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EMPIRICAL EVALUATION OF THE FOREIGN EXCHANGE MARKET INTERVENTIONS IN ZIMBABWE PRE TO POST DOLLARIZATION (1985-2016)

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Abstract:

The study empirically evaluated the Reserve Bank of Zimbabwe (RBZ) foreign exchange interventions in for the period pre and post dollarization. There have been different forms and motives of intervention used by the RBZ in line with the exchange rate system and fundamental macroeconomic problems at each given point in time. There has been sterilised and unsterilized intervention together with direct and indirect interventions. Success ranges from the fixed exchange rate system when the main reason for intervention was to defend the fixed parity hence success was mainly imminent for the period 1985 to 1995 when the foreign exchange reserves were more than enough but the reserves started to be depleted towards 2000 and hence led to the move towards the flexible exchange rate system from the Auction system of 2003 to the actual flexible exchange rate system leading to the abandonment of the local currency as it continued to lose value relative to foreign currencies. Intervention became indirect and fairly successful from 2008 after the adoption of the multicurrency system. Reasons behind unsuccessful intervention being depletion of foreign currency reserves due to persistent Balance of Payments deficits, declining levels of productivity, vulnerability to natural disasters such as droughts, rampant corruption, policy inconsistency and incredibility. However if the above fundamental issues are not addressed, there is no need for the country to return its own currency since it will never stand against other foreign currencies hence recommend the need to continue with the multicurrency exchange rate regime.

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1. Introduction

The attainment of political sovereignty in 1980 also brought about major economic, financial and social structural reforms and adjustments. The lifting up of political, financial and economic sanctions to formerly Southern Rhodesia resulted in a visibly extended role of the central bank in the foreign exchange market. The use of foreign exchange interventions as a possible tool needs to be assessed taking into account both the design and implementation of monetary policy (Rossini et al 2013). For this reason, this paper analyses the forms of foreign exchange intervention and their effectiveness in achieving their intended intervention objectives.

The period 1982 to 1990, the Zimbabwean currency was pegged to a trade weighted basket of fourteen currencies (*including South African rand, British pound, US dollar, the Germany Deutschemark, the Japanese yen and the Botswana pula*). However, the adoption of structural adjustment programmes from 1991 led to a dynamic financial system shift, that is, financial liberalisation. The free floating exchange rate system was a condition from the International Monetary Fund (IMF) for access to Balance of Payments (BOP) support. In this new financial era, there were limited foreign exchange restrictions and less direct government controls in the foreign exchange market. During the period 1991 to July 1994, a two tier exchange rate system was used – one quoted by the Reserve Bank of Zimbabwe (RBZ) and the other one determined in by inter-bank market.

Following unprecedented market forces and their direct implication on the whole economy, the central monetary authorities revised their policy of intervention to managed float exchange rate system, from July 1994 to March 1999. Unfortunately, this period was characterised by ever rising BOP deficits, budget deficits and the domestic price level. These adverse developments in the economy, coupled with other macroeconomic problems exerted unbridled pressure on the exchange rate. The immediate consequences were externalisation or hoarding of foreign currency, a factor which intensified speculative activities in the foreign exchange market. It is imperative to mention that it is during this period that Zimbabwe experienced a major currency crash when the exchange rate depreciated by 31.4 % from Z\$13.7/US\$ to Z\$18/US\$ between 13 and 14 November 1997 (A. Makochekanwa 2009).

With recession now taking its toll on the economy, foreign currency reserves further depleted and intensified the parallel foreign exchange market activities. At the same time, international debts grew to over US\$420 million by mid-2000. New political developments in the country on the turn of the millennium resulted in BOP support suspension and continuous accumulation of external financial obligations to unsustainable levels. This and other pressing factors called the RBZ to institute a fixed exchange rate regime from August 2000 to February 2003. The exchange rate was first pegged at Z\$38 /US\$ in 2000 and further adjusted to Z\$55/US\$ in 2001. An export support rate of Z\$800/US\$ was introduced in February 2003 to January 2004 followed by Foreign Exchange Auction System of January to 24 October 2005 (Makochekanwa 2009). Zimbabwean monetary authorities instituted several currency reforms between the period 2005 and January 2009, chief among them were the introduction of bearer's cheques and cancellation of "zeros"ⁱⁱ on the currency.

Following the demise of the Auction System, the Reserve Bank of Zimbabwe announced the Tradable Foreign Currency Balances System (TFCBS) on 24 October 2005. TFCBS was meant to determine the exchange rate by using the forces of supply and demand, and at the same time provide for the strategic or sensitive national import requirements, such as fuel. The special national imports were provided for from 30% surrender requirement of all export proceeds.

All RBZ foreign exchange market interventions to April 2008 failed to abet the critical national situation in relation to foreign currency needs. Therefore, on the 30th of April 2008, the central bank opted to deregulate the foreign exchange market, removing all prior special arrangements. The new system was based on a willing buyer willing seller basis of foreign currency. Thus, the exchange rate was determined by the interbank exchange rate. On the first day of implementing the new foreign currency system, the rate reached ZW\$168 million/US\$1 from Z\$30 000/US\$1ⁱⁱⁱ. The period April 2008 to January 2009 was characterised by high volatile exchange rates, a factor which rendered the local currency valueless. The new minister of Finance in the Government of National Unity, therefore, proclaimed the use of a multicurrency system, which is in use to today, February 2017.

2. The Parallel Foreign Exchange Market in Zimbabwe

The unavailability of foreign exchange on the formal market, strict foreign currency controls by the RBZ and the need to remain afloat economically and welfare wise, forced the business community and ordinary Zimbabweans to rely on the parallel exchange market for their currency needs. Speculative activities were therefore rampant, especially so towards dollarization in 2008. Traditionally, foreign currency was only accessed from banks in the large cities, and was later decentralised resulting in the licensing of several Bureau de Changes across the country. However, during the

ⁱⁱ After the removal of six zeros, former Z\$1,000,000.00 became \$1, only

iii <u>http://www.rbz.co.zw/pdfs/2008%20mps/aprilmps2008.pdf</u>

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2002 to 2013 era, there were policy revisions, reversals and thus all bureau de changes were de-licensed, and this however created policy incredibility on the part of the monetary authorities. All foreign currency transactions were limited to registered commercial banks but this created the parallel market and thrived to date taking advantage of the premiums and unavailability of foreign currency from the official market.

Exchange rate premiums on the parallel market were very high prior to the adoption of the multicurrency system in February 2009. However, even after 2009, the speculative activities on the parallel market remained in place, and so were the premiums higher than in banks. Currently, the foreign exchange markets and or dealers are a common feature in major cities, towns, growth points and even shops. Popular parallel exchange market places include the Road-port, and Copa Kabana - (Harare); World Bank - (Bulawayo); Civic Centre (Masvingo), Jerera and Gutu Growth Points - (Masvingo) and Mudzviti – (Mutare) to mention but a few.

Parallel foreign exchange market activities in Zimbabwe thrived well due to the insufficient supply of foreign currency in the formal financial market to satisfy the demand (A. Makochekanwa 2009). Extensive controls on foreign exchange limit the accessibility of foreign exchange on the official market, and this led to the emergence of the illegal market for foreign exchange (Jianping 1998). The recently introduction of bond coins and notes (2016) have given another golden opportunity for the parallel foreign exchange market to flourish given that the bond notes and coins are more or less a perfect substitute for the US\$ and an exchange rate is being rated despite it being fixed at 1:1 by the RBZ and the US\$ is gradually disappearing in the local market started with the big notes that is US\$100 and US\$50 and now the turn is on the US\$20 meaning the trend is likely to persist up until the smallest US\$1 will be nowhere to be found in the Zimbabwean market.

3. Forms of Central Bank Interventions in Zimbabwe

Central Bank Interventions (CBI) involves the direct purchases or sales of foreign currency made by the central monetary authorities on the spot market with the explicit aim of influencing the dynamics of the exchange rate. For the period 1985 to 2014, The Reserve Bank of Zimbabwe engaged itself in many forms of intervention in the foreign currency market which include sterilised and unsterilized interventions, direct and indirect interventions (through the quasi-fiscal operations) and often secret and money market interventions. A distinction can however be drawn between (1) unsterilized intervention (the norm in fixed rate regimes) where the foreign exchange intervention is not offset by other domestic open market actions and, (2) sterilized intervention (the normal situation in floating rate regimes) where the foreign exchange intervention is offset by influencing domestic reserves market.

3.1 Sterilized operations

These are active purchases (sales) of foreign-currency by the central bank to neutralise or sterilise through sales (purchases) of bonds to banks in order to control the impact on the monetary base. Such types of intervention are often called double edged interventions. Under sterilized intervention the RBZ take deliberate action to offset foreign exchange market intervention with an equal change in the net domestic credit and this happens either simultaneously or with some short lag, while leaving interest rates unchanged. Sterilised intervention constitutes an independent policy tool (Christopher J. Neely, 2001). Note that, sterilised intervention does not affect domestic prices and interest rates directly hence, it does not influence the exchange rate through the two macroeconomic variables, but through the portfolio balance and the signaling channels as highlighted in the theoretical literature review below.

When a monetary authority buys (sells) foreign exchange, the monetary base increases (decreases) by the amount of the purchase (sale). By itself, this type of transaction would influence exchange rates in the same way as domestic open market purchases (sales) of domestic securities. However, the RBZ routinely sterilize foreign exchange operations through reversing the effect of the foreign exchange intervention on the domestic monetary base by buying and selling domestic bonds (Edison, 1993).

3.2 The Sterilisation process

The relationship between exchange rates and monetary control largely comes from central banks' balance sheet. On the liabilities side, there is the base money (BM) which comprises reserves, currency and the central bank's net worth. On the assets side, there is net foreign assets (NFA) and net domestic assets (NDA). Intervention in the foreign exchange market will change NFA (Simatele, 2004). The balance sheet summary can be presented as:

$$BM = NFA + NDA$$

Sterilization needs the central bank to take deliberate action such as open market operation (sales or purchases of securities) resulting in an equal change in domestic assets.

Without sterilization, the monetary base also changes i.e.

$$\Delta BM = \Delta NFA$$

The size of sterilization largely depends on the extent to which simultaneous changes take place in NDA as NFA (Simatele, 2004). Full sterilization happens when changes in NFA are totally offset by changes in NDA, thus the expression:

 $-\Delta NFA = \Delta NDA$ hence $\Delta BM = 0$

Under full sterilisation, there will be no impact on the monetary base. The changes will result in changes in broader money aggregates and interest rates which will further affect expectations, capital inflows and ultimately the exchange rate and in the case of Zimbabwe there was no-longer full sterilisation due to the continued loss of value of the domestic currency hence even the domestic currency denominated bonds became very risk assets and such interventions have contributed immensely to the continued price rises of the period 2003 to early 2009. Sterilised intervention usually affects the exchange rate through the portfolio balance channel and the signalling channel.

3.3 Non-sterilized central bank intervention

Unsterilized interventions are conducted without any deliberate action taken to offset the impact of interference on the monetary base. If interventions are not sterilized, purchases or sales of foreign currency lead to changes in the relative money stocks and/or relative interest rates thereby affecting the exchange rate. This have been the common form often instituted by the RBZ hence usually punctuated by the lowering of interest rates, capital outflows and over ballooning rates of domestic inflation resulting from excessive growth of money supply. Without sterilisation, the monetary base will be directly affected (*as shown by the illustrations below*) and the result will be mounting inflationary pressures in the economy emanating from increasing domestic money supply and the lowering of interest rates.

$$\Delta BM = \Delta NFA$$

If interventions were not fully sterilised, changes in the monetary base will be inevitable despite being less than that of the intervention, meaning that in some instances we have:

$$\Delta BM < \Delta NFA$$

There was also non-sterilized direct intervention by the central bank in the foreign currency market which involves the buying and selling of currency without adjusting the monetary base. Unsterilized sale of foreign exchange would be expected to appreciate the exchange rate through contraction of money supply and therefore interest rates. Conclusively, intervention is non-sterilized when it is conducted without any action taken to offset the impact of intervention.

3.4 Indirect Intervention

This refers to other indirect policies or strategies that are implemented to influence the exchange rate and this include capital controls (taxes or restrictions on international transactions in assets like stocks or bonds), exchange controls (the restriction of trade in currencies) (Dooley, Mathieson, and Rojas- Suarez, 1993; Neely, 2001), changing the regulations of banks' foreign currency exposure, closing and incarceration of illegal foreign currency dealers, trade restrictions, among other measures. Zimbabwe, during the period 2000 to 2008, underwent a series of such structural policy interventions in a bid to correct exchange rate misalignments and BOP challenges.

3.5 Secret intervention

Secrete interventions are done usually to maximize and or minimize market impact and for portfolio adjustment. Owing to mistrust and lack of sound credibility by the general public to the central bank of Zimbabwe, the monetary authorities were left with no option but to institute secret foreign exchange interventions in some cases between 2002 and 2014.

4. Theoretical Literature Review

4.1 The Portfolio Balance channel

This theory states that sterilised intervention through open market operations will change the currency composition of government securities held by the public (Humpage, 2003). A sterilised purchase of foreign exchange, for example, increases the amount of domestic bonds held by the public relative to foreign bonds, resulting in a depreciation of the local currency. Viewed from the perspective of a representative investor with an international portfolio of assets, a change in the relative scarcity of domestic versus foreign currency assets will cause a portfolio reallocation that changes relative prices (exchange rates) in the process. In large and well developed financial systems, small changes in the relative scarcity of domestic and foreign assets (imperfectly substitutable assets) can be induced by sterilised intervention and result in exchange rate changes.

4.2 The signalling or expectations channel

Mussa (1981) suggested that central banks might give indications regarding future, unanticipated changes in monetary policy through their sterilised interventions, with sales or purchases of foreign exchange implying, monetary tightening or ease, respectively. This has direct implications for future fundamentals, and traders would immediately adjust spot exchange rate quotations.

Intervention change perceptions of the factors that are relevant to different groups of market participants. Perceptions of future relative scarcities, future income streams and risk change prices. Signals of future monetary policy influence the exchange rate through changing expectations. The changed expectations are usually associated with speculative attacks and speculative bubbles. Credibility of the signal determines the direction of influence. The central bank's signals to resist currency appreciation might be more credible than signals of resistance to depreciation (Moreno 2005). Intervention coordinates trading in the direction of equilibrium hence the central bank in effect consolidates and coordinates expectations of the people.

Mussa (1981) however suggested that such signals could be stronger than a mere announcement of monetary policy intentions because interventions give monetary authorities open positions in foreign currencies that would result in losses if they failed to confirm their signal. Reeves (1997) has formalised Mussa's approach and has demonstrated that if the signal is not fully realistic, or if the market does not use all available information, then the response of the exchange rate intervention will be low. However, Edison (1993) argued that intervention is effective and occurs through both the portfolio balance and signalling channels.

4.3 The monetary policy channel

A potentially important influence on the exchange rate is the relationship between interest rates at home and abroad. Changes in real interest rate differentials caused by monetary policy actions tend to move the exchange rate, especially if unanticipated through the transmission of monetary policy actions to the economy. There are linkages from sterilised intervention back to the monetary policy channel which operate through the existence of policy trade-offs - whereby inflation and real economy developments both enter the objective function of the monetary authorities - and through expectations of how those trade-offs will affect future policy.

4.4 Profit criterion channel

If official intervention yields a profit, it will reduce unnecessary exchange rate fluctuations. If intervention entails losses, it becomes an additional source of exchange rate instability. This criterion is based on static view that of equilibrium exchange rate, which must be computed in the first place. The profit criterion also takes into account interest differential.

5. Empirical Literature Review

Dominguez Kathlyn (1998) carried out a study on the effects of monetary intervention on dollar-mark and dollar-yen for USA, German and Japan for the period 1977 to 1994. Results from this study indicated that interventions increase volatility of the exchange rate. The study shows that some traders have knowledge that the central bank is intervening at least an hour before the public release of the information in newswire reports. Evidence from this study also shows that timing of the intervention is significant.

Michel B. et al (2001) also carried a study on the effect of central bank interventions of DEM-USD and YEN-USD exchange rates. Allowing for regime dependent specifications, it was found that coordinated interventions either destabilise or stabilise the exchange rate depending on the level of volatility prevailing.

Simwaka K. and Mkandawire (2009 and 2012) used monthly exchange rate and official intervention data applying the GARCH (1, 1) model for Malawi to analyse the effectiveness of central bank intervention. The analysis revealed that intervention by the central bank affect the Kwacha during the period 1995 to 2008 and 2002 – 2006. It was found out that net sales of dollars depreciate rather than appreciates the Kwacha. The intervention also reduces volatility of the Kwacha thus achievement of the central bank objective of smoothing out fluctuations of the Kwacha. Therefore, intervention was seen as an effective tool for moderating fluctuations and that CBIs have long lasting, quantitatively significant effect.

Simatete (2004) used a GARCH (1.1) model to investigate the simultaneous effect of the central bank intervention on the mean and variance of the Zambia Kwacha and results indicated that central bank intervention in the foreign exchange market reduces the Zambian Kwacha volatility.

However, the inefficiency of using of proxing CBIs with the fluctuations in national foreign currency reserves especially on the part of many developing countries like Zimbabwe ultimately resulted in the study being qualitative. This is due to the fact that much of the fluctuations are due mainly not to CBIs but to other unproductive, corruptive and non forex market interventions. Despite the ineffectiveness of Reserves, fluctuations being used as the dependent variable of intervention, unavailability of the reserves fluctuation data also limited this study to be qualitative in nature. If the fluctuations may happen to affect the exchange rate, they will be more or less indirect hence difficult to capture with the fluctuations in reserves.

6. Motives of Central bank Intervention in the Foreign Exchange Market in Zimbabwe

The monetary authority's prime objectives of foreign exchange interventions in Zimbabwe have been mainly to defend the fixed exchange rate and to directly influence the levels of exchange rates. With a fixed exchange rate system, the country required adequate foreign currency reserves to defend the fixed exchange rate parity and to fund imports which were (are) in very nature price inelastic. However, there were other intervention motives, which include smoothing of exchange rate volatilities and for balance of payment management. The forms of interferences ranged from direct intervention such as devaluation to indirect interventions such as the imposition of trade barriers.

A. Managing foreign currency reserves - Severe quasi-fiscal activities by the RBZ during the period 2000 to 2008 and adverse natural phenomena experienced by the country, such as drought, triggered a perpetual depletion of the national foreign reserves. Hence, RBZ's efforts were meant to meet the economy's demand for the foreign exchange against volatility of capital flows and to rebuild its reserve stocks.

B. To control inflation or maintain internal balance – In a bid to curb hyperinflation, the monetary authorities of Zimbabwe used the exchange rate policy, among several other tools. Such policy direction was being borrowed from South American countries which had an earlier hyperinflationary experience. These include Argentina and Brazil. Some countries which also controlled inflation using exchange rate policies as indirect targets to support monetary policy include Chile, Israel and Singapore (Moreno, 2005).

C. Correction of Balance of Payments disequilibrium - Central Bank Interventions (CBIs) are also undertaken to achieve external balance, enhance competitiveness and boost growth. Exchange rate targets have been used to prevent real exchange rate misalignment and achieve external equilibrium like in Korea until 1997 (Moreno 2005). In Zimbabwe, foreign exchange intervention goal has been to prevent exchange rate appreciation and correct or reduce large current account deficits. The nation has been subjected to BOP crisis for prolonged periods under both rigid and flexible exchange rate regimes together with the period under dollarization.

D. To prevent crises both currency and financial crises – With the experience of the currency crash in 1997, Zimbabwean authorities were acting in fear of a severe currency and financial crisis. Despite concerted efforts by the central bank, such as currency reforms, institution of financial access constraints and shifts in exchange rate management, the nation plunged into a currency crisis in 2008. It is against the background of the devastating effects of currency and financial crisis that the monetary authorities have actively intervened in the foreign exchange market directly or indirectly to keep the possibilities of crisis under strict surveillance.

E. Containing foreign exchange volatility – Whilst the RBZ was operating uneconomic exchange rate, speculative activities in the parallel exchange market were very volatile. The government's failure to satisfy the foreign exchange demand forced them to rely on parallel markets in order to continue supporting their daily industrial import and investment needs. Thus, one principal objective of the RBZ foreign market inventions was to curtail exchange rate fluctuations, a move which ended up affecting domestic prices through exchange rate depreciation. This was among other reasons for the Peruvian central bank's foreign exchange intervention mainly to reduce the volatility of the exchange rate and to accumulate international reserves in order to private sector.

F. Intervention goals under floating (2003-2014) - The floating exchange rate regime in Zimbabwe can be divided into two phases; that is, from 2003 to the 2007 (on the inception of the controlled foreign currency auction system) and from 2009 to 2016 during the multicurrency system or unofficial dollarization. In either case, the major motives behind the RBZ intervention was to dampen exchange rate volatility, countering excessive exchange rate movements (undershooting or overshooting); reducing the rate of change in the exchange rate ("leaning against the wind"); and to supply liquidity to the foreign exchange market since the nation was characterised by high debts (domestic and foreign debts), currency mismatches/misalignments and very fragile and weak financial markets.

G. To promote economic growth – the general objective of interventions is to promote domestic productivity growth. This was aimed to respond either directly or indirectly through the various channels of productivity growth

7. Factors that constituted to the thriving of parallel exchange market in Zimbabwe

- Unrealistically strict Government foreign exchange policy controls The RBZ's measures to control and restrict access to foreign exchange for other macroeconomic objectives like BOP, triggered the eruption of the parallel foreign exchange market. The general business community and general households were left with no best suitable alternative sources of foreign currency given the increased demand for imports, but to heavily depend on the parallel market. In general, when the government imposed controls on the holdings and transfers of foreign exchange, the demand for alternative sources of foreign currency arises (Grosse, 1991).
- *Demand side and the supply side determinants* Makochekanwa A. (2009) analysed the existence of the parallel foreign currency market in the demand side and the supply side determinants. The demand side include reasons like currency substitution, capital flight (both human and financial), financing of trade by

enterprises which rely on imports (fuel and other raw materials) and financing of fiscal deficits and international financial obligations. Excess demand was created by droughts and industrial closures which resulted in the increased demand for imports and hence foreign currency which the official routes were not even able to satisfy more than 25% of the total demand for it.

- Quasi-fiscal operations and corruption The national foreign currency reserves were severely depleted during the period when some government officials and associated companies were having access to low cost foreign currency from the Central Bank and diverted it into the parallel market through speculative activities. The depletion of the reserves was also rendered to the central bank's mechanisation quasi-fiscal operations like BACCOSSI, ASPEF, farm programmes, among others, which sucked a lot of foreign currency together with their failure to generate the foreign currency after accessing it from the central bank. These programmes, in addition to the indulgences in non-banking activities, like the acquiring of companies, were a form of resources abuse and contributed much to the fast depletion in foreign currency reserves. Central bank active involvement in fuel acquisition and drought mitigation programmes further compromised the foreign currency position of the country. Thus, foreign currency was dry and inaccessible on the formal market.
- Droughts which resulted in aggregate supply being less than aggregate demand hence the increased demand for imports leading to increased demand for foreign currency to access even the basic agricultural goods from nearby countries like RSA and Botswana and Mozambique and Zambia. Unemployment which resulted in the growth of cross border trading as an alternative form of employment significantly increased the demand for foreign currency which was not easily accessed from the formal sources hence the parallel market was and still the simplest next best alternative.
- *Supply of foreign currency* The availability and increased remittances of diaspora funds into the country also contributed to a vibrant parallel exchange market. The unrealistic official exchange rate was a motivation for agents to take their fortunes to the "black market". The major sources of remittances were from retaining citizens, Zimbabwean employees abroad, salaries of workers in foreign currency by local companies (NGOs from 2007), cross border traders, informal Money Transfer Agents, farmers (especially tobacco growers) and many other unofficial sources.

9. Implications of Unsuccessful CBIs

Excessive money printing by the central -the Zimbabwean government massively used the money printing machine to finance its unbudgeted expenditure which includes the

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1997 printing of money to pay the war veterans gratuities (resulted in the 1997 currency crush), the unjustified intervention in the Democratic Republic of Congo's (DRC) war in 1998; the expenses on land reform from 2000, the parliamentary (2000/2005) and presidential (2002) elections, introduction of senators in 2005 and the international payments debt obligations from 2004, all resulted in massive money printing by the government (Makochekanwa, 2007). Money was also printed to meet the civil servants salaries. This printing has thus contributed towards the loss in value of the local currency, the Zimbabwe \$ and the rising inflation. This was not sterilised by the purchase of foreign currency to neutralise the increase in the domestic currency which have affected the asset holdings of the economic agents through the portfolio balance channel basing on the perfect imperfect substitutability of domestic and foreign currency denominated assets. The loss of value of the domestic currency resulted in Zimbabwe \$ denominated assets being risk hence it triggered a serious portfolio adjustment from domestic to foreign currency denominated financial assets thereby increasing the demand for the already scarce foreign currency to aid the portfolio adjustments. Dollarization amplifies the reaction of financial intermediaries to sharp movements in their funding or to high exchange rate volatility. As a result, the economy is prone to credit booms and busts associated with flows of foreign currency deposits, foreign credit lines or other capital flows, and to exchange rate movements that affect the quality of the credit portfolio. Dollarization therefore alters the transmission mechanism of monetary policy and increases the liquidity and solvency risks of the financial system. (Rossini et al 2013).

10. Conclusion

The RBZ interventions (both direct and indirect and or sterilized and non-sterilized) have been successful for the period 1980-1997, dismally failed for the period 1997-2008 leading to the abandonment of the Zimbabwean dollar and fairly successful for the period 2009-2016. The early 80s period was characterized by a stable economic environment, with the new Government having inherited from the British Government one of the most structurally developed economies and effective state systems in Africa. Sadly, the years that succeeded the 1980s saw the downward spiraling of the economy. This was evidenced by low exports owing to high input costs leading to a critical shortage of the foreign exchange, heavy time and transaction costs, repressed interest rates which discouraged saving. Some of the factors were reduced supply of capital owing to the state's high propensity to borrow among other things, stoked inflation and increased public spending. Since 1991, the Zimbabwean dollar was devalued repeatedly, after the crisis that started with the land restitution process, and it became almost worthless. Ironically, this period witnessed success in the CBIs. There were

complementary policies (Monetary and Fiscal), limited to no political interference in Central Bank operations (Central Bank independence), macroeconomic stability which led to low demand for foreign commodities and ultimately low foreign currency demand, High levels of exports, adequate foreign currency and gold reserves and high levels of production were among other reasons behind the success period.

Towards 2008, the CBIs failed dismally due to parallel fiscal and monetary policies, political interference in the CB operations, political instability, depletion of foreign currency reserves due mainly to government activities (monetization of public debt, participation in regional wars, droughts), low levels of productivity translating into high demand for foreign commodities since domestic demand exceeded domestic supply hence high demand for imports and overreliance on imports since the imports are price inelasticity. Also CB intervention in the economy which may include the extra ordinary interventions in 2008 (RBZ 2008) which may include farm mechanization, Productive Sector Facility Fund and BACCOSI of 2008 which all further depleted the few generated foreign currency reserves. This period was however dubbed the worst in Zimbabwe since it was punctuated by many macroeconomic problems among others balance of payments deficits, budget deficits, high unemployment, low levels of investment and hyperinflation and this period was also punctuated by the 1997 and 2008 currency crushes. Under the multicurrency regime, the dominance of the US\$ restored a lot of macroeconomic fundamentals leading to a steady improvement in economic performance but on the facet of CBIs, the CB have been stripped off the majority of its sole responsibilities. The intervention turned to be indirect since the RBZ have no direct discretion over the multiple currencies except recently (2015 and 2016) when the RBZ introduced the bond notes and coins in trying to regain national currency sovereignty and pegged the bonds at 1:1 with the US\$. Others also argue that the introduction of the bond notes is a gradual move towards de-dollarization given the evident disappearance of the US\$ since the circulation of the bond notes and coins This however weakened the transmission mechanism of monetary policy usually the interest rate and credit channels in favor of the ineffective and subjective exchange rate channel to economic growth.

References

- 1. Dominguez, K.M., 1998. Central Bank Intervention and Exchange Rate Volatility. Journal of International Money and Finance 17(1), 161-190.
- 2. Dominguez K. (2003)., The market microstructure of central bank intervention, Journal of International economics 59 (2003) 25-45.

- 3. Dooley, M.P., D.J. Mathieson, and L. Rojas-Suarez (1997), "Capital Mobility and Exchange Rate Market Interventions in Developing Countries," National Bureau of Economic Research (NBER), Working Paper 6247, Cambridge, MA.
- 4. Edison, H. (1993): "The effectiveness of central bank intervention: a survey of the literature after 1982", Princeton University Special Papers in International Economics, no 18.
- 5. Grosse, Robert (1991), "Peru's Black Market in Foreign Exchange", Journal of International Studies and World Affairs, 33(3), 153 167.
- Hung, J. H. (1997): "Intervention strategies and exchange rate volatility: a noise trading perspective", Journal of International Money and Finance, vol 6, pp 779-93.
- 7. Humpage, O. (2003): "Government intervention in the foreign exchange market", Federal Reserve Bank of Cleveland Working Paper, 03-15.
- 8. Jianping, D., 1998. China's foreign exchange black market and exchange flight: analysis of exchange rate policy. The Developing Economies 36, 24–44.
- 9. Makochekanwa, Albert, 2009. "Zimbabwe's Currency Crisis: Which Currency To Adopt In The Aftermath Of The Multi-Currency Regime?," MPRA Paper 22463, University Library of Munich, Germany.
- 10. Makochekanwa Albert, (2007), "A Dynamic Enquiry into the Causes of Hyperinflation in Zimbabwe", Working Paper Series No. 9, Department of Economics, University of Pretoria, South Africa.
- 11. Mussa, M. (1981). "The role of official intervention" Group of thirty occasional papers, no.6.
- 12. Neely, Christopher J. (2001), The Practice of Central Bank Intervention: Looking Under the Hoodî, Federal Reserve Bank of St. Louis Review.
- 13. Moreno, R., 2005, "Motives for intervention", BIS Papers, No. 24, 4-18.
- 14. Reeves Silke Fabian. 1997. Exchange Rate Management when Sterilized Interventions Represent Signals of Monetary of Monetary Policy. International Review of Economics and Finance. 6 (4): 339-360.
- 15. Reserve Bank of Zimbabwe Monetary Policies for (2003, 2005, 2008, 2009, 2012, 2015 and 2016.
- 16. Simatele, M. (2004). Financial Sector Reforms and Monetary Policy in Zambia. PhD Dissertation. University of Goteborg.
- 17. Simwaka K. and Mkandawire (2009)., The efficacy of foreign exchange market intervention in Malawi, Munich Personal RePEc Archive, paper no. 15956.
- Simwaka K. and Mkandawire (2012)., The efficacy of official intervention in foreign exchange market in Malawi, African Development Review, Vol. 24, No. 2, 2012, 125-136.

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