"Challenges of Monetary policy for Namibia within the Common Monetary Area (CMA) Arrangemen





Bank of Namibia

Bankers
Conference

SAFARI COURT & CONFERENCE CENTRE, WINDHOEK, NAMIBIA, 6 OCTOBER 20

TABLE OF CONTENTS

1.	Preface and overview
2.	OPTIMAL FINANCIAL STRUCTURE FOR NAMIBIA4
3.	THE ROLE OF FINANCIAL DEVELOPMENT IN ECONOMIC GROWTH
4.	A REVIEW OF THE NAMIBIAN FINANCIAL STRUCTURE
5.	IMPERATIVES OF GROWTH AND DEVELOPMENT: THE EMERGING FINANCIAL GAPS
6.	TOWARDS AN OPTIMAL FINANCIAL STRUCTURE: IS THERE A NEED FOR A PARADIGM SHIFT71
7.	CONCLUSION AND ISSUES EMANATING FROM CONFERENCE

1. Preface and Overview

1.1 Preface

On October 6, 2000, the Bankers Conference was held in Windhoek to deliberate on the Challenges of Monetary Policy for Namibia within the Context of the Common Monetary Area (CMA) Arrangement . The objective of the conference was to exchange views on monetary policy options available to small open economies in general and Namibia in particular taking into account the CMA arrangement. The conference was the second of a series that started in 1999 aimed at providing a forum for the exchanging of views on economic policy in general and monetary policy in particular. It is the stated aim of the Bank of Namibia to organise this type of conferences on annual basis.

Three imminent speakers were invited to address the conference. These were Dr. K. Jefferis, Deputy Governor of the Bank of Botswana, Mr. Steven Xu from Hong Kong, and Mr. Brian Kahn from the South African Reserve Bank. Their papers are published herein.

The discussion centred around three main issues. The first dealt with the role of monetary policy in macroeconomic management with special reference to objectives, goals and instruments. Particular reference was placed on the experience of Botswana. The second issue looked at some strategies and issues in monetary policy with special reference to the experience of Hong Kong. The last issue discussed was the monetary policy within the CMA Arrangement.

1.2 Overview and Reflections

In his opening address, *Mr. T. Alweendo, Governor of the Bank of Namibia* highlighted immense challenges for monetary policy in small open economies. In the case of Namibia, these challenges include the limited scope for a discretionary monetary policy owing to the CMA membership. However, Governor Alweendo reiterated his standpoint that it was in Namibia s long term interest to remain in the CMA. He singled out a number of benefits, such as providing price stability, constraining monetary expansion, restraining excessive government spending and sending out credible signals about prospects for inflation. On regional integration issues, Mr. Alweendo argued that Namibia and the other smaller CMA countries would benefit greatly through enhanced closer co-ordination of monetary and economic policies. CMA would thus be better placed to serve as a springboard for monetary integration at the SADC level.

In his presentation, *Mr. K.R. Jefferis, Deputy Governor of the Bank of Botswana*, provided an overview of the general evolution of monetary policy in recent years, focusing on objectives, targets and instruments. It has now become widely accepted that the overriding objective of monetary policy should be low inflation or price stability. The prioritisation of the price stability objective has been accompanied by moves to strengthen central bank independence in the implementation of monetary policy. However, there remains considerable variation as to the choice of operational or intermediate targets that guide the implementation of monetary policy. He argued that the choice of an appropriate intermediate target depends on many factors, including the type of economic relationships and institutions that exist in a country, size and openness of an economy, the quality of information and knowledge about the monetary transmission mechanism, as well as prevailing economic thinking.

On the conduct of monetary policy in Botswana, Mr. Jefferis noted that since the country left the Rand Monetary Area in 1976, it has pursued an independent monetary policy whose main objectives is to achieve low inflation and a stable and competitive real exchange rate. Essentially this policy consists of a mixture of exchange rate and monetary targets. Such policy has to a large extent been successful in achieving a lower rate of inflation from 16.1 per cent in 1992 to 6.5 per cent in 1997. However, inflation has been rising since 1997 due to increased government expenditure, which points to the need for co-ordination between fiscal and monetary policy.

In his paper, *Mr. Steven Xu* focused on the strategies and issues in monetary policy from the Hong Kong experience. Mr. Xu noted that Hong Kong has tied its dollar more closely to the US currency, which in effect amounts to a partially dollarisation. This was done not only to ensure financial stability and investors confidence, but most importantly to limit and control speculation and attacks on the Hong Kong Dollar, which has been prevalent in the past. The other reason was the hand-over of Hong Kong to China, which brought about the question of credibility of Hong Kong as a financial Centre and the ability of the monetary authority to pursue an independent monetary stance.

The last presentation focused on the monetary policy within the CMA arrangement. *Brian Kahn of the South African Reserve Bank*, observed that the scope for discretionary monetary policy for Namibia, Lesotho and Swaziland (LNS) has been severely constrained by the nature of the CMA Agreement. This is so despite the fact that there has been a slight shift from pure currency boards to the present situation where LNS have introduced their own national currencies. Mr. Kahn also noted recent changes in South Africa s monetary policy, mostly the introduction of inflation targeting. This has made the primary objective of monetary policy in South Africa explicit and has implications on the LNS countries. This also means that the LNS countries would have to adjust to shocks that are specific to South Africa and those that apply to some or all of the LNS countries may not be factored into policy.

The above concern raises what is probably a central issue for the LNS — the issue of consultation. The existing agreement does not oblige South Africa to include its CMA partners in the monetary policy decision making process. Mr. Khan, however, noted that there were new developments for informal consultation, and these may further provide more focused policy input from the CMA perspective.

2. THE CHALLENGES OF MONETARY POLICY FOR NAMIBIA WITHIN THE COMMON MONETARY ARRANGEMENT

OPENING ADDRESS

Mr. Tom K. Alweendo Governor, Bank of Namibia

Board Members of the Bank of Namibia, Deputy Governors, Distinguished Guests, Ladies and Gentlemen, I would like to welcome you all to the *2nd Bankers Conference* organised by the Bank of Namibia. This event is an annual event and I thank you therefore for coming here, especially the speakers and distinguished visitors.

The theme under discussion today is not new to us although it might represent a new dimension from the visitor's afar. As most of us know, the Common Monetary Area (CMA) comprised of a monetary union of South Africa, Namibia, Lesotho and Swaziland (the NSL countries). The CMA, formerly known as the Rand Monetary Area (RMA) has been in existence since 1974 and is governed by the Multilateral Monetary Agreement of 1974 as amended in 1986. The NLS countries also have separate bilateral monetary agreements with South Africa.

Under the present arrangement, the NLS countries operate a fixed peg regime against the South African rand and there are no restrictions on capital flows. The arrangement has worked well, as reflected in the relatively low inflation rate and business confidence arising from fixed exchange rate. But few problems still remain that need further discussion among the member countries. These problems mainly represent challenges that a small economy such as Namibia needs to confront and solve within the CMA arrangement.

One important challenge that Namibia faces in terms of being in the CMA is the suitability and stability level of the exchange rate that should support economic growth in the country. Suffice to say that the monetary policy stance of Namibia is the pursuance of price stability with growth. And therefore in order to maintain that price stability, it is of utmost importance that the exchange rate remains at an appropriate level to support price stability with ensured growth.

During the five years after independence, Namibia has enjoyed dynamic economic growth rate of close to 5 percent. This growth was led by strong impetus in offshore diamond mining, fishing and tourism. During this time, inflation enjoyed double-digit figures of 12 per cent on average with a stable exchange rate. Therefore, sound macro-economic stability in South Africa with a stable inflation and exchange rates allowed Namibia to enter into a monetary arrangement best suited for its economic realities on the ground. However, growth started to slide down in the second half of the decade, with real GDP growth only averaging around 2 per cent between 1995 and 1999. This slow down in economic activities was largely brought about by a restrictive fishing policy to allow the recovery in stocks, persistent drought, weak commodity demand and high interest rates; the latter two resulting from the South East Asian economic crises. During this time, the exchange rate remained variable and depreciated by over 20 per cent against the US Dollar. Inflation, however remained to decline significantly from the double-digit figures to around 5 per cent in 1998/99. The question that comes to mind is, giving the monetary arrangement Namibia is having within the CMA, would the effect been any different if it was not in the CMA.

My best answer would be no. Namibia as a small open economy, susceptible to external shocks and no sufficient foreign exchange reserves to back an independent currency, would have been affected worse by the crisis if it were not under the CMA arrangement. Hence under the current circumstances, the challenge for Namibia would be more profound if it is within the present monetary arrangement. Here I would like to re-iterate my standpoint that it would be in the long run interest for Namibia to remain in the CMA. The reasons are still relevant today as I have been articulating in the past. Namibia does still derive benefits from the CMA, which out-weight the costs.

As alluded earlier on, one of the greatest benefits of the CMA arrangement is that it provides price stability in the domestic economy. The arrangement also constrains monetary expansion, restrains excessive government spending, and sends out credible signals to private agents about prospects for inflation. The measured inflation rate between the CMA economies is in most cases co-integrated, although they sometimes diverge because of the prices of the non-tradables in the respective CMA economies. The current CMA arrangement has given Namibia a major advantage in that it helps to avoid exchange rate fluctuations and reduces the unfavourable effects of exchange rate uncertainty on trade and investment. As South Africa is Namibia's main trading partner, a major benefit of the CMA membership for Namibia is the elimination of uncertainty associated with exchange rate variability. Since Namibia is a net importer of goods and services from South Africa, the benefits derived from the CMA membership may in this respect be large.

Against these benefits of the CMA arrangement, we have also to consider some costs or limitations. The loss of autonomy of monetary policy is the most important, and the stability of the South African Rand as a reserve currency has at times been questioned. Namibia has also experienced a persistent net capital outflow, and we have asked ourselves if the stability we have achieved to some extent has been at the expense of development. The conclusion remains, however, that the present arrangement has served Namibia well.

There are issues that I believe this conference could also look in addition to the monetary issues and its implications on growth. Does the present monetary arrangement pose positive challenge in capacity building as far as developments in inter-bank and secondary markets are concerned? Is the present arrangement conducive for achieving co-operation and consultation on a mutual and understandable basis between the CMA economies to achieve a set of agreed upon objectives of steering the monetary arrangement in a direction beneficial for us all? The benefits from the CMA arrangement for Namibia and the other smaller countries could also be increased by extended consultation and exchange of views about future policies that affect the members countries individually and as a group. The recently formed CMA Governors consultative forum is a step in the right direction as its purpose is to look at the CMA monetary arrangement from a more practical and operational point of view.

Dear participants

Another challenge that Namibia, and indeed Lesotho and Swaziland need to be aware of is the future conduct of monetary policy in South Africa that should be naturally of special interest to us. Monetary policy in the CMA area will in future be focused on price stability as South Africa recently has formally adopted an inflation targeting system. The effects for Namibia of this change should not be too noticeable. One important reason given by the South African authorities for the change is that an explicit inflation-targeting framework will be more transparent than the previous framework. To the extent the inflation targeting system and the

monetary policy decision-making process is perceived by market participants to be more transparent, this will be a positive development for the other CMA countries and for Namibia. This should reduce unwarranted market reactions, which at times result in disruptive movements in exchange rates and interest rates, with negative consequences for trade and other economic activities.

Perhaps the most important challenge that the CMA monetary arrangement has to face is how it sees itself in the future, taking into account the global trends towards forming regional monetary blocks. As you are aware, the experience of the European Union provides some interesting lessons in regional monetary integration and I believe these are invaluable lessons for the CMA as we seek greater monetary co-operation in our region. As I have mentioned in the first Annual Governor's Speech last year, Namibia and the other smaller CMA countries would benefit from an evolution of the CMA toward a full monetary union. This would require a closer co-ordination of monetary and economic policies than is the case today. If this should materialise, I also believe that the CMA will be better placed to serve as a springboard for a strengthened and enlarged monetary and economic union at the SADC level. The direction in our policies must then be to move toward establishing a single market in the region for capital, labour and goods.

In practical terms, this implies that the present efforts to liberalise exchange controls have to continue. Likewise, the rigidities in our labour market policies have to be addressed, and the openness in our economies with regard to trade and commerce has to increase. This process can be gradual, as the group of countries that comprise the CMA could be extended to include more countries in the SADC region with similar economic structures and development priorities. In the end, the achievement of monetary union will require that countries in the region commit themselves to confront the process of solving conflicting national interests in a fair and democratic manner.

I am fully aware that the realisation of this objective can only be achieved in a long-term perspective. It would require that the present CMA arrangement should be managed in a way that promotes stability and development in all member countries. More importantly, it would depend on the willingness of South Africa to give up some of its monetary policy autonomy and to accept a framework based on regional, rather than domestic, economic development objectives.

Finally, I look forward to a day when the Southern African region is characterised by a meaningful and coherent monetary block, able to compete successfully with other regional monetary blocks globally. It is therefore my distinct honour to declare the *2nd Annual Bankers Conference* open. I wish you all fruitful discussions on the topic concerned, and urge you all to come up with innovative ideas that would be useful not only for the CMA economies, but also indeed for the whole of Southern African region.

I thank you

3. THE ROLE OF MONETARY POLICY IN MACROECONOMIC MANAGEMENT WITH SPECIAL REFERENCE TO OBJECTIVES, GOALS AND INSTRUMENTS

K R Jefferis

PART I

3.1. Introduction

Monetary policy is one of the main components of macroeconomic management that is available to governments and central banks. Over time, however, there has been considerable evolution in thinking and practice as to the appropriate role of monetary policy in macroeconomic management and how it should best be implemented. This applies to both the desired objectives of monetary policy (real activity as opposed to price objectives), the chosen targets of monetary policy (exchange rate targets, monetary aggregate targets, and inflation targets), and instruments (from direct to indirect controls, interest rates versus monetary base control etc.)². There are also inevitable differences in the conduct of monetary policy between industrialised, transition and developing countries, given the differing degrees of sophistication and development of their financial sectors.

The aim of this paper is twofold. First, to describe the general evolution of monetary policy in recent years, focusing on the changing objectives, targets and instruments used in the conduct of monetary policy, with reference to both industrialised and developing countries. Second, to provide an overview of the conduct of monetary policy in Botswana, a small open economy that shares some general features of such economies but which also has some specific characteristics that impact on monetary policy.

3.2. The Monetary Policy Framework: Objectives, Targets and Instruments

(a) Objectives

It is now fairly widely accepted that the overriding objective of monetary policy should be the maintenance of low inflation or price stability. In this sense monetary policy is one element of the overall range of macroeconomic policies employed by governments, but its specific focus is increasingly on the price stability element of overall macroeconomic stability. Historically, monetary policy has at times had a broader focus, and has been used to pursue explicit objectives with regard to economic growth or employment creation, for instance by loosening monetary policy to stimulate economic growth and achieve lower unemployment, even if at the cost of higher inflation. However, it is now recognised that the perceived inflation-unemployment trade-off on which this approach was based was illusory, and that in the long run, it is not possible to achieve lower unemployment or higher growth by accepting higher inflation.

The changed views towards the Phillips Curve relationship have been accompanied by revised views

¹ The author is Deputy Governor of the Bank of Botswana. This paper expresses the author s personal views only and should not be taken as representative of any official position of the Bank of Botswana. Comments on the paper are welcome. *Email: KEITHJ@BOB.BW*.

² For an overview of the evolution of the conduct of monetary policy in the UK and other industrialised economies, see Goodhart, 1995, chapters 5 and 6.

about the harm that can be done by inflation. There are strong (but not unanimous views) that price stability is a desirable objective³. The following view from the Bank of England is characteristic of this thinking:

With a stable general price level, individual price signals can be read more clearly, and more rational decisions taken about whether to save or borrow, how much to invest and to consume, and what and when to produce. In this way, price stability can help to foster sustainable long-term economic growth (Bank of England 1999a:1).

At the same time there is widespread agreement that high inflation is harmful to long-term economic growth. Inflation tends to introduce uncertainty, which hinders economic decision-making. Furthermore, inflation levels and inflation volatility tend to be positively correlated — countries with higher inflation rates tend to also experience greater variability in inflation — thus exacerbating the uncertainty problem.

The legislative framework surrounding the choice of monetary policy objectives varies considerably. In the USA, the Federal Reserve Act specifies that in conducting monetary policy, the Fed should seek to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates (Federal Reserve, 1994). Thus price stability is only one of a number of objectives. This contrasts with many other countries, where price stability is given a more prominent position. In Australia, the framework for monetary policy is set out in the Reserve Bank Act 1959, which requires monetary policy to be conducted in a way that will best contribute to the objectives of:

- (a) the stability of the currency of Australia;
- (b) the maintenance of full employment in Australia; and
- (c) the economic prosperity and welfare of the people of Australia.

The first objective is interpreted as allowing the Reserve Bank to focus on price stability, while taking account of the implications of monetary policy for activity and, therefore, employment in the short term (Reserve Bank of Australia 1996).

With the renewed emphasis on price stability⁴ as the objective of monetary policy, more recent legislation has tended to give clearer prioritisation to this objective. For instance, the Reserve Bank of New Zealand Act 1989 requires the Reserve Bank to independently manage monetary policy to maintain overall price stability (Reserve Bank of New Zealand 2000). More recently, the new Bank of England Act 1998 specifies that the monetary policy objective of the Bank is to maintain price stability and, subject to that objective, to support the Government's economic policy, including its objectives for growth and employment (Bank of England, 1999a:1). The founding statute of the European Central Bank (ECB) also specifies that its primary objective is to maintain price stability.

Recent trends to give legal backing to the prioritisation of the price stability objective in the conduct of monetary policy by central banks have often been accompanied by moves to strengthen central bank independence in the implementation of monetary policy — as demonstrated in the Bank of England Act

³ Because of various biases in the CPI, price stability is typically accepted as being compatible with a small positive rate of CPI inflation, around 1-2 per cent. Alternatively, price stability is achieved when changes in the general price level do not materially affect the economic decision-making process (SARB, 2000).

⁴ The term renewed is appropriate because in the early part of the twentieth century price stability was the main focus of monetary policy — and perhaps of overall macroeconomic policy — especially for countries adhering to the gold standard. It was only in the second half of the century that monetary policy became more activist in terms of targeting real economic activity.

1998 which gave the Bank independence in the setting of interest rates. However, it is important to realise that central bank independence refers to the implementation of monetary policy; governments often retain control of the defining of price stability. In countries that have adopted inflation targeting as their monetary policy framework, this can mean the choice of the inflation target to be reached, leaving the central bank with the operational independence to achieve that target.

While the above refers to the larger developed economies, similar trends have been evident in many developing and transition economies, with the objective of price stability (or at least of reducing inflation) formally identified as the foremost monetary policy objective in countries such as South Africa, Chile, Brazil, the Czech Republic and many others. This is not to say that price stability is the universal objective of monetary policy, however. In some countries monetary policy still remains dominated by the need to accommodate large fiscal deficits (such as Zimbabwe), whilst in those countries that are undergoing stabilisation programmes, monetary policy is part of a package of measures focusing on the broader task of macroeconomic stabilisation (which may include fiscal and balance of payments stabilisation as well as reducing inflation).

(b) Targets

While there is increasingly widespread agreement on the ultimate objectives of monetary policy, there remains considerable variation as to the choice of operational or intermediate targets that guide the implementation of that policy. Potential intermediate targets include various monetary aggregates, exchange rates, interest rates, the yield curve, or the inflation rate itself. The choice of an appropriate intermediate target depends on many factors, including the type of economic relationships and institutions that exist in a country, size and openness of an economy, the quality of information and knowledge regarding the monetary transmission mechanism, as well as prevailing economic thinking.

In the Bretton Woods era of fixed exchange rates between major currencies, from 1944 to 1971, monetary policy focused on maintaining the exchange rate at the fixed (target) level, supported by other policies such as capital controls. Since 1971, when major currencies have been floating, other targets have been adopted, although even floating exchange rates may be characterised by informal targeting. For much of the 1980s, major developed economies focused on broad monetary aggregates as targets of monetary policy. In the UK, for instance, the Medium Term Financial Strategy published in 1980 set out broad money targets for several years into the future, and a similar approach was adopted in other major western economies. In the USA the Humphrey-Hawkins Act required the Fed to publicly announce its targets for money and credit growth each year.

By the mid-1980s, however, concern was growing that such targeting was not working. It was predicated on a stable relationship between targets and objectives — between the growth of money and credit on the one hand and the price level and inflation rate on the other. Many countries had undertaken major financial reforms in the 1970s and early 1980s, including a movement away from direct controls (particularly on bank lending and interest rates) towards a more market-related monetary environment, and a relaxation of controls on capital movements. This process of financial liberalisation had altered the relationship between monetary aggregates, prices and GDP, and some historical patterns were no longer valid. In particular, the velocity of money and credit — essential for a stable demand for money function and hence the relationship between monetary aggregates and real output began to change unpredictably, making the relationship between the various measures of money

supply and the ultimate inflation objective unreliable⁵. By the end of the 1980s explicit monetary targeting had largely been abandoned by most of the major developed countries, although it remained in use for indicative purposes. Most western European economies returned to exchange rate targeting, as part of the process of moving towards monetary union, through the discipline imposed by the EU Exchange Rate Mechanism (ERM). In the USA, the Fed had concluded that none of the potential intermediate targets had shown a consistently close enough relationship to the ultimate goals of monetary policy that it could be relied upon single-mindedly. Instead it has tended to rely upon a broad range of indicators (exchange rates, monetary aggregates, interest rates, the slope of the yield curve), along with other information about the actual performance of output and prices, to judge trends in the economy and to assess the stance of monetary policy (Federal Reserve, 1994). In Europe, the ECB also takes a somewhat eclectic approach, albeit with a monetary aggregate focus. The ECB'S two pillars of used to achieve the monetary policy objective of price stability are:

- 1) a prominent role for money, as signalled by the announcement of a quantitative reference value of the growth rate of a broad monetary aggregate; and
- 2) a broadly based assessment of the outlook for price developments and risks to price stability in the euro area as a whole 6.

Monetary vs. Exchange Rate Targets

One of the main decisions that has to be made with respect to the intermediate targets of monetary policy is whether to focus on monetary targets or an exchange rate target. Since the ending of the Bretton Woods system of fixed exchange rates, as noted above, major economies have tended not to target exchange rates on an ongoing basis, although at times intervention has been used to bring about desirable moves in exchange rates. Perhaps the most sustained period of exchange rate targeting in recent times was in Europe when major currencies were tied to each other in the run-up to Economic and Monetary Union (EMU). This was not always successful, of course, as Britain found when sterling was ejected from its unsustainable membership of the ERM in 1992. Since the establishment of the euro on January 1, 1999, the world s three major currencies — the US dollar, the euro and the yen — have of course floated against each other.

The above discussion has mostly been in the context of relatively advanced, developed economies. Policy debates in developing countries, particularly small developing countries, have at times been quite different. While there has also been a need to reduce inflation in many developing countries, it has often been suggested that this can be more effectively achieved by focusing on an exchange rate target rather than monetary targets. Especially for high inflation countries with relatively open economies, the use of a fixed or crawling peg exchange rate can provide a nominal anchor for prices, forcing domestic inflation to converge on international inflation rates. This technique has often been quite successful at bringing high (or hyper) inflation rates down quite quickly, albeit (sometimes) at severe cost in terms of economic recession, at least in the short term. It has been useful as a

⁵ Some of the most extreme examples of the breakdown of previously regular money stock-nominal income relationships occurred in the cases of those aggregates which had been chosen as the intermediate monetary target, an illustration of Goodhart's Law, that any observed statistical regularity will tend to collapse once pressure is placed on it for control purposes (Goodhart 1989: 99-100).

⁶ The monetary policy strategy and the operational framework of the Eurosystem (http://www.ecb.int/about/monetarypolicy.htm)

transitionary policy where a sharp break has been required from earlier policies, particularly where a floating exchange rate had previously helped to accommodate excessive monetary expansion. More generally, there is evidence that countries with pegged exchange rates have generally benefited from lower inflation than those with flexible exchange rates (Ghosh et al, 1997).

While this particular scenario is less common now than it was in the 1980s or early 1990s, it does help to illustrate the contrast between the use of exchange rates and monetary aggregates as intermediate targets, and the broader relationship between exchange rate policy and monetary policy. In principle, at least where there is capital mobility, a country has to make a choice: either the exchange rate has to be flexible and allowed to accommodate the chosen monetary target(s), or monetary policy has to be passive and accommodate the chosen exchange rate target. With a fixed exchange rate, active monetary policy interventions would simply result in changes in foreign exchange reserves, which would have the monetary effect of offsetting the original intervention. This is an illustration of the impossible trinity a country cannot have a fixed exchange rate and capital mobility and an active monetary policy; it can only choose any two of these policies.

The received wisdom (and hence much of the policy advice received by developing countries) is now that fixed or pegged exchange rates are often difficult to sustain, especially for larger economies that are substantially open to global financial markets (see e.g., Mussa et al, 2000). This is because of the harsh lessons learned from countries that have tried to defend unsustainable pegs (fixed or quasifixed exchange rates that are out of line with economic fundamentals). Maintaining pegs that are out of alignment creates a perverse set of incentives with regard to the accumulation of assets and liabilities in domestic and foreign currencies (which was a major contributor to the crises faced in the late 1990s by many East Asian countries). And with the globalisation of capital flows, such pegs become vulnerable to speculative flows and thus more difficult to sustain, and incur higher economic costs when they have to be abandoned. As a result, countries that have focused on exchange rate targeting have often been subject to speculative attacks on their currencies that have led to damaging macroeconomic consequences, including sizeable interest rate adjustments and output instability (Jonsson, 1999:8). Certainly, countries with flexible exchange rate regimes (such as South Africa, Chile, Mexico, Peru and Turkey) seem to have fared the crises of the 1990s better than many of the Asian countries with currencies pegged to the US dollar.

The adoption of floating exchange rates does of course bring the focus back to the choice of an appropriate framework for monetary policy to achieve inflation objectives. Several of the medium sized floaters have now adopted inflation targeting to achieve this, which will be discussed further below. However, it would not be correct to suggest that there is no role for exchange rate targeting in the form of fixed or pegged rates. Indeed, following the exchange rate volatility of the 1990s there has been renewed interest in very hard pegs in the form of currency board type arrangements⁷, which have been adopted by Argentina and several of the transition economies of Eastern Europe (Estonia, Lithuania, Bulgaria). With a currency board, of course, the scope for any exchange rate or monetary policy more or less disappears, and attention must be focused on ensuring that the economy can adjust flexibly to the circumstances of that monetary and exchange rate arrangement.

⁷ It has been suggested that the current period is one of the hollowing of the middle, with countries moving towards either floating rates or very hard pegs, leaving few with in between policies such as actively managed floats or crawling pegs (Mussa et al, 2000).

The Special Case of Small Open Economies

While there appears to have been a shift in preferences towards floating rather than pegged exchange rates in recent years, this does not mean that floating exchange rates are always preferable — indeed, one of the key conclusions about exchange rate policy is that at least in the current global economic context, no single exchange rate regime may be prescribed for all countries. There is one particular set of countries where it is widely acknowledged that pegged exchange rates remain sensible - those with small open economies, especially those with a dominant trading partner that maintains a reasonably stable monetary policy. For such countries, there is generally little point in incurring the costs of attempting to run an independent monetary policy (Mussa et al, 2000:42). The implication is that relatively low inflation will in any case result, through import prices, from the monetary policy of the dominant partner, and that there is little scope for (or benefit from) deviating from this reference point.

With a pegged exchange rate, of course, there is little independence or discretion over monetary policy (especially for countries such as Namibia, Lesotho and Swaziland that have capital mobility, at least with respect to their dominant economic and trading partner). This may appear to be a negative in terms of macroeconomic management, but this is not necessarily the case; the alternative of a floating exchange rate may also be problematic. Small economies with flexible exchange rates have proven susceptible to contagion (i.e., exchange rate flexibility does not make them immune to trends affecting larger economies, especially those to which they are economically linked) and to exchange rate instability (Worrell, 2000). And even though flexible exchange rates, in principle, provide for an independent monetary policy, in practice this may be more apparent than real. The exchange rate instability that may result from focusing on monetary targets can have its own costs in terms of increasing uncertainty and undermining the credibility of the central bank — which will be seen as responsible for the exchange rate — thus undermining its ability to build public support for monetary policy targets.

Monetary Policy Objectives and Targets under IMF Stabilisation Programmes

It is worth making special mention of the structure of objectives and targets utilised by countries under IMF stabilisation programmes. While the exact content of these programmes varied from country to country, and evolved over time, the basic content of the IMF's financial programming approach has been applied fairly widely to developing countries suffering from the twin problems of high inflation and a deficit on the balance of payments. The root cause of these problems was often large government fiscal deficits that led to excessive monetary expansion (and hence inflation) and to domestic aggregate demand (and hence to imports, balance of payments problems, and inflationary pressures).

The ultimate objective of the policy package put in place to deal with these pressures was macroeconomic stabilisation in general, and more specifically to reduce the rate of inflation and improve the country's external balance. Two key policy instruments were used: control of government spending, to reduce the fiscal deficit, and exchange rate policy, which typically meant moving away from an unsustainable (overvalued) fixed rate to either a floating or crawling peg regime. These led to the adoption of two specific targets: domestic credit growth (with an upper limit, or ceiling), and the level of foreign exchange reserves (with a lower limit, or floor). Over time the credit growth limit became more

⁸ Other reforms included interest rate policies aimed at keeping rates positive in real terms but low, as well as structural reforms aimed at making the economy more flexible and efficient, often in collaboration with the World Bank.

focused on credit to government, especially that portion of it funded by borrowing from the central bank or the rest of the banking system. The aim of the reserves target was to ensure that the central bank did not use excessive intervention to counter market pressures toward a more depreciated exchange rate (Polak, 1997).

While the focus of these targets was on reserves and the domestic credit of the banking system, this implicitly involved a monetary aggregates target. In practice the focus was somewhat different, targeting the supply of base money (currency plus commercial bank deposits with the central bank), partly because it was felt to more amenable to control by the central bank than other variables, and, as long as there was a stable money multiplier, the money supply is proportional to the monetary base.

Some countries, however, found that success in meeting the programme s targets could still lead to excessive monetary growth and inflationary pressures. This arose when the reserves improved by more than expected, hence leading to monetary expansion from a different source (i.e., from reserves, not the fiscal deficit). If this inflow is not accompanied by an equal increase in money demand, a monetary imbalance results, and the excess money supply must be absorbed. Dealing with this problem would require the domestic currency proceeds of reserve inflows to be absorbed through open-market sales of government paper at high interest rates, which can be very costly. One study noted of the IMF's financial arrangements with 36 countries over the period 1988 to 1992 noted that targets for broad money growth were overshot by wide margins in about two-thirds of the program years; in most countries this reflected mainly larger than expected foreign assets. These developments illustrate the power of financial programs in general, and credit restraint in particular, for building reserves but [equally] their weakness for curbing money growth and, ultimately, inflation, particular when the exchange rate is not used as a nominal anchor (Schadler et al, 1995:20-21, quoted in Polak, 1997:13).

Inflation Targeting

Over the past decade one of the major changes in the choice of monetary targets has been the adoption of inflation targeting in several small and medium-sized developed economies. In principle, inflation targeting is simple: a target figure (or range) is chosen for the inflation rate, to be achieved at some specified time in the future, and the central bank commits itself to utilising its available monetary policy instruments to achieve that target ¹⁰. This marks a distinct break with earlier approaches, as there is no intermediate target such as the money supply, exchange rate or interest rates; the focus is simply on the ultimate objective, or inflation target itself. Nevertheless these variables, as well as many others, continue to be monitored for indications of inflationary pressures.

Inflation targeting was first adopted by a number of o ECD countries, including New Zealand, Canada, Israel, the UK, Australia, Finland, Spain and Sweden, all of which had found their previous experience of targeting monetary aggregates or the exchange rate either unsatisfactory or unsustainable. Their apparent success has induced a number of developing countries including Chile, Brazil, Colombia, Mexico, the Czech Republic, Poland, South Africa and Thailand to adopt more-or-less formal inflation targeting as the basis for conducting monetary policy (Aninat, 2000).

 $^{^{9}}$ The money supply equals the sum of reserves plus domestic credit of the banking system.

¹⁰ The target may be chosen by the government, the central bank, or a combination of both. It is considered by some commentators that the involvement of government in the setting of the inflation target helps to ensure policy consistency between fiscal and monetary polices and to reinforce policy credibility.

Inflation targeting is more explicitly forward-looking than other approaches. The central bank makes forecasts of future inflation rates, compares these forecasts with the target, and adjusts monetary policy according to the difference between the forecast and targeted inflation rates. For instance if the forecast rate is above the target rate for the relevant point in the future, monetary policy would be tightened; the aim is that this tightening would take place before inflationary pressures became too intense, and thus would be more effective (and hopefully less severe) than if left until inflation had actually risen.

It is also important to note that inflation targeting is generally accompanied by renewed efforts by the central bank to explain its policy actions (such as the Bank of England's quarterly *Inflation Forecasts*). At the same time, a new mechanism is introduced for making the central bank accountable, although the exact form of the mechanism varies from one country to another¹¹. The point is though that the adoption of inflation targeting is generally associated with enhanced levels of transparency and accountability in the central bank s implementation of monetary policy.

A number of reasons can be identified for the adoption of inflation targeting. First, the disillusionment with previous approaches, especially those targeting monetary aggregates such as various money supply measures or attempting to maintain a fixed exchange rate¹². Second, an enhanced understanding of the importance of expectations in determining the rate of inflation. In other words, part of the process of bringing down the rate of inflation involves generating expectations that inflation will indeed fall. This sometimes requires a clear change of monetary policy regime, and the adoption of inflation targeting is sometimes considered to bring this about. Furthermore, it gives a clear numerical target around which expectations can be based — assuming the target has credibility. This is related to the third reason for the adoption of inflation targeting, which is the need for some central banks, especially in high-inflation countries, to regain credibility as effective implementers of monetary policy. As can be seen from the list of countries that have adopted inflation targeting, in many of them the control of inflation had long been a problem. More generally, inflation targeting has been used by countries to build (or rebuild) the credibility of their macroeconomic policy framework. Finally, the adoption of inflation forecasting has been made easier by recent improvements in time series econometric analysis and forecasting techniques that permit a fuller understanding of the dynamics of price formation process. This has made it easier to develop the inflation forecasting models on which inflation forecasting depends.

While it is too early to make a full assessment of the merits of inflation targeting, given that its adoption as a framework for monetary policy is still a relatively new phenomenon, it is nonetheless clear that there are a number of prerequisites for any country hoping to adopt and successfully implement this approach. These prerequisites can be identified as follows.

A consensus that achieving low inflation should be the overriding objective of monetary policy.

This is important because the implementation of an inflation targeting policy may involve short-run costs in terms of lost output, should that be required to achieve the target ¹³.

¹¹ In the UK, the Governor has to write an open letter to the Chancellor of the Exchequer if inflation deviates from the agreed target by more than a pre-specified amount. In New Zealand, the renewal of the Governor's contract is tied to the Reserve Bank's success at achieving the inflation target.

¹² Chile, for example, had abandoned monetary targeting in the early 1990s because of concerns about the suitability of that strategy in the context of fast-developing financial markets and volatile demand for money. In view of two failed experiences with exchange rate anchors . . the remaining choice of a nominal anchor was an inflation target (Aninat, 2000)

¹³ For instance, it is questionable that there was sufficient national consensus behind a low inflation objective in South Africa prior to the adoption of inflation targeting early in 2000.

An independent central bank, able to freely use the instruments of monetary policy and implement monetary policy in accordance with its objectives (the inflation target) without being subject to external control.

No fiscal dominance: monetary policy must not be overwhelmed by fiscal influences. This means that the government budget must not be running excessive deficits; that public sector borrowing from the central bank must be low or non-existent; and that the government's revenue base is broad enough that it is not significantly reliant upon revenues from seignorage.

Agreement not to target other indicators. Inflation must be the only monetary policy target. In particular, the central bank cannot target a particular level of the exchange rate; any country that chooses a fixed exchange rate subordinates its monetary policy to exchange rate policy, especially in the context of capital mobility. In this situation the exchange rate then becomes the intermediate target of monetary policy.

Sufficiently developed financial markets that will respond to and transmit monetary policy interventions in a reliable and predictable manner.

A good understanding of the sources of inflation, and of the dynamics of the monetary transmission mechanism, that can provide the basis for an inflation forecasting capacity. The monetary authorities must have the technical and institutional capacity to model and forecast domestic inflation, have some knowledge or estimate of the time it takes for the inflation determinants to have their effect on the inflation rate, and have a well-informed view of the way in which monetary policy impulses affect the main macroeconomic variables as well as of the relative effectiveness of the various policy instruments at their disposal (Masson, Savastano and Sharma, 1997:9-10).

Early experiences with inflation targeting have mostly been in developed countries, and experience in developing countries is limited in both extent and duration. The prerequisites for adopting inflation targeting are quite strict in both technical and institutional terms, and there are clearly questions as to how many developing countries meet these requirements. It will be important to monitor how countries fare with this policy, and especially how the policy responds to shocks such as the recent oil prices increases. One of the key questions will be whether the monetary authorities in inflation-targeting countries will be prepared to resolutely pursue their inflation targets even when domestic inflation is increased by external cost factors, such as oil prices, over which they have no control. The monetary policy tightening that would be required to achieve the target in this situation is likely to have short term costs in terms of reduced output and growth and higher unemployment, which may be politically difficult to pursue, and hence rests upon the national consensus behind the policy objective mentioned above, as well as an understanding of the policy framework. A revision or relaxation of inflation targets in the light of supply cost increases may be justified in economic terms, but can undermine the intended benefits of inflation targets in terms of credibility and expectations¹⁴.

Successful inflation targeting is likely to be difficult in an economy (especially one that is small and undiversified) that is likely to be subject to relatively large exogenous shocks (such as supply or terms of trade shocks). These shocks are likely to require either very harsh policy responses or frequent

¹⁴ Most inflation targeting regimes do have an escape clause designed to deal with such events that were unforeseen at the time the target was set.

deviations from or relaxation of targets, and the latter will give rise to credibility problems. This point illustrates the particularly sharp trade-off faced by developing countries that choose to target inflation. As the Bank of International Settlements points out, if they set their targets too ambitiously, they will lose credibility if targets are missed. Conversely, if they set more realistic goals, these may be judged to be unambitious and the regime will enjoy no credibility in the first place (BIS 2000a:147).

Nevertheless, given the difficulties faced by other monetary policy frameworks (e.g. monetary aggregate or exchange rate targeting), it is inevitable that more and more developing countries will consider inflation targeting, and the prerequisites listed above provide an agenda for the necessary institutional reform and strengthening.

(c) Monetary Policy Instruments

Historically central banks in both developed and developing countries have used both direct and indirect instruments to achieve monetary policy objectives. The UK, for instance, used direct controls during the 1950s and 1960s, with restrictions on consumer credit and bank lending, which were phased out during the 1970s in favour of a more market-oriented approach to monetary policy and more reliance on interest rates in the allocation in credit. Developing countries often had highly restrictive monetary regimes, with restrictions on both the overall growth of credit, and its sectoral allocation in the economy, as well as on interest rates. Banks were often required to lend to the government to fund budget deficits, or to state-owned enterprises, often at very low interest rates that were negative in real terms. With credit rationing, and little role for the assessment of risk and return in lending decisions, banks were often unprofitable, with large amounts of non-performing loans on their balance sheets, and interest rates paid to depositors were unattractive. The result in many cases was disintermediation, a lack of competition, and an inefficient financial sector. This situation has changed extensively over the past two decades, with financial reform policies leading to market-determined allocation of credit and the restructuring of bank balance sheets.

In an environment of indirect controls, the main instrument of monetary policy in developed financial systems is control over short-term interest rates, either directly through rates that are set by the central bank or through control over liquidity conditions in markets where short-term rates are determined. Central banks derive their power to determine short-term interest rates through their status as the monopoly supplier of base money, or high-powered money ¹⁵. In general banking systems are short of liquidity as a result of daily transactions, and therefore have to borrow from the central bank in order to have sufficient resources to meet their obligations which ultimately have to be settled using balances at the central bank at the end of each day. The central bank determines the price at which it will lend reserves to the banks, and through this can influence the whole structure of interest rates.

Open Market Operations

In economies with at least moderately developed financial systems monetary policy is implemented through various types of open market operations (OMOS), which are used to influence interest rates, manage the liquidity situation in the market and signal the stance of monetary policy. The main tools used in omos are repo¹⁶ and reverse repo operations or outright sales and purchases of eligible

¹⁵ The monetary base, sometimes termed M0, consists of notes and coin plus bankers deposits at the central bank.

¹⁶ A repo is a sale and repurchase agreement whereby an eligible security held by a commercial bank (or other repo counterparties) is sold to the central bank with a legally binding agreement to repurchase the security at a pre-determined price and date; essentially a repo is a cash loan with the security used as collateral.

securities¹⁷. Repos are increasingly favoured because they tend to be relatively short term (a few days up to a few weeks), and provide enable central banks with considerable flexibility in the amount of liquidity they provide to the market. Other instruments include foreign currency swaps, and the direct issuance of bills by central banks, and the movement of government deposits between the central bank and commercial banks. Some of these instruments (especially the longer term ones) are also used in what may be termed structural operations, aimed at changing the structural liquidity position of the banking system, vis a vis the central bank. They can be used to ensure that a general liquidity shortage prevails and hence that the banking system remains in need of central bank money. All of the above instruments are implemented at the initiative of the central bank.

Standing Facilities

Central banks also typically offer overnight lending facilities to approved borrowers that can be used by banks to meet short-term liquidity shortfalls, especially those that may arise at the end of the daily clearing rounds. Such facilities (standing or Lombard facilities) are usually secured against eligible assets, and the interest rate applied normally provides the ceiling for the overnight market interest rate. Central banks may also offer overnight deposit facilities to absorb end-of-day excess liquidity. Standing facilities are generally available to eligible counterparties at their own initiative, although within prescribed limits (beyond these limits facilities may be refused or penal rates applied).

Reserve Requirements

Reserve requirements refer to the minimum reserves that financial institutions are required to keep on deposit with the central bank, and are often non-interest bearing ¹⁸. Reserve requirements have several purposes. First, they can in principle be used to limit the amount of deposit (credit) creation by the banks, and hence limit monetary expansion. Second, they can be used to create (or enlarge) a structural liquidity shortage in the financial system. Third, they provide resources and income to the central bank ¹⁹. Practice with respect to reserve requirements varies considerably. Several countries have more or less done away with them. The Bank of England, for instance, does not use reserve requirements for the first two objectives above, but only for the third objective and hence the level is minimal (0.15 per cent of deposits). The ECB, by contrast, uses them for the first two objectives, but not the third, and hence required reserves are remunerated at a market-related rate.

The balance of monetary policy instruments varies considerably between developed and developing countries, depending on the degree of financial sector development and sophistication. The use of omos, for instance depends on two factors to be effective: (i) the existence of money markets with suitable instruments where omos can be carried out, and (ii) sufficiently liquid and efficient money and capital markets where the impulses resulting from the central banks control over short-term interest rates can be quickly transmitted to other instruments and through the yield curve. Where OMOS cannot be used effectively, central banks are likely to be more reliant upon changes in the interest rate charged on standing facility loans (the Bank Rate or Lombard Rate, etc.) as an indicator of its preferences with regard to the direction of interest rates in the economy as a whole. They may also make more active

¹⁷ Eligible securities are normally short-term high quality instruments, usually issued by central and local governments, such as Treasury Bills.

¹⁸ They are usually calculated as a proportion of bank deposits, and may be variable across different classes of deposits.

¹⁹ Required reserves provide income to the central bank when they are unremunerated or remunerated at a below-market interest rate. In this case they are a tax on banks and depositors.

use of reserve requirements, which can, depending on the asset portfolio structures of the banks, have a quick and direct impact on credit and monetary aggregate growth²⁰.

Conclusions

The conduct of monetary policy continues to evolve, with the most recent focus on inflation targeting in a range of developed and developing economies. While alternative frameworks, such as the maintenance of fixed exchange rates or the adoption of monetary targets, have not been completely abandoned, they have fallen out of favour in many countries that have found them to be wanting, in pursuit of the ultimate objective of price stability. Nevertheless these approaches remain relevant in many developing countries, especially small open economies for which fixed exchange rates may well be appropriate. In other developing countries, targeting of some form of monetary aggregate may be the most appropriate approach to the conduct of monetary policy. This especially applies to those with relatively undeveloped financial sectors and limited information regarding the specific structure and dynamics of the monetary transmission mechanism, especially following macroeconomic instability and the structural changes associated with stabilisation and structural adjustment programmes.

PART 2: The Framework of Monetary Policy in Botswana

3.2.1 Historical Background

Botswana's independent monetary history stretches back to its decision to leave the (then) Rand Monetary Area in 1976, and establish its own currency, the Pula. The objectives of this radical policy move were specifically to gain flexibility with regard to monetary and exchange rate policy and to be less closely tied to South African interest rates and exchange rates, to secure independent management of the country's foreign exchange reserves, and to secure the seignorage income from note issue (Hermans, 1996). Despite strong advice received at the time not to pursue this route, these objectives have by and large been achieved.

Domestic monetary policy has evolved through certain phases over the past 25 years. Up until the late 1980s, the monetary authorities made use of direct controls, although these tended to be on interest rates alone and not the process of credit allocation. Given the environment of excess liquidity (resulting from balance of payments surpluses), interest rates were kept low to encourage the borrowing of these funds for investment purposes. Residual excess liquidity was absorbed directly into call accounts at the Bank of Botswana; liquidity absorption by the central bank was thus entirely passive and determined at the initiative of the commercial banks.

By the end of the 1980s, however, it was clear that this policy framework was leading to a number of problems, including those associated with negative real interest rates, and inadequate development of financial markets and instruments. The loose monetary policy that characterised much of the 1980s, combined with an upsurge in government spending towards the end of the decade, contributed to a sharp rise in inflation, which peaked at 17.7 percent in June 1992.

²⁰ If the existing reserve requirement acts a constraint on lending then any changes in it would be expected to lead to increased or decreased lending accordingly. If, however, the banks have a significant proportion of liquid assets (such as treasury or central bank bills) on their balance sheet then changes in reserve requirements may impact mainly on liquid asset holdings rather than advances.

During the 1990s, monetary policy has had a different focus, concentrating on the maintenance of positive real interest rates, the containment of inflation, and the development of market-based, indirect methods of monetary policy implementation. The rest of this paper will discuss the current monetary policy framework in more detail (see also, e.g., Majaha-Jartby, 1998).

3.2.2 Monetary Policy Objectives

The current framework of monetary policy in Botswana has evolved over time, in response to the changing structure of the economy, the availability of monetary policy instruments, and understanding of relevant economic relationships and processes. The broad outline of the framework is depicted in Chart 1.

Monetary policy has two primary objectives: (i) the achievement and maintenance of low inflation, and (ii) the maintenance of a stable real exchange rate. While these two objectives are to a certain extent compatible, there are times when they could be in conflict²¹. Prioritisation of the objectives depends on the prevailing circumstances and the views of policy makers.

In pursuing these objectives, a related issue is the nature of exchange rate policy. The current policy is essentially that of a pegged (but adjustable) exchange rate, whereby the value of the Pula is fixed against a basket of currencies. The basket comprises the South African rand and the IMF's Special Drawing Right (SDR), in proportions that are not made public but which are broadly related to trade patterns, which means that the rand weight is dominant.

The implication of the above is that in order to maintain real exchange rate stability in the context of a fixed nominal exchange rate, Botswana's inflation rate must be equal to the average of the inflation rates of its trading partners. This essentially sets an inflation target. However, this is not quite the same as the inflation target used in inflation targeting regimes, because this inflation rate is an ultimate objective and is not targeted directly; instead, intermediate targets are used (see Chart 1).

3.2.3 Choice of Intermediate Targets

The choice of intermediate targets is essentially a pragmatic one, made with reference to the structure of the Botswana economy and the causes of inflation, the availability of monetary policy instruments, and the availability of data. Inflation in Botswana can be attributed to a combination of three main causes:

- (i) Imported inflation, arising from a combination of foreign price changes and exchange rate effects.
- (ii) Changes in administered prices, mostly of domestically produced goods and services;
- (iii) Domestic inflationary pressures arising from excessive growth of aggregate demand, over and above the growth rate of aggregate supply of goods and services.

²¹ For instance, pursuit of the low inflation objective alone would indicate a need to allow the exchange rate to appreciate (so as to mitigate imported inflation). However, depending on the extent and speed of the pass through of exchange rate changes to domestic prices, this could cause the real exchange rate to appreciate, thus causing a loss of competitiveness.

Under (i), inflationary pressures are exogenous, and (once the exchange rate has been fixed) are not subject to manipulation by domestic policy instruments.

Under (ii), changes in administered prices are determined domestically, but are not amenable to manipulation by monetary policy instruments.

While monetary policy cannot be used to influence the inflationary pressures arising under (i) and (ii) above, it is of course necessary to take these inflationary pressures into account in the use of monetary policy instruments. This is necessary to prevent the accommodation of such price increases, which might trigger a more generalised inflationary spiral, for example if they are reflected in wage demands.

The main focus of monetary policy is inflationary pressures arising from (iii) above. Monetary policy acts on aggregate demand, and while aggregate supply is exogenous, monetary policy can influence the level of demand relative to domestic supply capacity, and hence can influence inflationary pressures arising from that source.

Aggregate demand is composed of the following components (%t of total GDP)

Domestic demand			89
	Private Consumption	33	
	Public Consmption	29	
	Investment	27	
Net external demand			11
	Exports	52	
	Minus imports	-41	

The figures show the magnitudes of each component in Botswana (average over the past five years). In comparison with many other countries, private consumption is relatively small while investment and public consumption are relatively large.

Although aggregate demand is closely linked to domestic inflationary pressures, it is not suitable as a target of monetary policy, for a number of reasons. First, data on demand is only available with low periodicity (annually) and with a long time lag (6-18 months). Second, monetary policy instruments do not have a direct impact on aggregate demand, which is subject to a range of other influences.

Hence other intermediate target(s) are required, and these are identified in the factors that influence the components of aggregate demand. Given that a large proportion of domestic demand is derived from government spending (public consumption plus a major component of investment spending), the rate of growth of government spending is an important contributor to inflationary pressures. Hence this is monitored closely, although it is not a target of monetary policy as such (monetary policy has no immediate influence on government spending). With regard to private consumption and investment, the rate of growth of credit to the private sector is considered to be an important contributor to the growth of these components of aggregate demand. Furthermore, credit growth can in principle be influenced by monetary policy instruments. In addition, data on credit growth is available at high frequency (monthly),

with a short time lag (around 2 months delay), and is considered to be reasonably accurate (at least in aggregate). Hence private sector credit is taken as the main intermediate target of monetary policy.

While private sector credit is taken as the main intermediate target of monetary policy, it is important to note that the situation is not quite so straightforward. In practice there is another intermediate target to monetary policy, which is the level of real interest rates, in particular the real 3 month BOBC rate. Of course the two are closely related, in that the rate of credit growth is (or should be) dependent upon the level of real interest rates. However, the real interest rate, unlike nominal interest rates, is not under the direct control of the monetary authorities, and hence is not an instrument itself. In practice, the targeted level for the 3-month BOBC rate is the real interest rate on 3 month Treasury Bills in major industrial economies (effectively the USA, the Euro zone and the UK), which in recent years has meant a range of 2-4 percent.

3.2.4 Choice of Monetary Policy Instruments

Since the early 1990s, the Bank of Botswana has implemented monetary policy through the control over two key short-term interest rates:

- (i) the Bank Rate (the rate at which the Bank of Botswana makes overnight loans to commercial banks); and
- (ii) the interest rate on Bank of Botswana Certificates (BOBCS²²).BOBCs are used to absorb liquidity from the market, and hence these two interest rates represent the prices at which the Bank provides or absorbs liquidity.

Strictly speaking the instrument in the case of BOBCS is the sale of paper rather than fixing an interest rate as such, and the interest rate on BOBCS could also be viewed as a target rather than an instrument. However, consideration of the mechanics of the process through which BOBCS are sold makes it clear that in practice, the interest rate is set by the Bank. BOBCS are sold at auction²³, approximately monthly, with bids submitted by approved primary counterparties²⁴. The bids therefore represent a demand curve for BOBCS (or a supply curve of liquidity) from the market. The Bank then decides the value of BOBCS that it will supply to the market (the amount of liquidity that it will absorb). The decision with regard to the (face) value of BOBCS to be issued therefore determines the price of the paper, and hence the interest rate. In practice, the decision as to the amount of BOBCS to issue is made with reference to the targeted BOBC interest rate rather than a targeted quantum of liquidity absorption — effectively making the BOBC interest rate a policy instrument. Given that the only reason to sell BOBCs is for monetary policy purposes (with a government budget surplus there is no financing requirement to meet), the Bank in principle has complete discretion over the stop out price and hence the BOBC interest rate. In practice, however, this discretion is slightly constrained because some bid must be chosen as the marginal bid, and hence the Bank is restricted in its interest rate decision to the available range of bids. In practice, however, there has always been a bid available close to the desired rate, so this is not a significant constraint in practice²⁵.

²² Central bank zero coupon bills issued at a discount, with maturities of up to 12 months.

 $^{^{23}}$ At present the auction method used is that of a uniform price (Dutch) auction.

²⁴ Counterparties include all the clearing banks, other financial institutions, and certain large corporations

²⁵ The Bank has informed the market that a change in the BOBC reference yield of 20 basis points or less at an auction should be interpreted as a technical adjustment (resulting from the need to match an actual bid), and that movements greater than this can be interpreted as a change of monetary policy stance.

BOBCS have turned out to be extremely important as a tool of monetary management, with a total outstanding (as of mid-2000) of around P4 500 million, equivalent to around 50 percent of broad money supply.

It should be noted that reserve requirements have not been actively used as an instrument of monetary policy. One reason for this is that commercial bank lending is not in general constrained by reserve requirements, in that they could increase lending considerably before running into hard reserve requirement constraints. The cushion is provided by the high levels of liquidity held by the banks in the form of BOBCS, and it is likely that any increase in reserve requirements, unless to very high levels - would mainly result in an equivalent running down of BOBCS rather than a reduction in bank credit.

3.2.5 The Basis for Monetary Policy Decisions.

Although the Bank can set both the BOBC interest rate and the Bank Rate independently, in practice the two are closely related. Changes in the stance of monetary policy are indicated first and foremost by a change in the Bank Rate; changes are usually at least 50 basis points but on occasion changes of 25 basis points have been made. Changes in the Bank Rate will then usually bring about changes in the bidding behaviour at the next BOBC auction, and the benchmark/reference BOBC rate will also change by approximately the same amount.

The crucial question is what determines a change in the monetary policy stance, as denoted by a change in the Bank's short-term interest rates?. There are a number of circumstances under which interest rates would be changed.

First, in response to changes in the inflation rate. The targeted level of BOBC rates is specified in real terms. If the inflation rate changes, then the level of nominal interest rates will have to change in order to maintain a given real rate; such a change in nominal interests rates does not therefore mark any change in the stance of monetary policy.

Second, if a change in monetary policy stance is desired, in which case a change in the level of real interest rates would be targeted. A tight monetary policy would be denoted by the real 3-month BOBC rate being towards the top end (or even beyond) the 2-4 per cent range noted above, with the opposite for a loose monetary policy.

In assessing whether a change in monetary policy stance is required, policy makers take a somewhat eclectic approach and examine a number of indicators, including the private credit growth target mentioned above. The actual rate of credit growth is compared with a notional target rate of credit growth that is considered to be compatible with projected growth of aggregate supply, the desired inflation rate, and other objectives such as financial deepening^{26,27}. If the actual credit growth rate exceeds the desired credit growth rate, this would point to a need for monetary policy to be tightened, in order to bring the credit growth rate down towards the desired level. The opposite would apply if the credit growth rate was below the desired level.

²⁶ This exercise would normally be carried out at the beginning of each year, at the same time as preparing the annual Monetary Policy Statement. A desired growth rate for government spending would also be calculated. The desired growth rates for credit and government spending might be revised during the year in relevant new information comes to light.

²⁷ At the beginning of each year, policy makers project the rate of credit growth that is compatible with the projected increase in the aggregate supply capacity of the economy (derived from medium term growth projections contained the National Development Plans) and with other desired objectives, such as financial deepening.

Policy makers would also look closely at the growth rate of government spending. If this was considered to be undesirably high, this would also be cause for a tightening of monetary policy — not because monetary policy can bring down the growth rate of government spending, but because the injection to aggregate demand that would come from excessive government spending growth would need to be offset by a slower growth rate of credit. One advantage of this framework is that it makes clear the relationship between fiscal and monetary policy, and the fact that a balance is needed between the two; the alternative, whereby an excessively loose fiscal policy would need to be offset by excessively tight monetary policy (or vice versa), does not contribute to macroeconomic stability.

Other factors that would be considered in assessing whether a change of monetary policy stance is needed include foreign interest rates, foreign inflation, trends in nominal and real exchange rates, other developments that may affect prices, as well as any other factors that cast light on domestic economic conditions.

It should be noted that the emphasis of monetary policy is on interest rates and not on the direct targeting of liquidity absorption, or indeed on any other monetary aggregate target such as reserve money. Despite the concern about level of liquidity, and its link to credit expansion, it is considered that targeting liquidity through the sale of central bank paper would lead to interest rate volatility. Obviously if a specific quantum of liquidity was targeted, the Bank of Botswana would lose its ability to determine the interest rate on BOBCS. Another factor in this decision is that, with considerable short-term liquidity fluctuations arising largely from fluctuations in net foreign exchange in flows and government spending, it is difficult to determine what the appropriate liquidity absorption target should be.

3.2.6 Key Monetary Policy Issues

The above framework has several advantages. It is relatively simply and easy to follow, and has manageable data requirements. It also provides indications when a change of monetary policy stance is needed, and it allows quick monitoring of some of the key determinants of aggregate demand. It also emphasises the linkages between monetary, fiscal and exchange rate policy, and the need for consistency between them.

Nevertheless, there are a number of issues that have arisen in connection with the operation of this monetary policy framework, and its effectiveness. These issues can be summarised as:

- (i) the consistency between monetary and exchange rate policies;
- (ii) uncertainties over the exact nature of the monetary transmission mechanism;
- (iii) and the appropriate measure of inflation.

Exchange rate and monetary policy

As noted above, there is in principle a choice to be made between an active monetary policy and an active exchange rate policy: if there are no capital controls, monetary policy loses its effectiveness to

²⁸ Data on government spending is available monthly, with a lag of 2-6 months. While it is not generally available as quickly as credit data, recent improvements in the reporting system have meant that the lags recently have been much reduced when compared to previous years.

the extent that the exchange rate is fixed. Botswana aspires to maintain a broadly pegged exchange rate and an active monetary policy, in an environment where there is capital mobility²⁹. Is this possible?

Since 1998 Botswana has attempted to maintain a relatively tight monetary policy, with real (BOBC) interest rates approaching 4 per cent, with the aim of restraining the growth of credit. The theoretical monetary policy problem is that, with capital mobility, this attracts capital inflows. If the exchange rate is pegged and cannot appreciate, this causes the foreign exchange reserves to grow and hence the money supply to expand. In practice, however, capital inflows only result if there are domestic assets for foreigners to purchase. The nature of Botswana's economy, and particularly the financial sector, is that there is a very limited range of assets available for foreigners to buy. Financial markets are relatively illiquid, with few marketable instruments available. In particular, BOBCS are not available for purchase by non-residents, a restriction that is effectively a control on capital inflows. Hence there is little capacity to absorb capital inflows, and their impact is limited. The main problem is likely to be on the part of residents, who perhaps choose not to export capital to the extent that they would otherwise, or with firms raising loans from domestic rather than foreign sources in response to interest rate differentials. To the extent that this raises domestic liquidity, which has to be absorbed by the central bank, the main problem is an increased interest rate cost to the central bank, and ultimately to the government³¹. This cost results from the fact that domestic real interest rates are higher than the real returns on the foreign exchange reserves.

Botswana also has the flexibility to cope with the capital outflows that might result from a relatively loose monetary policy with low real interest rates. Given the very high level of foreign exchange reserves, any conceivable level of capital outflow (which would be from domestic residents rather than foreign portfolio capital, given that the latter is relatively small) can easily be accommodated. A reserves outflow would mainly result in a reduction in excess liquidity and holdings of BOBCS. In present circumstances, therefore, it appears that Botswana can maintain a pegged exchange rate and an active monetary policy, at least within limits, due to the cushion provided by the high level of domestic excess liquidity and foreign exchange reserves, and structural constraints on capital mobility. However, this is an unusual set of circumstances that not many countries would find themselves in. It may also be difficult for Botswana to maintain this policy framework indefinitely. With a pegged exchange rate and relatively high real interest rates, capital inflows will be attracted, and hence there is an incentive for non-residents to find ways around the restrictions on capital inflows into Botswana. Such inflows would add further to monetary growth and liquidity, and would have to be mopped up through further issuing of BOBCS. If this happened on a large scale, the fiscal cost could become unsustainable.

There is an important question, however, regarding the extent to which the exchange rate can be used actively as an instrument of monetary policy. In principle, the peg could be used to mitigate the effects of imported inflation. Indeed, the structure of the basket to which the Pula is pegged means that, in an environment when the rand is generally depreciating against the SDR currencies, the Pula should appreciate against the rand, and thus the domestic impact of import price inflation should be below the South African inflation rate, even through the majority of imports come from that country. There have been suggestions that Botswana should take advantage of its strong balance of payments and reserves position and peg to the SDR or an SDR currency, and use the more rapid appreciation against the rand that would result from this to bring domestic inflation well below the South African inflation rate.

²⁹ Exchange controls on capital movements were abolished in February 1999.

³⁰ This has given rise to a real prime (commercial bank) lending rate of 7-8 per cent, and higher effective rates for the majority of borrowers.

³¹ As central bank profits are paid to the government, the interest rate cost is ultimately a fiscal cost.

The problem is, however, that unless the pass-through of exchange rate appreciation to domestic prices is complete and immediate, the real exchange rate will appreciate and domestic tradeables producers will suffer a loss of competitiveness with a likely adverse impact on output and employment. Evidence suggests that the pass-through is relatively slow and is less than complete, even in the long run (Atta, Jefferis & Mannathoko, 1996; Jefferis & Mannathoko, 1998)³². Hence the speed at which the Pula can be allowed to appreciate against the rand must be moderated to ensure that any real exchange rate appreciation can be accommodated by domestic productivity and efficiency gains. As a result, the exchange rate has not been actively used as an anti-inflation measure.

Uncertainties over the Transmission Mechanism

While the framework outlined above has a consistency and logic to it, a number of problems arise in its practical implementation. These arise from uncertainties over the specific operation of the monetary transmission mechanism. While the determinants of inflation can in principle be identified, there is uncertainty over the precise quantification of the links in the chain, in terms of both magnitudes and timing, the dynamics of the price formation process. Four key issues in particular need to be resolved.

- (i) Aggregate Demand and Inflation. What is the exact relationship between the various components of aggregate demand and the inflation rate? More information is needed on the relationship between the rate of credit growth and the rate of inflation, and on the relationship between the rate of growth of government spending and the rate of inflation. This would enable a more precise quantification of the trade-off between the two, i.e., if government spending growth is above target, by how much does credit growth have to be below target? It would also enable a more precise quantification of the amount by which credit growth has to be reduced in order to achieve a desired rate of inflation, and assist in the use of monetary policy to offset the impact of an expansionary fiscal policy.
- (ii) The Determinants of Credit Growth. In particular, how important are real or nominal interest rates in determining credit growth, and how important are other factors that contribute to credit growth? Without this information, it is difficult to know by how much interest rates have to change in order to influence credit growth to the desired level.
- (iii) Time Lags what are the dynamics of the above processes?. At present monetary policy is not genuinely forward looking, and tends to respond to changes in current inflation rather than anticipated changes in future inflation. The question that arises is, if monetary policy is tightened in response to perceived inflationary pressures, or a rise in actual inflation, how quickly will this tightening have an effect? The experience of advanced economies is that it takes up to one year for a monetary policy change to have its peak effect on demand and production, and up to a further year for these activity changes to have their fullest impact on the inflation rate (Bank of England 1999b). The time lags in smaller, less developed economies could be longer or shorter, and need to be identified through appropriate research. Without proper information on these lags, there is a danger, for example, that the impact of a monetary policy tightening in response to excessive aggregate demand growth could come too late, perhaps at a time when inflation would have been falling anyway, and could be excessively deflationary at a time when

³²This is supported by evidence from African economies as a whole (BIS 2000b), which indicates that for 13 non-CFA zone African economies over the period 1985-99, the short-run elasticity of inflation with respect to changes in the nominal exchange rate is 0.4, and the long-run elasticity is 0.7

aggregate demand growth is slowing for other reasons.

(iv) Import Prices and Administered Prices. As noted above, these can have an important influence on inflation. It would be helpful if there were more advance information on changes in administered prices, and also better knowledge of the pass-through of exchange rate and foreign price changes to domestic prices. Also important is the mechanism by which these price changes get incorporated into prices more generally, for instance through wage increases. Increases in import and administered prices also entail a real income loss, which will reduce aggregate demand and have a deflationary impact that will to a certain extent offset the original inflationary impact. Better understanding of the impact of import and administered prices on inflation would enable monetary policy to respond appropriately to these supply-driven cost increases as compared to demand-driven price increases.

Answers to the above questions are needed to enable monetary policy changes (through interest rates) to be finely tuned to achieving a given rate of inflation. Information is also needed on the stability of the various relationships discussed here — if they are unstable then the impact of monetary policy instruments becomes uncertain.

Most of these issues are the subject of active research in the Bank of Botswana, which will contribute to improving the ability of the central bank to achieve desired inflation rates. Two other issues also need to be considered in the monetary transmission mechanism, although these are considered to be less of a priority. First, how important are other components of aggregate demand - net exports and those parts of private consumption that are not related to credit growth (or interest rates), and what is their impact on inflation? Second, to what extent do changes in interest rates affect asset prices and expectations, which might also have an impact on inflation.

There is a further issue regarding the extent to which short-term interest rates alone can be an effective tool of monetary policy. The questions noted above need to be answered in order to firmly establish and quantify the link between interest rates, credit growth and inflation; certainly there is a perception that credit, especially credit to households, is not particularly sensitive to interest rates, a finding that is not unusual (Goodhart, 1995; Worrell, 2000). In some quarters the limited reintroduction of direct controls on credit has been suggested as an additional instrument, such as minimum deposits and maximum maturities on consumer loans, but the general experience of direct controls in an increasingly liberalised and open economy suggests that these might not be effective, and could introduce undesirable distortions.

Finally, there is the question of what is the appropriate measure of inflation? Most central banks use some measure of core inflation, from which certain components have been stripped out from the broad consumer price index basket used to calculate headline inflation rates. Three main approaches are used. One is simply to remove components that are directly related to interest rates, such as interest payments on housing mortgage loans (this is used in the UK and South Africa). The logic is that any increase in interest rates resulting from a tightening of monetary policy aimed at reducing inflation would have the immediate effect of increasing inflation, thus making the effectiveness of policy difficult to evaluate. The second approach is to strip out a broader range of items with volatile prices that are considered to be unrelated to underlying inflationary pressures — such as the us approach of excluding food and energy prices. The third approach entails a different method of stripping out volatility. Instead of pre-specifying a range of items to be excluded, the ones left out from the inflation calculation are

simply the outliers — those with price changes furthest from the mean. Such trimmed mean measures are considered to be more efficient measures, in statistical terms, of the underlying inflation that monetary policy is concerned with (see, e.g., Cecchetti, 1997; Bryan, Cecchetti and Wiggins, 1997; Roger, 1998). Their main drawback, however, is that they are less transparent, and perhaps less publicly acceptable, than the first two types of core inflation measures³³.

Conclusions

Botswana's case is somewhat unusual, with monetary policy consisting of a mixture of exchange rate and monetary targets and objectives. The move to indirect methods of monetary management during the 1990s has been reasonably successful in achieving a steady reduction in inflation from 16.1 percent in 1992 to 6.5 percent in 1997, although this was undoubtedly helped by a reduction in inflation in neighbouring South Africa over the same period. Since 1997 inflation has risen slightly, a problem that is thought to have largely resulted from an upsurge in government spending in the late 1990s. The resulting inflation has been slow to respond to relatively tight monetary policy. In this situation, there are limits to the extent to which instruments of monetary policy can be used to restrain inflation. This is partly because of the uncertainties discussed above concerning the transmission mechanism of monetary policy, and partly because the level to which interest rates would have to rise to bring inflation rapidly down could involve substantial costs in terms of reduced output, especially in the private sector, and would no doubt raise political concerns. This illustrates two key points. First, that monetary policy can only be successful if there is co-ordination between fiscal and monetary policy (Worrell, 2000). Second, that if this co-ordination breaks down, and fiscal policy is excessively expansionary, it is extremely difficult for monetary policy alone to get inflation back under control.

³³ The South African Reserve Bank noted that the measurement of core inflation has further disadvantages in that it does not comprehensively reflect the cost of living, is difficult for the public to understand and is less credible than headline inflation (SARB, 2000:61), and as a result chose headline inflation excluding mortgage interest payments as its inflation target.

4. STRATEGIES AND ISSUES IN MONETARY POLICY: THE EXPERIENCE OF HONG KONG

Mr. Steven Xu (Director, Senior Economist of North Asia, SG Securities)

4.1. Hong Kong is being dollarised

Three years and three months after Hong Kong returned from British rule to Chinese control, it increasingly becomes the 51 state of the United States of America, in financial sense. In August 2000, Hong Kong took an important step to tie the Hong Kong dollar more closely to that of the US dollar. More importantly, Hong Kong sets to strengthen the peg to the US dollar, more closely than already exists under the present linked exchange system. Effectively, the Hong Kong Monetary Authorities (HKMA) will facilitate a partial dollarisation. Of course, the Hong Kong dollar will remain the legal tender of Hong Kong, but it will be more closely aligned with the US dollar.

Two-way convertibility undertaking would turn Hong Kong immediately into another Panama

All this could take place under the basis of two-way convertibility undertaking between the Hong Kong dollar and the US dollar, or one-way convertibility if the spot rate of USDIHKD is close enough to the convertibility undertaking level. At present, there is one-way convertibility, whereby the HKMA will buy Hong Kong, dollars and provide US dollars in return at the stipulated convertibility undertaking rate of 7.80. Under two-way convertibility this would chance and the HKMA would oblige itself to both buy and sell the USDs for the HKDs at the stipulated rate of 7.80.

Two-way convertibility undertaking spells the death of the foreign Exchange Market

Under the system of one-way convertibility the HKMA has no reason to sell the USDs to financial institutions if USD/HKD trades below 7.80 because such transactions will be transacted in the interbank market. Under two-way convertibility, there is no scope for any discretion. All foreign exchange transactions are, in essence, taking place at 7.80 which means the local foreign exchange market ceases to exist. Precisely due to the factor that two-way convertibility undertaking would cause a drastically reduced volume in the local foreign exchange market, the HKMA decided not to adopt two-way convertibility undertaking so that the HKD is not marginalized right away by the USD.

The HKD: an almost perfect substitute of the USD

It is worthwhile to highlight the issue of convertibility undertaking and its implications for the interest rates. This year, I year HKD forward contracts have been trading consistently below 1 00 (equivalent to roughly 12 basis points of spread between 1 year interest rates of the HKD and the USD, and occasionally below zero (implying the HKD would appreciate moderately), despite the volatility of Hong Kong s stock market. Indeed, with the leading stock market index Hang Seng, registering a rate of return of -8 per cent so far this year, it is hard pressed to argue that equity-related capital inflows have resulted in HKD s real term appreciation. In essence, the market is pricing the HKD as a perfect substitute for the USD. The reason investors have such strong faith in Hong Kong s linked exchange rate system to the USD is the market s increasing perception that the Special Administrative Region (SAR) Government will tolerate USD s greater role in the local economy- a partial dollarisation.

4.2. Clearing system to facilitate a creeping dollarisation

An additional reason for expecting a change to the currency system is the SAR Government's strong desire to strengthen Hong Kong as a regional financial centre. In Q4 of 2000, Hong Kong will gradually implement a USD clearing system. This is hardly a surprise. It is a key policy issue, aimed at shoring up Hong Kong's role as a major financial centre in the face of increased regional competition from Tokyo and Singapore.

A USD clearing system will facilitate two-way convertibility undertaking

The USD clearing system will facilitate two-way convertibility undertaking (this is important) and enhance capital mobility by speeding settlement in the USD, or HKD s anchor currency.

By contrast, retaining one-way convertibility could undermine the effectiveness of a robust USD clearing system. Of course, the HKMA might well argue that a distinction between one-way and two-way is trivial under the market condition. Nevertheless, we firmly hold the view that a USD clearing system and two-way convertibility undertaking will further cement the position of Hong Kong s status as a financial centre. Both would increase public confidence and international investor confidence in the linked-exchange rate.

Present system

To understand all this, it is important to identify how the present system operates. Hong Kong experimented with floating exchange rate. It ended in Hong Kong s Black Saturday on Sept 24, 1983 when the HKD slumped and people were hoarding toilet papers. By Oct 17 that year, a peg was announced, at a fixed exchange rate of HKD7.80 to the USD.

4.3. What is the essence of the HKD peg?

Chips vs. anchor currency

What is the HKD peg about? This question brings us directly to the heart of an implicit, even explicit, dollarisation in the economy. The analogy 1 prefer to use for the orthodox currency board system is a casino, where chips are used for operational purposes. Everyone in the casino uses chips and important-the number of chips is entirely determined by the initial monetary endowment. Is this the way for an economy to set the level of a peg based on the amount of its reserves? In this sense, Hong Kong dollars are the chips and USDs the initial endowment. By keeping the exchange rate at 7.80, interest rates are the only mechanism to keep the peg.

The peg was being viewed as fragile

Since then the peg has survived many attacks, including the periods of Chinese RMB s devaluation and troubled global financial climate. The most severe speculative attack against the peg came in summer of 1998. The Asian financial crisis has exposed the local interest rate, the only variable allowed to change in the face of an external shock, to the true test. Presumably, sharp rise in nominal interest rates will lead to sufficient adjustment in the real economy. This is exactly what happened in Hong

Kong two years ago. By summer 1998, the stock market in Hong Kong, had lost more than a half of its value while the real estate market crashed. There was a significant fall in wage rates. Under an orthodox currency board regime, interest rates are supposed to drop after a sharp deflation occurs. But, they did not, as investors increasingly hoarded USDs. The reason for this was that the peg lacked credibility. The market saw the peg as fragile.

Part of the speculative pressure arose from the perception that Hong Kong was unwilling to bear further pains associated with higher interest rates. Also, the China risk or the perceived China risk has prompted investors or speculators to use Hong Kong as the best proxy to hedge their China exposure. Indeed, with the relatively opaque situation in China, it is difficult for anyone to quantify the China risk.

The HKMA is only a monetary authority

To compound the problems then, it was increasingly difficult or the SAR Government to claim that the currency board was being run in an orthodox fashion after HKMAs interventions in both the stock market and the currency market through the Exchange Fund(local currency papers fully backed by USDS). To be fair, even without the episode of HKMAs intervention in 1998, which aimed at inflicting pain on speculators, the market perception that political neutrality in the SAR was waning was unlikely to vanish.

Always an uphill battle for Hong Kong to maintain credibility

The harsh reality is that for any small economy, maintaining credibility is always an uphill battle. And this is particularly true in the past-handover of Hong Kong. Wasn t the purpose of having a currency board sixteen years ago to borrow credibility from the Fed? Nevertheless, cynics always say of China s non-interference that it is merely holding back an urge to meddle. So any clear attempt to send the message that the SAR is largely free from political interference will lower the excessively high risk premium on the Hong Kong dollar and stop capital flight.

Do exporters need HKDS?

So what is the best way to tell the market that the SAR has a high degree of political neutrality and Hong Kongers still have the stomach to embrace a deep recession, as a fair price for the peg? I argued during the Asian financial crisis that a number of objectives could be achieved if we allow further dollarisation. Remember that a currency board, by definition, requires all Hong Kong dollars in circulation to be fully backed by the USDS and thus takes away any monetary policy. Before, during, and after the Asian financial crisis, much of Hong Kong s external trade has been settled in USDS; vendors are always happy to take USDS as well as other hard currencies in major tourist spots in Hong Kong.

A quasi-dollarisation is the 2nd best choice

At that juncture, when the peg was under severe pressure, I advocated sending clear signals encouraging dollarisation, which would make the peg bullet-proof. As such, the Government would effectively assert that all claims on Hong Kong dollars will be honoured by USDS. And the best thing is that dollarisation will remove much of the lingering doubts on political interference. Many may feel it would be a loss of face for China to allow Hong Kong to accept the USD as legal tender. But China

has been more pragmatic than many expected If a quasi-dollarisation could enhance Hong Kong s role as the regional financial centre, it would make China s state-enterprise reform much easier. In fact, the Basic Law, Hong Kong s Constitution, does not stipulate that the Hong Kong dollar as the only legal tender. The other argument against dollarisation is that Hong Kong does not have enough reserves to cover money supply (we have heard that argument on the Indonesia case in 1998). I strongly believe that this argument is flawed. During the height of the Asian financial crisis, the USD reserves in Hong Kong were four times M1and roughly 40 per cent of M3. But the real issue is do we need big reserves to make dollarisation credible? If you indeed had unlimited amount of capital, would anyone bet against you?

Based on the above arguments, I openly argued that the challenge for the SAR Government in 1998 was to establish credibility that the peg would be kept at all costs. I suggested the HKMA to go the extra mile and demonstrate that one-country, two-systems is for real. Tolerating a greater degree of dollarisation and preparing for a full dollarisation would effectively bum the bridges behind us. What is the best way to deter vicious speculation- against the HKD peg? I wrote in August 1998 (Asiaweek and Standard Chartered Bank's research) that If I were taking a short position on the HKD, any concrete steps by the government towards dollarisation would make me cover my positions and turn long, most definitely.

4.4. Seven wonders

The HKMA resorted to an Implicit threat of dollarisation

Against that backdrop, in September 1998, the HKMA unveiled the so-called seven technical measures to strengthen Hong Kong s currency board system. The main feature of the seven technical measures is the convertibility undertaking which stipulating that licensed banks can go to the HKMA any time for themselves or on behalf of their clients to exchange 7.80 HKD per USD within a very narrow spread.

In essence, the HKMA has issued a put option on the HKD peg for those who do not feel confident about the linked exchange rate system.

According to the HKMAs official, the definition of the HKD peg, The linked exchange rate system is a currency board system. The monetary base (which comprises banknotes and coins issued, the aggregate balance of the clearing accounts of licensed banks maintained with the HKMA and all the Exchange Fund bills and notes outstanding) is fully backed by foreign reserves. Any change in the size of the monetary base has to be fully matched by corresponding change in the foreign reserves.

Clearly, the convertibility undertaking is implicitly imbedded within the official definition. If so, why did the HKMA have to suffer so much trouble to ensure that the exchange rate regime is robust. Is there a compelling need for the convertibility undertaking to be explained fully?.

4.5. How much should be forward premium?

Somehow, many market participants perceived the convertibility undertaking, as announced in 9/1998 as a one-way measure, applying to the stronger side of the bilateral exchange rate between the US

and Hong Kong. As a result, the premium for I-year HKD forward contracts, up to last July, continuing to hover around 400-500. This marginal premium, through, small, reflected that it had been somewhat inconvenient for investors to execute the convertibility undertaking.

Transitory or structural

Despite this inconvenience, there has been a sharp fall in HKD forward contract prices (up to the tenor of 2 years), a proxy of the HKD risk premium. This fall does not appear transitory. It is logical to attribute a sharp fall (rise) in the HKD overnight interest rates to massive portfolio inflows (outflows). In the end, changes in the domestic interest rates is needed to restore equilibrium under any currency board arrangement. But, such change, in theory, should only affect short-term rates, for example from overnight to 1 month. Because portfolio flows affect monetary base significantly. However, this year, investors have been pricing forward USDIHKD contracts of up to one year at almost the spot rate, even when the stock market is falling. Therefore, it is logical to conclude that structural forces are responsible for the steady reduction in HKD forward rates.

All this means the HKD has been transformed to a perfect substitute for the USD from an almost-perfect substitute for the USD, according to the changed market perception. Bear in mind that I have been repeatedly advocating a two-way convertibility. Now it seems the market is trying to discount the scenario in which financial institutions can come up with the products which will broaden the scope of the convertibility undertaking, once the USD settlement begins in Hong Kong.

Nevertheless, I think that the HKMA should have clarified the convertibility undertaking when it unveiled the seven measures in 1998, spelling out that is a two-way undertaking. If the put option written by the HKMA were genuine, investors should be allowed to arbitrage the interest rate differential between the HKD and the USD. A one-way undertaking diminishes capital mobility, by cheapening this put option.

The HKMA should do the following:

- * Encourage investors to use the USD clearing system
- * Limit HKMA's role in the economy;
- * An Euro clearing system, a yen clearing system
- * Make seven measures a part of the Basic Law

5. Monetary Policy within the CMA Framework

Mr. Brian Kahn (with assistance from N Maphalala and F Selialia) Research Department South African Reserve Bank

5.1 Introduction

The succession of crises in emerging economies during the 1990s has resulted in a reassessment of the appropriate exchange rate regime for emerging market economies in particular. This debate also has implications for the scope for monetary policy. The consensus view that has emerged is that either a super-fix or a free float are the appropriate alternatives. Choosing the former leaves little scope for monetary policy. Part of the rationale for the hard-fix option (exemplified by a currency board or dollarisation) is that it constrains monetary policy and thereby provides policy credibility. The evolution of the fixed exchange rate system in Europe and the emergence of the euro is also seen as part of the movement towards irrevocably fixed exchange rates.

The development of the CMA has however seen a slight shift in the opposite direction. Whereas initially the LNS countries were effectively characterised by currency boards, the more recent agreements have moved them away from pure currency boards. In addition, the fact that LNS are issuing their own currencies also represents a move in the opposite direction to Europe. Although exchange rates are irrevocably fixed in terms of the different bilateral agreements, these moves may be interpreted as opening the door to possible de-linking in the future. At the same time, South Africa has moved to a situation of greater exchange rate flexibility which in turn has important implications for the scope for monetary policy in South Africa. A discussion of the scope for monetary policy in the CMA will differ depending on whether we are discussing South African monetary policy or that of Lesotho, Namibia or Swaziland (LNS). It is well known that the scope for monetary policy in LNS is severely constrained by the nature of the CMA agreement even though there has been the move away from the currency board system. However there still is limited scope for monetary policy within these constraints.

Although it is well known that the nature of the exchange rate regime will be critical for analysing the scope for monetary policy, there are a number of issues that have been raised in the recent literature on exchange rate policy options for small open emerging economies that are perhaps worth highlighting here. Against that background we can assess the position of the CMA countries. Section 1 will therefore set out the new conventional wisdom of exchange rate policy options for developing countries. What is clear is that despite the extremely wide and deep literature on the subject, and despite decades of experiences with different policy regimes, there is still little unanimity about the appropriate exchange rate policy and therefore for monetary policy in emerging economies. The current CMA situation will be assessed within the context of these views. Section 2 will then try to assess the scope for monetary policy within the CMA, focusing on South Africa. Clearly the policy options open to South Africa are broader than those of the other members. This section will also look at the implications of the adoption of inflation targeting on the rest of the CMA.

Section 3 will focus on the scope available to LNS. It will be argued that there is some limited scope for monetary policy actions within the current regime, and a look at some of the variables will attest to this. There is some (although limited) scope for different inflation rates and different interest rates even

within the context of fixed exchange rates. Most of this scope exists because of institutional or structural differences.

It is not intended to discuss the pros and cons of membership of the CMA directly, nor is it intended to go into the technical or operational details of the monetary policies of the different countries. Rather the paper will focus on a number of broader and more general issues relating to monetary policy within the CMA framework.

5.2. Exchange rate policies for developing or emerging market economies.

In discussing the topic of monetary policy within the CMA framework, it is important to consider the latest thinking on the appropriate exchange rate policies for emerging market economies. The LNS countries are constrained in terms of what they can do with respect to exchange rate policy, having made the choice to link to the rand. But the discussion could allow us to consider the alternatives that these countries could face. It also allows us to consider the appropriate policy choices facing South Africa (and thereby indirectly the LNS countries).

Cooper (1999 p14) argues that the debate over the best exchange rate regime continues unabated, still unresolved. Empirical evidence that he reviews is mixed, and the only generalisation that he feels that can be made on the basis of over 20 years experience under floating exchange rates is that real exchange rate movements are highly correlated in the short and medium run with nominal exchange rate movements except when very high inflation rates are involved i.e exchange rate movements do not simply reflect exchange rate differentials.

The new conventional wisdom or new consensus view (as exemplified in Edwards, 2000) of exchange rate policy options is what Velasco (1999) calls the law of the excluded middle i.e. there is no intermediate exchange rate regime suitable for developing countries. Currency boards or dollarisation (super-fixity in Edwards terminology) or free floating rates are the only options. The reasoning for this is that crawling or adjustable pegs were prevalent in the crisis prone countries in the 1990s, even where sound macroeconomic policies were followed. If the lack of credibility and high interest rates were the major factors that brought the pegs down, then the solution is to adopt a hard peg such as a currency board or the abandonment of the domestic currency. Revocable pegs are indefensible under conditions of volatile capital mobility. If the conditions for radical fixing are not present, then the other extreme is the appropriate solution i.e. complete flexibility. As Velasco (1999) notes, the other way to ensure credibility is not to make any promises about the exchange rate at all.

Velasco (1999) argues however that this new orthodoxy is on shaky ground. Firstly, it is on shaky empirical grounds. Currency boards have not been around long enough to judge unequivocally, and Argentina's experience has been questionable. Free float success stories on the other hand gloss over the fact that very few floaters are indeed free floaters. It is therefore a question of how much dirt to allow in the float. Secondly, there are no clear criteria as to which countries should adopt which polar system, and thirdly there is the problem of implementation. Currency boards or hard pegs are only viable under certain conditions, and have the problem of the guarantee of the stability of the domestic financial system in the absence of a domestic lender of last resort. In other words currency boards can lead to banking crises, which, as is now widely accepted in the crisis literature, leads to currency crises (and in turn exacerbates the banking crisis). Velasco's overall conclusion is that currency boards can

only work under stringent conditions, and free floating cannot work either. His focus then becomes how to make limited flexibility work.

With respect to currency boards, it is argued that the required conditions to be met include:

- (1) Optimal currency areas criteria must be satisfied, implying that small countries are better candidates, and that countries must be prone to similar shocks;
- (2) A concentration of trade with the country to which the peg is going to take place;
- (3) The adopting country must have preferences about inflation that are broadly in line with those of the country to which it plans to peg;
- (4) Flexible labour markets are essential, to allow wages and prices to adjust in response to adverse shocks, therefore labour market reforms should take place in advance;
- (5) Strong, well capitalised and well regulated banks are also essential, since a hard peg prevents the local central bank from serving as lender of last resort to domestic banks;
- (6) Hard pegs are most necessary for countries with weak central banks and chaotic fiscal institutions. But Velasco points out that making hard pegs work requires high-quality institutions and the rule of law matter: a currency board for instance, is a commitment to adhere to a set of very strict rules governing monetary policy. It may also involve putting the exchange rate into the law as Argentina has done. These arrangements only make sense in countries where governments adhere to their own rules and where laws cannot be changed by fiat. (Velasco, 1999, p9).

Cooper argues that the incompatible triangle of fixed exchange rates, independent monetary policy and free capital movements has been understood for a long time. What is less obvious, he argues, is that floating rates, independent monetary policy and freedom of capital movements may also be incompatible, at least for countries with small and poorly developed domestic capital markets i.e. for most countries. That would leave a more limited menu of choice for such countries: between floating rates with capital account restrictions and some monetary autonomy, or fixed rates free of capital restrictions but with loss of monetary autonomy. Put bluntly, two prescriptions regularly extended to developing countries by the international community, including the IMF and the US Treasury, namely to move toward greater exchange rate flexibility and to liberalise international capital movements, may be in deep tension, even deep contradiction. (Cooper, 1999, p21)

The reason for this is that speculators selling the currency short, even if the speculators concerned do not hold much of the resources concerned can easily manipulate small countries currencies. A combination of sales and rumours would be sufficient to start a run on the currency. If the price level then adjusts and the central bank later accommodates the adjustment, the depreciation will have been justified ex post. This is a fundamentally unstable dynamic, with multiple equilibria. Thus situations

arise where the fundamentals are basically sound, but the currency depreciation leads to inflation that subsequently justifies the depreciation. The core problem is that where we have economies with imperfect financial markets, the exchange rate is one of the most important asset prices that gets buffeted by changes in portfolio sentiment. Given that in a small open economy the exchange rate is also the most important price in the market for goods and services, these volatile asset prices will badly disrupt the markets on which the economic well-being of the majority of residents depend.

Cooper also argues that it is unlikely that a broad diversified financial market based on domestic currency can develop under floating exchange rates. If there is free movement of capital, residents, faced with the option of more liquid and stable financial instruments abroad would prefer them to the local ones. Under direct competition, domestic markets are unlikely to develop to the point at which they are competitive with assets held abroad (p24). The unwelcome conclusion is that there is a basic incompatibility between free capital movements and exchange rate flexibility (except for large diversified economies with well-developed financial sectors). Given that free capital movements are also incompatible with fixed but adjustable pegs, he argues that unless countries are prepared to fix permanently to some leading currency, or adopt a leading currency as the national currency, they may reasonably choose to preserve the right to control at least certain kinds of capital movements into and out of their jurisdictions, in the interests of reducing both nominal and real exchange rate variability. (Cooper, 1999 p24). The ultimate choice would depend on factors such as wage and price flexibility. the nature of shocks, the administrative capacity to control capital flows, particularly surges in or out. Edwards (2000) however, has argued that the experience with capital controls has been disappointing. Thus the choice is for some type of hard fix (the LNS option) or flexible exchange rates with capital controls (the current South African situation).

At a more general level it implies that although exchange rates may be a useful shock absorber for real disturbances, the fact that financial transactions today overwhelm trade and other current transactions, makes the exchange rate a source of uncertainty for trade and capital formation and other productive economic activity. Cooper s view is that a cost-benefit calculation for flexible versus fixed exchange rates will gradually alter the balance against flexibility, even for large economies.

In the context of this debate it would appear that the major issue here is the monetary policy framework adopted by South Africa. There is no suggestion at this stage that South Africa would adopt a hard peg. The issue then becomes the degree to which capital controls should be relaxed. It is around this issue which the major controversy revolves. Whereas in the early 1990s the conventional wisdom was the abolition of capital controls, this is now less clear-cut, with even the IMF being a bit more cautious on the issue. It is exemplified in Cooper (1999), as well as in the recent UNCTAD review (2000) which argues that the success of Malaysia in dealing with the Asian crisis owes much to the imposition of capital controls in that country. This is not to suggest that South Africa should not continue on its liberalisation path. What it does suggest is that the cautious path that is being followed is probably appropriate. It also illustrates the level of uncertainty that there is at the policy level about the appropriate degree and speed of capital account liberalisation.

5.3 Developments in South Africa's Monetary Policy and the implications of Inflation Targeting

In 2000 the South African Reserve Bank moved away from its so-called eclectic approach to monetary policy. Under this approach, guidelines for M3 were set, but being within the guideline range was more

the exception than the rule. In addition to setting guidelines for M3 growth, other factors were also considered including the exchange rate, credit extension, etc. Although it was often stated that low inflation and financial stability were the primary objectives of monetary policy, there was no clear target or yardstick by which to measure success. In addition the fact that the guidelines were often missed did not concern the financial markets as the link between M3 growth and prices was not stable. Furthermore, exchange rate policy complicated the issue, particularly the treatment of capital account shocks.

In February 2000, in line with a number of other emerging markets, South Africa adopted a policy of inflation targeting. Inflation targeting does not really involve any major changes at an operational level of monetary policy, the repo rate remains the main operational instrument, and the Reserve Bank has not needed to introduce any new instruments. However there have been important changes in focus and approach to monetary policy.

Inflation targeting as its name suggests, makes the primary objective of monetary policy explicit. A numerical target is set, and the objective of the Bank is to achieve this target. In the case of South Africa, a target range of 3-6 per cent was set, and this has to be achieved on average for the year 2002, with the appropriate measure of inflation being CPIX (ie headline CPI excluding mortgage interest rates, for metropolitan and urban areas). By setting this target, the Reserve Bank s role is transparent, and its accountability is also made clear.

However in practice there are a number of inflation targeting issues that have implications for South African monetary policy and this is turn will affect the LNS countries. The following issues have arisen:

- The choice of the target: the target was chosen after consultation between the Finance Ministry and the South African Reserve Bank. This target was deemed appropriate for the South African economy, but it is unclear if this would have been an appropriate choice for the LNS countries. It is not clear if this in itself was a problem, but it potentially could have been. It is also not clear what the equivalent target would have been in these countries once adjusting for the mortgage payments.
- (2) The implications for monetary policy independence: much has been written about the implications of inflation targeting for monetary policy independence. What is clear from the literature is that a necessary precondition for the implementation of monetary policy is central bank independence. However this really extends to instrument or operational independence rather than goal independence (although this is not excluded as an option. In some countries the central bank drives the process of deciding to adopt inflation targeting, and also decides on the target. In other cases the Finance Ministry or Treasury drives it). Ironically however, inflation targeting does constrain monetary policy as it does remove a degree of discretion. This is particularly true in the case of South Africa where the previous policy regime operated on a broad discretionary basis. By focusing on the inflation target, it means that other possible objectives have to be secondary. Although it is not the same a rule (e.g. a money supply rule) in the sense that there is a clear short-term objective, the specified end-point means that at times the needs of the real economy may have to be subordinated to the requirements of the target.

- (3) Following from the above, it means that monetary policy has to be more forward-looking and the intermediate target becomes the inflation forecast. If the expected inflation is above the forecast, monetary tightening is required, and if it is below, then monetary easing is appropriate. Because of this forward-looking nature of policy it does mean that stop-go policies are less likely. If correctly implemented it means that we may have a smoother business cycle. This would be to the advantage of the CMA as a whole. On the other hand however, it may well be that in cases where we are confronted with real shocks, we could land up with greater output instability given that we have to focus on the inflation target alone. For this reason Velasco, among others, argues that a Taylor rule would be more appropriate, as this also focuses on deviations of output from potential.
- (4) A further implication of inflation targeting is for the exchange rate. Although the LNS countries have no control over their exchange rate, South Africa s exchange rate policy is of importance to them. Given that the focus of the framework is on the inflation rate, it means that exchange rate targeting is ruled out. In the literature, this is referred to instrument instability, which refers to possible interest rate or exchange rate instability resulting from inflation targeting. Inflation targeting has changed the conduct of exchange rate policy in South Africa in the sense that unlike in the past, there has not been an attempt to defend the exchange rate at times when it has come under pressure. However the South African Reserve Bank's Monetary Policy Committee has been concerned about possible second-round effects of exchange rate depreciation. It is not possible to say whether this policy has in fact led to longer run instability. It could be argued that an attempt to defend the rand under conditions of capital outflows could result in increased speculation against the rand and ultimately greater variability or a more depreciated level. But such fluctuations in the nominal exchange rate cannot be avoided, with or without inflation targeting. But inflation targeting does impose a hands-off discipline on the South African Reserve Bank with respect to the exchange rate. In the longer run, as the inflation rate declines, there should be greater stability in the nominal exchange rate in any case. The bottom line however is that the LNS countries are also directly affected by the change in focus of exchange rate policy.
- (5) Possible instrument instability does not only refer to the exchange rate, but also to the interest rate. There is no evidence that the introduction of inflation targeting has resulted in more variable interest rates. On the contrary, it appears that greater stability of the nominal interest rate has been the result.
- (6) A major source of concern is how to deal with real shocks. Different countries deal with this issue in different ways. Some countries explicitly exclude real shocks, other specifically allow for deviations from the target when confronted with real shocks. In the South African case, the issue of real shocks was not directly addressed in the initial inflation targeting

announcement. It could be argued that having a relatively wide target band does allow for the presence or possibility of real shocks, as is the case in some inflation targeting countries. In an explanation of inflation targeting, the Governor of the Reserve Bank stated that: In the application of inflation targeting in South Africa allowance will be made for serious supply shocks. Some discretion must be applied in order to avoid costly losses in terms of output and jobs. The Reserve Bank will have to monitor economic developments closely to determine the origin and likely impact of such supply shocks. It is not possible to specify in advance all the economic shocks that could affect monetary policy. Such shocks could include developments affecting the terms of trade of the country or large disruptive international capital flows. They could also arise from natural disasters. If such developments do occur, the public will be duly informed of the likely consequences for attainment of the monetary policy objective.

Since the introduction of inflation targeting, the Bank has had to contend with some volatile capital flows, which affected the exchange rate, but more importantly with the oil price shocks. Although the above quote does seem to imply that some allowance would be made for these shocks, there is no formal mechanism for doing so. This does mean however that theoretically, these shocks could dominate policy decisions, even at a time when the rest of the economy may under normal circumstances have required an increase in interest rates.

It so happens that in the case of the oil price hike, all CMA countries are more or less equally affected. It is not necessarily the case for all types of shocks (as has been in the past), and the LNS countries would have to adjust to shocks that are specific to South Africa. On the other hand, shocks that are specific to some or all of the LNS countries may not be factored into policy at all.

Consultation within the CMA

This raises what is probably a central issue for LNS, the issue of consultation. Under a pure currency board arrangement or dollarisation, consultation is not really an issue. It is in a sense a unilateral decision by the pegging country to take that course of action. This results in what de Grauwe (1992) calls an asymmetric monetary union, where the centre country acts purely in its own interests. On the other hand the euro area would be a symmetric monetary union where adjustments to shocks are undertaken on the basis of consultation. Here we have a monetary union, where countries will be giving up their national currencies. The central banks of the different member countries are becoming regional branches of the ECB but the different countries interests however are directly represented within the ECB. But even here there is no mechanism for solving problems of different growth rates. For example, a particular monetary policy may be desirable for countries with low growth rates, but not for those with higher growth rates. One way in which this dilemma could be solved is through a system of fiscal transfers. There is however no provision for this. This would usually require political union, and is usually what happens within national boundaries with depressed regions.

In the CMA however, the situation is even more problematic for the smaller countries. Apart from issues such as differential growth rates, a fundamental issue is one of consultation and representation in the policy decision making. Whereas the agreements do involve some commitment to discussions, there is no obligation on South Africa's part to include its CMA partners in the monetary policy decision

making process. In the past, political considerations made this issue more complicated. More recently there have been meetings of governors twice a year to discuss issues of common concern, and a decision was made for the heads of research departments at the LNS central banks to get together at the SARB before MPC meetings in South Africa (which are held approximately every 6 weeks). These are new developments and are at this stage relatively informal. The intention is for the different central banks to set out their views current economic developments in the different countries. This should result in a more focused input to the MPC from a CMA perspective.

5.4 Monetary Policy issues in LNS

The basic question is, is there any scope for monetary policy for LNS within the current framework? The short answer is probably no, for reasons that are well known. However we will consider the issues in a bit more detail. As we will see, as is the case in most fixed exchange rate systems, there are imperfections in the market and institutional differences, which allow for some limited divergences from the theoretical models.

5.4.1 Interest rates

At a theoretical level, within a monetary union, interest rates should be equalised. Under conditions of perfect capital mobility, if interest rates were higher in one region, arbitrage would ensure that they were brought back into equality. This of course assumes that there are no transactions costs, and that risks are the same. As we will see, interest rates between South Africa and LNS can and do diverge. But the question is, is there any meaning in these divergences?

Chart 1 shows the comparative repo rates or bank rates (where applicable) in the CMA. Chart 2 shows the prime lending rates in the different economies. In Namibia the Bank rate has been set at 25 basis points below the South African repo rate. This means that when banks are short of liquidity they can use the overnight facility at the BON at a rate lower than in South Africa. Banks would therefore not go to the South African market under these conditions. However if the BON decided to raise the Bank rate above the South African repo rate, freedom of capital movements would mean that they would borrow from South Africa, either in the interbank market or their parent etc. What is interesting is that the prime lending rates in Namibia are higher than in South Africa, which could imply that banks are earning higher margins, or that South Africa has better quality prime borrowers. But it would be difficult for rates to get out of line for a sustained period of time. For example if Namibia lowered the bank rate, lending rates would fall, as would deposit rates. Presumably people would then borrow at lower rates and deposit rates would also therefore decline. Therefore, after adjusting for transport and transactions costs, people would start putting their savings into South African banks. This would then stop the decline of deposit rates. However banks would be constrained on the lending side as their margins began to be squeezed.

making process. In the past, political considerations made this issue more complicated. More recently there have been meetings of governors twice a year to discuss issues of common concern, and a decision was made for the heads of research departments at the LNS central banks to get together at the SARB before MPC meetings in South Africa (which are held approximately every 6 weeks). These are new developments and are at this stage relatively informal. The intention is for the different central banks to set out their views current economic developments in the different countries. This should result in a more focused input to the MPC from a CMA perspective.

5.4 Monetary Policy issues in LNS

The basic question is, is there any scope for monetary policy for LNS within the current framework? The short answer is probably no, for reasons that are well known. However we will consider the issues in a bit more detail. As we will see, as is the case in most fixed exchange rate systems, there are imperfections in the market and institutional differences, which allow for some limited divergences from the theoretical models.

5.4.1 Interest rates

At a theoretical level, within a monetary union, interest rates should be equalised. Under conditions of perfect capital mobility, if interest rates were higher in one region, arbitrage would ensure that they were brought back into equality. This of course assumes that there are no transactions costs, and that risks are the same. As we will see, interest rates between South Africa and LNS can and do diverge. But the question is, is there any meaning in these divergences?

Chart 1 shows the comparative repo rates or bank rates (where applicable) in the CMA. Chart 2 shows the prime lending rates in the different economies. In Namibia the Bank rate has been set at 25 basis points below the South African repo rate. This means that when banks are short of liquidity they can use the overnight facility at the BON at a rate lower than in South Africa. Banks would therefore not go to the South African market under these conditions. However if the BON decided to raise the Bank rate above the South African repo rate, freedom of capital movements would mean that they would borrow from South Africa, either in the interbank market or their parent etc. What is interesting is that the prime lending rates in Namibia are higher than in South Africa, which could imply that banks are earning higher margins, or that South Africa has better quality prime borrowers. But it would be difficult for rates to get out of line for a sustained period of time. For example if Namibia lowered the bank rate, lending rates would fall, as would deposit rates. Presumably people would then borrow at lower rates and deposit rates would also therefore decline. Therefore, after adjusting for transport and transactions costs, people would start putting their savings into South African banks. This would then stop the decline of deposit rates. However banks would be constrained on the lending side as their margins began to be squeezed.

affects economic activities by influencing the flow of credit and money from the banking system to the private sector. Its monetary policy stance at any time is by and large a reaction to the prevailing economic conditions. The channel through which the BON influences economic activities is the bank reserves. (Alweendo, 2000 p7). There is clearly a limited leeway within which the LNS banks can affect economic activity and inflation through such discretion, given Namibia s position in the CMA as well as the increasing role that the South African Reserve Bank plays as the dominant central bank in the monetary area.

There is no doubt that the commitment to a fixed exchange rate denies the Bank of Namibia any active discretionary monetary policy. In an attempt to enhance liquidity management the BON introduced a call deposit facility for commercial banks and the building societies so that excess funds would be placed locally instead of being invested elsewhere in the CMA. The call deposit facility for commercial banks is also used as an investment outlet for surplus funds of the banks.

According to Vollan (2000) the facilities available to commercial banks at the BON could in principle determine money market interest rates in Namibia. However he notes, in line with what was argued above, that this would only work if it reflects short-term interest rate levels in South Africa. This is necessary because the commercial banks in Namibia will cover any major change in their liquidity position by using the South African market if the marginal interest rates there are more favourable. As a consequence, any attempt by the BON to add or drain liquidity in an effort to influence the relative interest rates with South Africa would immediately influence the demand or supply for South African Rand and affect the levels of official foreign exchange reserves. (Vollan, 2000 p77).

Similarly, inflation rates can and do diverge, but to a large extent the divergence comes about as a result of different weights in the basket. In the same way that in South Africa the CPI may differ from city to city or between cities and towns because of different consumption baskets, so it is that there is no reason that the CPIs in LNS should exactly mirror that of South Africa. However it is the case that they do move together, as a number of studies have shown. However the overall trends are likely to be the same.

Lesotho

Prior to 1998, interest rates in Lesotho were directly and indirectly controlled by the monetary authorities. For instance, the Central Bank set the minimum rate to be paid on savings deposits and also set the prime lending rate for the commercial banks. The central bank also influenced money market interest rates through the manipulation of the discount rate. Prior to 1998, the prime lending rate in Lesotho was generally lower than that in the RSA. That situation was a reflection of administrative control of interest rates by the authorities in Lesotho (Central Bank of Lesotho, September 07, 2000). Since 1998, the market rates in Lesotho have been market-determined. That is, the restrictions on the rate of interest that the banks can charge on lending and the rate they can pay on deposits no longer apply. Commercial banks are now free to set their own lending as well as savings (deposit) rates. This was done in an attempt to liberalise the markets in the process of financial sector reform.

Since the liberalisation, the lending rates in Lesotho have been higher when compared with those in the RSA while the deposit rates in Lesotho have been lower. Given the CMA arrangement, we would expect depositors in Lesotho to keep their money in South Africa and borrowers to borrow from South Africa where lending rates are favourable. (However, this would happen under certain neo-classical conditions such as: the existence of perfectly competitive markets; absence of externalities; no prohibitive regulations; lenders having perfect information regarding quality of borrowers; and borrowers having access to information). According to the CBL Quarterly Bulletin, lower lending rates in South Africa will help to contribute to a capital inflow into Lesotho as people will borrow from South African banks. But of course there are limits to this. Rates cannot diverge too far from South African rates, as the asset side of the balance sheet of the Lesotho banks would decline.

Another feature of the banking system in Lesotho is that there is generally excess liquidity in the banking system and as a result banks do not borrow from the central bank. In that way, the central bank cannot influence the money market interest rates by the manipulation of the bank rate. The excess liquidity in the banking system is a result of the banks reluctance to make loans available to the private sector. This reluctance is, in turn, brought about by lack of bankable projects and/or prohibitive credit risks. Banks have also ascribed their reluctance to increase their lending activities to the absence of an adequate legal structure. That is, business laws as well as judicial procedures that give sufficient protection to the lender against delinquent borrowers. It is generally acknowledged that the absence of adequate legal framework to deal with delinquent borrowers contributed significantly to the destabilisation of the financial system in Lesotho (Central Bank of Lesotho, September 07, 2000). This situation, coupled with the deterioration of the financial position led to the liquidation of the Lesotho Agricultural Development Bank (LADB) in March 1999 and the privatisation of Lesotho Bank (another state-owned bank) in August 1999. In the case of Lesotho Bank, a strategic partner was sought to take a majority shareholding in the bank. The privatisation took place on the 2nd of August 1999 and a new bank, which is 70 per cent owned by Standard Bank Lesotho Limited and 30 per cent by Government of Lesotho was formed. In an attempt to alleviate the problem of banks being reluctant to extend credit, the authorities established a commercial court, with the sole purpose of speeding-up the execution of cases with a commercial content. The authorities believe that this will go a long way towards reducing credit risk to an acceptable level.

Another unique feature of Lesotho is that the banks were subjected to Minimum Local Assets Ratio (MLAR) prior to 1998, which was replaced by the Liquid Assets Ratio (LAR) after the liberalisation of interest rates in an attempt to attain the objective of promoting an effective financial intermediation process. MLAR was intended to encourage banks to invest domestically for developmental purposes but failed to achieve that objective. Instead, banks preferred to hold their deposits with the central bank rather than extending credit. Under the MLAR, banks were required to hold a certain percentage of their assets domestically. The LAR of 40 per cent of admissible liabilities will be introduced with the purpose of streamlining funds to the development expenditure by government.

Swaziland

As with the other CMA countries the small economic size of the Swazi economy compared to that of South Africa limits the scope for exercising monetary policy. Broad aspects of monetary policy, i.e. control of money supply and other monetary aggregates are beyond the scope of the Central Bank of Swaziland (CBS). Prior to 1995, the Central Bank of Swaziland tried to forge an interest rate regime that was independent of conditions prevailing in South Africa. Local interest rates were somewhat below those in South Africa, with a margin that varied from time to time, averaging at 2 per cent and

reaching a maximum of 6 per cent (CBS Policy Statement 1998). The rationale for this policy stance was to stimulate investment by affording cheaper capital. From 1995 onwards, a policy of narrowing the gap between Swazi and South African interest rates was adopted.

The Central Bank's discount rate generally serves as a policy indicator for the level of interest rates rather than a lending benchmark. Commercial banks do not utilise the discount window, as they are very liquid. Another objective pursued by CBS is to maintain real positive interest deposit rates to cater for the small depositors (CBS, 1999 Annual Report).

Inter-bank and capital market activity is almost non-existent and to foster interbank activity, the Central Bank has used moral suasion to get banks with liquidity needs to access fund from other banks with surplus funds.

Since 1995, the CBS has embarked on a programme of financial reforms involving progressive deregulation and liberation programmes aimed at financial broadening and deepening. These include:

- In May 1996, the 95per cent minimum local assets requirements on banks was scrapped and CBS ceased payment of interest on excess reserves held with the central bank. The aim was to address the excess liquidity problem, and encouraged banks to access the RSA money markets. However interest rate payment on excess reserves was later resumed, temporarily, in November 1996 until April 1998. The liquidity requirement remained at 17.5 per cent during this time. This measure is to continue based on the commercial banks interest rates awarded to depositors.
- ★ In 1997 CBS broadened the liquid asset composition to include rand currency held by banks.
- ★ In Feb 1999, following an IMF Article IV Consultation, the CBS relaxed the liquidity requirement to 15 per cent from 17.5per cent and reserve requirements from 6per cent to 4 per cent. In turn, commercial banks increased their investments in South African money markets leading to a noticeable reduction in domestic surplus liquidity.

From the Asian financial crisis and recovery experience, the CBS managed in 1999 to regulate local banking liquidity and credit creation by adjusting the bank rate at a slower pace than the South African repo rate. This demonstrated its limited capacity to influence interest rates and liquidity. Thus although rates can and do differ, there are limits to which they can diverge. The bottom line however is that the ability of the central banks to significantly affect the short term interest rates in severely limited. Fundamentally LNS have to more or less accept the interest rate set in South Africa.

5.4.2 Inflation Rates

It is sometimes noted that contrary to what is expected from a perfectly fixed exchange rate system, inflation rates diverge significantly in the CMA, as can be seen in Chart 3. However the constraints on monetary policy prevent the LNS countries from actively conducting an anti-inflation stance. A collaborative study from the CMA central banks in 1998 confirmed the dependence of the LNS inflation rates on that of South Africa. The differences in observed inflation rates can be ascribed to a large degree to differences in weights in the CPI baskets, as can be seen in Table 2. Interest payments on

reaching a maximum of 6 per cent (CBS Policy Statement 1998). The rationale for this policy stance was to stimulate investment by affording cheaper capital. From 1995 onwards, a policy of narrowing the gap between Swazi and South African interest rates was adopted.

The Central Bank's discount rate generally serves as a policy indicator for the level of interest rates rather than a lending benchmark. Commercial banks do not utilise the discount window, as they are very liquid. Another objective pursued by CBS is to maintain real positive interest deposit rates to cater for the small depositors (CBS, 1999 Annual Report).

Inter-bank and capital market activity is almost non-existent and to foster interbank activity, the Central Bank has used moral suasion to get banks with liquidity needs to access fund from other banks with surplus funds.

Since 1995, the CBS has embarked on a programme of financial reforms involving progressive deregulation and liberation programmes aimed at financial broadening and deepening. These include:

- In May 1996, the 95per cent minimum local assets requirements on banks was scrapped and CBS ceased payment of interest on excess reserves held with the central bank. The aim was to address the excess liquidity problem, and encouraged banks to access the RSA money markets. However interest rate payment on excess reserves was later resumed, temporarily, in November 1996 until April 1998. The liquidity requirement remained at 17.5 per cent during this time. This measure is to continue based on the commercial banks interest rates awarded to depositors.
- * In 1997 CBS broadened the liquid asset composition to include rand currency held by banks.
- ★ In Feb 1999, following an IMF Article IV Consultation, the CBS relaxed the liquidity requirement to 15 per cent from 17.5per cent and reserve requirements from 6per cent to 4 per cent. In turn, commercial banks increased their investments in South African money markets leading to a noticeable reduction in domestic surplus liquidity.

From the Asian financial crisis and recovery experience, the CBS managed in 1999 to regulate local banking liquidity and credit creation by adjusting the bank rate at a slower pace than the South African repo rate. This demonstrated its limited capacity to influence interest rates and liquidity. Thus although rates can and do differ, there are limits to which they can diverge. The bottom line however is that the ability of the central banks to significantly affect the short term interest rates in severely limited. Fundamentally LNS have to more or less accept the interest rate set in South Africa.

5.4.2 Inflation Rates

It is sometimes noted that contrary to what is expected from a perfectly fixed exchange rate system, inflation rates diverge significantly in the CMA, as can be seen in Chart 3. However the constraints on monetary policy prevent the LNS countries from actively conducting an anti-inflation stance. A collaborative study from the CMA central banks in 1998 confirmed the dependence of the LNS inflation rates on that of South Africa. The differences in observed inflation rates can be ascribed to a large degree to differences in weights in the CPI baskets, as can be seen in Table 2. Interest payments on

discussed in detail, it is probably not an option worth pursuing unless South Africa's monetary policies were to become extremely unstable. Otherwise there should be a firm commitment to the peg. Whereas Europe is moving towards a common currency, the CMA countries all have their own (relatively recently introduced) currencies. From a practical point of view, there should be no difference as long as there is a clear commitment to maintain the peg with the South African Rand. However there may be a credibility element involved here which could reduce the advantage of having a fixed exchange rate. One of the advantages of joining a monetary union is the more or less irrevocable commitment that is made. Thus in the case of the Euro area countries, their commitment is seen to be more firm once the Euro is adopted, than was the case when the commitment was simply to a fixed exchange rate. (The crisis of 1992 showed how easily that commitment could be broken). Although adopting a single currency itself is not a totally irrevocable commitment- as countries could theoretically leave the system- the costs of leaving rise substantially once a common currency is adopted. In the case of the CMA it could be argued that by moving away from a common currency, this has increased the debate over the issue of de-linking, and this in turn dissipates one of the main advantages of irrevocably fixed exchange rates- that of policy credibility.

Although there is limited scope for discretionary monetary policies, there are other areas where the Central Banks play an extremely important role. These areas include supervising the national payments systems, helping develop local money and capital markets, the supervision of the banking and financial systems, and the implementation of exchange control regulations. These of course are not all monetary policy in the narrow sense, and not all of these functions are necessarily carried out by central banks in other countries. But nevertheless they are important functions to help maintain overall financial stability, which is, after all, what monetary policy is all about.

6. CONCLUSION AND LESSONS FOR NAMIBIA

By Research Department, Bank of Namibia

Several broad themes emerged from the discussions. The first is that the scope for a discretionary monetary policy in a small open economy is limited mainly because these economies are susceptible to external shocks. Although small open economies can pursue independent monetary policy in theory, in practice these regimes can be volatile as per the Hong Kong experience. Floating exchange regimes in particular can add a lot of uncertainties. For this reason, small open economies like Namibia are unlikely to gain much from having a discretionary monetary policy.

Fewer small and open economies like Botswana have managed to pursue a discretionary monetary policy. But, it is important to note that Botswana's case is unique in the sense that the country has more scope for an independent monetary policy than other small open economies due to favourable balance of payments and higher foreign reserves. It is also important to point out that despite its discretionary monetary policy, the exchange rate of the Pula is closely linked to the South African Rand. This is because of its trade linkages with South Africa. And because of that, Botswana cannot, therefore, escape from the volatility of the rand. This is the main reason why Botswana's inflation rate and the exchange rate more or less move parallel to South Africa's.

The conclusion that can be drawn from the above discussion is that it is much better for small open economies to peg their currencies to the dominant economy (trading partner) in the region such as South Africa in the case of Southern Africa. As long as South Africa maintains a stable monetary environment, it makes sense to peg to that country s exchange rate. This is one of the main reasons for the partial dollarisation of Hong Kong after the Asian financial crisis to ensure financial stability and investors confidence in the economy.

Although there are costs associated with a peg, particularly in terms of macroeconomic management, the alternative may also be problematic. It is also argued that even where there is a pegged exchange rate regime, the central bank can still play an important role in the economy in areas such as national payments and settlement system, and the development of money and capital markets.

Furthermore, the trends towards regional economic integration, such as monetary unions, mean that some type of monetary co-operation and arrangements ought to be made. The question to be asked is what form such arrangements must take so that they will be mutually beneficial.

It is fair to conclude this section with a citation by Dr. Jefferis: while there appears to have been a shift in preferences towards floating rather than pegged exchange rates in recent years, this does not mean that floating exchange rates are always preferable — indeed, one of the key conclusions about exchange rate policy is that at least in the current global economic context, no single exchange rate regime may be prescribed for all countries. There is one particular set of countries where it is widely acknowledged that pegged exchange rates remain sensible - those with small open economies, especially those with a dominant trading partner that maintains a reasonably stable monetary policy. For such countries, there is generally little point in incurring the costs of attempting to run an independent monetary policy (Mussa et al, 2000:42).

References

Alweendo, T.K. (2000) Central Banking in Namibia, The South African Journal of Economics, 68(1): 1-7.

Cooper, R.N. (1999) Exchange Rate Choices (unpublished mimeo)

Edwards, S. (2000) Exchange Rate Systems in Emerging Economies (draft paper presented to the US Department of the Treasury project on the international financial system).

Tjirongo, M.T. (1995) Short-term Stabilization versus Long-term Price Stability: Evaluating Namibia's Membership of the Common Monetary Area, Centre for the Study of African Economies, 1-40.

Velasco, A. (1999) Exchange Rate Policies for Developing Countries: What have we learned? What do we still not know? (Paper presented to the Group of 24).

Vollan, B. (2000) The Development of Financial Markets in Namibia, The South African Journal of Economics, 68(1): 63-97.

Bank of Botswana 1999 Monetary Policy Statement

2000 Monetary Policy Statement

Bank of Namibia (1994) Annual Report

(1995) Annual Report (1996) Annual Report (1997) Annual Report

(2000) Quarterly Bulletin, Volume 8 No1.

Central Bank of Lesotho, (2000) Quarterly Review, Volume XIX, No1.

(1996) Capital Flows Survey.

(1999) Annual Report, Maseru, March 2000.

(2000) The Lesotho Economy — An Information Paper, Research Department September 07, 2000.

Central Bank of Swaziland, 1998 Policy Statement

1999 Policy Statement 2000 Policy Statement (1997/98) Annual Report (1998/99) Annual Report (1999/2000) Annual Report

Aninat, E. (2000) High-Level Seminar: Implementing Inflation Targets — Closing Remarks (www.imf.org) (March)

Atta, J., K. Jefferis & I. Mannathoko (1996) Small Country Experiences with Exchange Rates and Inflation: the Case of Botswana, *Journal of African Economies* 5(2), 293-326.

References (Cont)

Exchange Rates and Inflation: the Case of Botswana, Journal of African Economies 5(2), 293-326.

Bank for International Settlements (BIS) (2000a) 70th Annual Report (Basel: BIS).

Bank for International Settlements (BIS) (2000b) Monetary Policy Challenges in a Changing International and Domestic Environment, Background Note for Meeting of African Deputy Governors, Pretoria, October 23-24 (Basel: BIS).

Bank of England (1999a) Monetary Policy in the United Kingdom (www.bankofengland.co.uk)

Bank of England (1999b) The Transmission Mechanism of Monetary Policy. (www.bankofengland.co.uk)

Bryan, M., S. Cecchetti & R. Wiggins (1997) Efficient Inflation Estimation, National Bureau for Economic Research Working Paper 6183

Cecchetti, S. (1997) Measuring Short-Run Inflation for Central Bankers , Federal Reserve Bank of St. Louis Review, May/June, 143-155.

Federal Reserve (1994) The Federal Reserve System: Purposes and Functions (Washington: Board of Governors of the Federal Reserve System)

Ghosh, A., J. Ostry, A. Gulde and H. Wolf (1997) Does the Exchange Rate Regime Matter for Inflation and Growth? IMF Economic Issues No.2.

Goodhart, C. (1989) Money, Information and Uncertainty, 2nd ed. (London: Macmillan)

Goodhart, C. (1995) The Central Bank and the Financial System (London: Macmillan).

Government of Australia (1959) Reserve Bank Act

Hermans, H C L (1996) The History of the Bank of Botswana, Bankof Botswana Research Bulletin, 14(2), 1-48.

Jefferis, K. & I. Mannathoko (1996) A Note on Exchange Rates and Inflation in Botswana, Bank of Botswana Research Bulletin 16(1), 29-35.

Jonsson, G. (1999) The Relative Merits and Implications of Inflation Targeting for South Africa , IMF Working Paper WP/99/116

Majaha-Jartby, J. (1998) Adoption of Indirect Instruments of Monetary Policy in Less Developed Countries — The Case of Botswana, Bank of Botswana Research Bulletin 16(2), 1-10.

References (Cont)

Masson, P., M. Savastano & S. Sharma (1997) The Scope for Inflation Targeting in Developing Countries IMF Working Paper WP/97/130

Mussa, M., P. Masson, A. Swoboda, E. Jadresic, P. Mauro & A. Berg (2000) Exchange Rate Regimes in an Increasingly Integrated World Economy, IMF

Polak, J. (1997) The IMF Monetary Model at Forty IMF Working Paper WP/97/49

Reserve Bank of Australia (1996) Statement on the Conduct of Monetary Policy (www.rba.gov.au)

Reserve Bank of New Zealand (2000) Monetary Policy (www.rbnz.govt.nz)

Roger, S. (1998) Core Inflation: Concepts, Uses and Measurement, Reserve Bank of New Zealand Discussion Paper G98/9

Schadler, S et al (1995) IMF Conditionality: Experience Under Stand-By and Extended Arrangements, Part I: Key Issues and Findings, IMF Occasional Paper No. 128.

South African Reserve Bank (SARB) (2000) A New Monetary Policy Framework , Quarterly Bulletin No. 216 (June)

Worrell, D. (2000) Monetary and Fiscal Co-ordination in Small Open Economies , IMF Working Paper WP/00/56