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**MONETARY ECONOMICS AND CENTRAL BANKING:
THE INTERNATIONAL EXPERIENCE AND CASE FOR
ZIMBABWE**

PhD in STRATEGIC MANAGEMENT

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1.0 INTRODUCTION AND BACKGROUND

Monetary economics has made much success in making inroads in influencing real life developments in the design of monetary institutions and day-to-day conduct of monetary policy. Monetary economics has established a firmer footing for Central Bank's monetary policy design in many countries. Central Banks used to operate in a partial theoretical vacuum before the inter-linkage between economic theory, research and models from actual practice. Modern monetary policy is now based on a fairly firm theoretical and empirical foundation, which presents quite consistent advice for policy making.

- 1.1 To see this inter-linkage it is important to first define what monetary economics is. Monetary economics is the body of accepted theories that concern the role of money at micro and macro level. It largely involves the role of money in an economy. Role of money in affecting the price level, interest rate, employment, output and exchange rate.
- 1.2 Various theories that are sometimes in contradiction due to different assumptions made about the economy have been formulated trying to show how money may affect these variables. They range from Classical, Keynesian and Monetarist thinking. McCulum(1998) defined monetary

economics as the effect of monetary institutions and policy actions on economic variables such as commodity prices, wages, interest rates, employment, consumption and production.

- 1.3 The subject also covers the origin, functions and value of money, a large part of macroeconomics with emphasis on monetary policy, central banking and financial markets. Monetary policy tries to use mainstream monetary economics in formulating policies to achieve general objectives in the economy.
- 1.4 Specifically monetary policy, which is the main activity of central bank, is the deliberate effort by the Central Bank to control the money supply and credit conditions for the purpose of achieving certain broad economic objectives.
- 1.5 These objectives are price stability, promote economic growth, stabilise the exchange rate, and bring soundness and stability in the financial sector. More commonly the goal of monetary policy is to accommodate economic growth in an environment of stable prices.
- 1.6 From these definitions it can be envisaged that there is a greater inter-linkage between Central banking activity and

monetary economics. There is an element of reliance on each other. Developments both from practice and monetary economics per se have enabled convergence between these two.

- 1.7 First, advances in macroeconomics and monetary economics have aligned theory more closely with central banks' ideas of the importance and effectiveness of monetary policy.
- 1.8 Second, changes in the framework, communication and design of monetary policy-making have also impacted theory – the introduction of inflation targeting is probably the clearest example.
- 1.9 Third, the focus of research has increasingly shifted towards central bank tasks. Finally, model design has been reshaped in light of new knowledge. Academic economists and central bank experts now work closely together on developing new Classical, Keynesian and Monetarists general equilibrium models.
- 1.10 Monetary policy is now at center stage in discussions about how to promote sustainable growth and low inflation in the economy. Fiscal policy has lost its luster as a tool to

stabilize the aggregate economy because of doubts about the ability to time fiscal policy actions to obtain desirable stabilization outcomes, as well as concerns about budget deficits.

1.11 The result is that both economists and politicians in recent years advocate that the stabilization of output and inflation be left to monetary policy. The economics profession has also become more supportive of price stability as the long-run primary goal for a central bank.

1.12 In order to be successful in such an enterprise, the monetary authorities must have an accurate assessment of the timing and effect of their policies on the economy, thus requiring an understanding of the mechanisms through which monetary policy affects the economy.

1.13 In formulating monetary policy Central Banks takes four main factors into account:-

- The latest economic theories at any time
- Empirical research results for example the transmission mechanism of monetary policy and determinants of inflation
- Practical experience from previous monetary policy making

- Forecast of models that aim to incorporate all the above three.

1.14 Monetary economics is quite a diverse field. In the past models used in monetary economics were fiercely criticised by central banks. The gap between academic macroeconomic models and applied policy models has decreased in recent years.

1.15 There has been a clear tendency away from the large-scale disaggregated models of the 1970s towards traceable small- and medium-sized models, well suitable for short and medium-term policy analysis, which is the basis for efficient monetary policy-making in an uncertain environment.

1.16 The older large scale models were criticized on a number of fronts, e.g. for lacking microeconomic foundation, their treatment of expectations formation, their forecasting abilities in comparison to simple vector auto regression (VAR) models, their underlying econometric methodology and their modelling of the cost of disinflation in terms of output losses.

1.17 In the words of Pesaran and Smith (1995): “The models did not represent the data , ... did not represent the theory ... and were ineffective for practical purposes of forecasting and policy” (Pesaran and Smith, 1995: 65-66). It is therefore of paramount importance to reflect both international and Zimbabwe experience on how Central Banking activity and monetary economics has been related.

1.18 Theories that are of importance to reflect on are those that deal with :

- Role of money on economic activity (transmission mechanism)
- Stabilisation programmes
- Central bank independence and governance

1.19 This paper is divided into five sections. Section two deals with theoretical review, which is divided into three subsections; role of money on economic activity (the transmission mechanism), stabilisation programmes and central bank independence and governance. Given these theories, section three reviews empirical evidence, section four analyses Zimbabwe’s experience. Policy implications are contained in section five . Finally section six concludes the study.

2.0 THEORETICAL REVIEW

Under this section theoretical models will be reviewed in regard to three important concepts in monetary economics:-

- Role of money on economic activity (the transmission mechanism)
- Stabilisation programmes
- Central bank independence and governance

2.1 *ROLE OF MONEY ON ECONOMIC ACTIVITY*

An understanding of the transmission mechanism process is essential to the appropriate design and implementation of monetary policy. Monetary policy transmission mechanism is the process through which monetary policy decisions affect aggregate demand in the economy, inflation expectations and the inflation rate. Monetary policy actions are primarily manifested by changes in short and long-term interest rates, asset prices, liquidity and the exchange rate of domestic currency. There are various theories, which try to explain the role of money in an economy and its transmission mechanism. These range from Classical, Keynesian and Monetarist thinking.

2.1.1 Classical Transmission Mechanism-money

Classical theory is based on the notion that market always clear and assumes that the economy is always at fully employment. Prices and wages are flexible and the economy moves automatically and quickly to its full employment.

2.1.2 The Classical theory holds that money is just a veil; it does not affect real variables in the economy that is output, interest rate and employment. Rather they state that money directly affects the price level. Real variables for example output is determined by real supply side factors such as technological change, population growth, change in labour and capital formation. They base their arguments on the assumption of production function.

2.1.3 To them the quantity theory of money provides the basis for illustrating the effect of money in an economy. The following equation by Fisher (1921) illustrates the quantity theory of money:

$$M\bar{V} = P\bar{Q} \dots\dots\dots(1) \text{ where } M \text{ is}$$

money supply in circulation, \bar{V} is velocity of money circulation, which is assumed constant as it is determined by buying habits and institutional transactions which changes slowly in the economy. , P is the price level, and

\bar{Q} is output and is also assumed fixed from the classical; assumption of flexible prices and wages.

2.1.4 What it means is that if money supply changes prices will change by the same proportion. If money supply is doubled, price will double, nothing else in the world changes, money is just a veil. Its sole purpose is to determine the general price level at which transaction of goods will take place.

2.1.5 As money supply increase this will spill over to excess demand of goods and services, but as there will be no goods and services as they are fixed by supply side factors. The result will be, “too much money chasing too few goods”. Prices will continue to rise until excess supply of money is eliminated.

2.1.6 Implication for monetary policy for them is that money is neutral; it does not affect the real economic activity. Monetary policy should not therefore be geared to control real variables such as output and employment. In another sense money to them is very important, as it determines the aggregate price level. Therefore the goal for monetary policy is price stability as suggested by the classical quantity theory.

2.1.7 Keynesian Transmission Mechanism –interest rate channel

Keynesian theory holds an opposite view to Classical neutrality proposition. Keynes observes that a modern market economy can get trapped in an under employment equilibrium.

2.1.8 He emphasised that because of wage and price inflexibility, there is no economic mechanism that restore production at full employment capacity. A nation could remain in its low output, misery condition for long time from the absence of self-correcting mechanism or invisible hand to guide the economy back to full employment.

2.1.10 Money affects real variables such as output, employment and interest rate. Keynesian viewed interest rate as a price for parting with liquidity and thought interest rate as a real variable determined by money supply and money demand.

2.1.11 Basically the monetary transmission mechanism is that from the interest rate to aggregate demand. The effect can either be through the portfolio (investment) effect, credit availability effects and exchange rate effect.

2.1.12 The traditional Keynesian ISLM view of the monetary transmission mechanism can be characterized by the following schematic, showing the effects of a monetary expansion:

$$\uparrow M^s \Rightarrow \downarrow i \Rightarrow \uparrow I \Rightarrow \uparrow Y \dots\dots\dots(2)$$

where $\uparrow M^s$ indicates an expansionary monetary policy leading to a fall in real interest rates $\downarrow i$ which in turn lowers the cost of capital, causing a rise in investment spending $\uparrow I$, thereby leading to an increase in aggregate demand and a rise in output $\uparrow Y$. Although Keynes originally emphasized this channel as operating through businesses' decisions about investment spending, later research recognized that consumers' decisions about housing and consumer durable expenditure are also investment decisions.

2.1.13 Thus, the interest rate channel of monetary transmission outlined in the schematic above applies equally to consumer spending in which I represent residential housing and consumer durable expenditure. An important feature of the interest rate transmission mechanism is its emphasis on the *real* rather than the nominal interest rate as that which affects consumer and business decisions.

2.1.14 In addition, it is often the real *long-term* interest rate and

not the short-term interest rate that is viewed as having the major impact on spending. How is it that changes in the short-term nominal interest rate induced by a central bank result in a corresponding change in the real interest rate on both short and long-term bonds?

2.1.15 The key is sticky prices, so that expansionary monetary policy, which lowers the short-term nominal interest rate, also lowers the short-term *real* interest rate, and this would still be true even in a world with rational expectations. The expectations hypothesis of the term structure, which states that the long-term interest rate is an average of expected future short-term interest rates, suggests that the lower real short-term interest rate leads to a fall in the real long-term interest rate.

2.1.16 These lower real interest rates then lead to rises in business fixed investment, residential housing investment, consumer durable expenditure and inventory investment, all of which produce the rise in aggregate output.

2.1.17 Exchange rate effect:- changes in money supply can also

affect aggregate demand via an effect on exchange rate. This happens through the effect of money supply on interest rates. Reduction in money supply causes interest rate to rise, which in turn cause exchange rate to appreciate.

2.1.18 The reason is that higher interest rates make domestic financial assets more attractive than comparable foreign assets, all other things being equal. Demand for domestic currency therefore increases, causing a rise in its price that is an appreciation. However this depends on prevailing country situation. a rise in nominal interest rates which reflects higher inflation expectations generally causes the domestic exchange rate to depreciate since investors expect higher future inflation to reduce its value, i.e. cause a depreciation.

2.1.19 Therefore they immediately sell the domestic currency to avoid exchange rate losses later. This increased supply of domestic currency then causes it to depreciate. A rise in the policy rate may therefore weaken the domestic exchange rate if it is insufficient to offset higher inflation expectations, meaning that the central bank's real policy rate has in fact fallen, despite the nominal rise.

2.1.20 Monetarist Transmission mechanisms

Monetarists believe that changes in the money supply are a very important determinant of changes in the level of economic activity in both real and nominal terms. Friedman (1970) has stated a “modern” quantity theory of money, which has its roots in the classical quantity theory but is broader than its predecessor.

2.1.21 The “modern” quantity theory of money states that change in the money will change the price level as long as the demand for money is stable, such a change also affect the real value of national income and economic activity but in the short run only whilst in the long run monetary shocks changes nominal values.

2.1.22 Monetarists attributes short run non-neutrality of money to nominal rigidities or mistaken expectations and in the long run these rigidities wash out the error in expectations which are corrected making real outcome independent of the monetary changes. As long as demand for money is stable it is possible to predict the effects of changes in money supply on total expenditure and income. Money supply will lead to a rise in output and employment because of a rise in expenditure, but only in the short run.

2.1.23 An implication to monetary policy is that monetary policy should be governed by a simple rule for money growth and not be left to the discretion of policy makers. They advocated for a constant money- growth rate rule to prevent instability in money growth rate with resulting instability in prices and output. Central Banks can therefore control the volume of spending by controlling money supply (given stability in velocity)

2.2 STABILIZATION PROGRAMMES

In developing countries stabilisation programmes are aimed at bringing inflation from generally high levels down to levels similar to those observed in developed countries or, at least, to what is considered acceptable given a country's inflationary history. Because high inflation is harmful to growth and development, stabilisation is a major policy objective in countries facing it and is treated as a major issue in monetary economics.

2.2.1 This mainly stems from the general consensus that the main primary goal of Central banks is price stability. Different nominal anchors have been advocated in disinflation programmes. According to Agenor and Montiel (1999),

efforts to combat high inflation have been undertaken under mainly three different approaches:

- Populist
- Orthodox
- Heterodox.

2.2.2 The Populist approach: under this approach the focus is on direct intervention in the wage–price process through the implementation of wage and price controls, not necessarily accompanied by adjustment in underlying fiscal imbalance. The logic behind is that the economy suffers from unutilised productive capacity due to deficient demand, and monopoly power, and that by stimulating aggregate demand production will increase leading to a concomitant increase in total profits even though per-unit profits may be depressed. Price controls would be aimed at dealing with monopoly power.

2.2.3 The Orthodox approach: is concerned with getting the fundamentals right. The emphasis is on demand management through strong fiscal adjustment. Given that credit to the public sector is not the only source of monetary expansion - the others are the balance of payments and

credit to the private sector - a stabilisation plan based solely on fiscal adjustment does not necessarily imply controlling monetary aggregates. A plan that has the expansion of monetary aggregates as monetary targets is referred to as an orthodox money-based stabilisation (Agenor and Montiel, 1996). Thus, in this specific type of orthodox programme money is used as a nominal anchor this contrasts with other stabilisation experiences that use the fixed exchange rate as a nominal anchor. So basically under this approach we have two programs: money based program which rely on money as nominal anchor and the exchange rate based programme which rely on pegging exchange rate as nominal anchor.

2.2.4 Heterodox programmes: their main premise was that inflation has strong inertial components. Therefore, restrictive aggregate demand policies, which are at the centre of orthodox stabilisation, would only cause a deep and prolonged recession, with little success in terms of reducing inflation. Heterodox plans included fiscal adjustment, the use as the exchange rate as a nominal anchor, and price controls. Thus, heterodox plans combined elements of all the approaches mentioned above: populist (price controls); orthodox (fiscal adjustment); and exchange rate based (the use of exchange rate as a nominal anchor) or

social contract.. These plans were adopted in the second half of the 1980s.

2.2.5 Table below table reveal different types of stabilisation programmes developing countries have adopted in the past, in response to high inflation. Also briefly the result of each programme is shown on the results column.

| <i>Type</i> | <i>Main Diagnosis</i> | <i>Main Measures</i> | <i>Results</i> | <i>Country Examples</i> |
|-----------------------------|---|--|--|---|
| <i>Populist</i> | Unutilised productive capacity and monopoly power | <ul style="list-style-type: none"> price controls expansionary fiscal policy increase in real wages | Very high inflation and even hyperinflation | Chile (1970-1973); Peru (1986-1990). |
| <i>Orthodox money based</i> | Large fiscal imbalances and monetary decontrol | <ul style="list-style-type: none"> strong fiscal adjustment specific targets for monetary aggregates | Gradual decline in inflation; high output lost and labour unemployment | Chile (1973); Bolivia (1985). |
| <i>Exchange rate based</i> | Large fiscal imbalances and monetary decontrol | <ul style="list-style-type: none"> fiscal adjustment fixed nominal exchange rate (or timetable for nominal exchange rate depreciation) | Low inflation convergence; exchange rate appreciation; large trade and current account deficits; major currency and financial crises | Argentina (1978); Chile (1978); Uruguay (1978). |
| <i>Heterodox</i> | Inertia due to backward-looking contracts | <ul style="list-style-type: none"> fiscal adjustment use of a fixed exchange rate as a nominal anchor price controls | Initial drastic reduction in inflation, followed by rapidly increasing inflation to levels higher than at the outset of the plan | Argentina (1985); Israel, 1985); Brazil (1986). |

2.3 CENTRAL BANK INDEPENDENCE AND GOVERNANCE

The issue of central bank independence has generated considerable debate all over the world in recent years. The issue has attracted attention from both practitioners and academic economists. Central bank independence refers

to the freedom of monetary policymakers from direct political or governmental influence in the conduct of policy. Most discussions have focused on two key dimensions of independence.

2.3.1 The first dimension encompasses those institutional characteristics that insulate the central bank from political influence in defining its policy objectives. The second dimension encompasses those aspects that allow the central bank to freely implement policy in pursuit of monetary policy goals. Grilli, Masciandaro, and Tabellini (1991) called these two dimensions “political independence” and “economic independence.”

2.3.2 The more common terminology, however, is due to Debelle and Fischer (1994) who called these two aspects “goal independence” and “instrument independence.” Goal independence refers to the central bank’s ability to determine the goals of policy without the direct influence of the fiscal authority. Instrument independence refers only to the central bank’s ability to freely adjust its policy tools in pursuit of the goals of monetary policy.

2.3.3 Lybek¹ (2006) points on the different forms of autonomy which ranges from goal , target, instrument autonomy. Goal autonomy gives Central bank the authority to determine its primary objective from among several objectives included in the central bank law. Target autonomy allows the central bank to decide specific target for achieving primary objectives. Instrument autonomy allows central bank to retain sufficient authority to implement the monetary policy target using the instrument it sees fit.

2.3.4 The issue is as old as central banking itself, having been debated on and off over the past couple of hundred years. The hallmarks of independence – namely, autonomy from the government and non-financing of budgets – were identified clearly by David Ricardo in a paper on the establishment of a national bank in 1824: *‘It is said that Government could not be safely entrusted with the power of issuing paper money; that it would most certainly abuse it ... There would, I confess, be great danger of this if Government – that is to say, the Ministers – were themselves to been trusted with the power of issuing paper money. But I propose to place this trust in the hands of Commissioners, not removable from their official situation but by a vote of one or both Houses of Parliament. I*

¹ This has been viewed different. The European Monetary institute measures autonomy as institutional , functional, organisational and final independence as discussed by Amtenbrink (1999), for example.

propose also to prevent all intercourse between these Commissioners and Ministers, by forbidding any species of money transactions between them. The Commissioners should never, on any pretense, lend money to Government, nor in the slightest degree be under its control or influence ... If Government wanted money, it should be obliged to raise it in the legitimate way; by taxing the people; by the issue and sale of exchequer bills; by funded loans; or by borrowing from any of the numerous banks which might exist in the country; but in no case should it be allowed to borrow from those who have the power of creating money.'

2.3.5 Importance of central bank lies in the importance of achieving price stability (low inflation). Independence actually installs credibility from the public that the central bank is committed to its goals. This will entail that the central bank are far from being influenced by politicians to push the economy to grow faster and further than its capacity limits and also shrug off the temptations that government have to incur budget deficit and fund these borrowing from the central bank.

2.3.6 Central bank independence has often been represented in theoretical models by the weight placed on inflation objectives. When the central bank's weight on inflation

exceeds that of the elected government, the central bank is described as a Rogoff-conservative central bank (Rogoff 1985). This type of conservatism accorded with the notion that independent central banks are more concerned than the elected government with maintaining low and stable inflation.

2.3.7 Rogoff's formulation reflects both a form of goal independence – the central bank's goals differ from those of the government – and instrument independence – the central bank is assumed free to set policy to achieve its own objectives. Because the central bank cares more about achieving its inflation goal, the marginal cost of inflation is higher for the central bank than it would be for the government. As a consequence, equilibrium inflation is lower.

2.3.8 Measurement of Central bank independence: Cukierman, Webb, and Neyapti (1992) index is based on four legal characteristics as described in a central bank's charter. First, a bank is viewed as more independent if the chief executive is appointed by the central bank board rather than by the prime minister or minister of finance, is not subject to dismissal, and has a long term of office. These aspects help insulate the central bank from political pressures.

2.3.9 Second, the higher the independence the greater the extent to which policy decisions is made independently of government involvement. Third, a central bank is more independent if its charter states that price stability is the sole or primary goal of monetary policy. Fourth, independence is greater if there are limitations on the government's ability to borrow from the central bank. Cukierman, Webb, and Neyapti (1992) combine these four aspects into a single measure of legal independence. There are also informal indicators of actual independence, based on work by Cukierman, which measures of actual central bank governor turnover, or turnover relative to the formally specified term length, High actual turnover is interpreted as indicating political interference in the conduct of monetary policy.

2.3.10 Central bank governance

Broadly corporate governance encompasses systems and process that the Central bank has in place to oversee its affairs with the aim of meeting its goals and objectives. Its also provides the structures through which objectives of a central bank are set and the means of attaining these objectives including the determination of monitoring performance.

2.3.11 The Good governance should be entailed as a means to provide macroeconomic stability, orderly economic growth and a stable regulatory environment. Given the role commonly assigned to them, central banks are thought to play a vital role in achieving these goals to the extent that the legal framework in which they operate reflects good governance. As Lybek (1999) has pointed out: ‘Good central bank governance means that the objectives and tasks delegated to an institution are performed effectively and efficiently, thus avoiding misuse of resources, which is crucial for establishing a good track record.’

2.3.12 This contribution identifies a number of principles that arguably should form the basis for the good governance of central banks and what their impact is on the institutional structure of a central bank. Central bank governance is arguably defined by a number of key-concepts or pillars, which *together* should form the basis of the legal framework governing a central bank and on which central bank governance should rest, that is independence, democratic accountability and transparency.

2.3.13 While these concepts are in the first instance introduced

separately this is not to say that they should be considered in isolation. Arguably, the key to good governance in this regard lies in the combined application of these principles in designing the legal framework of a central bank.

3. EMPIRICAL REVIEW

Under this section empirical review is divided into the three elements listed below. It is also notable to see how developed and developing countries differ in their application of various theories reviewed. This section provides a link between theoretical underpinnings (monetary economics) and central bank practice (behaviour).

3.1 EMPIRICAL EVIDENCE ON TRANSMISSION MECHANISM

Various empirical evidence will be exposed under this section. Taylor (1995) has an excellent survey of the recent research on interest rate channels and he takes the position that there is strong empirical evidence for substantial interest rate effects on consumer and investment spending, making the interest-rate monetary transmission mechanism a strong one.

3.1.1 His position is a highly controversial one, because many researchers, for example Bernanke and Gertler (1995), have an alternative view that empirical studies have had great difficulty in identifying significant effects on interest rates through the cost of capital. Indeed, these researchers see the empirical failure of interest-rate monetary transmission mechanisms as having provided the stimulus for the search for other transmission mechanisms of monetary policy, especially the credit channel.

3.1.2 However, existing empirical works by Kashyap-Stein, (1994) based on macroeconomic models consistent with the credit view have hitherto failed to deliver robust results, owing to the so-called "causation puzzle": namely, inability to identify whether the observed positive correlation between bank loans and output is really due to *credit supply shifts* or whether it is instead due to *credit demand shifts* consistent with the traditional monetary transmission mechanism, or even to a passive role of endogenous monetary aggregates over the real business cycle (King-Plosser, 1984).

3.1.3 Pétursson T (2001), found out that The Central Bank of Iceland bases its monetary policy on setting its interest rate

in transactions with other financial institutions in the money market, in order to affect the behaviour of individuals and firms, thereby keeping aggregate demand in line with its growth potential and maintaining inflation expectations which are consistent with the Bank's 2½% inflation target.

3.1.4 The paper discusses the transmission mechanism and the lags from monetary policy decisions to its effect on the economy. The findings suggest that Central Bank of Iceland monetary policy changes are in general first transmitted to domestic demand after roughly half a year, with a peak effect after one year. Policy first affects inflation after a year, with a peak effect about 1½ years after the interest rate rise. In the long run, however, monetary policy has no effects on the real economy. Broadly speaking this is consistent with other countries' experience.

3.1.5 Carlo A. Favero, Francesco Giavazzi. Luca Flabbi (1999) have done empirical work on Europe. Available studies on asymmetries in the monetary transmission mechanism within Europe are invariably based on macro-economic evidence: such evidence is abundant but often contradictory. Their paper takes a different route by using micro-economic data. They used the information contained in the balance sheets of individual banks (available from the

Bank Scope database) to implement a case study on the response of banks in France, Germany, Italy and Spain to a monetary tightening.

3.1.6 The episode they studied occurred during 1992, when monetary conditions were tightened throughout Europe. Evidence on such tightening is provided by the uniform squeeze in liquidity, which affected all banks in our sample. They studied the first link in the transmission chain by analysing the response of bank loans to the monetary tightening. Their experiment provides evidence on the importance of the Europe and thus on one possibly important source of asymmetries in the monetary transmission mechanism.

3.1.7 They could not find evidence of a significant response of bank loans to the monetary tightening, which occurred during 1992, in any of the four European countries they have considered. However they find significant differences both across countries and across banks of different dimensions in the factors that allow them to shield the supply of loans from the squeeze in liquidity.

3.1.8 Ramlogan C (2004) has done a study on Caribbean countries. His paper presents an empirical analysis of the

monetary transmission mechanism in four Caribbean countries: Jamaica, Trinidad and Tobago, Barbados and Guyana. This research was timely since little was known about the transmission mechanism of monetary policy in developing countries in general and in the Caribbean in particular. In developing countries financial markets tend to be relatively unsophisticated hence monetary policy is likely to affect the real sector by altering the quantity and availability of credit rather than the price of credit.

3.1.9 The results showed that the credit and exchange rate channels are more important than the money channel in transmitting impulses from the financial sector to the real sector. The findings can assist policy makers in other developing countries in the design and implementation of monetary policy.

3.1.10 Spinelli F and Tirelli P (1991), traces the long historical evolution that Banca d'Italia has undergone concerning objectives and strategies of monetary policy in the post war period. During the 1950s the Bank aimed at providing sufficient monetary growth to accommodate economic growth in an environment of low rates of inflation. In the 1960s the Bank became Keynesian: its preference function gave substantial weight to output stabilisation. In the 1960s

the activist Bank followed an interest rate stabilisation strategy and for a period of three years a complete pegging.

3.1.11 The regime of fiscal dominance in the 1970s generated a new

intermediate target, total domestic credit creation. Thus in practice served to accommodate substantial monetary financing of government budget deficits. Finally, the more inflation conscious Bank of the 1980s returned to target the monetary base.

3.1.12 In conclusion the transmission mechanism has varied across

countries. In some countries money has been used as a nominal anchor for price stabilisation. Interest rate channels have also been used to target macroeconomic objectives.

3.2 EMPIRICAL EVIDENCE OF STABILIZATION POLICIES

3.2.1 Populism: empirical evidence

Examples of populist policies are Chile in the early 1970s and Peru in 1986-89 under the Alan Garcia administration.

3.2.2 Chile 1970-73

Initially result of this strategy was quite favourable. GDP and employment grew. The result was that the Chilean economy was overheated by the end of 1971 and inflation was simply kept repressed by price controls. As a response to these controls, a substantial underground economy emerged which reduced tax revenue for the government. The rate of inflation exceeded 200% in 1972 and the currency become seriously overvalued. Capital flight contributed to draining the stock of international reserves. By 1973 the fiscal deficit amounted to 25% of GDP, the informal economy was pervasive and foreign exchange reserves neared depletion. Inflation as a result soared and real economic activity declined.

3.2.3 Peru 1986-1990

As in Chile the initially result were favourable. As repressed inflation squeezed profit margins, subsidies made the difference putting pressure on the government budget. Losses in tax revenue were experienced. High fiscal deficit and increases in subsidized prices fuelled inflation, which reached 114% in 1987 and finally exploded in 1988. the overvaluation of exchange rate , together with the controlled interest rates, contributed to massive capital flight and international reserves were rapidly depleted.

Devaluation in early 1988 also contributed to inflation. By the end of 1988 inflation ran at an annual rate of 6 000%.

The conclusion from the above international experience shows that populism programs have not succeeded in bringing inflation rate down. Even the US government did apply price control from 1971 to 1973. And the US economy did go through a recession from Dec 1973 to Mar 1975. Here's what price controlling does. It causes shortages because equilibrium prices are what keeps supply and demand in check. So the common results from the populist approach: very high inflation and even hyperinflation.

3.2.4 Orthodox Money based programme: empirical evidence

It has been adopted in different countries such as Chile(1973), and Bolivia. However this paper will only review the Chilean experience. The results of fiscal contradiction were dramatic. Real GDP fell dramatically in 1975, while unemployment rate increased to almost 17% of the labour force from 4.5%. Inflation controls were not successful. The annual inflation increased almost to 500% in 1975 before starting to decrease but the short run response to inflation was sluggish. The key feature of the Chilean experience is that even sharp and seemingly credible fiscal correction did not succeed in bringing the

inflation rate down quickly and painlessly to international levels. However external correction was achieved.

3.2.5 Mankiw's text (Chap 18) cites Sargent's study of the European hyperinflation of 1923 as evidence that inflation is reduced by monetary restraint. In fact the major point of Sargent's article was that it was fiscal restraint--NOT monetary restraint that ended the European hyperinflations. In particular, inflation ends when a currency receives adequate backing. Unfortunately, quantity theorists are blind to the importance of the backing of money, and Mankiw is no exception.

3.2.6 Orthodox exchange rate based programme: empirical evidence

The case to be considered is Argentina (1978). The schedules of pre-announced exchange rate succeeded in dampening inflation, which decreased gradually from 175% in 1978 to a little over 100% in 1980. This occurred in spite of the very limited fiscal adjustment that took place in 1978 and 1979. However the speed of convergence of the inflation rate to the pre-announced rate of devaluation proved to be very slow and the resulting real exchange rate

appreciation and deterioration in the external accounts fuelled expectation of devaluation.

3.2.7 Heterodox programme: empirical evidence

Argentina (1985) experience will be considered. It was a response to the failure of the gradualist orthodox stabilization programme that the new government had attempted to implement during 1984. The effect on the inflation rate was immediate and sharp. Inflation rate declined. Immediately after the stabilization real interest rate were extremely high, with lending rate averaging over 90% per year in the last quarter of 1985. Monetary expansion remained fairly high, and although the Treasury did not borrow from the central bank, the bank financed both the servicing of external debt by some public enterprises and lending by public financial institutions to provincial government feeding a sustained rapid increase in money supply. In August 1986 the rate of inflation increased reaching 8.8%. Response was tight monetary policy from October 1986 to February 1987. In February a new wage price freeze was announced together with a pre-announced crawling peg for exchange rate. Although a transitory reduction in inflation was achieved vigorous inflation returned when controls were relaxed in January 1988.

3.2.7 Conclusion

Stabilisation programmes has varied across countries. The main departure point on this stabilisation was the use of nominal anchors. However important point is that stabilisation programmes can be successful in taming inflation rate down, but it depends on the prevailing economic condition in a certain countries.

3.3 EMPIRICAL EVIDENCE OF CENTRAL BANK INDEPENDENCE AND GOVERNANCE

Empirical studies for central bank autonomy are generally supportive but not compelling. Most studies compare an index of the central bank's de jure autonomy—sometimes also accountability—with inflation performance. The design of the index, the elements considered, their weights, and normalization procedures, all affect the results (Mangano, 1998).

3.3.1 Another type of study also tries to find such a correlation, but takes other factors into account as well. A third type of study identifies proxies for de facto autonomy and compares them to inflation performance. However, these proxies are often questionable. For instance, a low turnover rate of central bank governors may indeed be caused by strong autonomy, but it may also be caused by governors

willing to accommodate government instructions (de Haan and Kooi, 2000).

3.3.2 Finally, a few studies estimate whether inflation performance or changes of interest rates after amendments of the legislative framework are significant. While a correlation may be identified, verifying the causality remains a challenge. The question is whether sound economic policies lead to price stability and central bank autonomy, or whether central bank autonomy and accountability result in price stability and promote sound economic policies, or both.

3.3.3 Several studies have shown that the industrialized countries that accorded greater legal autonomy to their central banks also experienced lower average inflation during the period following the breakdown of the Bretton Woods system of fixed par values in the early 1970s (Berger, de Haan, and Eijfinger, 2000 and Grilli, Masciandaro, and Tabellini, 1991). Evidence from these countries further strengthened the case for central bank autonomy because the higher degree of autonomy did not appear to harm average real growth (Alesina and Summers, 1993), although a discussion of sacrifice ratios has later emerged (Cukierman, 2002).

3.3.4 In recent years, there has been a general commitment to combat inflation, and it has thus become increasingly difficult to identify a correlation between more autonomy and accountability on the one hand and lower inflation on the other. Daunfeldt and de Luna (2003), for instance, find that the decline in inflation often has happened before reforms of the legislative framework. Spiegel (1998), however, found that the announcement of the new legislative framework for the Bank of England in 1997 did coincide with a decline in the interest rate.

3.3.5 Cukierman, 1994 and 1992 has done studies that indicate that the correlation between legal autonomy and lower inflation in developing countries is less significant . This has been led to the use of other nominal anchors. If a pegged exchange rate is used as nominal anchor, it may temporarily alleviate inadequate autonomy (Anyadike-Danes, 1995). Furthermore, the size of the budget deficit and its financing tend to dominate the standard measures of central bank independence (Fry, 1998).

3.3.6 Schuler (1996) finds, based on a survey of 156 countries analyzing the period 1952–93 that central banks in developing countries have performed worse than central banks in developed countries. Gutiérrez (2003) applied an

index covering both autonomy and accountability to the constitutions of Latin American and Caribbean countries, taking several factors into account, and does find a significant relationship between a higher degree of autonomy and accountability in the constitution and better inflation performance. Jácome and Vázquez (forthcoming), find, after controlling for the exchange rate regime and fiscal deficits, a negative correlation between more legal central bank autonomy and better inflation performance in Latin American and Caribbean countries.

3.3.7 Lybek (1999, has done some studies in transitional economies and found the correlation between stronger central bank autonomy and better inflation performance in transition economies.

3.3.8 In a study done by Cukierman A, (1994), Bundesbank was ranked the second in terms of being as independent and last ranked is Poland. Also from his study the results were consistent with the view that Central Bank independence affects the rate of inflation in the expected direction but there are other factors as well. An important conclusion is that discrepancies between actual and legal independence are larger in developing than in developed countries.

4. THE CASE FOR ZIMBABWE

In the same manner Zimbabwe has in the past tried to follow theoretical underpinnings in formulating monetary policy. Role of money in economic activity has been viewed differently in different ways. Stabilisation efforts have also varied from populist, orthodox and heterodox measures depending on the situation prevailing at different times. Central Bank independence and governance has also evolved with passage of time.

4.1 ZIMBABWE CASE: TRANSMISSION MECHANISM

Monetary policy in Zimbabwe is geared at containing monetary and credit expansion at levels that ensure that economic activity takes place in a low inflationary environment. The objective of monetary policy is, thus, price stability, reflected in low and non-volatile rates of inflation.

4.1.1 The conduct of monetary policy in Zimbabwe has gone through two distinct phases since 1980, reflecting major shifts in broad macroeconomic policies. In the 1980s, the country inherited a structurally weak economy characterized by extensive controls and regulations in the

financial, productive and international trade sectors. Under this environment, monetary policy was relatively inactive.

4.1.2 The inception of economic reforms in the 1990s, however, saw the economy transform to a market-based system where free market forces had a significant role in promoting sustainable economic growth and employment generation. The shift from a highly regulated economy in the 1980s, to a market-based system in the 1990s, widened the scope for the conduct of monetary policy.

4.1.3 This saw the Reserve Bank of Zimbabwe adapting its operating procedures to the changing financial environment and monetary policy assumed a more active role. The major challenge to monetary policy in the 1990s and beyond has been stagflation – presenting monetary authorities with the staggering task of striking a balance between the need to arrest runaway inflation while at the same time avoiding exacerbating recessions.

4.1.4 Monetary policy framework in the 1980s

Economic conditions in the 1980s were characterized by extensive controls on domestic economic activity. These ranged from controls on prices, wages, interest rates and credit to controls on foreign exchange allocation. The

conduct of monetary policy under these conditions, where effective demand was administratively controlled, was, therefore, inactive and largely based on direct instruments.

4.1.5 Monetary policy focused on restraining credit creation to levels consistent with credit demand for productive activities in order to contain inflationary pressures and to promote agricultural development – the backbone of economic activity

4.1.6 Instruments of monetary policy in the 1980s

The main instruments of monetary policy were direct controls on both lending and deposit rates (interest rate caps), quantitative controls on credit (credit ceilings), use of Reserve Bank bills, prescribed liquid asset ratios, moral suasion and other monetary measures designed to discourage non-essential and deferrable consumption expenditures.

4.1.7 The use of interest rates, as an active instrument of monetary policy was quite limited, and this saw the same levels of interest rates being maintained throughout the 1980s. With the rate of inflation averaging 13% and interest rates averaging 9,8%, controls on interest rates led to negative real interest rates which discouraged savings mobilization and competition among financial institutions.

4.1.8 Challenges to monetary policy in the 1980s

High fiscal deficits, which absorbed disproportionately high levels of domestic savings, limited the contribution of monetary policy to economic growth and development. These arose from Government's need to redress past social imbalances through expanded social service investments.

4.1.9 Monetary policy framework in the 1990s

In the 1990s, a more active monetary policy was witnessed as most controls on domestic economic activity were removed under the overall economic reform and liberalization programme. Integral financial sector reforms saw the removal of controls on financial sector activity, and the emergence of new financial institutions and instruments. This facilitated competition, efficiency and depth in the financial sector, thus encouraging savings mobilization and broadening the availability of financial services.

4.1.10 The removal of direct controls on interest rates paved the way

for the emergence of a responsive money market – crucial for the efficient execution of monetary policy.

4.1.11 Consistent with the shift towards a market-oriented economy,

monetary policy implementation switched to indirect instruments of control. Open market operations and a flexible interest rate policy became the principal instruments through which the monetary authorities conducted monetary policy. Where market conditions require the use of a more longer-term instrument, these instruments have been supported by appropriate changes to reserve requirements.

4.1.12 Shift in monetary policy strategy towards monetary targeting

In the 1990s, the Reserve Bank of Zimbabwe's monetary policy strategy shifted significantly to one based on targeting the intermediate monetary aggregates. The adoption of this strategy was based on econometric evidence which revealed that monetary aggregates were closely linked to the ultimate objective of monetary policy – price stability. In a correlation test conducted using quarterly data from 1980-1999, monetary growth (M3) was shown to be positively and highly correlated to inflation.

4.1.13 Given that price stability is the ultimate objective of monetary

policy, monetary aggregates are thus a suitable intermediate policy target. Under monetary targeting, the day-to-day level of liquidity in the money market is carefully monitored and influenced by the Reserve Bank, consistent with the monetary growth target. This is largely to ensure that the amount of liquidity in the money market does not translate into excessive credit creation, which will in turn expand money supply and fuel inflation.

4.1.14 The money supply aggregate (M2), which excluded the deposits of building societies, finance houses and the POSB, was the main intermediate policy variable up to 1997. Thereafter, further financial liberalization and innovation, greater importance was placed on a broader measure of money supply (M3) which included deposits of other banking institutions.

4.1.15 The framework of monetary targeting

The departure from the regime of direct monetary and credit controls prevailing prior to 1991, saw the Reserve Bank adopt a monetary targeting framework to guide its policy decisions. The rationale for the Bank's action in this regard has always been that, if unchecked, excessive

monetary growth would impact on future inflation and, hence, on macroeconomic stability.

4.1.16 Intermediate monetary targets, consistently derived from the

potential real economic growth and desired level of inflation, guide the formulation of monetary policy measures. The Bank's monetary targeting framework is guided by the quantity theory of money. The theory provides a transparent framework in which to analyze the relationship between the growth in money supply (M) and inflation (P). By identity, the theory shows that the stock of the money supply (M) multiplied by the speed at which it moves around the economy, velocity (V), equals output measured at current prices (PY).

$$M\bar{V} = P\bar{Q},$$

4.1.17 This theory provides a quantitative relationship between money supply (M) and inflation (P). An increase in money supply is directly reflected in higher inflation, assuming velocity (v) is stable, and output (Y) is at full potential. In the long run, the higher inflation will result in lower output.

4.1.18 2007 monetary policy

Central Bank has recognised that experience over the past 3 years has amply demonstrated that singular application of traditional monetary policy tools, such as interest rates, in the absence of concerted, holistic, well sequenced policy packages will only serve to throw the productive sectors deeper into stagflation – low capacity utilization co-existing with high inflation. The new framework of the “Roadmap to Our Recovery” proposed in the Policy Statement outlined the need to use the month of February 2007, as the soul-searching period, marked by decisive collective implementation of measures that remove the devastating distortions which have hitherto stood in the way of all efforts to turnaround the economy, before we the bank can announce an interest rate framework that is consistent with an agreed program of holistic measures.

4.1.19 In a bid to fight the galloping inflation, the Bank target annual

broad money supply which will be reduced from the levels above 1 000% to between 415% and 500% and 60% by end of 2008. The Bank also recognized that in order to achieve the set monetary aggregates, the Reserve Bank will continue to closely manage money market liquidity conditions. Consistent with this, during the second half of 2006, the money market has largely been

kept in a short position, so as to buttress efforts to fight inflation.

4.1.20 So it can be seen that the bank is following the monetarist/classical case in trying to use money supply to reduce inflation and achieve broad macroeconomic objectives.

4.2 STABILIZATION POLICIES: ZIMBABWEAN CASE

Kovanen A(2004), in his paper a Zimbabwe: A Quest for a Nominal Anchor , examines the appropriateness of alternative intermediate monetary policy targets for Zimbabwe in light of the stability of the demand for money and the information content of financial variables for predicting price level movements. Results of the study indicate that a well-defined long-run demand relation exists for currency in circulation, but not for other monetary aggregates.

4.2.1 Currency in circulation has strong information content for predicting future price level movements. The information content of other financial variables, such as the exchange rate and interest rates, is weaker. Statistical relationships break down of the outset of high inflation.

4.2.2 Zimbabwe has experimented with exchange rate and monetary anchors in the past, but as we discussed earlier, these policies failed to provide guidance for price expectations. This is for the most part because these policies have lacked credibility and were not supported by other macroeconomic policies, in particular fiscal policy. Studies by Jenkins (1999) and Nyawata (2001) report a well-identified relationship between monetary variables and the price level. However, empirical evidence to support an exchange rate anchor is more elusive.

4.2.3 Their study has analysed the underlying determinants of prices in Zimbabwe using a wide range of statistical techniques. The results are robust to alternative specifications. The key results for the full sample are as follows.

4.2.4 First, there is a strong linkage between currency in circulation and the price level. This suggests that currency in circulation would provide a good leading indicator of future price movements.

4.2.5 Second, cointegration analysis establishes a well-identified long-run money-demand relation for currency in circulation, suggesting that this monetary aggregate could be helpful to

the Reserve Bank of Zimbabwe as an intermediate monetary operating target.

4.2.6 Third, reserve money, which the Reserve Bank of Zimbabwe has used as an intermediate policy target, is ineffective in the current high inflation environment, because the demand for reserve money is not well defined, while its information content for predicting future price movements is weak.

4.2.7 Fourth, well-defined money-demand functions for narrow and broad money cannot be established in the full sample. Sixth, statistical relations seem to break down during the high-inflation period of the past few years. This raises serious challenges for monetary policy implementation, particularly regarding the appropriate anchor to facilitate disinflation in the Zimbabwean economy.

4.2.8 It has been argued that the exchange rate could serve as a nominal anchor in Zimbabwe. As experience has shown, however, pegging the exchange rate has not succeeded in constraining other—namely, monetary and fiscal policies—I therefore believe it has not been a credible policy anchor. This may in part explain its low information content for predicting future price movements.

4.2.9 The study's analysis suggests that exchange rate changes have an impact on domestic prices through the currency-substitution channel and influence the demand for currency indirectly through the interest rate channel. The pass-through effect to domestic prices is only partial, which does not mean that exchange rate changes are insignificant. The Reserve Bank of Zimbabwe would be well advised, therefore, to counter inflationary effects arising from exchange rate changes with an appropriately tight monetary policy. In general Central Bank once followed a populist programmes like nature, but it failed.

4.3 CENTRAL BANK INDEPENDENCE: ZIMBABWE CASE

The Central Bank is governed by an RBZ Act (Chapter 22:15) which prescribes a clear set of objectives, functions, accountability structures and arrangements for monitoring performance and financial reporting and auditing and other matters incidental or connected thereto. However it should do so in consultation with the Ministry of Finance.

4.3.1 The RBZ claims that it is independent in setting its target as it adopts its own internal practice in governance. The RBZ

has in place internal governance structures and process that allow the Bank to operate in a transparent, efficient and effective manner, not only in respect to the functions outlined in the RBZ Act but also in respect to the Banks' stewardship of the resources entrusted to it.

4.3.2 The RBZ like any other central bank world-wide plays a vital role in advancing government's economic policies and implementing measures that are aimed at strengthening the domestic economy. It is also among government agencies that are responsible for implementing international measures aimed at consolidating global financial association.

4.3.3 Mujutywa Melania's (2007), study Further, the study analyses the institutional set-up of the Reserve Bank of Zimbabwe (RBZ) to determine its independence in monetary policy implementation. Results show that political interests have been driving the monetary policy and this has undermined the credibility of the central bank. The study concludes that, even if independence is not the complete answer, it is at least suggestive that a more autonomous central bank would be effective even though it is neither necessary nor sufficient by itself for achieving and maintaining low inflation.

5. IMPLICATIONS ON POLICY

5.1 TRANSMISSION MECHANISM POLICY IMPLICATIONS

Important lessons that can be drawn here is that a country should actually learn from past monetary policy in implementing new decision. What has been seen in Zimbabwe is a shift from one transmission mechanism to the other. The general lesson is for the monetary policy to be used to reduce inflation. However of importance is to empirical determine the influence of interest rate, exchange on macroeconomic behaviour.

5.1.1 Another challenge confronting Zimbabwe's monetary authorities is the current trend of changing channels and the emergence of new ones in the transmission mechanism of monetary policy. In a rapidly changing environment, it is indeed very difficult to identify with precision the channels through which monetary policy affects the economy. The remarkable development of the financial system in recent years has provided the business community with a much wider array of financing alternatives.

5.1.2 Businesses are now able to avail themselves of a great diversity of products offered by finance companies and

other non-bank financial institutions, which have experienced very rapid growth in recent years. In response to the new developments, Central Bank should follow a rather pragmatic (eclectic) approach. In the transition to a new mechanism of monetary control, a pragmatic approach is important.

5.2 STABILIZATION IMPLICATIONS

The following lessons can be learned from the experience of inflation stabilization in developing countries. These are policy implications that can be drawn.

5.2.1 Firstly fiscal adjustment is necessary. In the absence of a permanent fiscal adjustment inflation does not stay permanently low. This conclusion is shown clearly from populist experiences of Chile and Peru, from the experience of Argentina under a variety of approaches to stabilization, including both the exchange rate – based orthodox programs and heterodox programs reviewed.

5.2.2 This clearly point out that setting price-based nominal anchors such as exchange rate freezes and wage and price controls is not sufficient for inflation stabilization. Experience with populism sends this message clearly. Heterodox elements (an exchange rate freeze accompanied by income policies) can be useful supplements to a credible fiscal program in stabilizing inflation, but they are dangerous to use.

5.2.3 With sufficient commitment to a permanent fiscal adjustment, a suspension of indexation and the adoption of income p[policies can help establish low inflation rapidly while avoiding the short run damage to economic activity associated with orthodox adjustment under these circumstances as demonstrated by both Israel and Mexico.

5.2.4 The danger is that the programs short run success will tempt policymakers to slide into populism by relaxing fiscal discipline while relying on wage and price controls for inflation abatement as in Argentina and Brazil's heterodox programs. This path will quickly run into domestic capacity and foreign financing constraints and is likely to leave the country in worse conditions than before the attempted stabilization.

5.3 CENTRAL BANK INDEPENDENCE POLICY IMPLICATIONS

To fulfil the objective of stabilization policies what has been called upon in the international arena is central bank independence. Economic policies are only effective if accompanied by credible and genuine commitment of the authorities.

5.3.1 In the past, the credibility of monetary policy has been undermined by the lack of support from fiscal policy, as well as the lack of consistency in policy implementation. Strengthening the Reserve Bank of Zimbabwe's independence and clarifying its policy objectives should assist in enhancing its credibility.

5.3.2 The Reserve Bank of Zimbabwe Act Chap 22:15 is the relevant legislation for the conduct of monetary policy. It is an adequate piece of legislation that needs no significant changes. However, the following are suggested amendments that could enhance the RBZs effectiveness in the implementation of monetary policy. Amendments to give the RBZ greater operational independence from the Ministry of Finance.

5.3.3 The current legislation requires the RBZ to make most of its decisions in consultation with the Minister of Finance. This is appropriate on issues relating to the articulation of policy objectives and targets. This is called goal dependence. It ensures that monetary policy is pursued in a manner that helps achieve governments overall objectives. It also ensures consistency and coordination between fiscal and monetary policy objectives and targets.

5.3.4 For this reason, few, if any, Central Banks strive for goal independence. Elected governments are susceptible to political pressures that often lead them to adopt measures that are contrary to their stated objectives. Because they are un-elected, central banks are less susceptible to such pressures. Therefore, giving them greater operational independence would insulate them from such pressures and make implementation of monetary policy more effective.

5.3.5 Thus, once government has set the objectives and targets for monetary policy, the central bank should be left to design instruments with which to pursue the objectives without much interference (or directives) from the Ministry of Finance. With these developments the central Bank can adequately address the problem of inflation in Zimbabwe. Thus, the Reserve Bank of Zimbabwe Act should be

amended to remove the phrase in consultation with the Minister of Finance where it relates to implementation and or operational issues.

6. CONCLUSION

This paper has tried to show how monetary economics has impacted on the central bank activities. The area of focus is on the transmission mechanism of monetary policy, stabilisation programmes and central bank independence and governance. The importance of the study is on giving insight on how these issues has been used in the international arena. More important is a reflection on the Zimbabwean experience and policy conclusions that can be drawn from these international and Zimbabwean experiences. It is clear from the study that Central Bank independence and governance provide a basis for credibility for central Bank activities and hence help in both the transmission mechanism and stabilisation programmes to achieve the needed results.

BIBLIOGRAPHY

Agenor P and Montiel P.J (1996), *Development Macroeconomics*; Princeton University Press, New Jersey.

Berger, H., S.C.W. Eijffinger, and J. de Haan, 2001, 'Central Bank Independence: An Update of Theory and Evidence', *Journal of Economic Surveys*, Vol. 15, 3-40.

Berger H, V Nitsch and T. Lybek, (2006), *Central Bank Boards around the World: Why does membership size differ*, IMF Working Paper

Burdenkin R and Langdana F, (1995), *Confidence, Credibility and Macroeconomic policy; past, present and future*, Routledge, London

Cukierman A, (1994), *Central Bank strategy, credibility and independence: theory and evidence*, The MIT Press, Massachusetts, England

Cukierman, A., S.B. Webb and B. Neyapti, 1992, 'Measuring the independence of central banks and its effects on policy outcomes', *The World Bank Economic Review*, Vol. 6, 353-398.

Fry M.J (1995), Money, Interest, and Banking in Economic Development; John Hopkins University Press, London.

Lybek T, Central Bank Autonomy, Accountability and Governance: Conceptual Framework, IMF

Mumbengegwi C, (2002) Macroeconomic and Structural Adjustment policies in Zimbabwe, Pelgrave Publishers, New York

Mumbengegwi C, (1998), Conference on Macroeconomic Policy, Management and Performance in Zimbabwe since independence: Lessons for the 21st Century, Department of Economics, University of Zimbabwe and Professional Development and Training Programme Economics Project (Government of Zimbabwe

Fratianni M and Salvatore D, (1993), Monetary Policy in Developed Economies; Studies in comparative Economic policies, Volume 3, North- Holland, New York

Fraser B. W, (2004), Central Bank independence: What does it mean?, Reserve Bank of Australia Bulletin

Mabika S.E, (2001), Monetary policy framework in Zimbabwe

Petursson T. G, (2001), The transmission mechanism of monetary policy, Monetary Bulletin

Olafsson T, (2006), Developments in Monetary economics and central bank practice, Central Bank of Iceland Working papers number 31.

Reserve Bank Monetary policy Statements, 2003, 2004, 2005, 2006

Rogoff K, (1985), The optimal commitment to an intermediate monetary target, Quarterly Journal of Economics 100

Spinelli F and Tirelli P (1991)Storia Monetaria d'Italia, Milan, Mandadori

Kovanen A, (2004), Zimbabwe: A Quest for a Nominal Anchor, IMF Working Paper