Managing volatile capital flows: the case of Nigeria

Introduction

The aim of the paper is to present the magnitude and composition of capital inflows to Nigeria and analyse capital flows management measures undertaken by this country. The author focuses on the period of 2005–2015. The paper consists of three sections, not counting the introduction and conclusion. The first section presents benefits and risks associated with capital inflows, as well as instruments allowing to manage the risks from capital inflows. The second section contains characteristics of capital inflows to Nigeria. The third section examines capital flows management measures which were undertaken by Nigeria.

The study is based on analytical work using literature studies and the available statistics provided mostly by the Central Bank of Nigeria and the International Monetary Fund.

Theoretical background

In the literature, it is usually argued that the liberalization of capital flows may bring a number of benefits to the developing countries. First of all, in the case of countries suffering from shortages of domestic capital, capital inflows may allow to bridge a saving-investment gap [1]. Capital inflows can finance current account deficits, which may allow to increase productive investment or smooth the path of consumption [2]. When it comes to foreign direct investment (FDI) flows, they can bring new technology, know-how, managerial and marketing skills, international best practices of doing business, benefits arising from increased competition and so on [3]. That all may promote the modernization of the economy and boost the economic growth. Additionally, free movement of capital may result in a more efficient allocation of resources and is welfare-enhancing for both lenders and borrowers [4]. Researches show that capital flows can enhance the competitiveness of the domestic financial sector and enable beneficial portfolio diversification [2].

Fears associated with capital flows relate mainly to a high risk of their volatility. In particular, this applies to portfolio investment and other investment which can be quickly withdrawn from the country. A number of financial and currency crises that occurred in the emerging market economies in the 1990s and 2000s may be an example of this. The increased use of external sources of finance may also result in increasing levels of foreign debt, as it happened in many countries in the 1980s, when debt levels became unsustainable and were blamed for the wide-spread macroeconomic imbalances during the period. Concerns about the surge in capital inflows are also associated with the possibility of excessive real appreciation of the local currency, deterioration in the current account of the balance of payments, inflation and the weakening of the monetary policy transmission mechanism [5].

Countries which experience surges in capital flows have at their disposal two groups of instruments allowing to manage the risks from those surges. The first group includes macroeconomic policy tools. In the case of capital inflows, macroeconomic policy adjustments include:
allowing currency to appreciate provided that it is not overvalued, accumulating foreign exchange reserves to prevent further appreciation if the currency is strong, sterilizing the intervention when there are concerns about inflation, making an adjustment in monetary policy (interest rates and reserve requirements) and fiscal policy [6].

Besides macroeconomic policy measures, country’s authorities also have access to tools for managing capital flows. Among them, prudential measures and capital controls can be distinguished. Prudential measures aim to increase the ability of the financial sector to cope with the excessive risk or reduce its ability to incur excessive risk. Prudential measures can be divided into FX-related prudential measures and other prudential measures. FX-related prudential measures cover measures which discriminate on the basis of the currency. That category includes such measures as limits on banks’ open FX position, limits on banks’ investments in FX assets, differential reserve requirements on liabilities in FX and local currency. Other prudential measures cover measures which intend to improve balance sheets of financial institutions by restraining credit growth and regulating credit quality, eg. maximum LTV (loan-to-value) and DTI (debt-to-income) ratios, countercyclical capital requirements, liquidity regulations, reserve requirements, sectoral limits on loan concentration, asset etc. [6, 7].

In turn, capital controls affect cross-border financial activity by restricting capital transactions or associated transfers and payments. Capital controls discriminate according to residency. They typically include: unremunerated reserve requirements which relate to foreign capital, taxes on flows from non-residents, special licensing requirements for non-residents. Restrictions may even take the form of outright limits or bans on capital inflows or outflows [6, 8].

**Characteristics of capital inflows to Nigeria**

In 1986, with the introduction of Structural Adjustment Programme (SAP) in Nigeria, a period of economic liberalization in this country began. Reforms were initiated, *inter alia*, to improve the investment climate in Nigeria both among domestic and foreign investors. A wide range of structural reforms (internationalization of domestic money and capital markets, changes in national law related to foreign investment, financial sector reforms, etc.) resulted in an increased interest of foreign investors in this country. Until the early 2000s, the country had attracted quite significant amounts of foreign capital, yet, inflows were primarily limited to FDI and debt. Capital inflows to Nigeria increased dramatically in the 2000s, particularly after 2004 [1, 8]. In this period, it could be observed, in particular, the growing importance of portfolio investment flows.

After some weakening associated with the global financial and economic crisis, net capital flows to Nigeria, as well as to other Sub-Saharan African countries, began to grow rapidly in 2011. In 2011, 2012 and 2013, total capital flows to Nigeria amounted respectively to US$ 14,8 billion, US$ 25,1 billion and US$ 21,6 billion, which was equivalent to 3,6 %, 5,4 % and 4,1 % of the country’s GDP. In particular, strong growth was observed in the case of portfolio investment inflows, especially equity and bonds. Factors which contributed to the rapid growth of portfolio inflows to Nigeria and some other sub-Saharan African countries include both push and pull factors. Push factors reflect external conditions, largely weak economic growth, excess liquidity and low bond yields in the developed countries. Pull factors include better economic perspectives for sub-Saharan African frontier markets.

Since mid-2013, portfolio inflows to Nigeria have shown large fluctuations. An important external factor that contributed to this was the Fed tapering program, which was announced in the United States in June 2013. The program which led to the reduction in quantitative easing in the US, as well as to the interest rates increases that started in mid-2014, provided impetus for capital reversal from emerging markets, including Nigeria [10].

As it can be seen in Figure 1, in 2005–2015, FDI inflows to Nigeria remained the most stable compared to two other forms of foreign investment. Over the period, net FDI inflows to Nigeria averaged US$ 6,22 billion annually, and except for the year 2015 were in the range US$ 4,69 billion to US$ 8,91 billion. On the other hand, net inflows of portfolio investment amounted to an average of US$ 5,07 billion, yet, they were subject to large fluctuations changing from US$ 0,48 billion in 2009 to US$ 17,20 billion in 2012. Even higher volatility was observed in the case of net inflows of other investment. In 2005–2006 they were negative and amounted to approximately US$ – 17 billion per year. In subsequent years, except for 2010, they were positive and ranged from US$ 0,31 billion US dollars in 2008 to 8,35 billion in 2014.

**Capital flows management measures in Nigeria**

The most important institution regulating capital flows in Nigeria is the Central Bank of Nigeria (CBN). The objects of the CBN include: ensuring monetary and price stability, issuing legal tender currency in Nigeria, maintaining external reserves to safeguard the international value of the legal tender currency, promoting a sound financial system in Nigeria, acting as a banker and providing economic and financial advice to the federal government.
Before analysing capital flows management measures in Nigeria, it is worth examining macroeconomic conditions of this country.

In 2006–2010 the Nigerian economy grew rapidly. Over the period, real GDP growth averaged 8.9 % annually (Table 1). Strong growth maintained even in 2009 during the global economic downturn. Growth was largely driven by non-oil sector, especially agriculture, trade, and some services [11]. In 2011–2012, Nigeria’s economic growth levels declined below 5.0 % annually. In 2013 and 2014, growth rates accelerated to 5.4 % and 6.3 %, respectively. However, in 2015 Nigeria’s economic growth reached only 2.7 % and recorded its slowest pace since 1995 [12]. The Nigerian economy, which is Africa’s biggest crude producer, was badly affected by declining global oil prices and other macroeconomic challenges, in particular exchange-rate volatility [13].

CPI inflation in Nigeria rose from 5.4 % in 2007 to 11.6 % in 2008 and maintained at the level of above 10 % until 2012. In 2013–2015, due to the tightened monetary policy environment, inflation was at a single digit.

In 2006–2012, with the exception of 2007 and 2009–2010, Nigeria recorded a government budget surplus ranging from 0.2 % to 8.9 % of GDP. Nigeria’s central government budget remains highly dependent on oil receipts which generate 75 % of government revenue [14]. Lower oil prices had a negative impact on Nigeria’s fiscal position especially in 2009 and 2014–2015. In 2014–2015, declining oil prices also put pressure on the current account which in 2015 recorded a deficit for the first time since 1998 [12].

As has been noted above, capital inflows to Nigeria increased substantially a few years before the outbreak of the global financial crisis. In the two years preceding the crisis, in a situation of strong current account surplus, capital inflows contributed to an unprecedented increase in international reserves which rose from US$ 31.3 billion in January 2006 to an all-time peak of US$ 62.1 billion in September 2008. Over the period, the currency of Nigeria – naira (linked to US$ within the foreign exchange band) – appreciated against the US dollar (Figure 2). The Central Bank of Nigeria sterilized capital inflows with different intensity [5]. However, in the fourth quarter of 2008, sudden reversal in net capital flows to Nigeria was observed. Net portfolio and other capital inflows turned negative. Outflows intensified in the first quarter of 2009. Capital outflows and lower oil revenues weakened Nigeria’s balance of payments. Pressure on the naira increased which led the CBN to adjust the exchange rate band by nearly 25 percent [15]. From November 2008 to June 2009, the naira weakened substantially. The CBN sold foreign exchange to defend its currency. By the end of June 2009, it had lost 30 % of its international reserves since a peak in September 2008.

In January 2009, the CBN introduced a number of exchange restrictions to limit pressure on the Nigeria’s currency and safeguard international reserves [16]. The restrictions were removed by July 2009, after the Naira exchange rate had stabilised.

Capital inflows to Nigeria are considered to be one of the causes of the banking and financial crisis that hit the country in 2009. Before the crisis, proceeds of foreign borrowing by banks had been invested in the stock market which contributed to a stock market bubble. The capital market was hit severely by the crisis. As foreign investors withdrew from the market, there was a sharp fall on the Nigeria Stock Exchange. From September 2008 to the end of first quarter of 2009, the market capitalization nearly halved [17]. The crash of the Nigerian capital market brought a number of banks to insolvency.

The banking crisis in Nigeria indicated the importance of macroprudential measures in managing capital flows. After the crisis, the Nigerian authorities took the steps to enhance the quality of banks and establish financial stability. The example of regulation measures introduced in 2009 is the provision that «Where exposure to a particular industry within a sector is in excess of 20 % of total credit facilities of a bank, the risk weight of the entire portfolio in that industry shall be 150%».

In the period from the second half of 2009 to mid-2011, despite a rebound in oil exports, Nigeria recorded reduced current account surpluses. Some recovery in capital inflows was observed. However, international reserves continued to fall steadily, as the CBN focused on maintaining exchange rate stability and low interest rates [18]. The reluctance to raise interest rates was associated with condition of some banks which had been weakened by the financial crisis. However, attempt to not raise interest rates was in conflict with significant and sustained pressures on the currency and prices [15].

In mid-2011, pressure on the naira reappeared. As Nigeria’s international reserves were half of the levels of the peak in September 2008, the CBN responded by tightening monetary policy [15]. From November 2011 to April 2013 reserves grew again which was the result of relatively high international oil prices and capital inflows. Capital flows were dominated by portfolio investment, especially in government securities, which was driven by relatively attractive interest rates. Large portfolio flows were also a positive response to the elimination in 2011 of a restriction placed on foreign investors to hold their securities for at least one year [11]. The above conditions helped to maintain the value of the Nigerian currency.

However, in mid-2013 the naira came under pressure again. The CBN pursued intensified interventions in the

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**Figure 2 – Exchange rate of the Nigerian currency (parallel market, naira per US$) and Nigeria’s international reserves (US$ million)**

Source: [9]
foreign exchange market which led to a substantial loss in international reserves. Pressure on the naira intensified in 2014, when oil prices started to fall sharply and foreign portfolio flows slowed significantly. In this situation, in November 2014 the CBN further tightened monetary policy and devalued the national currency [13]. In 2015, as the depressed oil prices continued to put pressure on the naira and further deterioration of macroeconomic conditions was observed, the CBN introduced foreign exchange restrictions [19].

Conclusion

After 2004, capital inflows to Nigeria increased dramatically. In 2005–2015, the CBN used both macroeconomic policy measures and prudential measures to manage volatile capital inflows. It also resorted to foreign exchange restrictions.

The use of different measures was associated with the changing macroeconomic situation of the country which was highly influenced by volatile oil prices. The actions of the central bank in the area of capital flows management measures were particularly highly influenced by the recurring pressure on the naira and falling international reserves.

Список литературы

