INFLATION TARGETING:
A COMPARATIVE ASSESSMENT OF SOUTH AFRICA'S EARLY EXPERIENCE

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Executive summary

The general purpose of this study is to determine how South Africa's early experience with the inflation targeting framework compares with the early experiences of Brazil, Chile, Israel, the Czech Republic and Poland. One developed economy, namely New Zealand, is included in the study since it was the pioneer of the inflation targeting framework. The experiences of these countries are compared along three dimensions: the stress tests the frameworks were subjected to and the monetary authorities' responses to these tests; the adjustments made to the frameworks, operational and institutional procedures; and the credibility losses or gains as a result of these experiences.

In order to arrive at a satisfactory conclusion to the problem a number of questions are explored. The theoretical basis of inflation targeting is analysed; the nature of South Africa's framework is assessed to see how it conforms to general practices; South Africa's early experience under the inflation targeting framework is assessed; and, lastly, South Africa's experience is compared with the experiences of the six countries mentioned in the first paragraph.

The assessment in this study shows that South Africa's experience is not out of line when compared with other emerging-market countries. Many of the emerging markets surveyed faced significant stress tests and long-term obstacles that contributed to their failure to achieve their inflation targets in the early years of implementation. In response, the central banks surveyed sought to focus on the primary goal of monetary policy and to counter the second-round effects. As they became more experienced at operating an inflation targeting framework, some of the countries refined their frameworks.

Ultimately, the survey draws lessons from the common experience of the seven countries assessed. It shows that credibility is key to the success of an inflation targeting framework, as is a supportive context. However, the survey also highlights that simply judging a country's monetary policy success on

whether it achieves its inflation targets is too limited an assessment for justifying the merit of an inflation targeting framework.

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List of acronyms and abbreviations

BLP	Backward-looking prices
CNB	Czech National Bank
Cosatu	Congress of South African Trade Unions
CPI	Consumer Price Index
CPIX	Consumer Price Index excluding mortgage costs
EMU	European Monetary Union
ESCB	European System of Central Banks
EU	European Union
MoU	Memorandum of Understanding
MPC	Monetary Policy Committee
MTBPS	Medium Term Budget Policy Statement
NBP	National Bank of Poland
OECD	Organization of Economic Cooperation and Development
SARB	South African Reserve Bank

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1. Introduction

1.1 Background

During the 1970s high and variable inflation had become commonplace in many developed economies. The average rate of inflation in these economies more than quadrupled from 2 to 3 per cent in the 1960s to 13 per cent in 1974. It remained in the 7 to 12 per cent range for the next eight years (*The Economist*, 2004). The spike in inflation was largely the result of high state spending and high oil prices. Hence inflation increasingly became a focus for central bankers across the globe.

Consensus emerged about the harmful effects of inflation and the need for lower inflation. With the demise of fixed exchange rates and the liberalisation of global financial markets the attention of central bankers turned to containing and moderating these high rates of inflation through various interventions.

One of the forerunners of inflation targeting was the use of anchors for monetary policy which included money supply and credit growth. The use of these intermediate targets was motivated in part by efforts to convince the public that the monetary authorities were serious about the challenge of controlling inflation (Reddell, 1999: 63). However, these kinds of targets fell out of favour as changes in the banking sector made them increasingly unreliable indicators of inflation. Gradually the efforts to combat high inflation crystallised in the development of a formal inflation targeting framework.

The adoption of inflation targeting, arguably, yielded results. By the 1990s inflation had become much less of a problem. Consumer inflation in most industrialised countries fell from the double digits of the 1970s to between 1 and 4 per cent. Loayza and Soto (2001: 2) argue that the fall in inflation during the 1990s was rooted in the “profound change in the conduct of monetary policy”

which was central banks' unequivocal stance against inflation. However, Lee (1999) and Ball & Sheridan (2003) argue that disinflationary trends were present at the time which made the economic environment relatively benign. Therefore, the inflation targeting framework, according to these writers, remains largely untested.

It is apparent that the success of the inflation targeting model is not undisputed. Some authors question whether the framework is a panacea to modern economic ills. While no country has abandoned explicit inflation targets, except for Spain when it entered the European Union (Du Plessis, 2002: 5), many analysts contest whether inflation targeting really is the "holy grail" of monetary policy (Genberg, 2002: 161). Nadal de-Simone (2001: 240) succinctly sums up the arguments of two opposing camps. The pro-inflation targeting camp holds the view that inflation targeting has been instrumental in reducing inflation in a number of countries. The opposing view asserts that the performance of inflation targeting countries has not been a resounding success when these countries are compared with their non-inflation targeting neighbours. According to Nadal-de Simone proponents of the latter view conclude that inflation targeters "have been a lucky lot; …if the international environment becomes a high-inflation environment again, inflation targeting will prove to be more a fad than a trend…".

The success of the model aside, questions have been raised about the specific experience of emerging markets, like South Africa, under the inflation targeting model. This strand of the debate asserts that inflation targeting is more of a challenge for emerging market countries. As Minella et al. (2003: 4) state: "Inflation targeting in emerging market economies has been a more challenging task than in developed economies. The conduct of monetary policy has to build credibility and reduce inflation rate levels, and simultaneously deal with a greater vulnerability to shocks."

New Zealand was the pioneer and became the first country to adopt the inflation targeting framework for monetary policy in 1990. This small open economy introduced inflation targeting as part of a package of economic reforms following a period of poor economic performance. According to Bernanke et al. (1999: 86) the reforms included fiscal, structural and trade reforms as well as a change in monetary policy.

Chile followed New Zealand in 1991, becoming the next country to adopt inflation targeting as a framework for monetary policy. Since then an inflation targeting framework in some form has been adopted by several industrialised countries such as Canada (1991), the United Kingdom (1992) and Sweden (1993). Developing countries have also followed suit. These include Israel (1991), Mexico (1994), Brazil (1999) and Thailand (2000). Transition economies, such as the Czech Republic (1997) and Poland (1999), have also recently opted for inflation-targeting monetary policy frameworks (South African Reserve Bank, 2001: 5). Following this global move, South Africa adopted inflation targeting as an anchor for monetary policy in the year 2000.

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By November 2000 there were 19 inflation targeting countries (Mishkin & Schmidt-Hebbel, 2001: 1). This global move towards inflation targeting was prompted, in part, by the fact that price stability is deemed a necessary, but not a sufficient, precondition for economic growth and employment creation. Casteleijn (1999: 64) states: “Low inflation is almost universally accepted as the ultimate objective of monetary policy – not as an end in itself, but as the means whereby monetary policy can contribute to solid economic performance”.

The inflation targeting framework, in essence, holds that the primary objective of monetary policy is price stability. Alan Greenspan, Chairman of the United States (US) Federal Reserve Board, has been quoted on several occasions as saying that price stability is achieved when business and private individuals no longer take into account the prospective change in the general price level when making

economic decisions (Brash, 1997: 13). Inflation targeting countries generally follow the same principles. However, given the differing economic, social and political environments of these countries, there are some differences in the way they implement and operationalise the framework.

The preceding discussion highlights a number of issues surrounding the inflation targeting framework and countries which have adopted the framework. It is within this context that South Africa's short experience with inflation targeting is analysed.

1.2 Problem statement

This paper assesses South Africa's early experience under an inflation targeting framework. South Africa formally adopted inflation targeting in the year 2000 with targets set for achievement in the year 2002. In short, the first three years of inflation targeting were not plain sailing. South Africa had to contend with a number of adjustments in the economy which impacted negatively on the inflation rate and, on occasion, pushed it outside the target range. The monetary authorities also effected a number of adjustments to the policy framework and some of the operational procedures, and in so doing, had to contend with a number of credibility issues. The central problem to be addressed in this study is to determine how South Africa's early experience with the inflation targeting framework compares with the early experiences of five other emerging-market countries and one developed country.

The outcome of this study provides guidelines and lessons for South Africa and indicates certain international best practices according to which South Africa can benchmark itself. This study is intended to contribute to the growing body of research about South Africa's early experience with inflation targeting. It offers a good basis for further research once South Africa's experience has matured.

1.3 Demarcation and methodology

Broadly, the analysis is undertaken as follows. South Africa's early experience is compared with the early experiences of five emerging-market countries, namely Chile, Brazil, the Czech Republic, Poland and Israel. One developed country, New Zealand, is included in the study. Although it is a developed country, New Zealand's early experience is briefly analysed since it was the pioneer in the field of inflation targeting. As will be shown, a number of these countries were undergoing economic structural adjustments, struggled with credibility problems and missed their inflation targets in the early years. A number of them also suffered exogenous shocks which monetary policy could not counteract.

Comparing countries is always difficult because there are often as many differences between them as there are similarities. The five emerging-market countries were chosen because they fall into the emerging-market basket, similar to South Africa. However, South Africa, the Czech Republic, Poland, Brazil and Chile are considered middle-income countries while Israel and New Zealand are considered high-income countries (World Bank, 2004: 296-297). Israel can effectively be used for comparison as its economy is approximately the same size as South Africa's, but it operated a dual exchange rate and inflation target initially, making the comparison difficult. Brazil appears, on the surface, to be a good country for comparison since it, too, had to confront the challenges of currency depreciation, high administered prices and low credibility. Other countries, such as the Eastern European countries are undergoing extensive reforms, similar to South Africa. Given the differences between them, a range of emerging-market countries was chosen to obtain a broad view of the emerging-market experience. New Zealand was chosen as a developed country for comparison since, as mentioned, it is the pioneer of inflation targeting. The country was also undergoing extensive economic reforms at the time.

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In this study, therefore, the difficulty of comparing countries is acknowledged. The difficulties of comparison have been well documented (see Fraga, Goldfajn and Minella, 2003:5-6) and are discussed in section 1.4.

The early experience is interpreted to mean the first three years of inflation targeting, i.e. the first year refers to the initial year for which targets were set for achievement, not the year of adoption of the framework. South Africa's early experience as well as that of the six countries to be used for comparison purposes are analysed along three dimensions.

The first dimension for comparison is the stress tests the inflation targeting frameworks were subjected to that impacted on the achievement of the inflation targets. The analysis will include the monetary authorities' responses to these challenges. The stress tests include, chiefly, the volatility of the exchange rate; a spike in international oil prices; high food prices; high wage settlements, and therefore the labour sector's role in the process; and high administered prices and by implication, government's role in the process. Strictly speaking, the first three of these challenges can be termed stress tests as they are generally short, severe shocks to the system that by themselves can cause the inflation targets to be missed. The latter two challenges are generally less severe but are long-term factors contributing to the overall failure to achieve the targets.

The second dimension for comparison is the adjustments (if any) made to the framework and the institutional and operational procedures in the implementation of inflation targeting. South Africa's early experience is characterised by a number of framework and procedural refinements.

The third dimension of comparison in this study relates to the building of institutional credibility in the early years and the credibility gains or losses as a result of the early experience. If, as is widely held, the credibility of the central bank is instrumental in achieving the inflation targeting goal (Du Plessis, 2002:

12), any discussion about inflation targeting must analyse this issue. This issue is particularly pertinent in an emerging-market country context where institutional credibility has, in some cases, been severely lacking and where central banks have literally had to start from scratch. In the South African Reserve Bank's (SARB) case, the institution was, in the past, seen as rather secretive as monetary policy decisions lacked transparency. Some analysts argue that there are ways to improve the SARB's accountability and transparency to make the institution more credible. However, with transparency as a focal point of the current Governor Tito Mboweni's first five years in office, against the backdrop of a new era of democracy in South Africa, vast improvements have undeniably been made to the openness of the institution.

The structure of this study is based on certain supporting questions that are pertinent to the main purpose of the study. The questions are as follows:

1.3.1 What is inflation targeting?

This question addresses the elements of inflation targeting, the operational and institutional arrangements and characteristics of the inflation targeting framework. Auxiliary elements associated with inflation targeting, such as credibility and central bank independence, are also addressed.

This discussion also includes major debates on issues associated with the framework, such as the flexibility of the policy, the procedures and the question as to whether inflation targeting is merely a trend or an enduring monetary policy solution. The inflation targeting experience of developing countries is explored in contrast to the experience of developed countries.

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1.3.2 What is the nature of South Africa's inflation targeting framework?

This question focuses on the characteristics and nature of South Africa's inflation targeting framework in general terms. This chapter also includes a historical overview of inflation in South Africa and the rationale for adopting an inflation targeting regime. It details the operational and institutional procedures that the SARB adopted in order to conduct monetary policy under an inflation targeting framework. South Africa's adoption of inflation targeting coincided with a new era of transformation at the SARB when Mboweni was appointed governor in 1999. Mboweni has been the chief driver of the inflation targeting policy and it is under his guidance that the framework has been implemented.

1.3.3 Was South Africa's early experience of inflation targeting a success?

The third question takes an in-depth look at South Africa's first three years of experience under the inflation targeting framework. It details what this study refers to as the main stress tests the framework has been subjected to in the first three years. It also details the refinements and adjustments made to the procedural and operational aspects of the framework. The key issue of the credibility of the SARB is analysed in detail. In order to assess institutional credibility the monetary authorities' responses to the various challenges that have arisen on the way are detailed and the inflation expectations of a number of stakeholders within the broad economy are looked at.

1.3.4 How does South Africa's experience compare with the experience of other countries?

The final question explores the experience of five other emerging-market countries and one developed country's early experience of inflation targeting. The analysis includes the early challenges, the central banks' responses to those challenges and whether these countries made early adjustments and refinements

to their frameworks. The experiences of these countries are then compared with South Africa's experience to see if any lessons can be derived or similarities highlighted. This analysis draws on the literature highlighting the difficulty emerging markets often have in conducting monetary policy because they are more vulnerable to shocks and exogenous events than more developed countries.

Secondary sources are used as the primary literature basis of this study. The sources include central bank publications, research papers, books, newspaper articles and conference papers. Interviews with staff at the SARB were also conducted for the purposes of this analysis. The literature is extensive and covers a variety of topics within the ambit of inflation targeting. However, coverage of the topics is restricted to the scope of this study.

1.4 Limitations of the study

The chief limitation of this study lies in its comparative nature and the fact that a precise and direct country-to-country comparison is difficult. Countries differ vastly in terms of broad economic development, infrastructure development, socio-political characteristics and culture as well as central bank structure and independence.

The difficulties of comparing countries are well-known and well documented. Fraga et al. (2003: 5-6) note in their comparison of two country groups, developed and developing, that not all developing countries are alike. Further, the adoption of inflation targeting in emerging-market economies, as in South Africa, is a relatively recent phenomenon. Most developed countries adopted inflation targeting between 1990 and 1993 while the majority of developing countries adopted it from 1998 onwards.

1.5 Key concepts

Inflation target: Numerical value for an inflation measure to be achieved at some time in the future. Countries differ in the measure used for inflation targeting purposes. Some central banks use headline inflation while others use core inflation or some variant. South Africa uses headline inflation excluding mortgage interest costs.

Inflation expectations: The Federal Reserve Bank of San Francisco (2004) defines the term as the rate of increase in the general price level anticipated by the public in the period ahead. Many central banks use some form of expectation survey to keep abreast of the inflation expectations of the public. In South Africa such surveys are undertaken on behalf of the SARB by the Bureau for Economic Research.

Inflation targeting framework: A monetary policy framework that is based on specific communicated targets for a specific inflation measure which the central bank has to meet within a certain time frame.

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Administered prices: Prices controlled or set by the government or a government agency. These prices are, therefore, independent of market or competitive forces.

Credibility: The *Penguin Dictionary of Economics* (Bannock, 1998: 86) defines credibility as "a measure of the expectation of the population that the government, or monetary authorities, will adhere to policies delivering low inflation." There are a number of measures employed by central banks to measure credibility. One is a survey of inflation expectations among the private sector. The other is the interest rate on long-term loans.

Emerging market (or developing market): The term 'emerging market' is used interchangeably with the term 'developing market'. It was originally coined by the International Finance Corporation (IFC) of the World Bank to define an economy with low-to-middle per capita income. The term's meaning has since been expanded to include more or less all developing countries. It continues to be refined and in 2002 was defined as those countries with a Gross National Income (GNI) per capita of $9,265 or less. The World Bank classifies economies as low-income (GNI $755 or less), middle-income (GNI $756–9,265) and high-income (GNI $9,266 or more). Low-income and middle-income economies are often referred to as developing countries (World Bank, 2002).

Stress test: This is taken to mean the short-lived but severe events, either external or internal, that may cause the inflation target to be missed.

2. Theoretical overview of inflation targeting

2.1 The rise of inflation targeting

Although inflation targeting may seem a relatively new phenomenon, Haldane (1995: 1) contends that the intellectual roots of inflation targets can be traced to as far back as the previous century. Alfred Marshall advocated a monetary system in 1887 which "adjusted to fix the purchasing power of each unit of currency closely to an absolute standard" (Haldane, 1995: 1). Almost a decade later, Knut Wicksell, a Swedish economist, advocated an explicit price-level standard for monetary policy. In the aftermath of the Second World War monetary policy focused largely on demand management. It was only during the 1970s when attention gradually returned to price stability as the appropriate medium-term objective of monetary policy.

Initially, price stability was pursued indirectly through intermediate policy targets such as money supply or the exchange rate. During the 1990s price stability was pursued directly. The gradual consensus that emerged is that "low, stable inflation is important for market-driven growth, and that monetary policy is the most direct determinant of inflation" (Bernanke et al., 1999: 10-11).

This consensus rests on three arguments. Firstly, Bernanke et al. (1999) note that the emphasis on controlling inflation arises because most policy-makers and macroeconomists agree that in the long term inflation is the only macroeconomic variable that monetary policy can affect. Secondly, there is some agreement that even moderate rates of inflation are harmful to economic growth, and that maintaining low and stable inflation is perhaps necessary to achieve other economic goals. Thirdly, inflation targeting places a responsibility on the central bank and on government to be disciplined and accountable in regularly communicating their objectives, plans and progress to the public. The framework ultimately acts as an anchor for monetary policy and guides the expectations of the financial markets and the public.

2.2 The characteristics and theoretical basis of inflation targeting

Simply defined, inflation targeting involves a deliberate attempt to achieve a targeted level of some inflation measure. This measure is usually some variation of the consumer price index. The target is defined as a band or a point and the inflation measure has to coincide with the target band or point within a specified period. A central principle is that price stability must be the primary or ultimate long-term goal of monetary policy (Bernanke et al., 1999: 10). Genberg (2002: 162) notes that inflation targeting differs from monetary targeting or exchange rate targeting in that inflation can usually only be influenced with a long and variable lag, i.e. a delay between a monetary policy decision and its effect on the inflation rate. The effects of a monetary policy decision on money supply and the exchange rate are usually quicker.

As can be seen from the above, central banks have to make various operational and institutional decisions in the design of an inflation targeting framework. The key operational decisions include (Bernanke et al., 1999: 27):

- The definition of the target
- The specification of the time horizon
- The level of the targets
- How to manage deviations from the target, e.g. the use of escape clauses
- The monetary policy tools to be used
- Under what conditions the target should be modified

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According to Mishkin (2000: 1) inflation targeting as a framework for monetary policy encompasses five main elements:

- the public announcement of numerical targets for inflation – Bernanke et al. (1999: 23) elaborate on this point by saying that this communicates the central bank's intentions to the public and helps reduce uncertainty about the future course of inflation. The numerical

targets are usually set for the medium term to give the central bank enough time to meet the targets;

- an "institutional commitment" to price stability as the primary goal of monetary policy so that other goals are subordinated to this primary goal;
- an approach whereby many variables are considered when making monetary policy decisions, referred to as an "information-inclusive" strategy by Mishkin (2000);
- deliberate attempts to make the monetary policy strategy transparent through enhanced communications with the broader public, the markets and other stakeholders about the central bank's objectives and decisions; and, thereby,
- an "increased accountability" of the central bank for attaining its inflation objectives.

Genberg (2002: 162) argues that the interpretation and application of these criteria should be country-specific, given that countries differ in terms of transmission mechanisms and the sources of possible shocks, among other things. According to Genberg (2002: 162): "What would be an appropriate policy rule in an industrialised country would not necessarily be suitable in an emerging market even if the ultimate goal of the central bank were the same."

The success of inflation targeting is not only about whether central banks have the expertise, capability and commitment to attain this goal. It is equally about whether or not a supportive context exists which allows the central bank to attain its goal efficiently. In line with this, Genberg (2002: 165) notes that a crucial factor determining the success of inflation targeting is the support of governments, politicians and the public. Success cannot be achieved by the actions of the central bank in isolation. This necessitates a broad agreement on the goals of the central bank's monetary policy. Genberg (2002: 166) notes: "For inflation targeting to achieve political acceptability and therefore, some degree of longevity, there must be public consensus that low inflation is the appropriate goal for monetary policy." Interestingly and contrary to other

commentators, Genberg asserts that formal central bank independence may not be necessary for successful inflation targeting. He further states that if the government's overall economic policy is sound and the public understands what the role and functions of the central bank are, then the central bank will be able to carry out an inflation targeting strategy without formal independence.

2.3 The advantages and disadvantages of inflation targeting

Mishkin (2000: 3) suggests that inflation targeting has several advantages as a medium-term strategy for monetary policy. Inflation targeting encourages the use of all available information to determine the best course for monetary policy. The framework also focuses political debate on what central banks can achieve through monetary policy in the long term which is controlling inflation rather than on things like lowering unemployment and stimulating growth, which central banks cannot achieve through monetary policy. The framework is also easily understood by the public as a result of regular communication and is, therefore, transparent.

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Bernanke et al. (1999: 26) assert that transparency and flexibility are the two major advantages of inflation targeting. Transparency is defined as "clear and timely communication of policy objectives, plans, and tactics to the public." Transparency should enhance the public understanding of monetary policy; reduce uncertainty and strengthen the accountability of the central bank to the public and to government. They describe flexibility as the ability of the central bank to "react effectively to short-run macroeconomic developments within the broad constraints imposed by the inflation targeting framework" (Bernanke et al., 1999: 26).

Apart from the transparency benefits of an inflation targeting policy, Mboweni (1999: 404) argues that the main advantage for South Africa is that inflation targeting can "improve the coordination between monetary policy and other macroeconomic policies". Ideally, the inflation targets should be set jointly by government and the central bank. A policy agreement should be drawn up

between government and the central bank after all stakeholders, including business and the trade union movement, have been consulted.

Further, the inflation targeting monetary policy framework strengthens the accountability of the central bank since the targets are clear, the central bank's intentions are known and the framework is transparent. Should the targets not be met the central bank has to provide reasons which will lead to a better public understanding of how monetary policy decisions are made, further enhancing the transparency of the process.

Van den Heever (2001: 171) adds that the inflation target provides an anchor for inflation expectations as well as an anchor for price and wage setting. By having inflation targets which are publicly known it is likely that inflation expectations will converge to the inflation targets, thus making the central bank's job easier.

Critics have levelled various criticisms at various times against the framework. Mboweni (1999: 405) contends that an inflation targeting framework is a complicated approach to implement as it relies heavily on forecasts in an uncertain economic environment. This is particularly true of many emerging-market countries which are vulnerable to exogenous shocks outside the control of monetary policy.

The issue of inflation forecasts is an issue that can be particularly problematic for emerging-market countries that attempt to reduce inflation from high levels (Mishkin, 2000: 5). Under such circumstances forecast errors are likely to be large and inflation targets are likely to be missed, leading to credibility problems. Similarly, if inaccurate forecasts are publicised, Mboweni (1999) notes that this could damage the central bank's credibility. Other concerns particular to emerging markets are that inflation targeting can generate weak central bank accountability because of the lags between monetary policy decisions and outcomes. Another concern is that inflation targeting may not prevent fiscal dominance because governments can still pursue harmful fiscal policies. Lastly, Mishkin argues that the exchange rate flexibility required by

inflation targeting may cause financial instability. Currency fluctuations are inevitable and emerging markets are especially vulnerable to extreme currency movements. Severe depreciations can increase the risks of a financial crisis, such as was experienced in 1998 during the Russian financial crisis.

Some of these criticisms can be overcome by a well-designed inflation targeting strategy (Mishkin, 2000: 4). Therefore, according to Mishkin, institutions need to be created to help monitor fiscal policy and to ensure the success of the inflation targeting strategy.

2.4 The success of inflation targeting in developed countries

Much of the research on inflation targeting indicates that developed countries have, on the whole, achieved significant success under such a framework. However, there are those who contend that these countries could have achieved similar success without an inflation targeting framework. Bernanke et al. (1999: 297) argue that inflation targeting had important benefits for the countries that have adopted it. There is evidence that inflation targeting countries have achieved lower inflation rates and lower inflation expectations; these countries experience less 'pass-through' into the inflation rate of shocks to the price level; they usually have lower nominal interest rates as a result of the lower inflation expectations; and there is increased public understanding of monetary policy.

However, the authors do admit that there is scant evidence that inflation targeting reduces the real economic costs of achieving an initial reduction in the inflation rate. Mishkin (2000a: 220) concludes that inflation targeting has proved highly successful in keeping inflation under control and in promoting high economic growth in the case of Canada. However, he notes that inflation targeting needs to be continually refined. Similarly, Stevens (2003: 26) notes that the inflation targeting model has been a success for Australia in terms of being associated with lower, less variable inflation and better economic growth.

An important argument presented in the literature is that inflation targeting may not make that much of a difference to a country's economic performance. In a paper titled "Does Inflation Targeting Matter?" Neumann and von Hagen (2002: 127) note that the debate about inflation targeting has consistently failed to show that inflation targeting does indeed play an important role in achieving lower inflation rates. Studies have also failed to show that inflation targeting is an important feature in raising the credibility of the central bank's commitment to this monetary policy framework. The authors conclude that while the inflation targeting policy is an effective strategy for monetary policy, it is not necessarily any better than other strategies. Ball and Sheridan (2003) in a similar-titled paper, find no evidence that inflation targeting improves a country's economic performance. However, they acknowledge that their results also do not provide a conclusive argument against inflation targeting.

Nadal-de Simone (2001: 240) succinctly sums up the two opposing views about inflation targeting that have developed over time. One view holds that inflation targeting is instrumental in reducing inflation. The inflation rates in countries such as New Zealand, Canada and the United Kingdom (UK) fell below the Organization of Economic Cooperation and Development (OECD) average after the implementation of inflation targets. Although unfavourable effects on output growth were observed, in most cases these were short-lived. Nadal-de Simone (2001: 240) notes that these views are held by Mishkin & Posen (1997) and McCallum (1996).

The opposing view holds that the reduction in inflation was a global phenomenon in the 1990s and the success of inflation targeters at that time is not at all clear. Nadal de-Simone (2001: 240) states: "This second group of observers concludes that inflation targeters have been a lucky lot; if the international environment became a high-inflation environment again, inflation targeting will prove to be more a fad than a trend because it will not allow central banks committed to price stability to achieve their goal." However, the author concludes that more analysis is necessary before inflation targeters can be considered merely lucky.

Despite the questions about the success of inflation targeting, there is a strong belief that inflation targeting is an acceptable policy because it can actually achieve what it sets out to achieve. Firstly, Genburg (2002: 163) asserts that monetary policy can actually achieve low and stable inflation rates if it is defined as an average over some relatively long time period. Secondly, price stability contributes to general economic welfare by making the price system more transparent.

2.5 Inflation targeting in emerging-market economies

A number of papers have focused solely on the implementation of inflation targeting in emerging-market economies. The experience of emerging-market economies appears to be qualitatively different from the experience of developed economies. Plenderleith (2003: 243), who has been employed both by the Bank of England and the SARB and has sat on both central banks' Monetary Policy Committees (MPCs), notes that emerging-market countries differ in the economic, social and cultural context in which monetary policy must operate. Plenderleith argues that these combined factors heighten the uncertainty that faces monetary policy-makers in emerging markets.

Plenderleith observes four major challenges faced by emerging markets. Firstly, many emerging-market economies are undergoing significant structural adjustments and as a result may be more vulnerable to shocks than developed economies. Secondly, emerging-market economies may also be less immune to exchange rate volatility. Thirdly, policy-makers tend to have less information available about economic developments. Statistics may be less frequently available or less reliable. Similarly the workings of the transmission mechanism may be less clear in a rapidly-adjusting economy. Lastly, in uncertain conditions the role of confidence in the monetary policy framework and the credibility of the policy framework are critical (Plenderleith, 2003: 243-244).

However, far from supporting the argument that these factors necessitate an alternative policy to inflation targeting, Plenderleith (2003: 247) argues that a clear inflation target may be advantageous in communicating the central bank's policy intentions and thus diluting the effects of uncertainty.

Fraga et al. (2003) nevertheless argue that emerging markets do face more challenges with inflation targeting. However, the authors also note that emerging markets have had similar success with inflation targeting to developed markets, despite the challenges. Crucially, though, Fraga et al. (2003: 2) observe that emerging economies have had relatively more frequent and larger deviations from the targets. "This suggests that either inflation targeters in EMEs [emerging market economies] are less committed to their targets or inflation targeting in these countries is a more challenging task than in developed ones."

The challenges relate to the typically more volatile macroeconomic environments, weaker institutions and credibility that lead to more acute trade-offs (Fraga et al., 2003: 2). According to the authors, building credibility is a significant challenge for emerging market countries adopting inflation targeting. They note that the adoption of inflation targeting indicates an attempt to enhance the credibility of the monetary authority committed to price stability in developing countries, which often have weaker institutions. However, building credibility is a process. During the so-called transition phase the central bank's actions have to coincide with the inflation targeting framework. However, the central bank must also recognise that the public may not have complete confidence in the central bank's actions which may ultimately lead to higher actual inflation. In the event of a shock "…private agents do not trust completely that the central bank will react strongly. As a consequence, the central bank incurs a cost of trust building as it has to react to curb the inflationary pressures stemming from low credibility and has to 'prove' that it is committed to the new regime" (Fraga et al., 2003: 14-15).

Credibility is key to the inflation targeting process, particularly in emerging-market economies where credibility may have been low in the past, Fraga et

al. (2003) stress the importance of the communication and decision-making process. The establishment of an MPC is essential, they say, to provide a good decision-making environment and a focused period in which the committee can consider monetary policy. In many emerging economies the creation of an MPC marks a break from often secretive and ad hoc methods of monetary policy decision-making (Fraga et al., 2003: 35) as was the case at the SARB. This includes the timely publication of detailed minutes of MPC meetings which is key, they argue, for an effective communications strategy. Many central banks also publish a quarterly inflation report which also minimises the uncertainty about central bank actions and objectives.

Greater credibility of the process implies that results may be achieved with lower costs. In attempting to achieve this the central bank must provide sufficient information to the public to make clear that the policy response is the right answer to the problem.

In responding to a shock, Fraga et al. (2003: 32) highlight the consensus among academic economists and central bankers that central banks should accommodate the direct impacts, or first-round effects, of shocks on the inflation rate. This is generally achieved by maintaining a passive monetary policy stance. Monetary policy should only be adjusted to avoid further price increases. As will be shown in Chapter 4, this is precisely what the SARB attempted to do in the face of a rapidly depreciating rand.

2.6 Inflation expectations and credibility

As can be seen from the above discussion, credibility is crucial to the inflation targeting process. A key indicator of the credibility of the inflation targeting process is the level of inflation expectations. In fact, according to Kershoff & Smit (2002: 444-446), there is extensive literature on expectations as one of the causes of inflation. They argue that changes in demand and supply often cause a rise in inflation which is then sustained by the public's higher inflation expectations, among other things. Businesses, trade unions, producers and

other sectors of society build their higher inflation expectations into wage demands and selling prices, giving rise to a general rise in inflation.

Given the importance of inflation expectations, almost all the central banks that have adopted inflation targeting frameworks for monetary policy use inflation expectation surveys. These surveys are used to forecast inflation and are also used to evaluate the perceived credibility of the central bank's inflation targeting policies. Of the 13 industrialised and non-industrialised inflation targeting countries studied by Schaechter et al. (2000: 19), seven were motivated to adopt inflation targeting as a way of anchoring inflationary expectations.

However, there is some disagreement about the usefulness of inflation expectation surveys. The Federal Reserve Bank of New York's *Quarterly Review* (1989) states that while inflation expectation surveys contain useful information about future inflation, they have proved unreliable in recent years. Despite this, the expectation surveys still appear to reflect respondents' beliefs about inflation. These beliefs about inflation, even when they are wrong, still contribute to nominal compensation and interest rate determination. Similarly, Kershoff & Smit (2002: 446) acknowledge that there is wide disagreement about the usefulness of expectations data, although they do provide valuable information.

Landerretche et al. (2001: 28) in a study of inflation-targeting countries found that the gradual phasing in of inflation targeting contributed to declining inflation by lowering inflation expectations and changing wage and price dynamics. However, Ball & Sheridan (2003) in another comparative study of countries that target inflation and those that do not, found that inflation targeting had no effect on the level of long-term interest rates contrary to what would be expected if targeting reduced expectations. Similarly Bernanke et al. (1999: 22) conclude that it is not the introduction of inflation targets that materially lowers inflation expectations, but rather evidence that the central bank can achieve and will maintain low inflation.

Sterne (1999: 279) posits that the increasing use of explicit targets throughout the 1990s appears to have been driven by the intention to "build credibility through transparency". However, he states that in the long run credibility is primarily built through the central banks' actions and achievements. Explaining the outcome of targeted variables more clearly and defining the objectives more narrowly can be an important contribution to central bank credibility. Bernanke et al. (1999: 91) quote Nicholl & Archer (1992: 319) who hold a similar view regarding the introduction of inflation targeting in New Zealand: "There did not seem to be a large 'announcement effect' on the passing of the legislation. Ultimately, credibility is derived from results – and particularly from results in relation to publicly advertised intentions."

According to Plenderleith (2003: 46) the credibility of the inflation targeting process has both an international and a domestic dimension for emerging markets. Domestically, central banks need to ensure there is public agreement about the value of low inflation and public confidence in the central banks' ability to achieve low inflation. On the international front, the perception that the inflation targeting process will be enduring can impact on investment flows and the exchange rate. Establishing credibility is more challenging in emerging-market economies "because the track record of commitment is relatively much shorter" (Plenderleith, 2003: 46).

2.7 Transparency

Once the public is convinced that the central bank will do everything reasonably within its power to achieve the inflation targets, public expectations should fall in line or close to the inflation targets, thereby impacting on future inflation. Friedman (2002) suggests that inflation targeting is a way of "manipulating" private-sector decision-makers' expectations about future inflation. This manipulation has to coincide with a visible and transparent communication strategy. In fact, the adoption of inflation targeting often leads to a major improvement in central bank communication with the public and the financial markets, as occurred at the SARB.

Similarly, Haldane (1995) writes that the move towards greater transparency in monetary policy allows private-sector agents to monitor the monetary authorities. This, in turn, encourages the authorities to perfect their analysis. Haldane argues that “Agents will penalise the authorities if they cheat by raising their inflation expectations, so that monetary policy credibility is instantly sacrificed” (Haldane, 1995: 11).

However, Haldane notes that there are varying degrees of transparency. The Reserve Bank of New Zealand and the Bank of England both publish inflation forecasts and the Bank of England also publishes the minutes of its Monetary Policy Committee meetings with a two-week delay. Others, like the SARB, do not publish explicit forecasts (a fan chart is published) or minutes but publish an inflation report and a detailed statement after the interest rate setting meetings. In many cases central bank governors are required to appear before parliament to give an account of their progress towards meeting the objectives, thus fulfilling the requirements of transparency and accountability. It is also true that once steps are taken towards greater transparency, it is difficult to retract those steps.

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2.8 Summary

The gradual development of the inflation targeting framework for monetary policy that emerged over the years rests on the notions that low and stable inflation is important for growth; that monetary policy can actually achieve low inflation; and that in placing a duty of responsibility and accountability on the central bank the framework can guide inflation expectations.

The framework includes a public announcement of the inflation targets; a commitment to price stability as the primary goal of monetary policy; an information-inclusive strategy; and increased transparency and accountability. However, the manner in which the generally accepted elements of an inflation targeting framework are implemented often depends on a country’s stage of development and the nature of its transmission mechanism.

From the vast amount of literature on the subject it is evident that debates abound regarding the merits or not of inflation targeting as a monetary policy framework. What is clear, however, is that the adoption of such a framework by central banks around the world has lead to fundamental, generally positive differences in the way they conduct monetary policy. Despite this, two opposing camps exist about the success of the inflation targeting policy. The one camp holds that inflation targeting has been instrumental in lowering inflation rates. The other camp argues that the reduction in inflation was a global trend during the 1990s and the inflation targeting framework has, therefore, not been put to a real test.

It is clear that emerging-market economies face a number of challenges when implementing such a policy. Although these challenges may also confront developed economies, they are often less severe. Emerging markets differ fundamentally in the economic, social and cultural contexts in which monetary policy operates. These elements amplify the uncertainty within which the monetary authorities have to function. Among the challenges emerging markets face are the structural adjustments many are undergoing, the extreme exchange rate volatility and the lack of information available to monetary authorities.

It is also clear that the context within which an inflation targeting framework is implemented is important for the success of the framework. More broadly speaking, the support of the government and key stakeholders is essential as is the confidence of the public in the central bank's capability and commitment to achieving the targets. For example, a strong trade union movement, as in South Africa, could have a huge impact on the meeting of inflation targets in future if they consistently base their wage negotiations on historical inflation figures.

Supporters of the inflation targeting policy argue that one of its advantages is that the policy employs an all-encompassing information strategy. The framework is easily understood by the public as a result of regular central bank communication and is, therefore, transparent. This transparency goes

hand in hand with the accountability central banks need to demonstrate as they function within this framework. The framework should also improve co-ordination between monetary policy and other macroeconomic policies and provide a guide for inflation expectations.

Despite the growth in popularity of the inflation targeting framework over the past 15 years, there are several criticisms of the framework. Some commentators contend that the framework is complex to implement since it relies heavily on forecasts in an uncertain economic environment. Further, the framework requires exchange rate flexibility and provides no protection against frequent bouts of currency weakness.

Credibility is key to the success of the framework and in this area, too, central banks in emerging markets may also have to work that much harder. Inflation expectations are a key indicator of the credibility of the inflation targeting process. Transparency and communication are central to achieving the necessary credibility. Transparency is also key to fulfilling the duty of accountability. A transparent central bank that regularly communicates with the public and explains its progress, or lack thereof, can be held accountable.

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