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INFLATION TARGETING AND IT'S APPLICABILITY TO THE SOUTH AFRICAN ECONOMY

By

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TO WHOM IT MAY CONCERN

RE: CONFIDENTIALITY CLAUSE

Due to the strategic importance of this research it would be appreciated if the contents remain confidential and not be circulated for a period of five (ten) years.

Sincerely

STUDENT'S INITIAL AND NAME: SN TYIBILIKA

DECLARATION

This research has not been previously accepted for any degree and is not being currently submitted in candidature of any degree.

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STATEMENT

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ABSTRACT

With the change in Governor at the South African Reserve Bank in August 1999, also came the announcement by the South African monetary authorities of the decision to move to formal inflation targeting. There seems, however, to be a lack of understanding by the South African public on the concepts and issues of inflation targeting and thus the potential benefits. This is mainly due to the lack of international evidence given that inflation targeting is not even a decade old yet.

This study was largely motivated by the need for a more comprehensive understanding of the intricacies of inflation targeting as the future monetary policy strategy. Thus, the aim of this study is to examine inflation targeting in its entirety and determine whether South Africa is truly ready for the new age of inflation targeting.

There are three prerequisites for inflation targeting:

1. central bank independence
2. having sole target
3. existence of stable and predictable relationship between monetary policy instrument and inflation.

In many developing countries, the use of seigniorage revenues as an important source of financing public debts, the lack of commitment to low inflation as a primary goal by monetary authorities, considerable exchange rate flexibility, lack of substantial operational independence of the central bank or of powerful models to make domestic inflation forecasts hinder the satisfaction of these requirements.

CHAPTER 1
INTRODUCTION

1.1 Introduction

Globally, inflation targeting has become increasingly popular as a monetary policy framework. The move towards this new approach is primarily a consequence of problems and shortcomings of other policy frameworks. The appointment of a new governor, Tito Mboweni at the South African Reserve Bank in August 1999 brought with it, soon afterwards, an announcement of a more formal Inflation Targeting. In line with the new trend towards Inflation Targeting, which began in the 90's, South Africa has abandoned its previous 'eclectic' monetary policy in favour of this new approach.

The general public in South Africa appears to be in the dark about the intricacies and implications of Inflation targeting. . This paper, therefore seeks to move beyond the usual 'traditional' stance on the analysis of South Africa's introduction of Inflation Targeting, which, it is suggested, has generally tended to be of too superficial a nature. This thesis attempts, rather courageously, to tackle and analyse the predicament of Inflation Targeting in South Africa, and to do so from a holistic perspective. It is important to note that South Africa, due to its unique background that has been caused largely by its history, has unique status that differentiates it from other developing economies that have recently adapted the Inflation Targeting framework.

In less than 10 years, South Africa has undergone major social, political, cultural, ideological and economic transformations. Such extreme transformations have posed several challenges for South Africa and complicate the straightforward or textbook adoption of Inflation Targeting.

Regarded as an emerging market, the country falls victim to inconsistent investors using general emerging market strategies in their country evaluation. The impact of this, as it pertains to Inflation targeting, is that the resultant volatility in our exchange and interest rates makes the adoption more multifaceted. This, in turn, affects inflation itself and impacts on the controllability of inflation by the monetary authorities.

As monetary policy has moved into a new era, with the changing of the guard, stakeholders wrestle with issues that the new system has borne. This introduction has been received with much uncertainty. The stringency of Inflation Targeting has, as this paper seeks to highlight, been perceived as lacking the more all-encompassing focus of the previous "regime". Inflation Targeting, by its very nature has only one focal point, thus turning a blind eye to other factors that are believed to be of equal importance. Such other considerations may include, for example, growth, employment, redistribution, and supply side measures of economic policy. The resulting lack of consensus is more than likely to pose a problem to the adoption of Inflation Targeting, which has, as one of its central requirements the premise of "buy-in'.

Inflation targeting sets aims for price stability as the ultimate goal of the monetary policy. South Africa's unique conditions may well be detrimental and possibly dangerous to set goals for price stability in apparent total disregard of the need for economic growth and employment creation. The Reserve Bank would not conquer with this and will generally adhere to its view that the attainment of relative price stability as the exclusive objective of its policies constitutes the best contribution that the monetary authorities can make to economic growth and well being. The impact of the Reserve Bank's strict stance is that other key areas of economic policy are, or at least cannot but be seen as ignored.

Thus, the overall objective of this study is to examine Inflation Targeting in its entirety and to determine whether this new framework is in fact appropriate and relevant to South Africa in its unique circumstances.

The potential dangers of Inflation Targeting in South Africa create the need to formulate and adopt inflation targets within the framework of a more all-encompassing approach, such as GEAR. Within the GEAR framework, organised labour and other parties can and should be invited to subscribe to a set of simultaneous and mutually consistent outcomes, within an acceptable set of future feasible outcomes, the future inflation rates could still be turned into a mandatory policy objective of overriding importance of the monetary policy. The proposed framework should incorporate labour-friendly elements in order to achieve acceptance from the unions. If a more favourable climate is created for organised labour, great participation can be achieved and labour unions could be more understanding to the needs for low inflation. In an ideal world, this monetary framework would ensure that inflation is targeted on the basis of outcomes for growth and employment that leave no doubt about the authorities' concern for these quantities.

1.2 Background of Research

Inflation targeting is the central topic among many economic representatives and those interested in South Africa's economy. It is also an area of monetary policy surrounded by much uncertainty, as the general public is not sure what to make of it. Given the fact the Inflation Targeting has only been in existence for just over ten years, it is difficult to determine whether South Africa is an ideal country for the framework. Although a fair amount of research has been conducted on inflation targeting in South Africa, the work that has been done concerns itself primarily with textbook requirements mostly of a technical nature, for the successful implementation of an Inflation Targeting strategy. My justification for engaging in this area of research is that Inflation Targeting in South Africa has reached a stage that necessitates analysis and evaluation. My interest in this area is also based on my belief that this is an area of monetary policy that needs to be explained on and looked at from a deeper, more holistic approach. Also, to look at how far it has taken South Africa, since its inception in late 1999.

This paper, while analysing the general requirements and benefits of Inflation Targeting, extends to cover areas that seem to have been ignored in the past. South Africa is, and has for many years been undergoing a process of intense structural changes, which makes the framework far less straightforward than the academics and monetary authorities would have the public believe.

The governor of the Reserve Bank, Tito Mboweni introduced the new monetary framework and moved away from the eclectic approach to monetary policy to join the ranks of other advanced and emerging economies that have adopted this new framework More than three years have passed now since this Inflation Targeting was introduced in South Africa, and the timing seems right for an assessment of the effort until now. The general consensus on Inflation targeting is positive but the framework is still newer and its applicability to emerging economies, South Africa included, remains questionable. This would seem to be confirmed by the fact that the majority of these economies, presumably for technical and other reasons, have not yet seen fit to adopt Inflation Targeting strategies.

Various individuals and schools of thought insist on strict technical requirements for Inflation Targeting which South Africa seems to fulfil, much of the literature ignores many of the country specific issues. South Africa is dealing with issues that accompany its recent and current social, economic, cultural, political and ideological transformations and their impact on monetary policy.

1.3 Motivation For Conducting Research

There is a growing consensus across the globe that low and stable inflation is important for market driven growth and, as such, the primary task of central banks should be to achieve and maintain price stability. South Africa is in many a different country comparatively. It is these unique characteristics which, if not accounted for, may prevent the authorities to make a success of the policy; South Africa still retains infancy status with regard to its current monetary framework. It is for this reason that understanding Inflation Targeting within a broader context is significant and important.

1.4 Value Of The Study

The study's overall intention is to determine the appropriateness of Inflation Targeting to South Africa and to evaluate the successes of this strategy to date. This study will seek to provide information that will determine whether the South Africa Reserve Bank has been correct in its adoption of this framework, and to propose an alternative, more all-inclusive option.

The aims therefore include the following:

1. To describe and analyse the concept of inflation Targeting
2. To analyse the potential advantages of adopting this framework into South African Monetary policy.
3. To define the prerequisite requirements for the adoption of Inflation Targeting and to assess whether or not these requirements are met in South Africa.
4. To draw lessons for South Africa from international experience.

5. To determine whether Inflation Targeting, given South Africa's unique circumstances, is suitable to South Africa and can provide the benefits proposed by its advocates.
6. To propose an alternative, more holistic, economic policy framework that is geared specifically towards South Africa's unique features, conditions and policy needs.

1.5 Problem Statement

Is inflation targeting appropriate and relevant to the South African economy as a developing country with a unique history? Is the South African Reserve Bank within its rights in adjusting the interest rates in order to meet the inflation target?

1.6 Objectives Of The Study

The purpose of this paper is to determine the appropriateness of inflation targeting to South Africa and to evaluate the successes its feasibility. The main focus will be on the assessment of whether preconditions of inflation targeting are satisfied in South Africa.

- central bank independence,
- having sole target
- existence of a stable relationship between the monetary policy instruments and inflation.

There are studies questioning the position of the South African Reserve Bank in terms of independence and analysing the effects of fiscal dominance and fiscal burden on inflationary expectations. However, they do not pay too much attention to the relationships between the monetary policy instruments and inflation. This study will seek to provide information that will determine whether South African Reserve bank has been correct in its adoption of this framework, and to propose an alternative, more all-encompassing option.

1.7 Limitations Of The Study

Qualitative research methods by their very nature have more shortcomings than do quantitative methods, being more open to interpretation, thus possibly more subjective.

Findings in this study may not be generalised due to the fact that many of the issues discussed for their relevance to inflation, or inflation forecasting, do not lend themselves to incorporation into econometric models. Various premises that this study relies on have not been tested empirically, while those that have are subject to much debate.

1.8 Research Methodology

According to Copper & Schindler (2001), "A research methodology is a plan which includes every aspect of a proposed research study from the conceptualisation of the problem right through to the dissemination of the findings". The research design to be used in this study can be described as a mixture of the exploratory and the (causal) quantitative-descriptive designs. Copper & Schindler (2001) describe an exploratory research as an investigation aimed at refining concepts as well as the development of questions and hypothesis for further research. Very little formal research to investigate the appropriateness of Inflation targeting as a monetary framework in South Africa has been carried out, this study is exploratory; and because the study aims to describe the perceptions of monetary authorities regarding appropriateness to South Africa., it can be regarded as descriptive in nature. Collins (1987) maintains that (causal) quantitative-descriptive design mainly serves to reveal potential relationships between variables.

1.10 Summary

The overall objective of this study is to determine the appropriateness of Inflation Targeting to South Africa, or of South Africa's suitability for inflation Targeting. For this reason, I will produce information that will assist in the determination of whether the South African Reserve Bank has been correct in their adoption of this framework, and to propose an alternative, more all-encompassing option.

The research design used in this study in terms of Cooper & Schindler (2001) can be termed as a mixture of exploratory and the (causal) quantitative-descriptive designs.

1.11 Use Of References

Several Acknowledged reference methods exist. For the sake of uniformity, I have used a modified version of the Harvard method. The author's name, date of publication and page number are provided in the text. A bibliography arranged alphabetically, according to the author's surnames, is provided at the end of the study.

CHAPTER 2

INFLATION TARGETING: THEORY AND EVIDENCE

2.1 Introduction

A prerequisite to understanding Inflation Targeting as a monetary framework for South Africa is an understanding of what Inflation Targeting is. In this chapter I aim (1) to provide a definition of Inflation Targeting as provided by Bernake and Mishkin (1997), and (2) briefly analyse this definition, using appropriate and relevant theories.

2.2 Definition

Literature provides various, but broadly similar and overlapping, definitions of Inflation Targeting[1]. Bernanke and Mishkin (1997) present a standard definition of Inflation Targeting for purposes of this chapter. They define Inflation Targeting as "*a framework for monetary policy characterized by the public announcement of official quantitative targets (or target ranges) for the inflation rate over one or more time horizons, and by explicit acknowledgement that low, stable inflation is monetary policy's primary long-run goal*". Among other important features of Inflation Targeting are vigorous efforts to communicate with the public about the plans and objectives of the monetary authorities, and, in many cases, mechanisms that strengthen the Central Bank's accountability for attaining those objectives.

The above definition emphasises the fundamental elements of Inflation Targeting. It highlights the fact that Inflation Targeting does not simply mean the setting of a target for the inflation rate; but it does mean the adoption of a framework for application. As such, it consists of the following elements:

- A public announcement of the adoption of an explicit Inflation Targeting framework
- Official quantitative targets to be achieved through the Inflation Targeting framework
- Price stability as the long run goal of monetary policy

[1] See, for example, Almeida A. & Goodhart C.A.E (1998); Debelle, G., (1997); Masson, Savastano, and Sharama (1997) ; and Svensson 91996)

- Communication to the public on the nature, rationale and importance of Inflation Targeting
- Accountability of the Central Bank for the attainment (or non-attainment) of the set inflation targets.
- An information framework, which includes the analysis of all relevant economic indicators, not only monetary indicators.

2.3 Nature of Inflation Targeting

A distinction of Inflation Targeting, as opposed to other monetary frameworks, is that Inflation Targeting has inflation as its sole target. Other variables, such as the nominal exchange rate or the money supply, are subordinated in favour of the inflation target. This point is relevant to a country like South Africa where exchange rate volatility is notably higher than in most developed countries where Inflation Targeting has been implemented, making it increasingly difficult to ignore the influence of the nominal exchange rate (particularly in short term). It is important to note that certain anomalies exist, whereby countries that define themselves as targeters, such as Israel, have explicit targets for both inflation and the exchange rates.

Inflation Targeting creates an infrastructure whereby countries take a forward-looking approach in policy making, such that the forecasted future inflation rate becomes the intermediate target (although inflation targeters have no option but to look at past behaviour as a first approximate guide to the future). The difference between Inflation Targeting and other monetary frameworks is vis-à-vis authorities who are responding (largely) to current, or the most recent developments. The forward looking-ness arises from the fact that the authorities have no choice but to recognise the lags in effect of their policy actions.

Inflation targeting is multi-faceted. As such, certain requirements exist in order to adopt the framework[2]. This includes the absence of fiscal dominance and a specific goal of monetary policy. Once framework is implemented the Central Bank typically finds itself constrained to adopt supporting modifications of its behaviour, such as enabling communication leading to increased openness and transparency

[2] Discussed in detail in Chapter 4.

Proponents of Inflation Targeting advocate the advantages of the framework. A nominal anchor is provided for the anchoring of inflationary expectation, while having government "buy-in" ensures that the fiscal authorities keep their side of the deal regarding the government wage bill and administered prices.

There are, however, other factors that are problematic and that make the straightforward adoption of Inflation Targeting difficult. Undeniably, it is still largely uncertain whether Inflation Targeting will bear the anticipated fruit and whether its advantages outweigh the disadvantages.

2.4 Review of the Literature

A number of studies have investigated both theoretically and empirically the inflation targeting framework as a monetary policy regime. Some of them discuss the issues of inflation targeting in developing countries, conditions for successful inflation targeting, the reasons why these countries switch to inflation targeting regime, and to what extent these conditions are satisfied in developing countries. Others evaluate inflation targeting as a monetary policy strategy in particular countries by offering empirical models to assess the feasibility of inflation targeting in these countries. There are some studies analyzing the relevance of inflation targeting regime for developing countries.

Masson, Savastano, and Sharma (1997) examine the applicability of inflation targeting to developing countries. They argue that in most of the developing countries the requirements of inflation targeting are absent due to the seigniorages being an important source of financing or due to the lack of consensus on low inflation as a primary objective.
Kadioglu, Ozdemir, and Yilmaz (2000) discuss the applicability and prerequisites of inflation targeting in developing countries. They analyze the general aspects of inflation targeting regime in developed countries and study the scope for inflation targeting in the developing countries by giving some examples of country experiences. They come up with the result that in many developing countries, the preconditions of inflation targeting are not satisfied and that they do not have powerful models which enable them to make successful inflation forecasts. Although they claim that it is too early for some developing countries to apply inflation targeting regime they provide some country cases where they show that the regime has successful results in developing countries. They

relate the success in Chile to the absence of fiscal deficits, the rigorous regulations and supervision of financial system and substantial hardening of the targets, in Israel, to the credibility obtained by pre-emptive actions taken by the monetary authorities when a deviation from the target is foreseen.

Jonas (1998) summarizes the reasons why many countries including developing countries switch to inflation targeting regime by using the cases of Czech Republic and Poland as a reference. The reasons are the inadequacy of exchange rate targeting due to the increasing capital mobility in the 1990s and of monetary targeting due to financial innovations, and the desire of some of the transition economies to join the European Monetary Union (EMU), which requires a clear target for disinflation.

Mishkin (2000) explains what inflation targeting involves for emerging market economies by discussing the advantages and disadvantages of this regime and making a reference to Chile's experience of inflation targeting. He claims that inflation targeting may not be appropriate for many emerging countries because weak central bank accountability is a serious problem, which results from long lags from monetary policy instruments to the inflation outcome, and also, because financial instability caused by flexible exchange rate required by inflation targeting is a relevant fact for these countries.

Moreover, he reveals that fiscal dominance and high degree of dollarization, which may create severe problems for inflation targeting regime, are common features of emerging market economies. There are many studies that judge whether or not inflation targeting is feasible in particular countries by offering theoretical or empirical evidence.

Hazirolan (1999) assesses the applicability of the inflation-targeting regime for Turkish economy and gives a proposal to implement it in Turkey. He claims that to get satisfactory results from inflation targeting Turkey first needs a successful disinflation period.

Jonsson (1999) examines the implications and relative merits of inflation targeting for South Africa in a theoretical framework and concludes that although South Africa satisfies the main prerequisites of inflation targeting such as central bank independence, lack of commitment to macroeconomic objectives which might be in conflict with low inflation and relatively developed capital and money markets, a refinement of the inflation forecasting framework of the South African Reserve Bank and further experience with the operational aspects of the repurchase system are needed before the implementation of inflation targeting.

Woglom (2000) provides empirical evidence to judge whether South Africa is a good candidate for inflation targeting. He uses vector auto-regressions (VARs) to analyze the dynamic interaction of the variables of interest like a monetary instrument, the price level, the real GDP and the nominal exchange rate. He makes comparisons between South Africa and pre-target periods of New Zealand and Canada and argues that South Africa is not a good candidate for CPI inflation targeting due to the loss in benefits provided by a fully flexible exchange rate. Because according to his model, a perfectly flexible exchange rate has the advantage of providing complete automatic stabilization of IS shocks. CPI inflation targeting causes the exchange rate to be less flexible in response to external shocks. As a result, the CPI inflation targeting partially remove some of the stabilization advantages of completely flexible exchange rates.

Gottschalk and Moore (2001) also make use of VARs in order to provide empirical evidence on the links between the monetary policy instruments and inflation in Poland. They examine the effects of an exchange rate shock and interest rate shock on the price level. The results show that although the exchange rate seems to be effective with respect to output and prices, the direct linkages between the interest rate and inflation do not appear to be very strong. This requires a better understanding of the links between the monetary policy instruments and inflation target.

Christoffersen, Slok and Wescott (2001) claim that Poland appears to be ready for inflation targeting. They too analyze the statistical linkages between monetary policy instruments and inflation, and also between leading indicators of inflation and inflation itself by performing Granger causality tests. They observe that there are significant relationships between the CPI and various leading indicators of inflation. They also reveal that although there is a predictable linkage between the exchange rate and inflation measures, the relationships between the changes in the short-term interest rates and changes in inflation are weak. However, they argue that as the Polish economy matures and stabilization is completed, the relationship between the policy interest rates and inflation will be more regular.

2.5 Summary

The adoption of an Inflation Targeting strategy means a public announcement by monetary authorities for the attainment of a specified, quantified target for one or more inflation rates over a certain future time period, or at some future point of time, on the understanding that price stability is the long-run goal of monetary policy.

The various definitions of Inflation Targeting incorporate defining features of the framework and highlight requirements that have to be met to facilitate its application. For example, because Inflation Targeting typically inspires increased communication with the public, the abandonment of other anchors, and generally promotes increased transparency; these elements are factors that the authorities will feel constrained to put in place as a foundation for the framework and its implementation. However, while these elements are important, they are not unique to Inflation Targeting. It is important, therefore, to distinguish between defining Inflation Targeting and identifying the features of monetary policy that are generally seen as essential for the framework to be implemented. These will be laid out in Chapter 4.

CHAPTER 3
THE CASE FOR INFLATION TARGETING

3.1 Introduction

This chapter deals with the question of why has a move towards Inflation Targeting become so prominent amongst Central Banks around the world.

The 1990's can be identified as the era of Inflation Targeting, with several developed economies, such as the UK, Canada, New Zealand and Australia, as well as various developing economies, such as Chile, Brazil, and now South Africa, adopting the "new" framework.

Combined with an assessment of the strengths of Inflation Targeting, this section analyses the rationale and advantages claimed for this monetary policy framework. Analysing the advantages of Inflation Targeting will yield valuable information for the application of Inflation Targeting in South Africa, as well as yielding insight into the rationale for its adoption.

3.2 The Reasons for Adoption

Although the move towards Inflation Targeting seems to have occurred across the board, the countries that have adopted this framework, along with certain commonalities, reveal divergent key characteristics, for example, as regards the monetary and fiscal climate. These disparities seem to point toward the idea that the reasons for the adoption of Inflation Targeting can differ across countries.

The prime motives for the adoption of Inflation Targeting have been identified as follows:

1. Inflation Targeting providing a nominal anchor for inflationary expectations.
2. Inflation Targeting inducing increased Central Bank accountability.
3. Difficulties in establishment of Central Bank credibility, as inflationary expectations are unclear and difficult to change.
4. Obstacles to an evaluation of the Central Bank's performance.

The move towards Inflation Targeting as a monetary policy framework, over the past decade, has occurred for a number of reasons. Primarily, this shift has been a consequence of the failure of other policy frameworks, such as, fixed exchange rate regimes in the case of Brazil, Chile, Sweden, and other countries. Elsewhere, Inflation Targeting has replaced more discretionary or eclectic policy approaches. Examples of such cases include Canada, New Zealand and South Africa.

In the case of the United Kingdom, Sweden , and Finland, Inflation Targeting was introduced in response to the failure of a fixed exchange rate regime. In Spain, Inflation Targeting was adopted primarily because of the failure of the use of an exchange rate target and of a monetary targeting regime.

Goodhart (1988:27) identifies two key reasons for the abandonment of a discretionary monetary policy in favour of Inflation Targeting. Firstly, it makes the Central Bank more accountable, because the bank now has a specified target to achieve. Mishkin (2000:19) would concur with this statement and emphasizes that the Central Bank's increased accountability prevents it from falling into a time inconsistency trap. Secondly, a normal anchor is required for a gelling of inflationary expectations.

Another reason for the adoption of Inflation Targeting replacing discretionary policy is that the Bank's performance under Inflation Targeting can be evaluated more effectively. Inflation Targeting makes evaluation unambiguous. The target is either hit or missed, whereas under an eclectic approach, accountability in its strict sense cannot exist – for lack of a clean or firm specification of what the Bank is or has been aiming at.

3.3 The Case for Inflation Targeting

Inflation targeting accepts the validity of four important propositions (Masson et al., 1997:5): Money is neutral in the long run, i.e. – an increase in the money supply ultimately affects only the price level in the long run, and has no effect on economic activity. Inflation is undesirable in terms of its negative effects on resource allocation and on long-run growth. Money is not neutral in the short run and as such manifestations on real variables, the extent of which is largely unknown. Monetary policy affects inflation with lags of an uncertain duration, pattern and extent.

Although the above propositions are often presented in various literature sources as arguments in favour of Inflation Targeting, it is vital to understand that they are reasons for fighting inflation, but do not necessarily make a case for the adoption of inflation Targeting. That case, therefore has to be based on benefits claimed specifically for Inflation Targeting.

3.4 Advantages of Inflation Targeting

The primary aim of Inflation Targeting is to facilitate or allow for the attainment of low levels of inflation while increasing the possibility of economic growth (Jonsson, 1999:2). The Central Bank is prevented from using monetary policy for short-term gain, as the likelihood of missing the target would thereby be increased. The bank commits to a target and through a process of communication and openness a greater degree of certainty is created in the markets.

Inflation Targeting has various advantages when compared with other monetary regimes. The public easily understands an inflation target, for example, when compared with a monetary target. When compared with an exchange rate target, Inflation Targeting allows policy makers greater freedom to respond to internal domestic considerations. (Mishkin, 1999:12)

Inflation Targeting may lead to better cyclical adjustment in the economy, because it can potentially provide greater flexibility to deal with shocks (Jonsson, 1999:6). In the face of a positive demand shock for example – resulting in inflationary pressure and an increase in the output gap – the Inflation Targeting policy response would be to tighten monetary conditions and to shrink the output gap. Shocks to the velocity of circulation are no longer an important consideration, because Inflation Targeting targets the ultimate goal variable (inflation), as opposed to an intermediate variable (money supply). As a result, the relationship between money supply and inflation becomes irrelevant. Similar considerations may apply in cases of supply shocks[4]. An Inflation Targeting framework, compared with an exchange rate targeting

[4] An area of concern , however are supply shocks – such as an international oil price increase – that induce accelerated measured inflation but simultaneously brake economic growth and create employment. In these cases, unqualified adherence to the inflation target may well prove destabilising to the real economy.

framework provides a greater amount of flexibility to deal with these shocks in a more stable environment.

Mishkin (1999:3) identifies several advantages and disadvantages of exchange rate targeting: The nominal anchor of an exchange rate target establishes the inflation rate or internationally traded goods and ultimately contributes to the improved control of inflation.
A credible exchange rate anchors inflation expectations to the inflation rate in the low-inflation country to whose country it is pegged.
The time-inconsistency problem is alleviated because the exchange rate target provides an automatic rule for the conduct of monetary policy.
The simplicity and clarity of exchange rate targets means that the public easily understands it. (Mishkin, & Posen, 1997 5,6)

Exchange rate targeting does have several costs and limitations:

- Loss of independent monetary policy because the peg imposes severe constraints on the ability of the authorities to use monetary policy for other purposes. This can result in a high cost to economic growth.
- Obstfeld and Rogoff (in Bernanke et al, 1999:303) have indicated that, in a world of highly mobile capital, fixed exchange rate regimes leave countries wide open to speculative attacks on their currencies.
- Elimination of the important signal that the bond market provides about the stance of monetary policy, which thus weakens the accountability of policy makers and the Central Bank.
- Exchange rate pegs do not solve the problem of maintaining price3 stability but rather they transfer the problem to another country. In addition, an exchange rate target does not guarantee that the monetary authorities will be sufficiently committed to maintaining the target.

3.5 Disadvantages Of Inflation Targeting

Inflation Targeting along with its advantages also reveals certain disadvantages. Bernake and Mishkin (1999) identify several key disadvantages. In a 200 publication they make a

distinction in the disadvantages identified by noting that the first four are relevant to emerging economies, whereas five to 9 are particularly important to these economies.
The first four are as follows:

1. Inflation targeting is too rigid:
2. The framework allows for too much discretion:
3. Potential exists for Inflation Targeting to increase output instability"
4. Inflation targeting lowers economic growth:

The suggestion that the first four disadvantages are not relevant to developing economies may, however, be a little presumptuous in South Africa's case. Inflation targeting may indeed lower economic growth as well as potentially create output instability. Moreover, in the face of severe economic shocks, the inflexibility of Inflation Targeting may cause the economy to be pushed into a downsizing, or may worsen the effects of a recession.

Bernanke and Mishkin's remaining disadvantages may be listed as follows:

1. Inflation Targeting can only produce weak Central Bank's accountability. Because of the effects of lags inflation is difficult to control, particularly in emerging economies. In the case of South Africa, this may well be relevant – the lags are of an uncertain duration.
2. The incidence of Government- controlled prices on the index used to compute headline inflation is a matter for concern (Mishkin 2000:5). Administered prices in south Africa over the past year have risen significantly faster that both the CPI and the CPIX.
3. Inflation Targeting cannot prevent 'fiscal dominance'. Governments can still operate without fiscal discipline, leading to large budgetary deficits and eventually causing the breakdown of the Inflation Targeting regime. Through monetization, the fiscal deficit or the public debt will be eroded, leading to high inflation.
4. Exchange rate flexibility required by Inflation Targeting may cause financial instability. This point is of considerable interest for most developing economies. It has been contended that much of the recent exchange rate volatility that has bee experienced in South Africa occurred because it was known that the Reserve Bank would try to defend the currency. It could be argued, however, that Mishkin's

specimen cases may also be looked at from another perspective, i.e that the defence of an increasingly unrealistic exchange rate may itself become the cause of instability.

5. Dollarization: In certain developing economies a substantial portion of long-term debt is likely to be in dollars. This creates an environment of potential financial instability. Mishkin (2000) suggest a possible chain of causation as follows:

The dollarized economy experiences currency depreciation, resulting from an external shock. The depreciation increases the burden of dollar-denominated debt, thus, depending on the degree of depreciation, increasing the likelihood of a financial crisis. A potential incongruity exists. This type of disaster struck the south East Asian economies in 1997 to 1998: the countries concerned, however, were on fixed exchange rates rather than pursuing Inflation Targeting.

Mishkin's argument suggests that certain emerging market economies, those with a large portion of dollar-denominated debt, should not use Inflation Targeting as a framework for Monetary Policy, unless there is strict supervision of financial institutions and the economy is capable of absorbing external shocks. The conclusion suggested by Mishkin corresponds to the conclusions drawn from the 1997-98 disasters: again, however, these countries were not inflation targeters.

What measure of inflation should be targeted? The choice of index involves a trade-off of inflation controllability versus the ability to influence expectations. If a common measure, such as the CPI, is used because it is entrenched in public perception, Inflation Targeting has a greater ability to influence expectations than in the case of a more artificial index (which the authorities may well have greater control over). When the measure has significant exclusions, inflation becomes more controllable and the Bank is more likely to hit the target. In these circumstances, however, the effect on inflationary expectations is not as good as with the a common index. The public has a perceptions of what the inflation is and this perception is generally based on CPI inflation. An artificial index will only have the ability to influence expectations when the Bank has pre-established credibility, which is not usually the case with emerging market economies. As one Czechoslovakian union worker said "We don't consume 'net' inflation"[5].

Reasonably, the public is sensitive to what it considers to be the comprehensive "cost of living". Where households carry much debt, interest rates are surely important to them, even if there is a more continuous awareness of the "supermarket type" price increases.

3.6 Summary

The above analysis illustrates that, potentially, Inflation Targeting has strong advantages. The provision of a nominal anchor for inflationary expectations, along with the effects of credibility, openness and transparency, are undeniably important advantages of Inflation Targeting. They can, however, be achieved without operating in an Inflation Targeting environment. Similarly a public understanding of the stance of monetary policy can be achieved in other monetary regimes.

As Mishkin notes, various shortcomings exist within the framework, many of which are relevant to developing nations. Factors such as the requirements of not anchoring the exchange rate, as well as the effect of government-administered prices (which are of particular concern in South Africa), can complicate the framework and outweigh the potential advantages.

[5] Net inflation is the index used for Inflation Targeting in the Czech Republic. It is a new indicator, which measures changes in CPI excluding movements in regulated prices ad adjusted for the impact on the remaining items of changed in indirect taxes or subsidy elimination.

CHAPTER 4
REQUIREMENTS AND FEATURES OF AN INFLATION TARGETING FRAMEWORK

4.1 Introduction

Inflation Targeting is a monetary policy framework that has certain features and prerequisites that need to be met in order for the framework to be implemented. This section investigates these characteristics and requirements.

4.2 Requirements

Literature (Masson et al 1997) reveals several requirements that act as prerequisites for the use of Inflation Targeting as a guide for monetary policy:

4.2.1 Central Bank Independence And Fiscal Dominance

A crucial issue when considering the implementation of inflation targets is the matter of Central Bank independence. According to Masson et al (1997), independence does not necessarily require goal independence, but must enable the Bank to achieve the goal as desired. A relationship exists between instrument independence and fiscal dominance (Debelle:1997). The Central Bank must not be required to finance the government budget. Although this form of central Bank freedom is helpful in most monetary control systems, it is an essential element of Inflation Targeting.

Governments, in certain circumstances have an incentive to see higher inflation figures, as, e.g, with a view to see-through revenue (Sherwin:2000). In such cases it becomes increasingly difficult for a Central Bank to attain a low level of inflation when it cannot operate independently. This relates specifically to instrument independence. The government should play a role in the actual setting of the target variable. This is a cardinal advantage of Inflation Targeting, in that the government can effectively 'buy into' the target. This facilitates a process whereby the government does, or is at least motivated to do, its part to ensure the attainment of the target.

Moreover, within a fiscally driven economy the presence of seigniorage revenue creation may destabilise policy and create inflationary pressures within the economy, which makes effective Inflation Targeting untenable.

Sherwin refers to the concept of 'democratic legitimacy', which is created once the goal has been jointly set. Sherwin (2000:4) states that " an independent Central Bank specifically charged with maintaining price stability, effectively empowered and resourced to do the job, and held accountable against the achievement of that objective, is a fairly logical response to dealing with an inherent inflationary bias by institutionalising a country bias in favour of long-run price stability".

The importance of instrument independence and joint target setting by the government and the Central Bank was emphasised by current Reserve Bank Governor, Tito Mboweni, in a speech in September 1999. He said, "the inflation target may be jointly set by the government and the Central bank. However, once the target has been determined the Central Bank should be free to use any instrument to achieve the ultimate objective" (Mboweni,2000:3). Mboweni's statement is potentially troublesome in that it presumes that the Bank is free to use "any" instruments, as opposed to recognised "market-orientated instruments" only.

The question could be asked if, in extreme circumstances, there could be a case for a ministerial right of intervention, even as this pertains to the potentially extreme use of policy instruments. Surely the bank only has the mandate to use the recognised market-orientated instruments? And also: if the governor goes beyond his mandate the Minister of Finance, having subscribed to the target and having certain responsibility for the target, should be able to intervene. The ministerial right of intervention would diminish further any remaining "democratic deficit".

4.2.2 No Commitment To Any Other Nominal Variable

Within the Inflation Targeting framework the monetary authority is required not to have any commitment to the level or path of any other nominal variable, such as wages ot the nominal exchange rate (Masson:1997:8). Exchange rate targeting, and particularly the maintenance of a fixed exchange rate, subordinates monetary policy decisions in favour of the exchange rate.

A pertinent choice is required between defending the exchange rate and steering inflation. An inflation target can increase certainty, as the markets are clear about the Bank's priorities. The existence of an additional commitment to the exchange rate, on the other hand, cannot but create uncertainty as to the Banks's priorities. The rationale behind this can be found in certain circumstances where a government or its Central Bank aims to maintain a fixed exchange rate and at the same time aiming at an inflation target. As a result, the exchange rate may find itself placed under immense pressure and the Bank is required to decide which variable to defend. Whichever variable is protected – a decision that is usually based on failure to defend the other variable – results in an inescapable loss in credibility.

According to Mishkin, the exchange rate issue can be be encountered by stabilising the short-term exchange rate movements, whilst making it clear to the public that they will allow exchange rates to reach their market-determined level over longer time periods. The problem arises, in South Africa, that it is difficult to determine to what degree the Bank is stabilising the exchange rate as opposed to playing a role in its determination. This problem is aggravated when large volatility exists within the economy.

4.2.3 The Effectiveness Of Monetary Policy

The relationship between policy actions and inflation must be relatively stable and forecastable. The tools used by the authorities need to be effective in their control of inflation. The monetary policy instruments should be a market-orientated and avoid direct action, such as credit ceilings. The monetary policy instruments should have a stable relationship with inflation (Debelle:1997). The reasons for this are obvious: if monetary policy is not effective in controlling inflation, or if the effect of policy measures cannot be adequately foreseen, inflation is not a variable that can be targeted with any accuracy.

4.2.4 Well Developed Money And Capital Markets

Well-developed money and capital markets are needed for three reasons. Firstly, to avoid "fiscal dominance". Secondly, because in the absence of such markets the Central Bank will not be able to conduct market-orientated policies. Thirdly, because only in such markets can the Central Bank's market operations be relied on to be effective without becoming disruptive.

Within a well-developed financial environment, policy changes by the Central Bank must effect money market interest rates in a clear and transparent manner. According to Masson et al (1997), shallow capital markets arise from government schemes to extract revenue from the financial system. Other manifestations of shallow capital markets include limited access to foreign funding.

4.2.5 Sophisticated Model for the Forecasting Of Inflation Targeting

The difference between Inflation Targeting and other policy frameworks is that Inflation Targeting (ideally) makes forecasting explicit and transparent (Mboweni:1999). Some form of forecasting model is probably the most essential of the requirements for Inflation Targeting in that the framework stands or falls, with or without forecasting and some predictability of the effect of policy measures. In South Africa the model is still in the process of being refined and only serves as the first point for discussion. In this case it is debatable whether the requirement is really being met.

4.2.6 It Should Be Embraced By All

The decision to make inflation the focal point, within an Inflation Targeting framework should be authorised by all stakeholders. The Reserve Bank cannot attain the target alone, or can do so only at a price of unacceptable hardships. In order for price and wage setting to be influenced, participation from all areas is required. All stakeholders need to agree that explicit Inflation Targeting is the correct framework for the country at the given point in time. The situation requires collaboration. A fundamental challenge to this collaboration exists. Both organised labour and the public may well be inadequately knowledgeable and are only dimly aware of what they are agreeing to and the implications. Often times, they do not take the target seriously or wish to insist on provisos once the potential consequences of Inflation Targeting become clear to them. The point assumes a special importance in South Africa to the extent that labour union-driven pressures on labour costs, and the permissive effects of unduly labour-friendly legislation, can be held accountable for much of the apparent intractability of inflation in South Africa.

4.2.7 The Inflation Rate Should Not Be Unusually High To Begin With

The higher the inflation rate is, the more difficult and less accurate forecasting becomes (Mishkin: 2000). An unusually high inflation rate is potentially problematic in the case of South Africa. Inflation in most developed countries is significantly lower than that in South Africa.

An additional requirement suggested is that Inflation Targeting should be accompanied by increased accountability, transparency, and communication. Although these elements were introduced as advantages of Inflation Targeting, it is important to ensure that they are present, so as to reap the benefits of increased transparency (Debelle:1997).

4.3 Features of the Inflation Targeting Strategy

Inflation Targeting, as a monetary policy framework, has four central features:

4.3.1 Nature of the Target

The Central Bank and the Government, depending on the nature of the Central Bank's independence, must determine an optimal Inflation Targeting strategy and whether a point or band should be targeted. Various factors must be considered; the width of the band, for example, is vital in ensuring Central Bank credibility. It is suggested that if the effect of monetary policy on inflation is unclear, as it generally is in developing countries, a band would be preferable (Svenson:1997). The crucial element is the width of the band chosen. This is important from a credibility point of view. If the target band is too wide, the Central Bank runs the risk of losing credibility, whereas if the band is too narrow, the likelihood of missing the target is greater (CREFSA:1998). The band should depepnd on size of the economy and economic stability – the smaller and more unstable the economy, the larger the target band.

The second point deserving consideration is the speed at which inflation should be brought down. According to CREFSA (1998), the preferred speed of the disinflation process is gradual. Canada aimed at a two-percentage points reduction the first year, and subsequently at reductions of half a percentage point in successive 18-month periods. Inflation Targeting was adopted when inflation was about 5 percent. Within transitional economies inflation is decreased gradually Poland targeted a decrease in inflation from 11 percent to 8 percent in the first year of targeting.

4.3.2 What Inflation Measure Should Be Targeted

The measure of Inflation to be targeted must be determined (see Table 2 for inflation indexes). Headline inflation is more susceptible to external shocks, which may also falsify the picture of the current "inherent inflationariness" of the economy. A variation in the CPI, as in South Africa's case, may be an easier variable to target, although it may not be seen as, in the minds of the public, either the most relevant or the most readily understandable measure of inflation.

A relevant consideration in fighting inflation would seem to be: what notion or measurement of inflation is most likely to provoke defensive reactions from price makers, that will themselves tend to sustain or accelerate inflation? If economic subjects are concerned about their living standards, the index might well have to include items such as taxes (VAT), fines and levies and interest rates on various types of household debt. It is also relevant to note that rapid structural change in the economy, shifts in income distribution patterns, social changes and improvements in basic living conditions (as well as occasional deteriorations in basic structure), and rapid technological developments in consumer goods and services, would tend to make surveys of household expenditures outdated and render existing consumer price indices less relevant.

Table 2. Inflation indexes used in selected countries

Country	New Zealand	Canada	United Kingdom	Finland	Australia	Sweden	Spain
Inflation Measure	Underlying CPI	CPI	Retail Price excl. mortgage interest payments (RPIX)	Underlying CPI	Underlying CPI	CPI	CPI
Factors excluded from CPI	Interest cost component, indirect taxes, government changes and significant changes in the terms of trade	None, underlying inflation rate used operationally	Mortgage interest payments	Mortgage interest payments, indirect taxes, government subsidies, house prices	Mortgage interest payments, indirect taxes, other volatile items	None	None

Source:Masson et al: 1997

4.3.3 Flexibility

Prior to the implementation of Inflation Targeting the crucial question of flexibility in the face of external shocks needs to be answered. A Central Bank can opt for setting certain escape clauses to allow for external shocks that are outside the control of the Bank. It must be noted, however, that much thought should be given to this in advance. If not, the Bank will lose credibility for the ex post, seemingly "opportunistic", adding of new escape clauses (and the Bank could excessively accommodate external shocks). "The series needs to be considered accurate, timely and readily understandable by the public, but may also need to allow for individual price shocks or one time shocks that do not affect trend inflation which is what monetary policy should influence" (Bernanke and Mishkin, 1997:16) Flexibility may complicate these issues. Too much flexibility may result in a loss of credibility[6].

[6] It is noteworthy that many of the extremely successful Inflation Targeting Central Banks seem mostly to have been hesitant to respond in a stimulatory way to undershoots of the inflation target.

4.3.4 Predictability Of Inflation

An important question when deciding on Inflation Targeting as a monetary framework is whether inflation is sufficiently predictable to be targeted. Bernanke (1997) points out two reasons why this is important. Due to lags between the policy action and its effect on inflation, under circumstances of low predictability the target would be difficult to hit and possibly, if the target is hit, this could be due to luck rather than to effective forecasting and an apt conduct of monetary policy. Secondly, if inflation is largely erratic and the target is missed, and for this reason credibility lost, it will be difficult to determine whether this occurred due to 'misfortune' or 'bad faith'. "The central Bank could argue that the wide misses were the result of bad luck, as opposed to bad faith, since the Central Bank's forecasts of inflation contain substantial judgemental components and such would be difficult to disprove" (Bernanke and Mishkin, 1997:18) This would weaken the argument that Inflation Targeting would increase accountability, with the result that building up credibility could be a difficult process.

4.3.5 The Democratic Deficit

Closely related to the Central Bank independence is the legitimate concern about the so-called, "democratic deficit". This relates to an independent Central Bank operating as a sort of mini government, "ruling" alongside the actual government but beyond the direct or indirect supervision and control of the people's parliamentary representatives. Concerns have been raised regarding the undemocratic nature of such a situation (Almeida and Goodhart:1998). For example, the Central Bank may come to use its instruments in such a way as to aggravate an already dismal real economy situation. If the government is opposed to this strategy, but the Central Bank refuses to make the necessary adjustments, the democratic nature of the country's economic management is compromised.

4.3.6 An Anomaly Regarding The So-Called Escape Clauses

As noted earlier, targets are subject to being missed due to unforeseen and (frequently) unforeseeable external and internal shocks which, in any case, would often be beyond the control of the monetary authority and may very well not allow for adequate countervailing action within relevant periods of time. Commentators suggest that because of this, Central Banks should specify "escape clauses". In circumstances when the inflation target is not, or does not appear to be sustainable, the Bank may enact an escape clause. These escape clauses have become subject to much criticism (McCullen:1996)

A case in point is that of New Zealand. New Zealand is one of the best known inflation targeters in history. Its success, although fairly controversial, has become the subject of much literature in Central Bank economics.

Reasons for escape clauses concentrate on inflation targets being missed because of "bad luck." But targets may also be hit because of "good" or " bad luck", or missed despite "good luck." In other words, performance should be evaluated as independent of all forms of luck.

4.3.7 The Importance Of The Technical Requirements

The technical requirements set out by Masson et al (1997) and others are undeniably important. They cannot, however be analysed in isolation: elements in the socio-political environment may well be of similar or more decisive importance. Factors such as labour market conditions, unemployment or income inequalities based on race, which have strong effects (albeit difficult to measure) on the outcome of the policy framework, therefore need to be considered along with the more purely technical requirements.

4.4 Summary

The application of Inflation targeting depends on the fulfilment of a variety of preconditions. Factors such as an absence of fiscal dominance and the role assigned to monetary policy are vital in deciding on the implementation of an inflation Targeting regime. While these factors are important, circumstances that are unique to a country also need to be granted consideration. Given that their effects often cannot be clearly determined, there should be an understanding that such factors may impinge heavily on the success or otherwise of the chosen policy framework.

CHAPTER 5

THE INTERNATIONAL EXPERIENCE

5.1 Introduction

I have considered the theory of inflation targeting in terms of the theoretical aspects and as an alternative to various other monetary policy strategies. It is also important however, to observe how inflation targeting has working in practice. As noted previously, the 1990's saw a number of countries adopting explicit inflation targets as the goal of monetary policy. The main reason for introducing the targets was to establish the central banks' commitment to achieve and maintain low rates of inflation.

This section looks at the circumstances and motivations for adopting targets in two of the inflation-targeting countries: New Zealand and Canada. In order to put the international experience in perspective, there is a brief summary overview of the critical aspects of inflation targeting in each country. Following that there is a more detailed analysis of each country's individual experience with inflation targeting.

5.2 Summary Overview

The following section consolidates the main inflation targeting issues and considerations for all the other countries not evaluated in this chapter. The following section attempts to draw on the key aspects from the various inflation-targeting experiences before applying these concepts to South Africa in chapter 6.

5.3 Motivation

The motivation for the introduction of inflation targeting has differed remarkably in the various countries considered. In some cases the introduction of the new approach occurred as a result of a particular event, the collapse of an exchange rate peg in the United Kingdom, Sweden, Spain and the Czech Republic for example. In New Zealand the adoption of a much broader package of economic reforms led to the adoption of inflation targeting. In most cases, the switch to inflation targeting was a gradual process in response to various dissatisfactions with the existing monetary policy strategy. This was the case in Canada, Israel and Australia.

5.4 Transparency

It is evident from the above analysis that central banks in inflation-targeting countries communicate in multitude of ways. Besides the legal requirements for communication policy decisions to the government, central banks also communicate with the general public by means of speeches and a variety of publications.

Table 2 shows that all the inflation-targeting countries attempted to enhance the transparency and communication of their regimes in a variety of ways. The United Kingdom was the first inflation-targeting country to start publishing an Inflation Report, which provides comprehensive information on inflation forecasts in addition to the central bank's plans and objectives. Since then, other inflation-targeting countries have followed suit and also started publishing Inflation Report, e.g. Sweden, Australia, and Spain.

Israel is probably the one country that hasn't proved to be very successful in ensuring the transparency of the inflation-targeting regime. Until recently the Central Bank of Israel had never officially published an Inflation Report but rather released a document which discussed a broad range of macroeconomic issues but no inflation forecasts or monetary policies. The lack of transparency contributes to the uncertainty of the inflation-targeting regime in Israel.

5.5 Accountability

A central feature of inflation-targeting regime is the increased accountability that it places on central banks. In general the transparency of the regime contributes to the accountability of the central bank to the public and the government. In order for the central bank to truly be accountable to the public and the government there needs to be some kind of penalty for non-performance. The one country that formally sets a penalty is New Zealand where the government has the right to dismiss the Reserve Bank's governor if the inflation targets are breached. In Canada, the Minister of Finance has the power to revoke the Bank's decisions by issuing a directive which may result in the governor's resignation.

5.6 Central Bank Independence

The inflation targeting strategy calls for the inflation targets themselves to be set by a political process in which the government consults with the central bank before making the final decision on the appropriate target for inflation. The central bank is then given complete freedom in the use of its policy instrument. In all the countries studied here, except the United Kingdom, the government sets the inflation target, usually in consultation with the central bank, and then the central bank has complete instrument independence in the execution of the policy. In the United Kingdom, however, the Chancellor sets the inflation target each year and then issues a directive to the Bank who is given complete instrument independence.

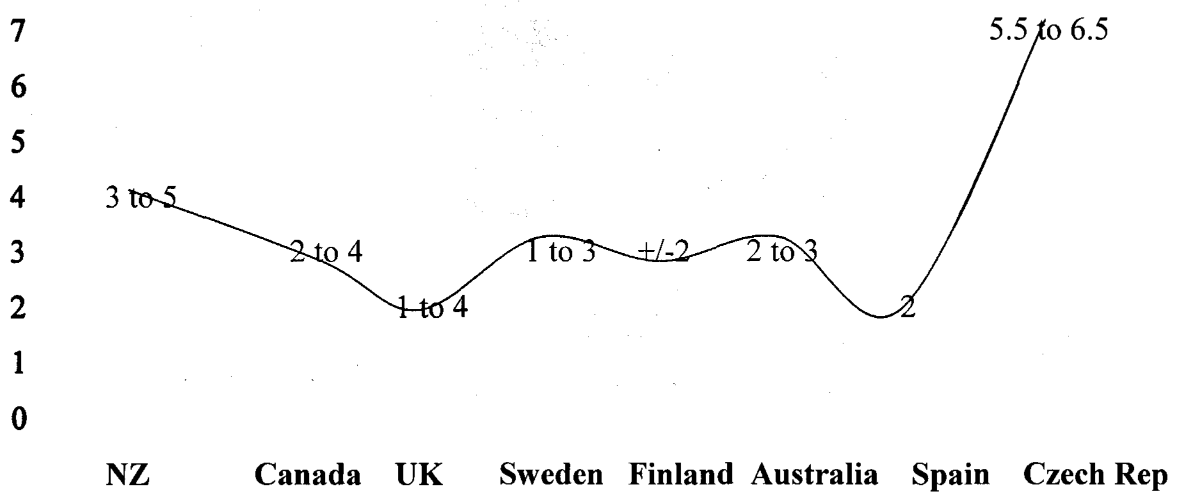
5.7 Design and Implementation

The success of the inflation-targeting regime often depends on the details of implementation and design of the policy framework. The most noticeable difference in the design of the inflation-targeting countries studied here is the divergence on the ideal measure of inflation. Some countries use the headline CPI because it is generally the most familiar to the public. The lack of consensus on the ideal measure of inflation reflects a central issue of inflation targeting, i.e. the short-run trade-off between transparency and policy flexibility.

Most countries attempt to smooth the effects of possible supply shocks by using some variant of the CPI adjusted for the prices of certain volatile items such as food and energy, e.g. New Zealand, Canada, Australia, and the Czech Republic. While this may help to establish the credibility of the targets, it may deplete the transparency of monetary policy. Other countries, such as Israel, United Kingdom, Sweden and Spain, use a well-know measure of inflation such as the headline or all-items CPI which promotes the transparency of the framework.

Looking at figure 1, one can see that with the exception of Israel, and more recently the Czech Republic, the initial inflation target or range was below 5 percent in all the countries. In most cases, the inflation target was set as a range but even when a point target was set, e.g. Sweden and the United Kingdom, a tolerance band was included to ensure the flexibility of the regime.

Figure 1: Initial Target Ranges (excl. Israel)



Following is a consideration of the individual country experiences in New Zealand, Canada. The first section is looking at a brief inflation history and hence the motivation for introducing inflation targeting. The various inflation issues of transparency, accountability and the independence of the central bank are discussed. The design and implementation of inflation targeting was different in each country and thus we need to consider the various design issued faced by each inflation-targeting regime. Next is the consideration of the main events in each country's monetary policy during the period that inflation targets were introduced. Lastly, are the lessons can be learnt from each of the international inflation-targeting experiences.

5.8 Lessons from Recent Inflation Targeting Experience

There are many important lessons that can be learnt from the inflation targeting experience of the countries studied here. Although there are different lessons to be learnt from each individual inflation-targeting regime, there are a few central lessons that were common to most countries' experiences with inflation targets.

1. The first lesson from the international experience is that the explicit goal of price stability has been successfully implemented in several countries. Looking at the experiences of inflation targeting to date it is evident that all those countries adopting price stability as the single monetary policy goal have dramatically reduced their inflation rates since adopting inflation targets.

2. A necessary precondition for inflation targeting is the commitment of the government that it agrees with the ultimate goal of price stability and that it supports the inflation-targeting framework. In fact, the inflation target is usually set jointly by the central bank and the government in order to ensure the commitment by both to the price stability objective.
3. Although some of the countries adopting explicit inflation targets did use headline inflation as the basis for their inflation target, most countries used some variant of the consumer price index. Adjusting the consumer price index for volatile components seems to be suitable measure for inflation targeting because if has the practical advantages of being practical and useable.
4. Experience shows that establishing the credibility of the regime is not easy and most countries embarked on ambitious communication campaigns to ensure the transparency and accountability of the inflation-targeting regimes. Thus, more transparent monetary policy reporting and communication should accompany inflation targeting by central banks.
5. In almost every case of inflation targeting it was emphasised that monetary policy goals of price stability should be consistent with other macroeconomic policies of the government. Indeed, international evidence shows that permanently low inflation is a necessary pre-condition for achieving growth and employment that lasts into the medium and long term.
6. Several countries have acknowledged the remarkable benefits of price stability as the principle goal of monetary policy and have consequently adopted inflation targeting as their strategy for monetary policy. We now consider the individual inflation targeting experiences by assessing the critical aspects of each regime.

5.1.1 NEW ZEALAND

New Zealand was the first country to adopt explicit inflation targeting when the Reserve Bank of New Zealand formally announced its commitment to price stability in February 1990.

5.1.1.1 The Rationale for Inflation Targeting

For most of the period from the first oil shock through to the late 1980's New Zealand experienced double digit inflation. Between 1974 and 1988 cumulative inflation, on a CPI basis, was 480 percent. In the early 1980's, a brief drop in inflation to below five percent occurred as a result of wage, dividend and interest rate freeze. During this period, there were various objectives facing monetary policy that were seldom clearly specified and rarely consistent with the aim of inflation reduction. These circumstances resulted in inflation expectations being deeply entrenched in New Zealand society. (Brash, 1998: 2)

At the same time, there was a growing dissatisfaction with activist monetary policy. This was part of a worldwide consensus that monetary policy is neutral in the long run and that the central bank cannot induce a permanent increase in output by tolerating a bit more inflation. It was at this time that certain members of the New Zealand government, the Treasury, and the Reserve Bank saw the need to pursue a nominal anchor. The problems that other countries were experiencing with unstable money demand seemed to discourage the monetary targeting option. The drop in inflation in the late 1980's required more ambitious and specific inflation objectives, which lead to an explicit definition of price stability. Under these circumstanced it became clear that the most appropriate option would be to target inflation directly.

The Reserve Bank of New Zealand Act, which took effect from 1 February 1990, announced the Banks statutory commitment to price stability in addition to an incentive structure to achieve it. The Act made the Reserve bank responsible and accountable for achieving its goal of price stability.

5.1.1.2 Transparency, Accountability and Central Bank Independence

In addition to the Reserve Bank Act, a Policy Targets Agreement was signed by both the Governor and the Minister of Finance and specified the targets by which monetary policy performance could be assessed during the Governor's period of term. The Reserve Bank Act prohibits goal independence but grants instrument independence and transparency by distancing the central bank from the impulsiveness of the political process.

The granting of operational independence to the Bank by the Reserve Bank Act to pursue its goal emphasises the accountability to the government in place at that time. In fact, the Act explicitly states that the Governor is held accountable for the consequences of monetary policy and penalties may be applied for failing to perform. The Governor of the Reserve

Bank may even be dismissed if his performance in attaining the mandated goal is not considered adequate. (Bryant, June 1996: 7)

In terms of transparency, the Governor is responsible for producing a policy statement on a regular basis, which outlines the implementation of monetary policy and explains how the objective of price stability is to be achieved. This Monetary Policy Statement is released twice a year and provides a detailed assessment of the macroeconomic environment, inflation trends, a provisional inflation forecast, and a survey of inflation expectations. In this way, the desired stance of monetary policy can be assessed in the short run. (Lafrance, 1997: 247)

In addition, the continual publication of quarterly forecasts combined with regular projections ensures that analysis is open and transparent. At the same time, transparency and credibility are constantly enhanced by the regular scrutiny of Governor of the Reserve Bank of New Zealand (RBNZ) gives a number of public speeches regarding fundamental policy issues, some of which are then printed.

According to Sherwin (1997: 272), one problem that arises with the New Zealand experience is that accountability is compromised by the fact that the RBNZ constructs the same measures, which evaluates its performance. Obviously, a situation where the central bank constructs the series that is used to measure its own performance is clearly not ideal.

5.1.1.3 The Design and Implementation Of The Inflation Target

The Policy Target Agreements (PTA) represent the only legal implementation of the Reserve Bank Act of 1989 and they also direct the operational aspects of New Zealand's inflation-targeting framework. The challenge for institutional designers in New Zealand was to incorporate flexibility into the monetary framework while at the same time balancing creditability with the realities of the volatile world economy.

In New Zealand the framework of the target is not expressed as a point but rather as a band. The reason for this is that bands allow for flexibility in case of unexpectedly large shocks or instances of excess economic volatility. A narrow band is favourable for influencing inflation expectations and establishing credibility but reduces scope for stabilisation flexibility but may seriously threaten credibility.

Initially, New Zealand's inflation target, expressed in terms of the twelve-month increase in the consumer price index (CPI), announced in April 1990 was three to five percent. Although the target was specified as a range with an explicit floor and ceiling to be adhered to, no special emphasis was placed on a specific point. This range was lowered in December 1992 to 0 to 2 percent and then widened again in December 1996 to 0 to 3 percent, showing the flexibility of this strategy.

McCallum (1996: 4,5) states that given the growth concern for external price shocks, government policy changes, and natural crises, the current PTA recognises that the CPI inflation rate may on occasion move outside the 0 to 2 percent r ange in response to these shocks. At the same time, even thought he Reserve Bank of New Zealand (RBNZ) monitors several prince indices, the actual price stability target is based on the All Group Consumers Price Index (CPI) since it is the most closely monitored and most easily understood by the public.

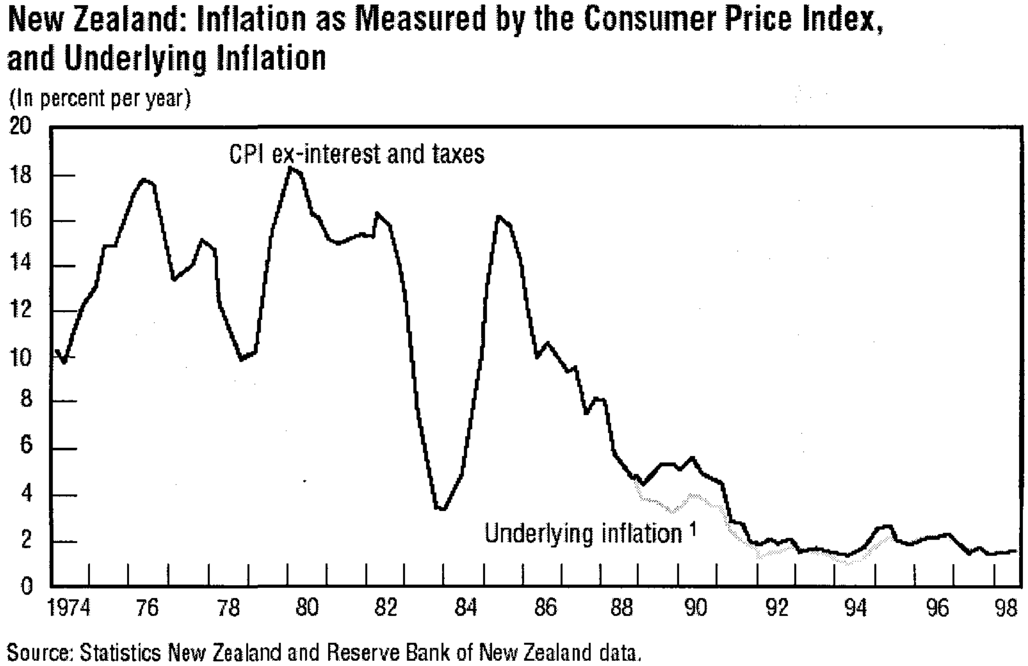
The RBNZ has introduced a monetary conditions indicator (MCI) which aids in determining the stance of monetary policy. This rationale for the MCI is based on the assumption that in an open economy, the central bank can affect economic activity and inflation via its influence on interest rates and exchange rates. It does so by combining an interest rate measure with an exchange rate measure depending on their relative estimated effect on aggregate demand. The relevant calculations show that in New Zealand, a 2 percent rise in the real trade-weighted exchange rate is approximately equivalent to a 100 basis point increase in the real 90-day interest rate.

5.1.1.4 The Inflation Targeting Experience

Brash (1998: 4) divides the inflation targeting experience in New Zealand into two periods. (The first identified as the period from 1987 to the end of 1991 where inflation fell from double-digit levels within the relevant 0 to 2 percent target range. During this same period, there was a fall in both the exchange rate and nominal interest rates in addition to low growth in gross domestic product (GDP) and an increase in unemployment

The second period is identified as the years from 1992 to the present, which has experienced a macroeconomic environment that resembles a conventional business cycle.(see figure 2). The initial sharp increase in growth was accompanied by falling unemployment and then inflationary pressures arose that pushed underlying inflation past the 0 to 2 percent range in 1996. As a result there was a tightening of monetary conditions with 90-day rates up from 4.5 percent to 9.5 percent in 1994 and a substantial appreciation of the trade-weighted exchange rate until early 1997. Recently, monetary conditions have been eased with the slowdown in growth and the easing of inflationary pressures.

Figure 2: Underlying and Headline Inflation – New Zealand



Even though, for the first time in many years New Zealand experienced a full business cycle without rapidly rising inflation, attaining the inflation target proved extremely challenging. In the next section the lessons that can be learnt from the inflation targeting experience in New Zealand are considered.

5.1.1.5 Key Lessons From The New Zealand Experience

Given that New Zealand has operated under an inflation-targeting regime for the longest, we can identify several lessons that can be learnt from their experience with inflation targets:

1. According to Mishkin & Posen (1997: 47), the New Zealand experience seems to indicate that the task of reducing trend inflation while maintaining low inflation expectations seems somewhat easier than tightly controlling the direction of inflation within a narrow range.
2. The experience with inflation targeting in New Zealand shows that when adhering too strictly to a narrow target range, any movements in policy instruments may be more excessive than would be preferred by the central bank. If the pressures from these movements becomes too great then there is potential for instrument instability. Mishkin & Posen (1997: 47)
3. The Reserve Bank of New Zealand has found that when excessive restrictions are placed on the exercise of the Bank's discretion, then its credibility is threatened and the flexibility of the policy is also questionable. The Bank's direct focus on formal accountability to the government as opposed to a broader accountability to the general public has also questioned the credibility and transparency of the targeting regime. (Mishkin & Posen, 1997: 47)
4. One important lesson that is emphasised by Brash (1998: 6) is that a distinction must be made between a monetary policy goal and a monetary policy regime. Even though the Reserve Bank Act and the Policy Target Agreements could provide a target for monetary policy, it doesn't provide a magical formula on how to achieve this target. At the same time, these agreements do not guarantee the credibility of the macroeconomic environment, ensuring that price stability will endure indefinitely.
5. Bryant (1996a: 19) also indicates that the New Zealand experience teaches us that inflation targeting does not imply the exclusion of all other macroeconomic considerations. The forward-looking nature of the inflation-targeting regime requires a consideration of the lags between policy actions and inflation outcomes.

Thus, the mere existence of an inflation-targeting regime does not automatically imply credibility. Rather, we learn form the New Zealand experience that credibility needs to be continually earned by actions and by account of policy. The Reserve Bank of New Zealand's continual effort to keep the inflation-targeting regime as transparent as possible and to remain accountable to the public and to government has ensured their credible status.

5.1.2 Canada

Although inflation targeting as a means of achieving price level stability was already proposed in 1988, the formal and explicit inflation target scheme only began in February 1991 when the Bank of Canada and the Minister of Finance jointly announced a series of targets. The participation of the Minister of Finance, in this instance, was significant because it emphasised the support of government for the goal of price stability.

5.1.2.1 The Rationale for Inflation Targeting

According to Lafrance (1997: 248), monetary policy in Canada has focused on the aim of low inflation since the early 1970's. In this period from 1975 to 1982, monetary policy was aimed at gradually reducing inflation by targeting the narrow monetary aggregate, M1. In 1982, the realisation that the link between M1 and nominal spending had weakened, lead to the abandonment of targeting monetary aggregates. From 1982 to 1991, although policy remained focused on reducing inflation, no explicit intermediate targets were applied.

Canada's formal adoption of inflation-targeting began in February 1991 when the Bank of Canada and the government jointly announced the aim of price stability through the use of explicit targets. Originally, explicit inflation targets were announced to establish inflationary expectations that resulted from the price-level shock induced by the introduction of GST in early 1991. Fundamentally, however, inflation targets indicate the longer-term commitment of the authorities to the goal of price stability.

5.1.2.2 Transparency, Accountability and Central Bank Independence

An essential element in establishing credibility and accountability is the regular communication of the Bank's strategy and policy initiatives. As such, the Governing Council of the Bank of Canada has released a semi-annual Monetary Policy Report since May 1995. This report provides reviews on recent inflationary experiences and considers the policy measures that have been implemented since the previous report. At the same time, it includes a forecast path for inflation in general terms and suggests possible directions for monetary conditions. (Lafrance,1997:249).

In terms of accountability, the inflation-targeting regime in Canada has emphasized that although accountability to the government is essential, the central feature of the Canadian experience is actually accountability to the public in general. Bernanke, et al. (1990: 120) states that it is not the actual announcement of targets itself that reduces inflationary expectations, but rather the achievement of these targets over the medium term which strengthens the publics' confidence in the central bank.

According to Mishkin and Posen (1997: 54), Canada's framework for inflation targeting gives the Bank the freedom to attain the target as long as it can transparently justify its actions to the public. Thus, in terms of central bank independence, the Bank of Canada has full operational independence in the use of its monetary policy instruments. However, the Bank of Canada is not free to choose the goal of monetary policy, i.e. it does not have complete goal independence but rather shares the responsibility with the Minister of Finance who make the final decision on the goal of monetary policy.

Although the Bank has the freedom to implement day-to-day monetary policy, the Bank of Canada Acts grants the Minister of Finance the power to revoke the Bank's decisions through the publication of a directive. The issue of a directive not only requires extreme circumstances but may also have severe repercussions. That is, although a directive has thus far never been issued, the issue of such a directive does imply the resignation of the Governor.

5.1.2.3 The Design and Implementation Of The Inflation Target

While the inflation target is defined for the overall CPI, the Bank of Canada has focused on its near-term policy actions on the CPI excluding food and energy prices and the effects of indirect tax changes which are considered to be more representative of underlying inflation. The reason for these exclusions is that the components in questions are often susceptible to sharp temporary movements that should not be corrected by monetary policy. A target range of 1 to 3 percent was initially specified in February 1991 and then reaffirmed by the government and the Bank on the appointment of a new Governor in December 1993. The target range that had been specified to the end of 1995 was extended a further three years and was then renewed in February 1998 until February 2001. (Lafrance, 1997: 248, 249)

The inflation-targeting framework is forward-looking in nature as it attempts to recognize the lags in the transmission mechanism of monetary policy. Monetary conditions represent the developments in both short-term interest rates and exchange rates. Canada was the first inflation-targeting regime to introduce the Monetary Condition's Indicator (MCI) which captures the relative effects of short-term interest rate and exchange rate movements on aggregate demand. Thus, in Canada, a 100-basis-point increase in the 90-day interest rate will affect aggregate demand via an estimated 3 percent increase in the real effective exchange rate.

5.1.2.4 The Inflation Targeting Experience

At the time that inflation targeting was implemented in Canada in 1991, the inflation rate as measured by the consumer price index (CPI) was 5.9 percent. Initially, the aim was to reduce inflation to progressively lower levels to establish a favourable economic environment. By December 1993, the inflation rate had declined to 2 percent and the Bank and the government agreed to extend the targets for three more years to the end of 1998 with a target range of 1 to 3 percent. By February 1998 inflation had been sufficiently contained within the range and the existing targets were extended to December 2001.

5.1.2.5 Key Lessons from the Canadian Experience

There are several lessons to be learnt from the Canadian experience with inflation targeting:

1. The success of the Canadian experience can largely be attributed to the emphasis placed by the regime on accountability to the general public as opposed to meeting specified obligations. Although tight constraints on central banks are necessary to establish credibility, the Canadian experience shows that transparency of policy is also important in establishing credibility.
2. The low inflation record under Canadian inflation-targeting regime can also be attributed to the close informal links that have been established between the Bank of Canada and the Minister of Finance. This relationship was enhanced by the Bank's strong and increasing commitment to transparency and the communication of monetary policy strategy to the public.
3. Thiessen (March 1997a: 3) emphasizes the ability of the Canadian inflation-targeting regime to contribute in focusing expectations of future inflation. Previously, in

periods of high inflation, any demand or price shocks would have a negative effect on inflation expectations and contribute to upward pressures on inflation. By publishing inflation forecasts, inflation expectations are now alloyed in times of price shocks and inflation fears are largely alleviated.

4. Another lesson to be learnt from the Canadian experience is that even though the inflation-targeting regime was allowed to deviate from the target range, it still managed to keep inflation low and stable. As a result of this flexibility, Canada's good inflation performance has still been maintained even in the event of unforeseen supply shocks.
5. Mishkin and Posen (1997: 70) state that the Bank of Canada has adhered equally to both the floor and ceiling of the target range and is thus considered to be assisting in dampening business cycle fluctuations. As a result, the Bank of Canada has often been able to ease monetary conditions when the economy has weakened by appealing to the inflation targets.
6. Lastly, the Canadian experience shows that, by responding to the trend of inflation relative to the target range, monetary policy can act as an important stabilizer for the economy. As such, in times of excess demand when capacity is pressurized, the targets effectively call for the Bank to tighten monetary policy. Similarly, when demand is weak, the targets call for the Bank to ease monetary policy.

5.8 Conclusion

While clearly Canada, New Zealand and South Africa are at different stages of economic development, they are all relatively open economies (with exports 25% of GDP in South Africa and 33% in New Zealand and 37% in Canada) with some similar features (manufacturing is about 25% of GDP in Canada and South Africa and 18% in New Zealand). Consequently, it is useful to compare the current South African evidence relating to the key issues relating to the desirability of inflation targeting to the pre-target evidence for Canada and New Zealand.

Canada and New Zealand appear to have been two quite different countries in the pre-target periods. Yet, both countries have enjoyed greater real economic stability since adopting an inflation target. In addition, both countries enjoyed a reduction in average inflation with the adoption of the inflation target in a manner that is consistent with a falling inflationary bias. The South African economy, on the basis of the VAR evidence, looks more similar to pre-target New Zealand: in both countries exchange rate shocks and CPI shocks were substantially negative. Again, in both countries exchange rate shocks were an economically important determinant of the CPI.

There is, however, one crucial difference between the behaviour of the pre-target New Zealand economy and the recent South African experience. In New Zealand, during both the pre and post inflation targeting periods, lagged exchange rates were an important determinant of real output. This suggests that the volatility of the exchange rate was not associated with the automatic stabilization of IS shocks. In South Africa, on the other hand, while the exchange rate has been volatile and an important determinant of the CPI, it has not been an important determinant of output. Thus this evidence suggests that the exchange rate has been providing important automatic stabilization of IS shocks in South Africa. The adoption of an inflation target would force South Africa to forego this automatic stabilization, which implies more volatile real economic activity. In addition, South Africa does not have a strong and predictable linkage between the CPI inflation rate and monetary aggregates. This could present problems of instrument instability for South African monetary policy under an inflation target; problems similar to those experienced by New Zealand (see Mishkin and Posen[1997]).

The issue of inflation targeting effect on the flexibility of the exchange rate is important because, the correlation between exchange rate changes and all of the popular measures of inflation in South Africa has been substantially negative and has become more so most recently. Apparently, IS shocks are becoming more important in the South African economy. A monetary policy aimed at stabilizing the CPI inflation rate in the face of frequent and severe IS shocks would lead to more output volatility, not less.

CHAPTER 6
CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

The aim of this study was to examine the appropriateness of inflation targeting as the future monetary policy strategy for South Africa. South Africa evidently needs to prepare itself for the new age of inflation targeting. Therefore, producing information that will determine whether the South African Reserve Bank has been correct in their adoption of this framework, and to propose an alternative, more all-encompassing option.

The aims included the following

- To analyse the potential advantages of incorporating such a framework into South African monetary policy.
- To define and analyse the concept, Inflation Targeting
- To define requisite preconditions for the adoption of Inflation Targeting, and to assess whether or not these preconditions are met in South Africa.
- To draw lessons for South Africa from international experience
- To determine whether Inflation Targeting, given South Africa's unique characteristics, is suitable to South Africa and can provide the benefits proposed by its advocates.

South Africa is indeed different from any other developing countries with the following distinguishing features:-

1. The racial and cultural heterogeneity
2. The "two nations in one" description
3. The pressure for redistribution of income and wealth, which results in militant labour union actions and unjustifiably labour-friendly legislation. This results in disproportionately high total real labour costs , and rising nominal labour costs. These, as well as other, oddities bring on high unemployment.

South Africa is quite unlike other emerging market economies, given that both the real wage level and efforts to boost it are highly insensitive to the existence of high and possibly growing unemployment.

Monetary policy aiming at price stability id burdened with the need to counterbalance these cost-push pressures. Particularly high real interest rates would depress investment as well as economic growth.

The chain of causality may become exceedingly detrimental and create a vicious circle. When mixture of low employment, low growth levels, a restrictive labour force, and fears of further government policies redistribute, arouse misgivings and reservations among foreign investors, the resultant capital outflows and downward pressures on the exchange value of the currency, give rise to price level pressures and inflation.

The above in my opinion, constitutes a deep-seated structural problem in the South African economy that works against the simple application of Inflation Targeting in the manner of more homogenous, closely knit and sophisticated societies, such as those of the UK and New Zealand. These problems go further than just to complicate the forecastibility of inflation in South Africa.

6.2 A Description Of Inflation Targeting Framework

Chapter 2 defined and explained the concept of Inflation Targeting. The adoption of an Inflation Targeting model signifies a public announcement by monetary authorities for the attainment of a specified, quantified inflation target over a certain time period, on the understanding that price stability is the long-run goal of monetary policy.

The various definitions of Inflation targeting incorporate identifying features of the framework and highlight requirements to be met to facilitate its application. For example, while Inflation Targeting typically entails increased communication with the public, calls for the abandonment of other nominal anchors, and increases transparency, these elements are factors that the authorities are required or encouraged to put in place as a foundation for the framework and its implementation. While these elements are important, they are not, however, unique to Inflation Targeting. It is important to distinguish between defining

Inflation Targeting and identifying the features of monetary policy needed for the framework to be implemented.

6.3 The Case For Inflation Targeting

Chapter 3 showed that, potentially, Inflation Targeting has strong advantages. The provision of a nominal anchor for inflationary expectations, along with the effects of credibility, openness and transparency, are undeniably important advantages of Inflation Targeting. They can, however, be achieved without operating in an Inflation Targeting environment. Creating a public understanding of the stand of monetary policy can be achieved in other monetary regimes.

As Mishkin explains, various shortcomings exist within the framework, many of which are relevant to developing nations. Factors such as the requirement of not anchoring the exchange rate, as well as the effect of government-administered prices (which are of particular concern in South Africa), can complicate the framework and cause the potential advantages to be outweighed.

6.4 Requirements Of Inflation Targeting

The application of Inflation Targeting is based on a variety of requirements. Factors such as an absence of fiscal dominance and the role of monetary policy are vital in deciding on the implementation of Inflation Targeting. The nature of the Central Bank independence impacts on the implementation of Inflation Targeting. While these factors are important, uniqueness of South Africa should also be taken into consideration (given that their effects cannot be clearly determined), with an understanding that these factors can impose heavily on the success of the framework.

6.5 The International Experience

International, Inflation Targeting has proven to be successful. The method of its implementation differs across countries. While the majority of countries that have implemented Inflation Targeting have seen falling inflation rates, whether and to what degree these decreases are related to Inflation Targeting is uncertain. Specific concerns exist for developing economies, given the greater degree of volatility in these economies. Factors such as shallow capital markets, and reliance on seigniorage revenue is concern specifically relating to developing economies. While inflation rates have been decreased in the developing economies analyzed in this chapter, the sustainability of these results cannot yet be determined. The main conclusion is that each country needs to be considered on its merits, depending on the circumstances in the country concerned. Policy makers need to determine factors such as the sacrifice ration to ensure that the framework is appropriate, and to decide whether the country would not be better off focusing on an acceptable balance between growth and inflation.

6.6 South Africa And Inflation Targeting

The more eclectic approach used by the South African Reserve Bank was abandoned in favor of Inflation Targeting. The authorities, anxious to prove that South Africa is as economically sophisticated as other more developed countries, may seem to have embarked with an unjustifiable haste on a framework that is not obviously suited to the economy. Possible sources of problems with the framework, include inter-alia South Africa's high and volatile inflation rates, structural changes to its economy that impinge on the authorities inflation forecasting ability, and socio-political factors, resulting in diverging views on the role of economic policy.

The nature of inflation in South Africa is an additional complicating factor. While diverging opinions exist of the cost-push/demand-pull nature of inflation, reference in the paper show strong empirical support for the view that inflation in South Africa is fundamentally a cost-push phenomenon. Radical trade union behavior within a highly rigid labour market acts as a deterrent to employment creation, while pressures for higher real wage levels stimulate inflation. Organized labour's role in inflation creation works against the efforts of the South African Reserve Bank. As organized labour does not perceive a real material interest in the attainment of the inflation target, its efforts will continue to complicate the inflation reduction process. Further complexities arise from the fact that the South African wage levels are insensitive to growing unemployment, as well as from resentment within income groups.

6.7 Recommendations

The analysis of Inflation Targeting in South Africa has highlighted problems and incongruities in the new framework. Inflation volatility, large differences in the inflation rates, structural changes within the economy that impact on inflation forecastibility, and the fact that inflation in the 1990's has been essentially a cost-push phenomenon, toss the appropriateness of the framework for South Africa into uncertainty. Because the views, given problems unique to the country, not all stakeholders have welcomed the framework.

The authorities in the face of a failed GEAR, sought to implement a new policy, a policy that has been embraced internationally, a policy that has been implemented in developed and developing economies alike, but a policy that indeed not suited to South Africa.

A framework is required that incorporates considerations pertinent to South Africa's unique and difficult circumstances. If an inflation target is to be set as part of an overall and comprehensive GEAR-type projection of South Africa's capabilities, encompassing attainable outcomes for growth, employment and redistribution, to which organized labour has seen its way clear to subscribe, rather than as an exclusive price stability objective, set in apparent disregard of everything else.

The proposed framework, while incorporating many of the advantages that Inflation Targeting[3] boasts, such as transparency, communication and accountability, can be attained within a broader "national intention". An additional advantage of such an approach, clearly lacking in Inflation Targeting, is that the broader framework involved will have the potential to attract the active participation of organized labour by specifying outcomes thought realizable for growth and employment concurrent with moderate targets for inflation. Stakeholders, being the labour market, business and government, may be presented with a limited "menu" of alternative options. Based on differing priorities, a target of, for example, two percent inflation combined with three percent realizable economic growth (and potential for increasing unemployment) may appear inferior to a less demanding target for inflation, combined with a higher real growth rate[4] .

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[3] While these advantages are integral to Inflation Targeting, they are not exclusive to it.
[4] Green (1996) suggests a mildly, similar concept, namely, targets for both inflation and growth

This means that , having looked at various combinations of employment , real growth and inflation , and having the "most attractive" one, inflation is turned into the target: it may then, realistically, be hoped that the projected employment and output outcomes in that combination will also be realized. In this case stakeholders will have had the opportunity to express themselves on the relative desirability of these various "good things".

The policy effectively involves a compromise with organized labour (in that employment needs will have been duly recognized alongside the need for some moderate target for inflation. In exchange for this, labour may be expected to moderate its aggression in their wage negotiations and to allow more labour market flexibility. Following from this, due to a more employer-friendly labour market, employers will be more likely to invest in labour and to de-emphasize labour-replacing capital equipment.

Based on the findings of the research study, the following recommendation is offered:
South Africa, with its unique and difficult circumstances needs an inflation target within a GEAR-type projection of possible outcomes for employment, real growth and price stability inflation, to arrive at an acceptable "tailor-made" framework.

APPENDIX A

A.1 INFLATIONARY EXPECTATIONS IN SOUTH AFRICA

Inflation Targeting provides a nominal anchor for inflationary expectations. This is tha main reason for the adoption of Inflation Targeting in both South Africa and other developing countries. This section analyses the trend in expectations, with the use of research undertaken through the Bureau of Economic Research at Stellenbosch University.

Figure A1.1 Inflation expectations: third quarter 2000

	Healine CPI inflation			CPIX inflation		
	2000	2001	2002	2000	2001	2002
Financial Sector	5.5	6.6	5.4	7.5	6.6	5.7
NF business	6.8	7.0	7.2	7.6	7.7	7.8
Labour	6.3	6.3	5.8	7.1	7.0	6.7
Average Above	6.2	6.6	6.1	7.4	7.1	6.7
Households	7.5	-	-	-	-	-
Grand Average	6.5	-	-	-	-	-

Non financial business sector

Source BER 2000

In the third quarter of 2000, expectations regarding the attainment of the target were low. The financial sector was the only party who expected the target for 2000 to be hit, while both labour and business expected the target to be missed. It is valuable to note that in this quarter both labour and the financial sector's sentiments were such that they believed that inflation would fall from 2000 to 2002

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