CURRENCY REFORMS IN ZIMBABWE: AN ANALYSIS OF POSSIBLE CURRENCY REGIMES

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ABSTRACT

The Government of Zimbabwe (GoZ) adopted a multiple currencies regime (MCR) in February 2009 and demonetized the Zimbabwean dollar in July 2009 after almost a decade of economic crisis. The MCR approach resulted in stabilizing the Zimbabwean economy; however, there are remaining concerns that need to be addressed. The purpose of this paper is to explore various options of currency regimes that could be adopted in the short and medium term in order to consolidate economic stabilization and recovery in Zimbabwe.

The debate on currency reforms comes at a favourable juncture in the country's recent political economy, marked by the signing of the Global Political Agreement in September 2008 and the inauguration of the Government of National Unity in February 2009. In March 2009 the Government adopted the Short Term Emergency Recovery Programme (STERP) whose major goal is to stabilize the economy through increasing capacity utilization in all sectors of the economy, ensuring availability of basic goods and services and rehabilitation of collapsed infrastructure and service delivery. Since the adoption of the MCR there has been a marked decline in inflation to single digits, an increased availability of basic goods and services, as well as a slow recovery in capacity utilization. However, further progress is hampered by the biting liquidity crunch that is affecting the financial sector which is worsened by the loss of lender-of-last-resort function of the Reserve Bank of Zimbabwe.

An analysis of the data suggests that at the core of the economic crisis was the Government's inability to borrow from domestic and international debt markets leading to excessive money printing to finance the budget deficit. This led to hyperinflation, worsening social conditions, negative GDP growth, and worsening balance of payments position.

The paper's review of international experiences of economic crises highlights a number of conditions crucial for a successful currency reform. These conditions are: monetary policy reform, fiscal reforms, central bank reforms, socio-economic convergence, establishment of social safety nets, financial sector reforms, re-engagement with development partners, structural reforms, and strong leadership and political commitment. The paper also places emphasis on timing and sequencing of reform actions.

The paper proposes that the optimal choice of a particular currency regime be based on a framework that takes into account the following: (a) the advantages and disadvantages of a particular regime, (b) the need for correct timing and sequencing of policy tools and reform actions, (c) the prior capacity conditions in the country, and (d) the political commitment to undertake the necessary reforms. It is imperative to note that these reforms are no quick fixes for designing economic stabilization and recovery programs needed in Zimbabwe. The Zimbabwean authorities and stakeholders need to fulfil the aforesaid preconditions for successful currency reform, before collectively selecting from among the various options.

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1The paper benefited from comments provided by the following members of the reference group: Frannie Léautier, Apollinaire Ndorukwiga, Maria-Nita Dengo, Deiynaba Tandian-Tall, Roger Atindehou, Coffi Noumon and Sally Dormeyan.
I. INTRODUCTION

The Government of Zimbabwe (GoZ) adopted a multiple currencies regime (MCR) in February 2009 and demonetization of the Zimbabwean dollar was announced in July 2009 after almost a decade of macroeconomic pressures on the Zimbabwean dollar (2008/2009 Mid-Year Fiscal Policy Review Statement). It needs to be noted that the adoption of the MCR stabilized the macro-economy by containing inflation and allowing the private and public sectors the possibilities of medium to long-term planning. This restored some degree of business confidence in the economy. However, the MCR has presented the GoZ with some significant policy challenges such as the loss of control over monetary and exchange rate policies, a liquidity crunch and in some areas of the economy a return to barter trade. Dollarisation/MCR has also denied GoZ seigniorage. Since then, there has been debate on whether to go for full dollarisation or randisation. The purpose of this paper is to provide an analysis and a set of recommendations on the merits and demerits of adopting a particular currency regime out of various possible options. This should also help guide government on its choice as it considers the optimal currency arrangement for Zimbabwe especially the steps to be taken, conditions to be met and an optimal regime to be selected in the event of any further currency reform.

The rest of the paper is organized as follows: Section 2 provides an overview of the current governance and economic reform programs being implemented in Zimbabwe and obligations therefrom as well as the recent effects of dollarisation on the economy. Section 3 outlines the pre-dollarisation events that led to the multi-currency arrangement; Section 4 is a review of international experiences of hyperinflations and currency reforms; based on a review of case studies in various parts of the world, including Africa; Section 5 discusses the prior conditions necessary for successful implementation of a new currency regime; Section 6 analyses the merits and demerits of alternative currency regimes; Section 7 examines what are the possible choices for an optimal currency arrangement; and Section 8 makes some general conclusions.
II. DESCRIPTION OF THE CURRENT SITUATION

This section highlights the major government reform agendas and discusses the effects of adopting MCR on the Zimbabwean economy. The main reform agendas currently are centred on the Global Political Agreement, the Short Term Emergency Recovery Programme (STERP), and the development of a Mid-Term Economic Recovery Plan (MTERP) which is underway.

The GPA-related outcomes
The Global Political Agreement (GPA) was signed on 15th September 2008 as a resolution of the political and economic impasse that had been facing Zimbabwe for well over a decade. The GPA set the framework for resolving current socio-economic and political crisis in Zimbabwe without which sustainable macroeconomic and overall human development would not be achieved. The GPA commits Zimbabwe to, amongst other measures, “give priority to the restoration of economic stability and growth in Zimbabwe.” The Government committed to lead the process of developing and implementing an economic recovery strategy and plan. It spelt out the need to develop a full and comprehensive economic programme to resuscitate Zimbabwe's economy, which would urgently address the issues of production, food security, poverty and unemployment and the challenges of high inflation, interest rates and the exchange rate. The other reforms committed to by the GoZ include: constitutional and governance reforms, revitalizing Zimbabwe's engagement with its traditional and other development partners, and the review of property rights. The compliance of GoZ with its obligations that flow from land reform would define the success or otherwise of any major socio-economic reforms including those related to a currency regime. The specific obligations include:

- Conducting a comprehensive, transparent and non-partisan land audit, during the tenure of the Seventh Parliament of Zimbabwe, for the purpose of establishing accountability and eliminating multiple farm ownerships;
- Ensuring that all Zimbabweans who are eligible to be allocated land and who apply for it shall be considered for allocation of land irrespective of race, gender, religion, ethnicity or political affiliation;
- Ensuring security of tenure to all land-holders;
- Calling upon the United Kingdom government to accept the primary responsibility to pay compensation for land acquired from former land owners for resettlement;
- Securing international support and finance for the land reform programme in terms of compensation for the former land owners and support for new farmers; and
- Seeking the restoration of full productivity on all agricultural land.

STERP-outcomes
The GPA and associated commitments were signed in an environment of severe macroeconomic instability and rising poverty for Zimbabweans. The economic crisis was characterized by hyper-inflation, a sustained period of negative Gross Domestic Product (GDP) growth rates, a massive devaluation of the currency, low productive capacity, loss of jobs, food shortages, poverty, massive de-industrialisation and general despondency. With respect to inflation, Zimbabwe experienced hyperinflation from 1998 to February 2009 when it managed to tame it by officially adopting a basket of currencies. The inflation rate had risen beyond 231 million percent by the end of July 2008. Consequent to the GPA obligation to address the economic crisis, Government developed the Short Term Emergency Recovery Programme (STERP). The key priority areas of STERP were identified with the major issues as:
a) Political and Governance Issues -  
   i. The Constitution and the Constitution making processes.  
   ii. The media and media reforms.  
   iii. Legislations reforms intended at:  
      a) Strengthening governance and accountability.  
      b) Promoting governance and the rule of law.  
      c) Promoting equality and fairness, including gender equality.

b) Social Protection -  
   i. Food and Humanitarian Assistance.  
   ii. Education.  
   iii. Health.  
   iv. Strategically targeted vulnerable sectors.

c) Stabilisation -  
   i. Implementation of a growth oriented recovery programme.  
   ii. Restoring the value of the local currency and guaranteeing its stability.  
   iii. Increasing capacity utilisation in all sectors of the economy and, hence, creation of jobs.  
   iv. Ensuring adequate availability of essential commodities such as food, fuel and electricity.  
   v. Rehabilitation of collapsed social, health and education sectors.  
   vi. Ensuring adequate water supply and safe sanitation.

As will be discussed in later sections of the paper, the success of a currency regime adopted in fostering growth and stability of the Zimbabwean economy partly depends on the implementation of GPA and STERP agendas. Indeed these agendas contain some of the pre-conditions for successful currency reform.

Medium to long-term outcomes  
The Government has over the months been having consultations with the various stakeholders on the development of a medium to long-term socio-economic strategy. The proposed Medium Term Plan, expected to cover 2010-2015, would build on the STERP and enhance policy consistency and credibility. Some of the actions being undertaken to reinforce this strategic approach include: the review of Public Finance Management System (PFMS), putting in place a debt clearance strategy, enactment of a Public Finance Management and Audit Bill, amendment to the Reserve Bank Act to ensure independent oversight and accountability in the financial sector, divestiture of public enterprises, reform of the mining sector and the legislative framework to liberalize the ICT sector (Wakiaga, 2009).

Some of the noticeable impacts of dollarisation on the Zimbabwean economy  
One could argue that the pre-dollarisation crisis punished cases of economic mismanagement, brought disciplining effects on GoZ albeit in a limited way and cleared the way for necessary reforms (see Rodrik, 1996 and Kohler, 2001 for these kinds of arguments). There are costs and benefits associated with the decision to dollarise the Zimbabwean economy.

With respect to costs, one could identify the following types: (i) fiscal and quasi-fiscal costs resulting from increased burden of public debt service (from previous devaluations and high interest rates) and the need to restructure financial institutions and some big corporations; (ii) costs related to lost
economic growth in some sectors during the transition; (iii) social costs connected to unemployment, decline in real incomes, poor liquidity in the economy, worsened health and education situation, etc. leading to a rise in poverty (see Figure 1 below); and (iv) political costs associated with the loss of sovereignty over monetary policy in particular as well as the socio-economic pressures mentioned earlier.

Figure 1: Average real earnings index, 1975-2004 (1990 = 100)

Source: UNDP (2009)

A recent Confederation of Zimbabwean Industries (CZI) Survey found that the major capacity constraints affecting the manufacturing sector can be attributed to lack of working capital; raw materials and low demand (see Fig. 2 overleaf). A number of the companies surveyed (3.6%) complained of the loss of market share to cheap imports that were selling sub standard products (CZI, 2009.) The crush of metal prices on the international market compounded by the local high cost of production has made Zimbabwean metal exports uncompetitive.

On the positive side, first, MCR managed to bring down hyper-inflation as the discussions in the next section on the pre-dollarisation/MCR period will show (see Table 1). This achievement is noteworthy for several reasons as low inflation has been proven to disproportionately benefit the poor relative to other groups in society, implying that a macroeconomic policy aimed at reducing poverty rather than simply promoting economic growth should give more weight to inflation control (Dollar and Kraay, 2000). Furthermore, by stabilizing the prices the multi-currency arrangement increased the confidence of market participants in transactions and laid the foundation for longer term planning.

Table 1 shows the different weights for consumer and other items that make the Zimbabwean CPI with food having the highest contribution. Any significant rise in inflation would largely affect the
Figure: 2: Major constraints on the Zimbabwean manufacturing sector as of August 2009

Table 1: Consumer Price Index (CPI) Major Groups and sub groups - September 2009

<table>
<thead>
<tr>
<th>Consumer Goods &amp; Services</th>
<th>2008</th>
<th>2009</th>
<th>% Change from Aug 09 to Sep 09</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weights</td>
<td>Dec</td>
<td>Jan</td>
</tr>
<tr>
<td>Food and non alcoholic beverages</td>
<td>31.93</td>
<td>100.0</td>
<td>98.25</td>
</tr>
<tr>
<td>Alcoholic beverages and tobacco</td>
<td>4.91</td>
<td>100.0</td>
<td>100.00</td>
</tr>
<tr>
<td>Clothing and footwear</td>
<td>5.71</td>
<td>100.0</td>
<td>100.11</td>
</tr>
<tr>
<td>Housing, water, electricity, gas, and other fuels</td>
<td>16.23</td>
<td>100.0</td>
<td>100.00</td>
</tr>
<tr>
<td>Furniture, household Equip. and maintenance</td>
<td>15.11</td>
<td>100.0</td>
<td>100.45</td>
</tr>
<tr>
<td>Health</td>
<td>1.31</td>
<td>100.0</td>
<td>100.00</td>
</tr>
<tr>
<td>Transport</td>
<td>9.77</td>
<td>100.0</td>
<td>94.61</td>
</tr>
<tr>
<td>Communication</td>
<td>0.99</td>
<td>100.0</td>
<td>--</td>
</tr>
<tr>
<td>Recreation and culture</td>
<td>5.75</td>
<td>100.0</td>
<td>100.40</td>
</tr>
<tr>
<td>Education</td>
<td>2.85</td>
<td>100.0</td>
<td>--</td>
</tr>
<tr>
<td>Restaurants and hotels</td>
<td>1.52</td>
<td>100.0</td>
<td>92.16</td>
</tr>
<tr>
<td>Catering services</td>
<td>1.44</td>
<td>100.0</td>
<td>89.87</td>
</tr>
<tr>
<td>Accommodation services</td>
<td>0.08</td>
<td>100.0</td>
<td>105.23</td>
</tr>
<tr>
<td>Miscellaneous goods and services</td>
<td>3.94</td>
<td>100.0</td>
<td>100.00</td>
</tr>
<tr>
<td>All items</td>
<td>100.00</td>
<td>100.00</td>
<td>97.66</td>
</tr>
</tbody>
</table>

Source: Central Statistical Office
poor who spend most of their income on food. The transport sector saw the highest fall in inflation in the months of August-September 2009. Food and non-alcoholic beverages; and transport had a significant fall in inflationary pressures. Food and non-alcoholic beverages; and health experienced the largest fall in inflationary pressures between January and September 2009 (see Figure 3 below).

Figure 3: Changes in selected items of Zimbabwe's CPI Jan-Sep. 2009

![Figure 3: Changes in selected items of Zimbabwe's CPI Jan-Sep. 2009](image)

Source: Central Statistical Office

Second, as a result of MCR adoption the economy started to grow again, albeit at a slow rate, and capacity utilization started to increase (see Figure 4 overleaf - with missing data point for 2008). As can be seen from the figure 4 (based on a recent CZI Survey of August 2009), the distribution of the rate of capacity utilization showed more manufacturing companies (82%) with capacity utilization less than 50% leaving the balance of 18% of companies with capacity utilization of above 49%, thus showing high levels of idle capacity in the economy. However there is still 6% of the industry producing at more than 74% - especially in the food sub-sector (CZI, 2009).
Third, the restoration of confidence in the economy managed to improve financial sector integration and intermediation. The banking sector has seen a general increase in bank deposits even though the banks continue to maintain a high differential between deposit and lending rates. By the end of June 2009, the reported deposit rates ranged from 0 percent to 2.65 percent for all deposit-taking financial institutions where in some cases lending rates exceeded 12 percent with a loan to deposit ratio of 37.3 percent. When the MCR was adopted, the monetary authorities set new capitalisation requirements for banks, revised the Prescribed Asset ratios for pension and insurance funds, reopened the Zimbabwe Stock Exchange, and set the requirements for reintroducing the Real Time Gross Settlement System (RTGS) and the use of plastic money, all of which were designed to strengthen the integration of the financial sector and revive private sector activities. For example, prior to MCR the use of plastic money was low as technical and collateral issues reduced the number of Zimswitch member banks that were active and processing US dollar denominated transactions. Since dollarisation, the RTGS system started processing US dollar denominated transactions following the signing of the Tripartite Agreement between the Ministry of Finance, the Reserve Bank and the Bankers Association of Zimbabwe.

Zimswitch is the National Electronic Funds Switch for automatic teller machines (ATM’s) and points of sale (POS) of Zimbabwe that serves not only the financial institutions who are its members and users but also provides an essential service to their customers.
Fourth, the adoption of MCR created space for the stock prices to be less jittery and the Zimbabwe Stock Exchange was allowed to resume trading in multiple currencies on 19 February 2009. However, demand on the market remained depressed due to liquidity constraints caused by the very low levels of economic activity. Share prices have failed to reach their levels prior to suspension of trade in November 2008.

Fifth, the monetary authorities established new capitalisation requirements, 50 percent of which was to be met by 30 September 2009; and 100 percent by March 2010 in an attempt to reduce bank fragility and enhance financial integration (see Table 2). However, as at end of September 2009 only 16 of the 26 banking institutions had managed to meet that minimum capital requirement.

Table 2: Minimum Equity Capital Requirement for Banking Institutions

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>Minimum Capital Requirement (USD) as at 30 September 2009</th>
<th>Minimum Capital Requirement (USD) as at 31 March 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Banks</td>
<td>6,25 million</td>
<td>12,5 million</td>
</tr>
<tr>
<td>Merchant Banks</td>
<td>5,0 million</td>
<td>10 million</td>
</tr>
<tr>
<td>Building Societies</td>
<td>5,0 million</td>
<td>10 million</td>
</tr>
<tr>
<td>Finance Houses</td>
<td>3,75 million</td>
<td>7,5 million</td>
</tr>
<tr>
<td>Discount Houses</td>
<td>3,75 million</td>
<td>7,5 million</td>
</tr>
<tr>
<td>Asset Management Companies</td>
<td>1,25 million</td>
<td>2,5 million</td>
</tr>
</tbody>
</table>

*Source: Reserve Bank of Zimbabwe Circular to Banking Institutions No. 04 - 2009/BSD dated 08 June 2009*
III. EVOLUTION OF EVENTS UP TO THE CURRENT SITUATION

Budget Deficit, Money Supply Growth, Inflation

Zimbabwe continued to experience an unstable macroeconomic environment throughout the 1990s with an average inflation rate of 32% per annum, double the 15% threshold beyond which inflation starts to inflict financial sector development. Budget deficits averaged 8 percent of GDP while average inflation was 12 percent per annum. Savers earned negative real interest rates and the financial sector financed a large part of the budget deficit, thus crowding out investment. Inflation rates escalated in the 1990s, exceeding 20 percent for much of the period, and reaching almost 60 percent in 1999 (Makina, 2000; Boyd et al., 2001). Inflation entered hyperinflationary territory starting from an annual average of 386 percent to over 231 percent by mid-2008, and an IMF-estimated rate of 500 billion by September 2008. The runaway inflation progressively debased the currency, which fuelled the rapid de facto dollarisation of the economy by year-end 2008. Figure 5 below shows the evolution of the budget deficit.

Figure 5: Evolution of the Budget Deficit 1997-2009

The spike of 23 percent in 2000 reflects the increased government expenditure to finance the 2000 parliamentary elections. The apparent downward trend since 2006 reflects the dire state of government expenses, which necessitated a forced trend toward cash budgeting. This period therefore coincides with a marked deterioration in public service delivery, as manifested by the 2008 cholera outbreak, for instance. However, there is concern that official estimates of the budget deficit exclude the central bank's quasi-fiscal expenditures that were sizeable and significant in fuelling money supply growth and inflation from 2004 till the dollarisation of February 2009 (see Figure 6). The true size of the budget deficit from 2004 onwards should therefore be decidedly upward trending if quasi-fiscal expenditures are taken into account.
Figure 7 below shows the evolution of the inflation rate and the money supply, the two key monetary dynamics driving the hyperinflationary environment.

Figure 6: Quasi-fiscal expenditures in Zimbabwe as % of GDP 2005-2008

Source: IMF Article IV (March 2009)

Figure 7: Underlying Monetary Dynamics Driving the Chronic Endemic Inflation and the Hyperinflation

Source: Ministry of Finance/ Central Statistical Office
The foregoing graphic shows a close mapping between inflation and money supply growth, indicating that the key source of the hyperinflation was excessive money printing to finance the budget deficit, most probably reflecting the limited domestic and external financing options for the government.

Hyperinflations in general take a heavy toll on the health of the financial sector, wiping banks assets, complicating settlement systems, and affecting savings mobilization due to negative real interest rates which creates a mismatch in financial intermediation, between an excessive demand for loans and an undersupply of loanable funds (Makina, op cit; Reinhardt and Savastano, 2003). Accordingly, the Zimbabwean financial sector was equally afflicted. Micro-finance institutions, instruments of financial sector inclusion, bore the brunt of the hyperinflation, steeply decreasing in number from 1,700 in 2003 to 75 in 2008 (Makina, 2000). This trend is more ominous given the extensive informalisation of the economy during the course of the economic crisis; the contraction of micro-finance institutions dries up critical finance to sustain small and medium enterprises (SMEs) growth, with adverse consequences on unemployment and livelihoods (Kanyenze, 2000). As the financial crisis deepened, banks cut back branches in smaller towns and rural areas, thus reducing bank density and worsening financial inclusiveness.

The negative real interest rates, while benefiting the government through reducing the cost of financing the budget deficit and reducing the stock of the domestic debt, came at the expense of the private sector more generally (through the crowding out effect) and the financial sector more specifically which served as the captive market for government debt through prescribed asset ratios particularly for pension funds, insurance companies and merchant banks. In 2004 the banking crisis came to a head when seven indigenous banks were placed under curatorship, and two into provisional liquidation; the latter were merged into a new recapitalized banking group. This trend saw the traditional, foreign-owned banks regain market share. A new banking policy was promulgated to increase the Reserve Bank of Zimbabwe's (RBZ) oversight over the financial sector, including the requirement that banks obtain an international credit rating. Figure 8 and Table 3 below give the trend in real interest rates.

Figure 8: Evolution of Real Interest Rates

Source: Ministry of Finance/ Central Statistical Office
apace, through the introduction of foreign currency shops and fuel stations. Government has throughout the economic crisis maintained a hugely overvalued exchanged rate, in keeping with much of Zimbabwe's colonial and post-colonial history, compared to the parallel market rate for foreign exchange, save for May 2008 when the currency was allowed to float in order to deal a blow to the currency speculators on the black market, and to attract scarce foreign exchange into the formal banking sector.

From 2004 onwards, a range of exchange rates and targeted export subsidies were introduced, for example for farmers and mineral exporters that aimed to increase the flow of foreign currency into the official financial sector. Though complex, this system helped avert an outright devaluation. Similarly, multiple interest rates were adopted, targeting to lower the cost of domestic borrowing for the government (90-day treasury bills), heavily subsidized rates for exporters through the RBZ discount window, and an auction rate for all other demand sectors. However, the official rate failed to keep pace with the galloping parallel market rate. In a bid to fight inflation, the central bank re-denominated the Zimbabwe dollar by knocking off a total of 13 zeros, 3 in August 2006 and 10 in August 2008, to no avail (EIU, December 2008).

The biting foreign currency shortage, a decline in inbound investment and aid flows, and decimated domestic production and export earnings continued to weigh down the currency, driving up prices hence partially contributing to the inflation. As the negative real interest rates escalated, the government increasingly found it difficult to borrow from the domestic debt markets to finance the budget deficits. The traditional buyers of public debt, including pension funds and insurance companies, took flight to the stock market because of the negative real interest rates. To correct for this, in November 2008 the Reserve Bank prescribed asset ratios for pension funds and insurance, requiring them (as noted earlier) to keep about 20-30% of their assets in government-prescribed assets.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Real Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>9.2</td>
</tr>
<tr>
<td>1998</td>
<td>4.7</td>
</tr>
<tr>
<td>1999</td>
<td>2</td>
</tr>
<tr>
<td>2000</td>
<td>6.4</td>
</tr>
<tr>
<td>2001</td>
<td>-11.4</td>
</tr>
<tr>
<td>2002</td>
<td>-93.2</td>
</tr>
<tr>
<td>2003</td>
<td>-265</td>
</tr>
<tr>
<td>2004</td>
<td>-217</td>
</tr>
<tr>
<td>2005</td>
<td>-102.2</td>
</tr>
<tr>
<td>2006</td>
<td>-950.37</td>
</tr>
<tr>
<td>2007</td>
<td>-22843.67</td>
</tr>
<tr>
<td>2008</td>
<td>-23099933.7</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance/Central Statistical Office

Apart from a brief period in the early 1990s, Zimbabwe's banking sector has been tightly regulated, with quantitative controls on interest rates and lending rates. As a result, the country has been experiencing negative real interest rates from about 2000 onwards, even though Makina estimates that the trend of negative interest rates dates back much earlier to the late 1990s (Makina, 2000).

Currency Devaluation and Other Monetary Reforms

Severe foreign exchange shortages have shaped monetary policy over the recent years, which undermined all economic activity. Dollarisation has further constrained monetary policy space through the difficulty of providing lender-of-last resort services to the financial sector, and the inability to influence the exchange rate should events warrant so. However, the rapid dollarisation in the economy proceeded aspace, through the introduction of foreign currency shops and fuel stations. Government has throughout the economic crisis maintained a hugely overvalued exchanged rate, in keeping with much of Zimbabwe's colonial and post-colonial history, compared to the parallel market rate for foreign exchange, save for May 2008 when the currency was allowed to float in order to deal a blow to the currency speculators on the black market, and to attract scarce foreign exchange into the formal banking sector.

Table 3: Trends in Real Interest Rates in Zimbabwe 1997-2008
Economic Growth and External Sector Performance

There has been a sustained contraction of the economy since 1998, with the largest contraction being in 2003 as a result of the drought that came in the 2002/3 agricultural season compounded by the disruption to commercial farming in the wake of the land reform program. The contraction of agriculture, previously the mainstay of the economy, and the collapse of manufacturing firms and associated agro-based industries including those in the financial sector that were based on the collateral value of the land including those that depended on government capital expenditure led to a massive contraction of the economy by about two thirds since 2000 (Ndlela and Hawkins, 2000). Figure 9 below shows the evolution of the growth rate over the crisis period.

Figure 9. GDP Growth Rates (GR), 1997-2009

[Graph showing GDP growth rates from 1997 to 2009]

Source: Ministry of Finance/ Central Statistical Office

The economy recovered during the period 2003 - 2004 and then declined until 2008, coinciding with the onset and escalation of the hyperinflation. The improvement in the political and economic environment since the inauguration of the Government of National Unity (GNU) and dollarisation explain the upward trend in 2009, albeit still in negative territory. This suggests that, barring any external shocks and the continual improvement in the political environment, the current trend could veritably mark a bottoming-out of the economy. The IMF is forecasting that the economy will grow by 3.7% (IMF, 2009).

Despite depressed import demand due to the biting shortage of foreign currency, the precipitous decline in domestic production saw a deterioration of export performance in the economy. As a result, exports almost halved between 2000-2003 (EIU, Dec 2004). Figure 10 below shows the evolution of the trade balance.
From 2000 there is a discernible deterioration in the trade balance implying a worsening balance-of-payment situation for the country. Although this period coincided with the international commodity boom, Zimbabwe did not benefit from the associated windfalls. The decline in the trade balance reflected the reduction in capacity utilization for all the major economic sectors of the economy, notably, agriculture, manufacturing, mining and tourism (Ndlela and Hawkins, 2009; Hawkins, 2009). The deteriorating balance of payments position is shown in the following evolution of the import cover over the crisis period was less than the recommended 3 months (see Figure 11).

Source: Ministry of Finance/ Central Statistical Office
Investment Climate

The country has witnessed a drastic deterioration in the investment climate over the course of the decade. Zimbabwe is currently ranked lowest among its regional competitors in the World Economic Forum's (WEF) Global Competitiveness Report, 2009-2010, with whom she competes for foreign investment, second only to Burundi. Similarly, Zimbabwe ranks a low 159th out of 160 countries. As a result, the country has attracted a paltry US$160m in Foreign Direct Investment (FDI) over 2006-2008, much directed to gold and platinum mining, second to Malawi and far behind its regional peers. This was however an improvement from US$20m in 2003 (EIU, 2004; 2009). Table 4 below compares the FDI inflows to selected SADC countries for 2008 and first quarter of 2009 whereby Zimbabwe remained the weakest performer. To the contrary, the country has sustained massive domestic capital flight in addition to keeping inbound resource floors at bay, which together with poor export performance has contributed to a sustained depreciation of the Zimbabwean dollar on the parallel market. Business confidence also took a knock from the new Indigenisation and Economic Empowerment Act (No. 14 of 2007) that seeks to transfer majority (51%) shareholding to black Zimbabweans for foreign owned firms, including mines and banks.

Table 4: FDI Inflows for Selected SADC Countries, 2008-2009

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesotho</td>
<td>54</td>
<td>53</td>
<td>53</td>
<td>41</td>
<td>43</td>
</tr>
<tr>
<td>Mauritius</td>
<td>60</td>
<td>70</td>
<td>122</td>
<td>126</td>
<td>39</td>
</tr>
<tr>
<td>Seychelles</td>
<td>66</td>
<td>71</td>
<td>168</td>
<td>59</td>
<td>44</td>
</tr>
<tr>
<td>South Africa</td>
<td>5642</td>
<td>793</td>
<td>2879</td>
<td>328</td>
<td>1175</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>15</td>
<td>-</td>
<td>37</td>
<td>-</td>
<td>15</td>
</tr>
</tbody>
</table>


Productive Capacity, export performance and formal employment

Since the onset of the crisis in 1999, there was a sustained decline in capacity utilization for the key productive sectors of the economy, notably mining which was hampered by lack of investment in new exploration, foreign currency shortages to import capital equipment, and power shortages; commercial sector agriculture which suffered disruptions to production during the land reform program, particularly the tobacco sector given its erstwhile importance as the second largest foreign exchange earner after mining; a decline in manufacturing activity as a result of an acute shortage of foreign exchange to import capital equipment and production inputs, and fuel and power shortages; low tourist arrivals and hotel occupancy rates due to the international perception of the country as an unsafe tourist destination. As a result, capacity utilization, export performance and formal-sector employment have concomitantly declined since 2000. Table 5 shows trend in capacity utilization in the manufacturing sector in Zimbabwe for the period 1994-2009.
Table 5: Capacity utilization in Zimbabwean manufacturing sector

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Capacity Utilization (%)</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>70.1</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>71.7</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>76.0</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>-</td>
<td>No survey carried out</td>
</tr>
<tr>
<td>1998</td>
<td>-</td>
<td>No survey carried out</td>
</tr>
<tr>
<td>1999</td>
<td>-</td>
<td>No survey carried out</td>
</tr>
<tr>
<td>2000</td>
<td>56.0</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>58.0</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>60.0</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>51.1</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>59.2</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>35.8</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>33.8</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>18.9</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>32.3</td>
<td></td>
</tr>
</tbody>
</table>


Figure 12 below shows the downward trend in manufacturing output during the crisis with direct implications for employment, export performance, tax revenues and the availability of basic goods and services and the bottoming out over the last two quarters from dollarisation and the inauguration of the GNU. Figure 12 also give trends on employment growth.

Figure 12: Trends in Manufacturing Output

Source: Survey of the Manufacturing Industry, Confederation of Zimbabwe Industries, 2009
Development co-operation and donor assistance

A recent study by UNDP noted that: “[M]ultilateral and bilateral ODA to Zimbabwe decreased sharply as the economic and political crisis deepened after 2000. The World Bank Group imposed restrictive measures in May 2000 due to the accumulation of payment arrears and loans, and all undisbursed loans and grants were cancelled. Zimbabwe subsequently made substantial payments to the International Monetary Fund (IMF) to offset its arrears in the General Resources Account (GRA), but only made token payments to the World Bank and the African Development Bank in contravention of the World Bank Group’s non-discriminatory debt servicing clause. The World Bank put Zimbabwe on non-accrual status in October 2000, and the IMF closed its Resident Representative Office in Harare in October 2004. Similarly, the European Union's Country Strategy programming process, which had been agreed in July 2001, was suspended in February the following year” (Simpson and Dore, 2009).

There was also a severe disengagement from Zimbabwe by major development partners. Most OECD bilateral donors withdrew their development aid, but continued with limited humanitarian assistance. The poorest and most vulnerable elements of Zimbabwe society have been provided with basic vaccines, prophylactics, anti-retroviral drugs to fight HIV and AIDS and emergency food assistance. Given the frosty relations with GoZ, some funds have also been channelled towards local community-based recovery initiatives.
Table 6: Major time-lines in the evolution of events up to the current situation

<table>
<thead>
<tr>
<th>Year</th>
<th>Evolution of Country's Political Economy Leading to and Through the Economic Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980s-90s</td>
<td>High budget deficits and chronic endemic inflation</td>
</tr>
<tr>
<td>1997</td>
<td>Inflationary pressures mount as huge gratuities are paid to war veterans</td>
</tr>
<tr>
<td>1998</td>
<td>Economic crisis marked by widespread riots and strikes</td>
</tr>
<tr>
<td>February 2000</td>
<td>The fast-track land reform program begins, targeting black resettlement on previously white-owned farmland</td>
</tr>
<tr>
<td>June 2000</td>
<td>Parliamentary elections held</td>
</tr>
<tr>
<td>July 2001</td>
<td>Finance Ministry admits the economic crisis, saying foreign reserves had dwindled and warned of serious food shortages.</td>
</tr>
<tr>
<td></td>
<td>Most donors, including the Bretton Woods institutions, had severed development assistance in protest against the land reform program.</td>
</tr>
<tr>
<td>February 2002</td>
<td>Parliament limits media freedom.</td>
</tr>
<tr>
<td></td>
<td>The European Union imposes sanctions on Zimbabwe</td>
</tr>
<tr>
<td>March 2002</td>
<td>Presidential elections held</td>
</tr>
<tr>
<td></td>
<td>Commonwealth suspends Zimbabwe from its councils for a year.</td>
</tr>
<tr>
<td>April 2002</td>
<td>State of disaster declared as worsening food shortages threaten famine.</td>
</tr>
<tr>
<td>December 2003</td>
<td>Zimbabwe revokes Commonwealth membership after organization decides to extend suspension of country indefinitely.</td>
</tr>
<tr>
<td>2004</td>
<td>New Reserve bank governor takes office, marking a new epoch in monetary policy and economic management</td>
</tr>
<tr>
<td>March 2005</td>
<td>Parliamentary elections held</td>
</tr>
<tr>
<td>December 2005</td>
<td>UN humanitarian chief warns of human crisis</td>
</tr>
<tr>
<td>May 2006</td>
<td>Year-on-year inflation exceeds 1,000%. Three zeros deleted from bank notes in August.</td>
</tr>
<tr>
<td>May 2007</td>
<td>Warnings of power cuts for up to 20 hours a day while electricity is diverted towards agriculture, with disastrous consequences for mining and manufacturing.</td>
</tr>
<tr>
<td>July 2007</td>
<td>Government imposes price controls to reign-in galloping inflation, leading to widespread shortages of basic commodities from the shops and fuelling the growth of black-market supply chains</td>
</tr>
</tbody>
</table>
Table 6: Major time-lines in the evolution of events up to the current situation (continued)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>March - June 2008</td>
<td>Presidential and parliamentary elections held</td>
</tr>
<tr>
<td>July 2008</td>
<td>Monthly inflation reaches 231 million percent. Government stops publishing inflation figures</td>
</tr>
<tr>
<td>September 2008</td>
<td>In keeping with market trends towards the dollarisation of the economy, the RBZ relaxes foreign exchange controls to make provision for Foreign-exchange Licensed Warehouses and Retail Shops (FOLIWARS), Foreign-exchange Licensed Oil Companies (FELOCS), and Foreign-exchange Licensed Outlets for Petrol and Diesel (FELOPADS)</td>
</tr>
<tr>
<td></td>
<td>Power-sharing agreement, the Global Political Agreement (GPA), calling for far-reaching political, media, constitutional and economic reforms to enhance participation, stabilize the economy and prepare country for the following elections signed. However, formation of government stalls over allocation of key ministerial posts.</td>
</tr>
<tr>
<td>January 2009</td>
<td>The Ministry of Finance abolishes price controls and sanctions partial dollarisation in order to enable all business including public utilities to transact in foreign currency in order to cushion businesses from the hyperinflation; the Zimbabwean dollar was still legal tender</td>
</tr>
<tr>
<td>February 2009</td>
<td>Government of National Unity inaugurated</td>
</tr>
<tr>
<td>March 2009</td>
<td>Unity Government formalizes partial dollarisation through the multi-currency system as part of the Short-term Economic Recovery Program (STERP); the Zimbabwean dollar remained legal tender. Month-on-month inflation falls for the first time since onset of the crisis, falling by an aggregate of 10.4 percent between March and September 2009</td>
</tr>
<tr>
<td>July 2009</td>
<td>Ministry of Finance formally demonetizes the Zimbabwean dollar, making a basket of foreign, convertible currencies as legal tender with the South African Rand as the reference currency, vowing that the Zimbabwean dollar would remain in abeyance pending fundamental monetary reforms and preconditions being met.</td>
</tr>
</tbody>
</table>
IV. A REVIEW OF INTERNATIONAL EXPERIENCES OF CURRENCY REFORMS

In the previous sections, the paper reviewed the evolution of factors that propagated the hyperinflation and the steep devaluation of the Zimbabwean dollar, the subsequent adoption of the MCR, and demonetization of the currency. This section reviews the recent international experiences of countries that went through economic crisis and how they reformed their currencies in order to stabilize the economy and restore confidence. These countries are Bolivia, Poland, Argentina, Liberia and Panama. The intention of the section is to draw on international lessons learnt to inform the design of the currency and ancillary reforms that Zimbabwe could consider for consolidating stabilization and economic recovery.

**Bolivia**

The Bolivian hyperinflation 1982-1985 was largely fuelled by excessive money printing to finance a burgeoning budget deficit. As the government printed money, that drove down the value of the currency vis-à-vis the (United States) dollar, which in turn increased prices of imported products hence contributing to overall inflation. The demand for the peso fell and this resulted in a burgeoning black market for foreign exchange. Over time, prices came to be quoted in dollars. The peso price of a one-dollar price tag rose to almost 5 million pesos, up from 2000 pesos a year earlier; marking a 3000-odd percentage increase (Sachs, op cit). The annual inflation rate rose from 1282% in 1984, soaring to 11,750% in 1985, before dropping to 286% in 1986. The key to ending the Bolivian hyperinflation was to design and implement a set of fiscal measures that would plug the holes in the budget.

Bolivia's budgetary problems in the 1980s lay in the price of oil, for the country had depended inordinately on taxes levied on hydrocarbons, which were mainly supplied by the state-controlled petroleum company, YPFB. The (peso) price of oil had changed infrequently relative to the hyperinflation, resulting in a decline in the real prices of petroleum and thus a shrinking tax base for the government.

Hyperinflations and related macroeconomic shocks in Bolivia also coincided with periods of political instability. These dynamics fed into and on the skyrocketing unemployment and decreasing social conditions. For example, the party that first championed economic reforms failed to win the elections despite earlier claims of victory. Instead, the result was declared a tie, in which circumstance Congress had to elect a leader leading to a relatively unstable political arrangement.

President Estenssoro provided a strong leadership for socio-economic reforms. For example, the Supreme Decree 21060 was not only a blueprint for arresting the hyperinflation, but also a major reform that provided a comprehensive basis for the transformation of the Bolivian economy. The implementation of the program commenced with a decision that recommended a sharp rise in the price of oil which suddenly closed the budget deficit, stabilized the US-dollar-peso exchange rate, and by implication a dramatic stabilization of peso prices (since prices were set in US-dollars and paid in peso prices). Thus, within a week, the hyperinflation was brought to heel.

Some of the major lessons from the Bolivian currency crisis and reform were:

- The early gains at controlling hyperinflation were fragile, hence the need to work harder to consolidate macroeconomic stabilization program to enhance sustainable recovery. Bolivia showed that macroeconomic reforms have their deep limitations in respect of efforts to
engender sustainable growth and poverty reduction. While the stabilization program tamed hyperinflation and re-established growth, the latter was too inadequate and too uneven to lift a huge section of the population out of poverty; and

- Despite the palpable gains of the economic stabilization program in positive economic growth and social indicators, the economic transformation of Bolivia remains partially completed.

As noted above, the main characteristic of the reforms was the ten-fold rise in price of oil which in turn led to: a) a sudden closure of the budget deficit; and b) a stabilized US-dollar-peso exchange rate. These reforms were premised on a number of pre-conditions namely:

- Structural reforms - the imperative to deal with the inexorable demise of the tin-mining sector which started with a fall in international tin prices in October 1985, which wrenched the budget, macroeconomic stability and unemployment and hence the need for structural reforms.
- Enhanced debt management - Bolivia had already defaulted on its debt to international banks and foreign governments, and was under pressure to resume payments now that hyperinflation was over – after difficult, drawn-out negotiations, Bolivia's international lenders acquiesced to suspend and ultimately write-off the country's debt. Bolivia needed to restructure its debt to relieve pressure on any adopted currency.
- Fiscal reforms - Bolivia was also in urgent need of tax reform in order to raise the tax contribution of the rich and wealthy, hence addressing the structural budget deficit – a sensitive political process which the committed political leadership saw through to its conclusion.
- Social and other sectoral reforms – it was imperative to address the dire social conditions of the country's vulnerable sections of the population (the unemployed, poor, children, elderly and the infirm) – an emergency social fund to cushion these vulnerable groups was finally set-up with World Bank assistance.

**Poland**
The Polish economic and political turmoil in 1989 was partly caused by factors such as: overhang of foreign debt and the country had suspended international debt payments; a large budget deficit; spiralling inflation; price controls; and unstable domestic currency not freely convertible at the official exchange rate – resulting in a black market for foreign currency.

The legalization of the Solidarity movement in the late 1980s by the communist authorities marked an important road toward political reforms in Poland. The country's first partially free elections in more than half a century were held in June 1989. The new government embarked on a number of reform programs with a view to stabilising the currency, reviving the economy and restoring socio-economic development. Some of these reforms were:

- Macroeconomic stabilization to tame high inflation and a large budget deficit; and establish a stable, convertible currency; and resolve a large debt overhang
- Liberalization to legalize private market activity, ending price controls and establishing the necessary commercial law to allow markets to come to life again;
- Privatization of state enterprises;
- Establishment of a social safety net (pensions, healthcare, and other benefits for the poor and other vulnerable groups) to help cushion the adverse effects of transition to a market economy; and
- Progressive institutional harmonization of laws, procedures and institutions of Western Europe to prepare the country for EU accession.
- A stabilization fund for the Polish currency, the Zloty Stabilization Fund, a $1 billion war-chest that was put together at the end of 1989 with assistance from the United States Government to
stabilize and defend the Zloty through open-market operations on the domestic foreign exchange market.

- All price controls were rescinded virtually overnight
- The Zloty was steeply devalued (to promote exports) and pegged at the rate of 9,500 to the US dollar
- Backed by the stabilization fund, the central bank announced a policy of vigorously defending the Zloty through open-market operations.
- A raft of new economic measures was installed, and trade barriers with Western Europe lifted.

By 2002 Poland’s per capita GDP was 50 percent higher than the 1990 level, and became a member of the European Union some 15 years after the start of democracy. Some of the other impacts of the currency reform were:

- Up to a fivefold increase in prices due to Soviet-era pent-up demand
- Commodity availability on the formal market slowly improving over a couple of weeks
- Increased availability of products on the formal market had the effect of lowering the transactions costs of searching for products; and
- Trade also picked up, starting with increased traffic of Polish traders exchanging Zlotys for marks (the new-found convertibility of the Zlotys, previously proscribed) and crossing into Germany to buy products for resale back home.

The Polish authorities had to ensure the achievements of the following conditions prior to undertaking the above mention currency and broader socio-economic reforms:

- Reviewing income and price policies – this was because the newly available goods were too expensive on the low salaries
- Restructuring of state enterprises – big state corporations were privatized or restructured resulting into the demise of Soviet-era state-owned enterprises which had thrived on cheap finance from government; energy from and trade with the Soviet Union
- Strengthening political dispensation – the power-sharing dispensation for the first time in Poland – the first of its kind in Eastern Europe (a Solidarity-led government which had to face up to the challenge of resolving the macroeconomic challenges facing the country)
- Enhancing engagement of development partners – the Solidarity movement mantra of a re-integration into the EU, then still a Community – effectively meant a transition from a centrally planned to a mixed, market economy within the ambit of the EU.

Argentina

The 1989-90 Hyperinflations and the subsequent Crisis - Argentina experienced serious economic and financial difficulties in the 1980s, leading to the hyperinflation of 1989/90 that finally elicited the necessary national political consensus for reform. The Argentine economy fared badly during the 1980s. Growth of real output stagnated, financial markets collapsed, prices rose as the currency steadily depreciated, and capital fled the country in pursuit of safer havens. Most public enterprises were running large deficits, and the external debt kept mounting. The central government, hampered by low tax collections and desperate for revenues, turned to the central bank for finance through the taxation of deposits and rapid money creation (or deficits financing). Inflation, which had risen gradually over the previous three decades soared, reaching average annual rates of 2,600 percent in 1989 and 1990. In the face of these developments, the banking system practically disappeared (Pou, 2000).

The Argentina hyperinflation was due to the lack of a strong, operationally independent Central
Bank of Argentina (CBA) that could effectively regulate money supply and maintain price and currency stability (hence the need for central bank and other institutional reforms). In the early 1980s CBA had tried to control excess inflation by issuing interest-bearing treasury bills to mop up the excess liquidity. The scheme worked pretty well until 1987 when interest rates were liberalized, causing the debt-servicing commitments of CBA to shoot out of control, in turn leading to the excessive money printing to pay its debts. Predictably, prices shot up, and the peso depreciated (Beckerman, 1995).

Argentina undertook a comprehensive and bold set of reforms that included among others: fiscal reforms; liberalization both of the capital and current accounts; and privatization of and removal of subsidies to most state-owned enterprises, hence reducing the size of the public sector.

Financial sector reforms were also an important component of the composite, particularly the two benchmark developments of the Convertibility Law of 1991 that fixed the exchange rate at one peso to the US dollar, eliminated indexing and mandated CBA to back two thirds of the monetary base with international reserves thus heralding holistic central bank reforms. CBA was converted into a form of a currency board, thus limiting the central bank’s discretion in printing money to extend credit to the government treasury or the financial system, thereby eliminating the possibility of inflationary financing of the budget deficit (Pou, op cit). Also the Central Bank Charter was amended to render the institution independent of the executive and legislative branches, and adopted as its major objective maintaining price and currency stability. The removal of central bank presidents and directors was made virtually impossible, while CBA was also proscribed from financing provincial and municipal governments, public firms, or the private non-financial sector. Banking regulations to ensure competition, check systemic risks, and reduce moral hazard were also instituted, which had the perverse effects of elimination of deposit insurance and a significant reduction of the social safety net to banks. Other measures were also instituted to maintain depositor confidence in the banking system, including temporary mandatory private deposit insurance.

The reforms in Argentina also had a number of impacts. The Convertibility Plan and associated structural reforms scored early successes in taming inflation and returned Argentina on a sustainable growth path. Inflation declined inexorably from a high of 27 percent in 1991 to single-digits in 1993 and remained low ever after. Growth had recovered till 1998 when there was a brief setback that was attributed to the Mexican crisis, averaging nearly 6 percent over 1991-98. Improvements in the investment climate attracted large capital inflows in the form of portfolio and foreign direct investment. The Convertibility Plan however remained vulnerable and was called into question when Argentina relapsed into crisis, though of a different sort, in 2000-2002. A series of external shocks had hit Argentina, including the increase in international risk premiums as a result of the Mexican Crisis; the sustained appreciation of the US dollar against the Brazilian Real in early 1999. The convertibility program ruled out nominal devaluation of the currency even when events warranted so. The political configuration also made it difficult to approve additional fiscal reforms that were required to alleviate the sustained pressure that had been building in the few years to 2000, leading to another unsustainable accumulation of debt most of which was foreign-currency denominated and externally held. Thus by the time of the crisis in late 2000 there were serious concerns about the country’s exchange rate and debt sustainability. However, given the extensive dollarisation in the economy, the option of exiting the convertibility regime was already very large.

The big lesson here in the context of hyperinflations and the ensuing stabilization is two-fold, that: (1) the restoration of sound macroeconomic performance may mask underlying structural
weaknesses in the economy; and (2) While the choice of exchange-rate mechanism may be appropriate and delivers the results for short-term stabilization, there is need to think through the medium-term implications in terms of the country’s inter-temporal development plan as well as the ever-present call to respond to unforeseen external shocks (IMF, 2004).

**Liberia**

After the civil war in 2003, Liberia began the process of developing a set of monetary instruments and building confidence for the Liberian dollar, centered on the institutional strengthening of the Central Bank of Liberia (CBL), against a background of extensive dollarisation of the economy. Liberia lacked the technical capabilities and data collection systems to formulate and implement an independent monetary policy and establish credibility for a domestic currency. In light of these circumstances policymakers regarded dollarisation as a natural option to nurture confidence with minimal technical requirements. However, some stakeholders proposed that Liberia should adopt the US dollar as its sole legal tender in order to strengthen fiscal discipline and promote growth. Ultimately the domestic currency carried the day. This was in keeping with most recent post-conflict countries that have largely favoured the domestic currency against full dollarisation, mainly in light of the high costs associated with adopting a foreign currency.

What worked against full dollarisation was the consideration that Liberia had previously failed to achieve fiscal discipline under the previous dollarisation regimes, notably the large fiscal imbalances that were sustained in the 1980s. Despite the limits on seigniorage, the country financed its deficits by accumulating arrears and borrowing from the domestic banking system chiefly through the central bank. Dollarisation also previously exposed Liberia to the macroeconomic consequences of external shocks during the oil crisis and global recession of the 1970-80s — a period of de facto full dollarisation — which worsened the country’s balance-of-payments, budget deficits and external debt burden. Ultimately, Liberia abandoned full dollarisation rather chaotically in 1988.

These consequences came about because at the heart of dollarisation or other fixed exchange-rate regimes including currency boards, lies the problem of limited economic policy space for the monetary authorities (monetary policy, exchange-rate policy) that countries would ordinarily leverage to smooth the consequences of external shocks. As a result, fully dollarised countries may buy short-term price stability at the expense of output variability from excessive exposure from external shocks. Also, there are leakages that governments could exploit to go round the touted fiscal straightjacket imposed by dollarisation. Add to these limitations the nontrivial cost of seigniorage involved in full dollarisation. Liberia would have to expend US$34 million or 7 percent of GDP to buy back its currency and introduce the US dollar (IMF, 2006).

**Panama**

the country adopted the US dollar at independence over a century ago (in 1904). The reason for adopting the dollar seems to have been the fact that Panama was a small Central American state that traded extensively with the United States. In addition, the USA had encouraged the then province of Colombia to break away to facilitate the building of the Panama Canal. These criteria fit the so-called traditional Optimum Currency Area (OCA) criteria that affect the choice of a country to adopt any particular currency. However, other so-called modern criteria were also at play in Panama’s decision to adopt the US dollar, particularly the fact that Panama had recently suffered a hyperinflation in Colombia’s currency — the so-called War of the 1000 Days — so that a desire for monetary stability was likely a strong motive for adopting the dollar. More generally, in all the countries that adopted the US dollar as the national currency, most have done so at Independence, save for the recent
examples of Ecuador that turned to the dollar because of the desperation of its economic situation (Hankel, 2000; Makina, 2000).

Panama is a small upper-middle income country that is dominated by services, has a free banking system with no central bank, and is highly integrated to the world (a fortiori US) economy. The long history of dollarisation in Panama has provided a rich minefield of data for empirically assessing the impact of dollarisation vis-à-vis other currency regimes. With no central bank to take the mantle of lender-of-last-resort, Panama relies on the external credit lines of its foreign banks to provide liquidity, which may dry up in times of high country risk or global external shocks. An analysis of the data by Hankel (2000) shows that Panama has on average attained better long-run economic performance than other comparable countries with more flexible exchange rates. The country had substantially lower inflation, and its long-run average growth rate of 5.3% - though lower than the worldwide average - was comparable to other Latin American countries. In trying to assess the extent to which the exchange rate regime is responsible for the differences between Panama and other countries, it was seen that though Panama was hard-hit by the Asian Financial crisis of 1997-98, she did not fare worse than other Latin American countries with more flexible exchange rates. On the balance of the analysis, therefore, Panama has come out ahead of comparable regional countries with more flexible exchange rates (Hankel, 2000).

Table 7. A Summary of the Reviewed International Experiences of Economic Crises and Associated Reforms

<table>
<thead>
<tr>
<th>Country</th>
<th>Features of the Crisis</th>
<th>Features of Major Reforms Undertaken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>Hyperinflation:</td>
<td>o Tax reform to enhance tax revenues and stabilize the budget</td>
</tr>
<tr>
<td>(1984-86)</td>
<td>o Money printing to finance budget deficit (worsened by a collapse in international tin prices, a key source of revenues)</td>
<td>o Sharp increase in the price of oil to plug the hole in the budget deficit</td>
</tr>
<tr>
<td></td>
<td>o Debt over-hang (forcing the country to suspend of international debt servicing)</td>
<td>o Stabilizing the peso-dollar exchange rate (thus committed to maintaining peso convertibility)</td>
</tr>
<tr>
<td></td>
<td>o Rapid depreciation of the peso to the dollar resulting into the currency losing its functions (as store of value and unit of account, though remained medium of exchange);</td>
<td>o Selling foreign exchange reserves to mop up the excess peso liquidity (arising from money printing due to renewed budgetary pressures as a result of the collapse in international tin prices)</td>
</tr>
<tr>
<td></td>
<td>o Thriving black market for foreign exchange</td>
<td>o Policy commitment to price stability (which enabled authorities to resist wage pressures)</td>
</tr>
<tr>
<td></td>
<td>o Subsidized petroleum products</td>
<td>o An Emergency Social Fund set up with World Bank Assistance as a safety net</td>
</tr>
<tr>
<td></td>
<td>o Dire social conditions</td>
<td>o Debt Rescheduling and ultimately Relief</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Transition to an open, market economy Building political consensus behind a comprehensive package of economic reforms beyond currency stabilization (Supreme Decree 21060)</td>
</tr>
<tr>
<td>Country</td>
<td>Features of the Crisis</td>
<td>Features of Major Reforms Undertaken</td>
</tr>
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<tr>
<td>Poland (1989-92)</td>
<td>Hyperinflation:</td>
<td>o Building central bank reserves to help defend the Zloty on the domestic foreign exchange market</td>
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<td></td>
<td>o Money printing to finance budget deficit</td>
<td>o Legalizing convertibility for the Zloty</td>
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<td></td>
<td>o Political turmoil</td>
<td>o Legalization of Solidarity and formation of coalition government</td>
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<td></td>
<td>o Smuggling and thriving black market for basic commodities</td>
<td>o Political consensus on a package of reforms based on return to a mixed economy and reintegration to the EU</td>
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<td></td>
<td>o Dire social conditions</td>
<td>o Establishment of the $1 million Zloty Stabilization Fund to finance the reforms, mainly towards a social safety net to cushion vulnerable groups (including the increasing unemployed who lost their jobs in the wake of dying heavy Soviet-era heavy industries)</td>
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<td></td>
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<td>o Legalizing trade with Western Europe</td>
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<td>o Establishing institutions for guiding transition to a market economy (e.g. rule-of-law)</td>
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<td>o Central bank reforms to enable it to pursue an independent monetary policy dedicated to price and currency stability</td>
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<td>o Building central bank international reserves to help defend the peso at the pegged rate in the domestic foreign exchange market</td>
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<td>o Tax reforms</td>
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<td>o Trade liberalisation on the capital and current account</td>
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<td>o Privatization of State-owned enterprises</td>
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<td>o Financial sector reforms that included the Convertibility Law that fixed the peso to the US dollar, and drastic measures to check moral hazard in financial markets</td>
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<td>o Abandoning the currency board in light of the resurgence of crisis (January 2002)</td>
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<td>o A decimation of the domestic financial sector</td>
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<td>o The Mexican debt crisis that made it difficult to raise funds in international debt markets</td>
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<td>o A large debt overhang and default in international debt payments</td>
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<td>Argentina</td>
<td>Hyperinflation:</td>
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<td>(1989-1990;</td>
<td>o Money printing to finance budget deficit</td>
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<td>2000-01)</td>
<td>o A decimation of the domestic financial sector</td>
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<td>o The Mexican debt crisis that made it difficult to raise funds in international debt</td>
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<td>o A large debt overhang and default in international debt payments</td>
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<td>Country</td>
<td>Features of the Crisis</td>
<td>Features of Major Reforms Undertaken</td>
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<td>Liberia (1970s-80s)</td>
<td>Hyperinflation:</td>
<td>o Restoration of domestic currency (given high costs of full dollarisation and the grim experience of de facto full dollarisation)</td>
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<td>o de facto full dollarisation</td>
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<td>o High budget deficits financed by borrowing from the domestic financial sector through the central bank despite limitations on seigniorage</td>
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<td>o External shocks, the oil crisis and global recession of the period</td>
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<td>o High debt burden</td>
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<td>o Abandonment of the peg in 1988</td>
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<tr>
<td>Panama</td>
<td>o No currency crisis</td>
<td>o Data strongly suggests that despite a greater exposure to international liquidity risk in the short-term, Panama was hard-hit by the Asian financial crisis no harder than other Latin American countries.</td>
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<td>o Adopted full dollarisation in 1904 for historical and political reasons including hyperinflation in Colombia's currency</td>
<td>o The country also had a comparable long-run average economic performance.</td>
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<td>o Offers a rich dataset for studying the effects of dollarisation</td>
<td>o While exposed to international liquidity risk, Panama had a decidedly lower default risk.</td>
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<td>o Country has a free banking sector dominated by foreign banks with no central bank let alone monetary policy</td>
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<td>o A middle-income country dominated by services</td>
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V. SOME CONDITIONS NECESSARY FOR SUCCESSFUL CURRENCY REFORMS

Following on from the international experiences and the literature, there are a number of conditions necessary for an economy to change its currency regime from dollarisation /MCR without falling back to earlier conditions that prompted status quo. Some of these conditions are:

Monetary policy issues
There are a number of actions that ought to be put in place to ensure a stable or predictable expansion in money supply and initiate appropriate monetary policy. Monetary expansion through printing in ways not matched by productivity gains and output expansion put inflationary pressures on the economy. In such circumstances, interest rates need to reflect inflationary expectations. Such expectations might be heavily influenced by the choice of the currency regime be it the introduction of a new currency as well as other macroeconomic policies in place at the time. With demonetization and dollarisation, experience seems to show that the market determined exchange rate might not adjust quickly to compensate for errors in the monetary authorities' judgment of inflationary expectations. Exchange rate management may therefore remain cumbersome. Equally, whether the capital account is liberalized or not, has implications for monetary policy and the adoption of a particular currency regime. For example, in the event of a large capital inflow, it would be prudent to purchase foreign exchange from the central bank and invest the money abroad. This arguably would eliminate the fiscal cost of sterilization, give domestic investors opportunities for international portfolio diversification and stimulate the development of domestic financial markets.

Fiscal issues
From the earlier discussions, one can argue that fiscal imbalances are important factors in generating currency crises as Government seeks to finance its commitment, the Central Bank will inevitably attempt to monetize the fiscal deficit with the possibility of reducing the levels of international reserves and financial crash. This seems to happen when the pace of monetization of the fiscal deficit exceeds the increase in the demand for money. Indeed, fiscal deficits may reflect deeper structural problems and the absence of consistent reforms – allowing soft-budget constraints to endure in the economy (e.g. subsidies to non-performing state enterprises), inefficient tax system and un-rationalized public expenditures. To avoid putting pressure on the domestic currency and making it a subject of speculative attack, the authorities need to create conditions that enhance the fiscal position with excessive domestic credit or debt expansion, protect adequate levels of international reserves, provide confidence and a sense of policy consistency and credibility (see Debrowski et al., 20002 for elaboration on some of these issues). Indeed, this becomes a major criterion for convergence and entry if a country chooses to join a single currency and related currency regime as fiscal consolidation arguably has a positive effect on growth (Kufa et al., 2003).

Central bank behaviours and governance and other institutional reforms
The other requirement necessary for currency reform is the 'good' behaviour of key institutions for socio-economic governance. Some of the main institutions are: the commercial courts, bureau of standards to ensure goods and services quality compliance, and the central banks. With respect to the central bank in particular, there may be need to review its legal mandate – especially to foster credibility and consistency in monetary policy and maintain the stability and efficiency of the foreign exchange market.
**Socio-economic convergence issues and the supply side**

It is also clear from our earlier discussions that there is a need for significant convergence or strength in the real sector of the economy if a country is to engage in currency reform. Some of the real variables required are: productivity, GDP growth performance, employment trends, training standards and skills. There is also need to review and harmonise legal and institutional arrangements to ensure domestic competitiveness.

**Socio-political reforms**

The role of political instability and crisis seems obvious in imposing shocks and pressures on the economy. Political instability or crisis may encapsulate a wide range of factors ranging from out-right military and civil conflicts (as in Liberia) to constitutional tensions between the legislative and executive arms in government (as examples from Latin America show) or between local and central government (as was in Argentina), let alone the difficulty of forming a stable government due to the existence of weak parties (as in DRC), be it due to uncertainty of elections under dictatorships. The major dynamic is that political instability creates uncertainty amongst economic agents (amongst money holders) thus increasing the risk margin associated with a specific currency or debt instrument. Political instability also reduces the planning horizon and increases the chances of policy inconsistency as well as complicating risk management. In that sense, political stability and good socio-economic governance become another major precondition for choosing among various currency regimes.

**Liquidity measures**

The analysis in the previous sections suggests that concrete measures to re-capitalise the economy and enhance the availability of liquidity are crucial if a country is not to return to pre-dollarisation economic difficulties. Such liquidity measures would include amongst others: enhancing FDI flows, improving revenue generation by the private sector, strengthening tax efficiency and improving tax incentives to foster financial intermediation. The economy needs adequate liquidity to operate normally and without excessive pressure on economic fundamentals.

**Re-engagement of development partners**

In the event the pressure on the domestic currency was driven by factors such as deterioration in the current account, drop in capital inflows and ODA, or debt over-hang; the country in question may need to find ways to enhance its engagement with development partners. Such a re-engagement may bring in much needed balance of payments support, enhanced debt management arrangements, greater confidence of foreign investors as well as enhancing regional integration and development co-operation. All these are likely to foster stability in macroeconomic and business environment essential for the introduction of a new currency regime.

**Some considerations on issues of timing and policy sequencing**

It is arguable that any major reform must be carried out at the right time using the right policy tools. A study by Zalduendo (2005) confirms the need for pacing and sequencing of policy. The Econometric results show that the introduction of sound economic policies has both level effects and growth effects, suggesting it is necessary to exercise caution when assessing a country's growth prospects immediately following the introduction of new policies – especially that growth strengthens when a country implements policies that outpace either a notional measure of “world average policies” or a country's own policy trend. The existence of sequencing factors in policy implementation were shown to be crucial; for example, that trade liberalization and financial liberalization positively affect growth, but more so if economic stability and fiscal sustainability have been secured – implying efforts must focus on stabilization first as opposed to attempting to achieve all policy objectives at once.
VI. AN ANALYSIS OF POSSIBLE ALTERNATIVE CURRENCY REGIMES FOR ZIMBABWE

From a theoretical perspective, the transacting public is not concerned about whether the currency in use is local or not as long it performs its functions as a store of value, medium of exchange, unit of account and is readily available. These functions are not restricted to money only as they can also be fulfilled by other commodities. Examples include exchange done on barter terms; storing value in terms of assets such as real estate, livestock, and precious minerals; using units of commodities such as ounces of gold, units of livestock as reference points for measuring value or as a unit of account. For money to perform the functions outlined above, it must be acceptable, trustworthy, have well defined rules governing its use as well as being more convenient than the other mediums. As noted above, the Zimbabwean dollar failed to perform its functions as it became worthless due to hyperinflation and was, therefore, substituted using a basket of currencies. The substitution is referred to as either dollarisation or currency substitution (see Cuddington, 1989; Calvo and Vegh, 1992; Zamaroczy and Sa, 2002 for the dollarisation concept; see Poloz, 1986; and McKinnon, 1996 for currency substitution).

Before adopting any new regimes, it is important to assess the extent to which they address the problems that led to the demonetisation of the Zimbabwe dollar in the first place. In particular, the restoration of the functionality of the reserve bank requires currency reforms that do not reignite the hyperinflationary pressures. The hyperinflation itself created credibility challenges that need to be overcome before the full restoration of its supervisory and regulatory functions related to the money supply process. Challenges that compromised the Reserve Bank’s credibility and integrity include weaknesses in the current Reserve Bank Act, the absence of a functioning board, involvement of the bank in non-core activities as well as deficiencies in the Reserve Bank’s accounting practices. Bank operations, accounting and reporting systems failed to comply with requirements of the International Financial Reporting Standards (IFRS). Bank reforms being considered include putting in place a Reserve Bank governance structure that ensures effective oversight and accountability of the bank through an appropriate non-executive board and refocusing the bank to its core functions of supervising and regulating the financial sector, monetary policy and payments system. The reforms are also aimed at making the reserve bank independent by appropriately limiting the government’s operations and oversight while ensuring that effective accountability mechanisms are maintained (Government of Zimbabwe (GOZ), Mid-Term Fiscal Statement, July 2009). An examination of the pre-reform scenarios and post-reform forecasts may be undertaken using banking models in which the money supply process is appropriately adjusted.

Some of the shortcomings of the MCR can be addressed by a number of currency regime options that include full dollarisation, Randisation, joining the Rand Monetary Union with or without the Zimbabwe dollar, or reintroducing the Zimbabwe dollar with a fixed or flexible exchange rate (see Annex 1 for framework for analysing alternative currency regimes). The choice of the optimal currency regime for Zimbabwe shall, however, be guided by the SADC objective of achieving a unitary currency by 2018 (GOZ, Mid-Term Fiscal Statement, July 2009).

Full dollarisation
The preconditions for full dollarisation are getting permission from the United States (or other foreign) monetary authorities to dollarise as well as a commitment by the Zimbabwe monetary...
authorities to non-reversal in the short-term (see Bogetic, 2000 on official dollarisation). With full dollarisation a country completely gives up control of monetary and exchange rate policy. Thus, full dollarisation results in policy credibility and reduces uncertainty of market participants since it is difficult to reverse. The difficulty of reversal makes dollarisation more credible and therefore gives the greatest benefits by eliminating the risk of devaluation (Bogetic, 2000; and Mendoza, 2001).

Without the risk of currency devaluation dollarisation reduces the country risk premium on foreign borrowing and the country gains lower interest rates thereby cutting the cost of servicing the public debt and reduces fiscal costs. By eliminating exchange rate risk and limiting the incidence and magnitude of crisis and contagion episodes the country also gains lower interest rate spreads on international borrowing thus encouraging investment and stability in international capital movements as well as economic growth (Alesina and Barro, 2001; Dornbusch, 2001; Rose, 2000; Kaminsky and Reinhart, 2000).

Officially adopting the dollar as the only currency in use also reduces uncertainty by eliminating imperfections in the substitutability of currencies (due to, for example, transaction costs differentials) and any possibility of changes in par values (Gale and Vives, 2001; Rose, 2000; Calomiris and Powell, 2000; Poloz, 1986). Other advantages of full dollarisation are that it solves the unit of account problem; partially restores seigniorage; and makes smaller denominations and change available. In addition, there is a possibility that the central bank could have ability to provide short-term liquidity to the monetary system or be able to assist individual banks in distress if necessary funds are available in advance, or when lines of credit are available with international banks under full dollarisation. An added advantage of full dollarisation is that the US dollar is globally accepted.

Even though there are many benefits from dollarisation, there are some problems with the system which include loss of monetary sovereignty, loss of the lender of the last resort facility and loss of control of the exchange rate which affects the balance of payments position (Rose, 2000; Hart, 1982; Corbo, 2001). Loss of control of the exchange rate has negative consequences in situations where there might be need to devalue. For example the current depreciation of the US dollar against the Rand has led to inflation in Zimbabwe since many commodities are purchased from South Africa.

Adoption of a foreign currency as legal tender leads to a loss of seigniorage (a loss of the profits accruing to the monetary authority from its right to issue currency). The loss is directly caused by the loss of stock of local currency as the US dollar is introduced and the domestic currency withdrawn from circulation. In addition, the monetary authorities would give up future seigniorage earning due from the flow of new currency printed to satisfy the increase in money demand (Bogetic, 2000 explains how partial seigniorage can be regained through some sharing mechanisms in various currency areas). The inability of authorities to print money as needed results in loss of confidence in the system since it would not be practical for the authorities to guarantee the payments system or to fully back bank deposits. Once the ability to print money ceases to exist there will be limits to the lender of last resort function. With no stocks of foreign currency the bank will have no resources to respond to banking crises. In situations where there are sudden runs on bank deposits the central bank will not be able cope.

Even though dollarisation removes devaluation risk it fails to eliminate the risk of external crises affecting the economy since investor positions could be affected by other factors such as the weakness of the government fiscal positions and the soundness of the financial system which were severely affected by hyperinflation (Nogues and Grandes, 2001; Rodriguez, 1999; Calvo and Reinhart, 1996; Calvo, 1999).
**Randisation**

The preconditions for full Randisation are getting permission from the South African monetary authorities to do so as well as a commitment by the Zimbabwe monetary authorities to non-reversal in the short-term. The situation under Randisation is similar to the one that obtains under full dollarisation except that the Rand has no global acceptability (Cuddington, 1989; Calvo and Vegh, 1992).

**Rand Monetary Union without the Zimbabwe dollar**

Prior to joining the Rand Monetary Union there should be convergence in monetary and fiscal policies and similarities in the rates of inflation. The situation under the Rand Monetary Union without the Zimbabwe dollar is similar to the one that obtains under full Randisation (see Frankel and Rose, 1999; Rose, 2000; Rose and Van Wincoop, 2001; Reinhart and Calvo, 2001 for a discussion on currency unions). There is a possibility of gaining partial seigniorage by joining the Rand Monetary union (Bogetic, 2000).

**Rand Monetary Union with the Zimbabwe dollar**

Prior to joining the Rand Monetary Union, with the option to reintroduce the Zimbabwe dollar, there should also be convergence in monetary and fiscal policies and similarities in the rates of inflation. Under this option the lender of last resort facility becomes available. As the lender of last resort the central bank provides liquidity to banks when they are in distress (short of funds but cannot get them from the inter-bank market). The lender of last resort function exists when the central bank can print money which it cannot do in a MCS. In the MCS the RBZ is unable to fully control the level of Money Supply to influence the level of economic activity. This function can be restored by using the Rand Monetary Union option with local currency or the restoration of the local currency. The disadvantage of joining such a Union is that there is need to have viable agreements on the conduct of monetary and fiscal policies in order to avoid free riding problems. Institutional mechanisms are needed to avoid such problems.

Other advantages are that the regime solves the unit of account problem; fully restores seigniorage; and makes smaller denominations and change available.

**Rand versus the Dollar**

The rand and the United States dollar are the two most widely used currencies in Zimbabwe. Inevitably the two currencies have been compared with some analysts preferring the rand to the United States dollar (Hawkins, 2009) and others preferring the United States dollar to the rand.

The case for choosing the rand rather than the dollar is based on four main reasons: (i) geo-political realities; (ii) trade/capital integration; (iii) preference for a weak currency; and (iv) convenience. South Africa is more likely to provide (non-humanitarian) financial assistance than the West. South African banks might be willing to extend credit lines whereas Western banks are unlikely to do so. South Africa is Zimbabwe’s main trading partner and, with the creation of a SADC Common Market and the plan for eventual regional monetary union, randisation makes greater economic sense than dollarisation. Adopting the rand would thus be compatible with increasing regional economic integration and plans for eventual monetary union in SADC by 2018. Given that Zimbabwe already has an elevated price level (in foreign currency terms), adopting a weaker currency makes a great deal of sense. Given that the rand is worth one tenth of the dollar it is a more convenient currency that would address the present tendency by traders to put a minimum price of US$1 on any transaction. The rand is therefore user-friendlier and is widely used in some parts of Zimbabwe.
There are, however, some downsides to randisation. The rand is a volatile currency which does complicate cross-border trading and investment decisions and raises transaction costs because firms are often forced to use forward cover when importing, exporting or borrowing abroad. Over time South Africa has relied on high real interest rates and substantial inflows of portfolio finance to balance its external accounts. Portfolio capital inflows to Zimbabwe are likely to be minimal and Government is likely to be unhappy with high interest rates. Accordingly, for the foreseeable future, the next 2 to 3 years, Government may have no alternative.

For full dollarisation to take place the authorities must buy out the current money stock, replacing the Zimbabwean $500 billion (or so) with US dollars or rands. They would also need to replace the assets of investors on the Zimbabwe Stock Exchange and pension funds as well. How feasible this is depends, in part, on whether there is anyone out there in the international community who will to pick up the tab. It would also depend on how much it would cost.

**Multiple Currencies**
Some economists have argued that in view of the declared intent of SADC to introduce a regional currency for the fifteen member countries (in the same manner as the euro is the currency of most of the countries constituting the European Union), it would appear to be premature for Zimbabwe to adopt any one currency, or to reintroduce its own currency, only to be faced with having to replace such currency with the intended new SADC currency. It is probably at least five years before a SADC currency comes into being. With the volatile and evolutionary state of the Zimbabwean economy, it may be undesirable to await the introduction of a SADC currency, albeit that it is equally undesirable for Zimbabwe at this time to concentrate exclusively upon one regional or international currency.

The disadvantage of Zimbabwe committing itself to any one existing currency, especially if it is the rand, is that in the event the South African economy experiences decline, substantial changes to South Africa's monetary policies would be necessary, good for South Africa but could be totally unsuited to then prevailing Zimbabwean circumstances and needs. But if Zimbabwe were to be exclusively using the rand as its currency, it would then be locked into these monetary policies; hence, adopting the rand as Zimbabwe's currency would not be advisable.

Similarly, it would not serve the Zimbabwean economy's best needs to adopt any other country's currency as its sole currency, for doing so would then commit Zimbabwe to that country's monetary policies.

If Zimbabwe continues to use a multiplicity of currencies until such time as it is opportune to reintroduce a Zimbabwean currency, then Zimbabwe is linked to a multiplicity of monetary policies, acting as hedges against negative consequences of any of them.

Therefore, despite the current cross-rate prejudices suffered by some, in the national interest and medium to long-term wellbeing of all, Zimbabwe should adhere to the current currencies' basket for the foreseeable future (Block, 2009).

**Reintroducing the Zimbabwe dollar**
One precondition for the return of the Zimbabwe dollar is a commitment by the monetary authorities to maintain price stability, stem hyperinflation as well as guarantee the independence of monetary authorities. This may be established by reforming institutions such as the central bank or introducing a Currency Board in order to return the confidence of market participants in them.
Reintroducing the Zimbabwe dollar restores the functionality of the central bank generally and in particular the lender of last resort role. Seigniorage will be restored. In addition the unit of account problem is addressed. The problem of smaller denominations and change will be eliminated. The use of the exchange rate as a monetary policy instrument is restored. The merits and demerits of using the exchange rate policy depend on whether it is fixed, managed float or flexible. The other options will be to set the exchange rate anywhere in between the fixed and flexible with the advantages/disadvantages of setting it close to the fixed (flexible) approaching those of the fixed (flexible) option (Summers, 2000; Fischer, 2001).

The fixed exchange rate or managed float policy option
When the exchange rate is fixed or is a managed float then the monetary authorities have limited control over money supply (in the extreme they will not have any). A fixed exchange rate results in the risk of running out of foreign exchange reserves. In addition it will not be possible to exogenously determine money supply unless it is practical to sterilise successfully. The money supply cannot be controlled because it is affected by the balance of payments position which in turn depends on the decisions of private-sector economic agents, given the exchange rate the authorities decide to maintain. If foreign currency flows cannot be sterilised, then the government cannot choose both the exchange rate and the money supply as independent policy targets. If the government chooses a particular exchange rate, then the money supply must adjust to a consistent level. The fixed exchange rate policy option is not viable in the long run (the country runs out of reserves resulting in a crisis). This problem can be resolved by adopting a Currency Board option where the money supply is restricted by the amount of foreign exchange reserves.

Currency Board
Another option for Zimbabwe is to adopt a currency board in which the domestic currency is fully backed by international reserves. A currency board is the most stringent form of the pegged exchange rate option where the country ties its currency to a basket of other currencies such as those of trading partners. In fact, under the current MCR in Zimbabwe, the economy is functioning as if under a Currency Board of some sort, as some economists have argued. Under the Currency Board regime (CBR) there is full convertibility between local and foreign currency. The advantages of the CBR include: taming of inflation; seigniorage from interest; no balance of payments crisis; transparent; no inflation; and cannot finance government spending. A Currency Board has the added advantage of not being under the influence of politicians (Ghosh et al., 1995, 2000). The Currency Board has some disadvantages that include: lender of last resort still a problem; costly speculative attacks resulting in loss of reserves; risk of default by country of foreign currency denominated government and private securities raises the interest rates on these securities (more information on currency boards is found in Hanke 1999, 2000; Hanke and Schuler, 1999; Balino et al., 1997; and Ghosh et. al., 2000).

A disadvantage of using a currency board is that there is a risk that the peg will be abandoned thereby creating a devaluation risk. Devaluation risk has the potential of increasing sovereign risk when a government acts to avoid currency crises but increases the risk of default (see Rose, 2000, Rose and Van Wincoop, 2001; and Reinhart and Calvo, 2001 for discussions of sovereign risk). Examples include the situation where a government imposes capital controls causing other debtors to default on dollar-denominated debt by blocking the private debtors' access to foreign currency. For that reason the interest rates on foreign currency denominated government and private securities tend to be high (higher than those for the industrial countries) reflecting risk of default by the country or sovereign risk on those securities.
It has generally been observed that countries that have used currency boards have suffered sharp increases in interest rates and recessions as speculative attacks spread from other countries (Hanke, 2000).

Some currency boards allow themselves some flexibility to create money that is not fully backed on the margin and so are partly able to deal with banking crises. They do that in order to provide the credits that the banks need to stay afloat by temporarily reducing their foreign reserve coverage of the money base. However, they can only continue to make money to the extent that they accumulate reserves.

**The flexible exchange rate option**

A flexible exchange rate policy increases control over money supply. The case of perfectly flexible exchange rates the balance of payments position remains at zero because the exchange rate adjusts to achieve equilibrium. The exchange rate is allowed to find its own level as determined by the forces of supply and demand and the rate settles at the point at which the market clears. The central bank can select the stock of money as a policy target, but must accept whatever rate of exchange is consistent with the money supply target.
VII. THE OPTIMAL CHOICE OF CURRENCY ARRANGEMENT FOR ZIMBABWE

Of the various options discussed above the Rand Monetary Union (with the local currency) option ranks the highest in terms of resolving all the current problems except that of sovereignty and global acceptance. Joining a monetary union requires the alignment of monetary and fiscal policies which prepares the country for the envisaged SADC common currency by 2018. Above all others it restores both credibility and the lender of last resort function. It also fully restores seigniorage.

Ranked second is the full dollarisation option which partially restores seigniorage but fails to satisfy the SADC vision for a common currency. Fully dollarising using the US dollar which is globally acceptable has that advantage over Randisation which ranks third. The Rand Monetary Union without the local currency option ranks fourth since it has further disadvantages that there is a need to have convergence in monetary and fiscal policies with countries that are already in the union. This would not be necessary in the full Randisation case. In terms of deliverables after managing to join the benefits will be the same as those under Randisation without joining the Union. However, the option fails to satisfy the SADC vision.

In fifth place is the restoration of local currency under the Currency Board option. This has the advantages that it manages to restore some level of credibility and brings back sovereignty. However, it is extremely difficult to make market participants believe that the authorities will not abandon it in favour of printing more money and bringing back hyperinflation. There is a moral hazard and adverse selection problem that cannot be resolved in this option (Diamond and Dybvig, 1983).

Restoring the local currency as well as maintaining a flexible exchange rate comes in the last place since it also requires the same level of commitment by the authorities. In addition the choice is negatively affected by the same moral hazard and adverse selection issues and the incentive compatibility constraints that are likely to make market participants remain uncertain about the behaviour of the authorities given past experience. This requires the credibility problem to be resolved first through the reform of institutions.

Given the advantages and disadvantages of the various policy options available to choose from the most desirable option is for the authorities to choose the Rand Monetary Union with the local currency option. However, GoZ needs also to be conscious of the prior capacity conditions and the political commitment to carry out the necessary reforms to ensure macroeconomic stability as well as economic recovery and sustainable development. The following stand out as areas for future research: the dynamics in the food-production and transport sectors, labour market adjustments and the distributional of the effects of the liquidity crunch.
VIII. CONCLUDING REMARKS

Zimbabwe is barely emerging from a decade long socio-economic crisis which was characterized by macroeconomic instability. The major pressures were from hyper-inflation, contraction in the real sectors of the economy, rising poverty and deterioration in the social condition. The signing of the GPA, the operationalisation of the STERP and dollarisation have created initials gains towards macroeconomic stability – especially reduction of inflation to single digit levels, and improved availability of basic commodities. However, dollarisation has imposed on the economy some of its negative side-effects. This has led to a renewed debate to what would constitute an optimal currency regime for Zimbabwe to consolidate macroeconomic stability and long-term economic recovery. This paper has sought to analyze and review various scenarios for currency reforms in the context of Zimbabwe; drawing on the country history and recent international experiences to propose possible currency regimes. The paper notes however, that the various currency regimes can only be successfully implemented subject to the achievement some specific prior condition such as: policy consistency, political commitment and leadership, socio-economic convergences, institutional reforms and the adoption of prudent monetary and fiscal policies. The criteria for selection of a particular currency regime could be based on a framework that considers the following: (a) the advantages and disadvantages to be obtained for a given regime, (b) the need for correct timing and sequencing of policy tools and reform actions, (c) the prior capacity conditions, and (d) the political commitment to undertake the necessary reforms. It is imperative to note that these reforms are no quick fixes for designing economic stabilisation and recovery programmes needed in Zimbabwe.
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