Asia countries. Similarly, the scale of the purchases made their central banks key players in setting the pattern of capital flows across countries.

The authors state that holdings of foreign assets have doubled since 1995 and assumed a more important role in central bank balance sheets and monetary policy operations. They attribute this trend to build-up of reserves by many central banks for the purpose of stabilizing their currencies. Analyzing the benefits and costs of reserve purchases, the paper reveals that they allow a country to insure itself against a destabilizing run on its domestic currency whose value it helps to stabilize over time. However, on the cost side, central banks loose interest income through reserve purchases and get exposed to potentially large capital losses whenever domestic currency strengthens against reserve currencies.

II Main Issues

The study identifies the framework for understanding the role of foreign exchange reserves in monetary management as one of the provisions of a simplified central bank balance sheet. It points out that the asset side of the balance sheet includes domestic currency assets and foreign currency assets, while the liability side includes

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private bank and government deposits at the central bank and domestic currency in circulation, as well as securities issued in the name of central bank, thereby constituting the monetary base. It then equates the monetary base to central banks' net domestic assets plus foreign exchange reserves, an accounting identity revealing the power of central bank to control the monetary base through the management of domestic and foreign currency assets.

The study identifies the components of a basket of global foreign exchange reserves to include the US dollar, the euro, the Japanese yen, the British pound and the Swiss franc, with analysis indicating that dollar reserve holdings account for about 70.0 per cent of the total across currencies and countries as at end-2003. The study states that reserve managers show much preference for dollar reserves because of the deep and highly liquid market for U.S. Treasury and Agency securities, thereby making foreign central banks key players in the U.S. financial markets.

In terms of capital flows, the authors note that the large quantum of central bank purchases has been a key factor in the determination of the allocation of global capital flows. Their study shows that countries send their surplus saving abroad to purchase foreign assets, but attract borrowing from abroad for domestic investment in times of shortfalls. Using current account balance to measure capital flows, the study reveals also that Asian countries have been very active in building up their foreign currency assets with roughly US$309.0 billion supplied to the rest of the world in 2003, while other sizeable outflows came from the oil-exporting countries. They identify some other non-Asian countries that built-up their reserve holdings between 1999 and end-2003 to include Brazil, Mexico and Russia. According to the authors, a substantial part of the savings was absorbed by the United States of America which borrowed about US$531.0 billion from the rest of the world, a development which helps to determine the value of the dollar and asset prices in the U.S. financial markets.

The study identifies maximization of expected returns relative to the perceived risks as the objective of the private investor who considers yield differentials, expected exchange rate changes and potential exchange rate volatility in deciding what securities to purchase. On the other hand, the paper states that public sector investor such as the central bank trades foreign assets for policy reasons that are beyond maximizing risk-adjusted returns, namely, self insurance and countering private flows.

The authors argue that the self insurance motive leads the central bank to acquire foreign currency assets to secure resources needed to hedge against potential currency market turbulence. In their view, this probably explains a good portion of the build-up in reserves by several Asian countries after their past currency crisis in the 80s and 90s. According to the paper, a common measure of an economy's degree of protection against a currency crisis is the ratio of reserves to short-term foreign currency debt, where a ratio of 1.0 or above is often considered a high degree of protection. On the other hand, the paper notes that countering private flows propels the central banks to buy reserves to "lean against the wind" whenever private capital inflows or outflows threaten to bring destabilizing effects on the value of the domestic currency. They observe that central bank sells domestic assets and buys foreign currency reserves when private investors exert much pressure in buying domestic currency assets. Similarly, central bank sells reserves and buys domestic assets when private capital outflows threaten to weaken the domestic currency.

The paper further argues that in both cases of self insurance and countering private flows, reserve purchases increase the monetary base by injecting liquidity into the economy, which in turn put downward pressure on domestic interest rates. It observes that the central bank could opt to sterilize its reserve purchases through an off-setting drawdown in its net domestic assets, which impacts on local financial markets because the mix of financial instruments held by the private sector is altered. The paper also opines that the central bank can sell domestic government securities or issue its own domestic currency securities to drain the cash injected into the economy through reserve purchases, thereby leaving the monetary base unchanged.

The study, however, identifies associated costs and risks of accumulation of reserves. It shows that sterilized reserve purchases generally come at a cost, which rises as sterilization continues and the magnitude of the fiscal burden depends on the gap between domestic and reserve currency interest rates. Furthermore, it shows that reserve purchases also expose a central bank to foreign exchange risk, with large capital losses when the domestic currency strengthens against the reserve currencies.

Finally, the study concludes that much of the foreign capital flowing into the United States come from foreign central banks and these flows compensate for a decline in private purchases of U.S. assets, allowing the U.S. current account deficit to be financed at prevailing asset prices and exchange rates.

III Comments

Accumulated foreign currency reserves are used to finance current international transactions and support balance of payments in the event of declining current foreign exchange receipts. Global capital flows are, in turn, motivated by efforts to maximize returns on capital and the concern by the investor that the asset value would be eroded if funds are continuously held in the domestic economy. So, an autonomous inflow of capital could be possible in any country if domestic interest rates are competitive relative to those abroad. Reserves accumulation could, therefore, be enhanced if authorities could guard against wide gap between domestic and reserve currency interest rates so as to minimize the fiscal burden associated with sterilization measures of government. On the other hand, the outflow of reserves could be attributed to both immediate and remote causes, in particular, the exchange rate volatility and macroeconomic instability. The outflows of accumulated reserves could occur either through legal channels such as special export financing facilities and the use of trade deficits or capital flight which is often stated as the source of sustained outflow of capital from the less developed economies. However, rapid movements and increases in capital outflows have destabilizing effects on domestic interest rates, exchange rates and international reserve position.

In developing countries such as Nigeria, capital outflow imposes severe constraints on economic growth and development because of the resultant loss of resources that are unavailable for domestic investment. The level of a country's external reserves depends on the quantum of inflow and the rate of deployment of such receipts for financing of imports and external debt service payments. International reserves are, therefore, protected through strict management of foreign exchange receipts and prevention of capital flight in the developing countries.

The foreign exchange situation in a country will continue to worsen if the monetary authorities continue to exchange domestic cash balances for foreign exchange by drawing down their international reserves when demand is accelerating. In most cases, however, the central bank applies either sterilized or unsterilised foreign exchange interventions in its reserve management. In that case, reserve accumulation could be enhanced while its adequacy could be measured by specifying a given level of reserves that is sufficient to meet the need of an economy over a given period of time, and which the International Monetary Fund (IMF) had set at about three months of imports level at the time. Nigeria had once set a threshold of six months for the country.

When reserve purchases increase the monetary base and put downward pressure on domestic interest rates, resident investors rationally tend to shift from domestic assets to foreign assets that carry higher returns. They shift from monetary balances and long-term financial instruments to domestic inflation hedges. However, greater international differentials in asset yields result in more international transactions and capital flows that benefit countries with the right macroeconomic conditions. In order to control an incidence of high powered money in the domestic economy as a result of increase in monetary base, the authorities would need to adopt an effective management of domestic and foreign currency assets so as to curb inflation.

In view of current developments, Nigeria still needs to participate in the U.S. financial markets by making considerable efforts to increase its share in total global reserves and become more relevant in the market. Increase in central bank reserves purchases will help to bring about efficient allocation of capital flows for the country with subsequent impact on economic growth. In terms of policy direction, the country will be in a position to determine its level of investment abroad in times of surplus and investment spread through borrowing from abroad in times of deficits. Also, there should be a well defined framework that identifies and assesses the risks of reserve management operations and allows the management of risks within acceptable levels.

Nigeria's foreign exchange balance is largely denominated in dollars when compared witb other components of reserves namely gold, IMF gold tranche and the holdings of Special Drawing Rights (SDR). The country practices the principle of reserve diversification aimed at optimal investment of the nation's reserves in various currencies to ensure maximum return, minimum losses in situations of fluctuations and the guarantee of some liquidity to be able to effect daily foreign exchange transactions. The current basket of Nigeria's reserve boldings are the U.S. dollar, the Pound sterling, the euro, the Swiss franc, the Japanese yen and the Saudi riyal.

The scarcity of foreign exchange as an economic resource prompts monetary authorities to intervene in the market with the aim of influencing the exchange rate, preservation of the value of the domestic currency and maintenance of a favorable external reserve position. When the balance of payments is experiencing a temporary deficit, it could be financed by short-term capital inflow or a draw-dawn of the external reserves. As at end-December 2004, Nigeria had accumulated foreign exchange reserves to a level of US$16.9 billion that could finance about 18.7 months of imports at current demand level, up from US$7.47 billion as at end-December 2003. This development has resulted to high credit rating with the country's creditors.

Overall, the authors have used their very incisive analyses to show that reserves accumulation is beneficial to countries.