Central Bank Independence in an Inflation Targeting Regime: An Assessment of South Africa's Central Bank Independence

By

Bongiwe Tindleni

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Abstract

Since the early 1990's IT has particularly become popular with most central banks, largely due to a failure of both monetary aggregate and exchange rate policies in bringing about price stability (Angeris and Arestiz, 2005).The literature, however raises concerns about the ability of emerging markets in implementing inflation targeting (Mishkin, 2004). In particular, concerns are raised about the commitment to maintain central bank independence, identified as a crucial pre-requisite in the implementation of IT. South Africa, implemented IT in February 2000 and it being an emerging market, questions about the level of the independence of the central bank are relevant.

To assess legal independence an index developed by Cukierman (Cukeirman, 1992) is used. In assessing actual independence, two approaches are used. These included interviews with a representative from the South African Reserve Bank (SARB) as well as eleven economists from the private and academic sector.

Findings reveal a central bank that has significantly higher actual independence than legal independence, a strange phenomenon for an emerging market. The Bank seems to have largely succeeded in maintain its independence since the implementation of inflation targeting despite the fact that South Africa is an emerging market. The lower legal score, however, raises concerns about the lack of sufficient provision for independence of the central bank in the law.

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University

Bongiwe Tindleni

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CHAPTER 1

1 Problem Definition

1.1 Introduction

Economists tend to agree that the primary role of monetary policy should be to bring about price stability. Despite this agreement, there is still no consensus on how this should be brought about. A number of alternatives have been used by different countries to effect monetary policy, these include inflation targeting (IT), growth in money supply (monetary aggregates) and targeting exchange rates.

Prior to the 1990s both monetary aggregates and exchange rate target policies were very common. In the early 1990s both these policies began losing popularity due to the realisation that they had lost their usefulness in their ability to predict future trends in inflation (Casteleijn, 1999). Money supply had particularly been shown to be a rather unreliable means of controlling inflation in view of instabilities in the demand for money(Angeris and Arestiz, 2005). The level of exchange rates is ultimately determined by international demand and supply of domestic currency, which renders central bank's influence on the currency rather limited.

IT has since been used by several countries as a framework for carrying out monetary policy. For a while, inflation targeting was a phenomenon of the developed world. New Zealand was the first country to implement inflation targeting in 1990 and was soon followed by other industrialised countries like Canada, United Kingdom, Australia and Sweden. During this period, developing countries were still [illegible] like Money Supply and Exchange Rates to effect monetary policy (Angeris and Arestiz, 2005).

The failure of these two policies in bringing about monetary stability and thus economic growth has resulted in a number of emerging economies choosing to target inflation as a monetary policy frame. These developing countries include South Africa, Brazil and Chile amongst others. A recent study by the International Monetary Fund (2005) states that 21 countries (8 developed and 13 emerging economies) are now inflation targeters, South Africa among them.

Table 1: Inflation Targeters (Source: IMF Report, 2005)

Country	**Inflation Targeting Adoption Date**
Emerging Market Countries	
Israel	1997 ,Quarter 2
Czech Republic	1998, Quarter 1
Korea	1998, Quarter 2
Poland	1999, Quarter 1
Brazil	1999, Quarter 2
Chile	1999, Quarter 3
Colombia	1999, Quarter 3
South Africa	2000, Quarter 1
Thailand	2000, Quarter 2
Mexico	2001, Quarter 1
Hungary	2001, Quarter 3
Peru	2002, Quarter 1
Philippines	2002, Quarter 1
Developed Countries	
New Zealand	1990, Quarter 1
Canada	1991, Quarter 1
United Kingdom	1992, Quarter 4

Australia	uarter 1
Sweden	1993, Quarter 1
Switzerland	2000, Quarter 1
Iceland	2001, Quarter 1
Norway	2001, Quarter 1

The table above gives an indication of the dates of adoption of inflation targeting as a monetary policy frame by different countries.

Although inflation targeting has been widely used as a monetary policy frame, there are still questions about whether it provides superior performance in comparison to other mechanisms. The 1990s were viewed as a “period friendly to price stability”, which suggests that the reduction in inflation in most inflation targeting countries has been as a result of a world-wide decline in inflation and should not necessarily be attributed to an inflation targeting policy (Angeriz and Arestis, 2005). Furthermore, questions exist about whether IT has superior effects on macroeconomic measures such as economic growth. Ball and Sheridan (2003) found no evidence that inflation targeting improved economic performance as measured by the behaviour of inflation, output and interest rates in their sample of Organisation for Economic Co-operation and Development (OECD) countries.

1.2 Inflation Targeting in South Africa

Inflation Targeting (IT) was introduced in South Africa by the South African Reserve Bank (SARB) as a monetary policy frame in February 2000 (ABSA Economic Perspective, 2002). A form of informal inflation targeting already existed in South Af [illegible], 2001). SARB had for a while been placing emphasis on the attainment of price stability without specifying the time period over which this would be achieved. Although emphasis was placed on price stability, growth in money supply anchored monetary policy as opposed to an inflation target as would be the case in an inflation targeting regime.

In his occasional paper for SARB, van der Merwe (2004) gives the rationale behind the adoption of formal inflation targeting despite the fact that he indicates that considerable success had been achieved with informal inflation targeting (inflation declined from about 15% in late 1980s to about 5% in 1999). According to him the reasons behind the adoption of IT included the following:

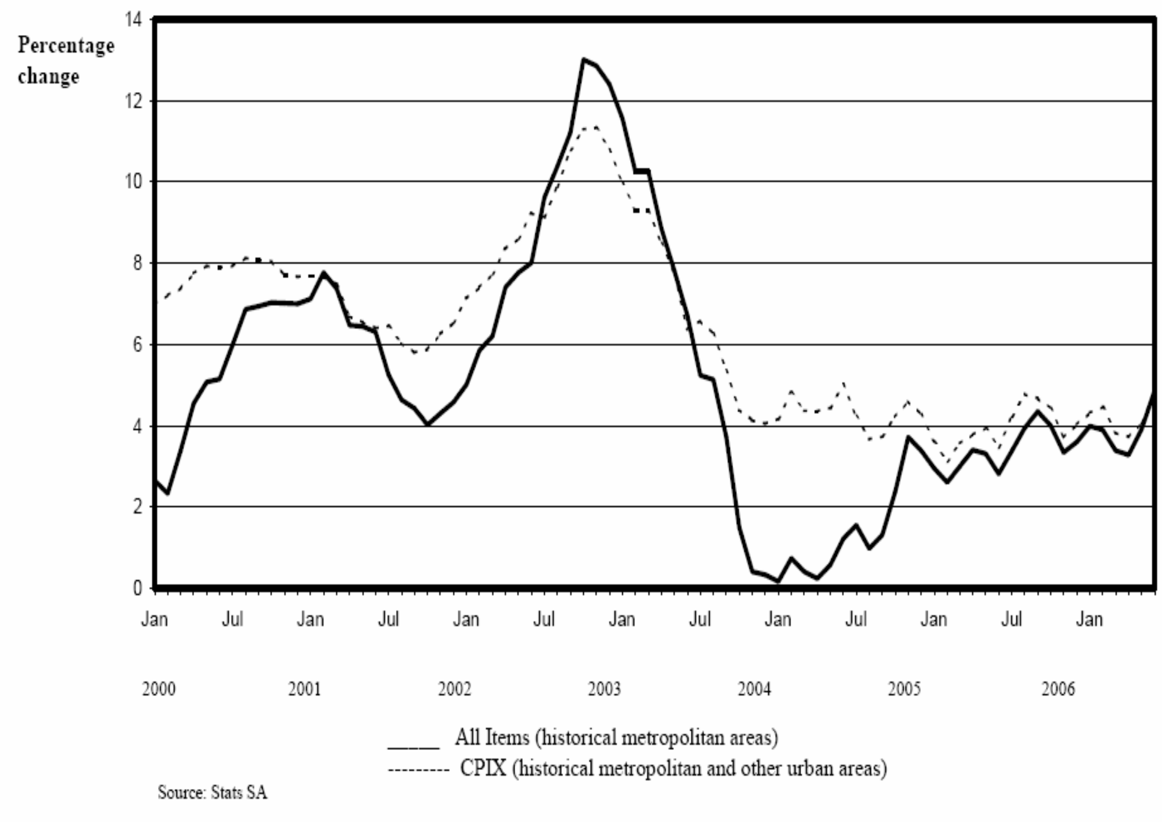
- Informal inflation targeting created uncertainty with the public about the monetary policy objectives of SARB;
- SARB was of the opinion that inflation targeting would improve co-ordination between monetary policy and other economic policies;
- The existence of an inflation target would bring about accountability of the central bank; and
- The positive effect that inflation targeting would have on inflationary expectations, thereby facilitating a reduction in inflation.

Decisions had to be made about the measure that would be targeted as well as the target that would be used. The South Africa Government chose to target the Consumer Price Inflation excluding mortgages (CPIX) and not core inflation. CPIX is targeted as it excludes mortgage interest costs which are a direct outcome of monetar 2001). There was also a debate at the time about whether energy and food prices should be included in the measure as the bank has little control in influencing them. Developing countries tend to be subject to more numerous and variable supply shocks that affect the price index and inflation (Masson, Savastano and Sharma ,1998). A decision was made to include both in the measure. In South Africa energy and food prices are a big determinant of inflation and excluding them would have resulted in consumers experiencing inflation levels far higher than those incorporated in the target. This would seriously bring into question the credibility of the target as well as the commitment on the part of the bank in bringing down inflation. The measure chosen needed to be one that is acceptable to the general public an accurate measure on inflation, otherwise the policy would lack credibility (ABSA Economic Perspective, 2002).

The target was set at a range, 3%-6%. Some have argued that not having a specific value but rather a range provides far too much flexibility for the central bank. However, having a range provides the bank with flexibility to react to any unforeseeable price shocks. It is also easier to achieve a target range rather than a specific value (van den Heerver, 2001). At the time of adoption, SARB needed to ensure that it established credibility in the market and having a specific target which they could not always achieve would have compromised this.

Achieving the specified inflation target was initially very challenging for SARB. After the implementation of inflation targeting in South Africa in February 2000, CPIX remained out 6% and 8% (see CPIX figure below). It peaked in November 2002 at 11.3%, which was significantly higher than the upper limit of the target. This may have been due to the lagged effect of the collapse of the rand in the latter part of 2001 (De Wet, 2003). The inflation target of 3%-6% was thus not met both in 2002 and 2003. This resulted in the target being revised for 2004 from 3%-5% back up to 3%-6%. The inflation target was finally achieved in September 2003 and has been maintained within the target since as is depicted in the figure below.

Figure 1: CPIX (January 2000 – June 2006) – (Source: Stats SA)



Source: Stats SA

1.3 Motivation f

Although a number of emerging market economies (EMEs) like South Africa have since the late 1990s adopted inflation targeting as a monetary policy framework, the literature raises concerns about their ability to appropriately institute an inflation targeting regime (Mishkin, 2004). The scepticism relates largely to the ability of emerging markets to fulfil and maintain the pre-requisites that have been identified as crucial to the successful implementation of an inflation targeting regime (Angeriz and Arestis, 2005). Identified pre-requisites include the following (Batini, Kuttner and Laxtons, 2005 and Angeriz and Arestis, 2005):

- Independence of the Central Bank;
- Adoption of price stability as the sole target for monetary policy;
- Presence of a well developed technical infrastructure;
- Presence of a healthy financial system; and
- Absence of fiscal dominance

The weak fiscal, monetary and financial institutions in emerging market economies render them sometimes unable to establish or maintain the identified pre-requisites. Weak fiscal institutions or fiscal dominance means that the conduct of monetary policy by the central bank may be unduly influenced by fiscal considerations (Wagner, 2000). Furthermore, the literature points to a lack of consensus between economic and political authorities in EMEs to fight inflation. This may render the implementation of an inflation targeting regime rather challenging. Some variations exist in the literature on the pre-requisites for inflation targetin e is the identification of Central Bank Independence as a critical pre-requisite.

South Africa is an emerging market economy, which has recently implemented inflation targeting. The challenges faced by other emerging market economies in implementing IT raises questions about what the South African experience has been in its attempts to implement an IT policy. It also raises questions about the extent to which South Africa, as an emerging market economy has been able to maintain the required pre-requisites for IT, specifically central bank independence. A number of challenges exist in South Africa which may pose a threat to the independence of the central bank and therefore impact on its inflation targeting policy, and some of these challenges are explored below.

According to van der Merwe (2004), there is a school of thought that argues that IT leads to an overemphasis on monetary stability at the cost of growth and development and therefore employment. An opinion exists, that with the current level of unemployment and low economic growth in South Africa, the cost associated with IT is too high. Although theories have been developed to show that in the long run, the Phillips curve is vertical i.e. high inflation does not result in low levels of unemployment (McAleese, 2004), there are individuals who still believe that high inflation will result in high levels of employment. In his comparison of the monetary policies of the two governors in South Africa in the period 1981-1999, Hodge (2001) concludes that there is little evidence of or scope for a Phillips curve trade-off between inflation and unemployment in South Africa. It is perhaps for this reason even more imperative that central bank independence [illegible] objective of the bank is not clouded by high levels of unemployment.

With the high levels of unemployment in South Africa, an assessment of the independence of the central bank (to effect price stability) becomes even more relevant. In the long term central banks can only create an environment in which there can be economic growth and therefore employment through ensuring price stability but cannot have a direct impact on economic growth. The South African Government is under consistent pressure from especially labour organisations and other economists who believe there is a trade-off between the conduct of monetary policy, economic growth and employment.

In his paper in Hodge (2001, p. 49) makes refers to the following quote made by Pillay in 1997, “In South Africa…the Reserve Bank needs to be less anxious to prove its anti-inflationary credentials to the financial markets and the international financial institutions and show more sensitivity to the wider economy and its crying need for economic growth, higher employment and visible improvements in standards of life of the majority of the people”. In their attempt to address unemployment, Government needs to ensure that the independence of SARB is maintained, whether this is always the case is the subject of this research.

In his paper Genberg (2002) makes reference to the fact that inflation targeting has been operating in an environment with low unemployment, this is however, not the case for South Africa. He says when unemployment becomes a problem (as in South Africa), [illegible] erceived as too inflexible, pressuring the central bank to be more accommodative. Independence will not protect the central bank from such pressures, as Government ultimately determines the objectives of monetary policy.

With the political changes that South Africa has experienced since the early 1990s as well as being an emerging market, the question of central bank independence becomes even more pertinent. Wessels (2004) states that political changes, especially ones with revolutionary potential (as was the case in South Africa) always result in serious changes for economic systems, the central bank and its monetary policy.

South Africa has a history of political interference in the policies of the Reserve Bank. In both 1983 and 1988 political pressure was exerted on the governor at the time, Dr Gerhard De Kock to follow an interest rate policy that was unwarranted by economic conditions (Hodge, 2001). Although this may have been largely due to the Apartheid Government which was in power at the time, the fact that the current governor, Tito Mboweni, previously served in the current Government may raise concerns about the bank’s independence and his political neutrality. In his paper, Jackson (2002, p. 30) states that the appointment of a governor that had some affiliation with political authorities “caused widespread consternation relating to independence issues”.

Wagner (1999) alludes to the fact that there are severe doubts about whether IT could be an appropriate solution for transition countries because its efficiency presupposes a very [illegible] already stipulated above, this is the case for emerging market economies as well. It is on this basis that this research will attempt to evaluate and assess the degree of independence of the South African central bank as an inflation targeting regime.

An assessment of the South Africa's central bank independence was conducted by Wessels (2004), in which he compared independence before and after the democratisation of the country. The assessment did not attempt to use a measurement model to assess the central bank's independence. Another assessment of the legal independence of SARB was done by Wessels (2006), in which he compared SARB's legal independence with that of five other central banks in Africa. In his assessment he only looked at legal independence and makes reference to the fact that these criteria are more definable and easier to apply than actual ones (Wessels, 2006).

Although not entirely objective, the numerous indices that have been used in assessing central bank independence provide a tool that allows for some objectivity in assessing central bank independence. Furthermore in all the assessments of independence conducted for SARB, no attempt is made to try and assess actual independence. According to Dvorsky (2000), a high degree of legal central bank independence without the necessary degree of actual central bank independence may not only be ineffective, but even counter-productive.

CHAPTER 2

2 Theory and Literature Review

Extensive literature is available on both inflation targeting and central bank independence as well as the relationship between the two. The literature review below will explore the definition of inflation targeting as well as the pre-requisites identified by the literature as critical in its implementation. IT has had both critics and proponents and both views will be explored. Having established the necessary pre-requisites, it will then assess the theory available to support the concept of central bank independence and how it can be measured. The literature review is concluded with an assessment of the studies conducted to assess the relationship between central bank independence and inflation.

2.1 Definition of inflation targeting regime

A number of definitions exist in the literature for what an IT regime is. Miskhin (2002) defined inflation targeting as a monetary policy strategy that encompasses public announcement of a medium term numerical target for inflation and an institutional commitment to price stability as the primary goal of monetary policy. Genberg (2002, p. 3) further emphasises the notion of price stability in his paper by indicating that "a central bank is following a strategy of strict inflation targeting when it has no other objective other than assuring price stability". Mishkin (2004) expands the definition of inflation targeting to include the following elements:

- An informatic ny variables and not just monetary aggregates or the exchange rate are used for deciding or setting policy;
- Increased transparency of monetary policy strategy; and
- Increased accountability of the central bank for attaining its inflation targets.

The inclusion by Mishkin of the above elements in his later work emphasises the view by most economists that inflation targeting is not purely around the numerical target but is a holistic policy instrument.

Amato and Gerlach (2002) argue that although the above criteria captures the essence of inflation targeting, they are not necessarily helpful in concisely defining this policy framework. They argue that a number of central banks satisfy the above criteria but do not necessarily consider themselves as IT Regimes. These banks include the Swiss National Bank and the European Central Bank. According to Amato and Gerlach (2002) a number of emerging market economies initially tended to conduct monetary policy solely using a numerical target and the policy is gradually refined to include all the identified IT elements. They conclude by suggesting that IT is best thought of as a range of strategies and that the only essential elements are the announcement of a clear inflation numerical objective and the commitment from both the central bank and the Government to achieve this.

2.2 Pre-requisit

The literature identifies a number of pre-requisites for the successful implementation of inflation targeting. Common to all the reviewed literature, the most important pre-requisites have been identified as the following:

i. **Independence of the central bank**

Masson *et al* (1998) emphasise the importance of central bank independence in an inflation targeting regime. There is broad agreement that instrument independence is a lot more important than goal independence (Amato and Gerlach, 2002). The central bank may not necessarily be in a position to determine the target of monetary policy (or the inflation target in this instance) but it should be in a position to use specific instruments at its disposal to effect monetary policy (Angeriz and Arestis, 2005). Wessels (2006) alludes to the fact that the importance of Central Bank Independence (CBI) rests on the premise that inflation is primarily a monetary phenomenon, and that the cost of reducing inflation can be lowered by an independent central bank with credibility. Constant interference by Government would undermine the independence of the central bank to implement monetary policy.

ii. **Adoption of price stability as the sole target for monetary policy**

The adoption of price stability as the only target for monetary policy to the exclusion of any other policies that could be in direct conflict with targeting infla ital to the implementation of inflation targeting.

iii. The presence of a well-developed technical infrastructure

Inflation targeting is a forward-looking policy and therefore aided by forecasting. Central banks thus need to have in place well-developed inflation forecasting and modelling capabilities (Batini, Kuttner and Laxtons, 2005). Furthermore, central bank need to have capabilities to gather relevant data and make it available for modelling and forecasting purposes.

iv. Presence of a healthy financial system

When the banking system is weakened, central banks cannot raise interest rates to sustain inflation as this leads to a total collapse of the financial system. For successful implementation of inflation targeting, the banking system has to be in a position to sustain increased rates to counter inflation (Mishkin, 2004). Most inflation targeting countries use short-term interest rates as the main operating instrument and rely on well-developed and healthy financial systems to transmit the effects of those changes to aggregate demand and inflation (Masson *et al,* 1998).

v. Absence of fiscal dominance

Wagner (2000, p. 61) states that “fiscal dominance exists when inflation is determined by the dominance of fiscal policy over monetary policy”. Corbo, Landerretche and Schmidt-Hebbel (2002) make reference to the absence of fi [illegible] nplementation of inflation targeting. Masson *et al* (1993) goes on to suggest that public sector borrowing from the central bank and the banking system should be low or non-existent. In his paper Genberg (2002) states that fiscal authorities need to commit to restraining budget deficits to levels that can be financed on the private capital market without putting significant pressures on interest rates. Large borrowing requirements by government crowd out lending to the private sector and put pressure on market interest rates. Excessive budget deficits may result in monetisation of debt by the central bank which may have inflationary outcomes.

Amato *et al* (2002) argue that the pre-conditions identified for IT are necessary for any monetary policy, be it IT, exchange rate or monetary aggregates targeting. They further suggest that in most EMEs, at adoption of IT, the pre-requisites usually do not exist and that steps are taken to put these in place only after adoption. Miskhin (2004, p.10) also agrees that “the view that these reforms are pre-requisites for attempting inflation targeting in emerging market countries are too strong”.

In his assessment of the pre-requisites of inflation targeting in South Africa in 1999, Jonsson came to the following conclusions:

- In South Africa’s case there is no fiscal dominance of monetary policy, nor is there a commitment to target the nominal exchange rate or other nominal variables with monetary policy;

- SARB has c [illegible] nstrument independence and is free to unilaterally announce a move to inflation targeting if it so desires; and
- South Africa has a sophisticated capital market and policy changes tend to influence the money market interest rate in a transparent fashion.

Based on the above one can conclude that South Africa did to a large extent have the required pre-requisites for the implementation of IT in place prior to 2000. It is however the subject of this research to establish if in particular, central bank independence has been maintained post IT implementation.

Mishkin (2004) has a view that inflation targeting can in effect help promote fiscal and financial reform in EMEs. Batini *et al* (2005, p.177) also argues that "the fact that none of today's inflation targeters either individually or on average had strong preconditions suggests that the absence of these preconditions is not by itself an impediment to the adoption and success of inflation targeting". They also allude to the fact that in most countries, the adoption of inflation targeting has actually led to an improvement in technical capabilities especially data gathering and forecasting.

2.3 Assessment of inflation targeting

Like all monetary policies, inflation targeting has distinct camps of proponents as well as critics. Both cite numerous reasons why inflation targeting is an appropriate solution (for proponents) and what its pitfalls are (for critics). In their paper Batini *et al* (2005) highlight advantages and disadvantages of adopting inflation targeting.

The following have b flation targeting:

i. **Builds credibility and anchors inflation expectations**

The adoption of an inflation target ensures that the goal of the central bank is very clear to the public and results in greater transparency. Furthermore, the commitment by the central bank to achieve the specific target contributes to its credibility in the public and also anchors inflation expectations.

ii. **Grants more flexibility**

Inflation targets are generally accepted to be longer term goals and therefore, there is less pressure on the central bank to achieve the target immediately. This allows for slight deviations from the target, provided that this will not impact the medium to long term target. The credibility that inflation targeting affords central banks ensures that slight deviations are not viewed as abandonment or lack of commitment to the target. Public expectations are managed through public communication as well as explanation of specific course of action on the part of the central bank

iii. **Lower economic cost associated with failure**

The output policy failure associated with other monetary policies like exchange rates and pegs can be large, involving reserve losses, high inflation, financial and banking crises. On the other hand, the output costs associated with inflation targeting are limited to temporarily higher-than-target ir erest rates are raised to bring inflation back to the target.

According to Batini *et al* (2005), critics have identified the following as the disadvantages of inflation targeting:

i. **Inflation targeting restrains growth**

The emphasis on attaining a particular inflation target may restrict output growth. In an inflation-targeting regime, the central bank has to put in place measures to bring down inflation even if it temporarily negatively impacts output growth. It is thus seen as a confining policy especially in EMEs where economic growth is essential due to high levels of unemployment.

ii. **Inflation targeting offers too much discretion**

Critics believe that inflation targeting does not help build credibility due to the flexibility associated with the policy. Individual countries can decide on any target and when it has to be achieved. Furthermore, the target can be changed at any point in time, which brings to question the level of commitment to a specific target.

iii. **Inflation targeting requires stringent pre-requisites**

A number of pre-conditions (discussed below) have been identified that are required in order to implement inflation targeting (IT). These preconditions render it rather difficult to implement IT in most countries.

2.4 Inflation tar [illegible] Economies (EMEs)

In his paper Mishkin (2004) states that some of the literature has been rather sceptical about the use of inflation targeting as a monetary policy frame in emerging markets. He explains that placing too much discretion on policy-makers in a weak institutional environment (as is the case in most EMEs) might lead to poor economic outcomes. He alludes to the following elements as posing the biggest challenge for EMEs in instituting any momentary policy frame including inflation targeting:

2.4.1 Weak fiscal and financial institutions

Excessive fiscal imbalances put pressure on monetary authorities to monetise debt. This is especially the case when governments have excessive budget deficits. The monetisation of debt will invariable lead to inflationary increases, seriously undermining any inflation targeting policy. If fiscal imbalances are large enough, monetary policy loses priority, and fiscal considerations become of primary importance and inflation targeting would have to be abandoned (Mishkin 2004).

If the banking institution is weakened, central banks cannot raise interest rates to sustain inflation targeting and furthermore an attempt by the government to bail out the banks could lead to monetization of government debt in the future (Mishkin, 2004). Wagner (2000) states that a main precondition for an efficient conduct of monetary policy is a well functioning market-based banking system.

2.4.2 Weak

Mishkin (2004) identifies two elements that are critical to the development of strong monetary institutions:

- institutional commitment to price stability; and
- institutional commitment to instrument independence of the central bank.

In some EMEs price stability is not always the primary target of monetary policy and government sometimes engages in practices that are in direct conflict with price stability. In their paper Sikken and de Haan (1998) state that in countries where the central bank's operations is not independent from central government, the bank often yields to pressure to monetise government deficits.

Soto and Cespedes (2005) identify another element which potentially increases the challenge of implementing IT in emerging market economies as the following:

2.4.3 Lack of credibility of the central bank

According to Blinder (1999), a central bank's credibility should influence how its monetary policy actions affect forward looking variables like long-term interest rates, hence its importance in determining the effectiveness of an inflation targeting regime. Blinder (1999) states that credibility matters both in theory and in practice but that the latter has been particularly difficult to prove empirically. In his research amongst central bankers, Blinder identified two criteria identified for establishing credibility:

- History of [illegible] s and
- Central Bank Independence.

In emerging market economies central banks are not always able to uphold their credibility due to government influence and lack of commitment from the central bank itself.

Through theoretical modelling Soto and Cespedes (2005) established that a central bank with low credibility levels will be less aggressive in its attempt to fight deviations from the target, while a highly credible central bank will be able to bring inflation back to the target more rapidly with lower output losses. Most emerging economies have chosen to set short-term inflation targets in the initial stages of inflation targeting to assist in establishing the credibility of the new regime (Soto and Cespedes, 2005).

Having established some of the challenges faced by emerging markets in the implementation of IT and the effect thereof on central bank independence, the research attempts to understand what South Africa’s experience has been in this regard. In particular it attempts to establish to what extent the South African Central Bank has been able to maintain its independence, given the fact that it operates in an emerging market economy.

2.5 Central Ban .

2.5.1 Theory of Central Bank Independence

Governments have a strong tendency to exploit the short-run trade-off between unemployment and inflation predicted by the Phillips curve in order to win the favour of the electorate (Polillo and Guillen, 2005). Central banks that are politically dependent on governments thus tend to impress an inflationary bias on the economy (Fuhrer, 1997). In this instance, the long-run intention of the monetary authorities would be to keep inflation low but its desire to keep employment high coupled with their inherent discretion would result in tension between its inflation and employment goals (Fuhrer, 1997). Consequently, the monetary authority would tend to be more tolerant of rises in inflation and err on the side of higher employment and thus more inflation, hence an inflationary bias.

Two approaches have been suggested to counter this inflationary bias, one is by Rogoff and the other by Walsh (Wagner, 1999). Rogoff’s approach suggests that the inflationary bias that exists in most governments can be eliminated by delegating monetary policy to an independent and conservative central bank (Jacome and Vazquez, 2005). The targeting or contracting approach by Walsh suggests that government should not only transfer management of monetary policy instrument to an independent central bank but should also provide the central bank with incentives to optimise the social welfare function (Wagner, 1999). Both approaches however, agree on the establishment of a central bank that is independent of interference fror 230) indicates that the support for central bank independence largely stems from the argument that "the power to create money should be generally separated from the power to spend it". Emphasizing some division of responsibility between government and monetary authorities.

Fuhrer (1997) goes on to make a distinction between goal independence and instrument independence. The former refers to the ability of the central bank to set its own goals. The latter refers to the ability of the central bank to determine the instruments it will use to achieve the set goal, even though the goals may have been set by government. In his paper Tuladhar (2005) states that in their survey Allen and Sterne found that whereas money targets are set in most cases by central banks, inflation targets are decided upon by government, either independently or jointly with the central bank. There is general agreement in the literature that central banks should have instrument independence but not necessarily goal independence, especially countries that are inflation targeters (Tuladhar, 2005) and South Africa subscribes to this view as the inflation target is set by the Minister of Finance, even though it is implemented by the SARB.

2.5.2 Legal and Actual independence

The presents of laws that confer (legal) independence on the central bank may not necessarily translate into a central bank that is independent to perform its duties without government interference (de Haan and Kooi, 2000 and Cukierman, Webb and Neypati, 1992). Legal independence merely refers to the m pendence based on the interpretation of laws (Wagner, 2000). Actual independence may differ from legal independence as it is also influenced by several other aspects such as the informal arrangements between the bank and other parts of government, quality of the bank's research department and the personality of key individuals within the bank (Cukierman, Webb and Neyapti, 1992 and Wagner, 2000).

The discrepancies between actual and legal independence are particularly pronounced in most developing economies (Wagner, 1999). A reasonably high legal independence of the central bank can be viewed as a useful step required towards actual independence but it in itself is not a sufficient condition for a truly independent central bank (Wagner, 2000). Cukiermam *et al* (1992) also indicates that legal independence gives a view of the degree of independence that legislators wanted to grant to the central bank.

Some of the literature argues that the presence of legal independence without actual independence could be detrimental to the central bank (Wagner, 1999). The central bank may be powerless in preventing government behaviour that may be inflationary and yet the government could shift responsibility for inflationary outcomes to the central bank based on legal independence. In their study, Cukierman *et al* (1992) concluded that there are larger divergences between actual practice and the law in developing countries than in industrialised countries. This view is also echoed by Cukierman, Miller and Neypati (2002) in their paper.

2.5.3 Measu dence

The differences that may sometimes exist between legal and actual independence renders the measurement of central bank independence a rather challenging task. There are a number of indices that have been developed for measuring legal central bank independence. De Haan and Kooi (2000, p. 644) refer to the fact that existing indices of central bank independence “are often incomplete and noisy indicators of actual independence”.

One of the most widely used indices for the measurement of legal independence is the Cukierman Index (Cukierman, 1992). The index covers a number of areas with regard to the central bank in an attempt to evaluate legal independence. These include the appointment and dismissal of the governor; policy formulation; the objectives of the central bank and limitations on the ability of the central bank to lend to government. Jacome and Vazquez (2005) allude to the following as the shortcomings of the Cukierman Index:

- The index only looks at the appointment and dismissal of the governor and does not extend the assessment to the appointment of the board as a whole;
- It does not assess the role of the central bank in the formulation of exchange rate policy, which is critical for the conduct of monetary policy; and
- It does not assess accountability, which is a critical component of central bank independence.

Despite the abc n Index has been used extensively and therefore provides an important source of comparison for scores at different points in time.

The other measure that has been extensively used in literature to measure legal independence is the Grilli-Masciandaro-Tabellini (GMT) index (Dvosrsky, 2000). The index looks at both political and economic independence. As opposed to assigning a score to a particular variable, the index uses a binary system in which an asterisk is either assigned or not assigned. The GMT index is less structured than the Cukierman index and is not as detailed.

Due to the large discrepancies that exist between legal and actual independence in emerging markets, Cukierman (1992) used the turnover of central bank governors as a proxy for measuring actual independence. This was also used by De Haan and Kooi (2000) and Dvorsky (2000) as a proxy for independence in developing countries and selected transition countries in their studies. Central bank governor turnover proved to be a more appropriate measure for actual independence in developing markets.

Forder (1999, p. 28) raises concerns about the measurements of CBI that have been developed, he states that “A good measure of central bank independence is one that measures the extent to which the central bank behaves in the way the theory calls ‘independent’, not one that is negatively correlated to inflation”. He argues that the present measures of independence h negative correlation with inflation and may not necessarily be an ideal measure of independence.

2.5.4 Central Bank Independence and Inflation

There appears to be no agreement in the literature on the relationship between central bank independence and inflation. Hayo and Hefeker (2002) concluded in their paper that CBI is neither necessary nor sufficient for price stability. They argue that CBI is but one of many alternatives that can be employed to bring about price stability. They further conclude that although a correlation may exist between inflation and central bank independence, it does not indicate causality. Fuhrer (1997) also concluded that there seemed to be no robust relationship between central bank independence and inflation. Wagner (1999) alludes to the fact that most studies for developed countries have shown a strong negative relationship between central bank independence and inflation. In his analysis of the relationship between CBI and inflation amongst third world countries, Cukierman (1992) concluded that for these countries the negative relationship between the two does not exist.

Cukierman, Miller and Neyapti (2002) reported that amongst transition economies, during the early stage of transformation, the negative relationship does not exist but that it did seem to be the case when full economic liberalisation had been realised. Cukierman et. Al (2002) does however indicate the existence of a negative relationship between inflation and central bank independence in developed economies.

Cukierman (2006) concluded that inflation and actual CBI are negatively related in both developed and developing countries but that the existence of this relationship is impacted upon by other factors including regard for the law in the specific country.

Although Hayo and Hefeker (2002) concluded that CBI on its own is not sufficient to create price stability, they do acknowledge the importance of CBI together with an inflation target as a frame for monetary policy. They further state that in this instance, the bank has instrument independence rather that goal independence, where the target is typically not set by the bank but by the government.

The research will not attempt to establish whether a correlation exists between South Africa’s central bank independence and inflation. It is accepted that central bank independence is a critical pre-requisite for successful implementation of an inflation-targeting regime. The study will assess the extent to which the South Africa Reserve Bank has been independent as an inflation-targeting regime. Furthermore, the research will be assessing the degree of operational (instrument) independence of the South African Reserve Bank, having acknowledged that SARB does not have goal independence as government sets the goal.

CHAPTER 3

3 Research Questions

The literature review has identified the importance of Central Bank Independence in an inflation targeting regime. It further provides context for the challenges that emerging market economies which are inflation targeting regimes face in trying to maintain central bank independence.

Six years after the implementation of inflation targeting in South Africa, the research will attempt to assess the degree of operational independence of the South African Reserve Bank. The literature review has also established that in emerging market economies, the presence of high legal independence may not necessarily translate to high actual independence. In line with this, the research will answer the following questions:

1. To what extent is the South African Central Bank legally independent?
2. To what extent is the South African Central Bank actually independent?
3. To what degree are the discrepancies between legal independence and actual independence in South Africa?
4. To what extent has the rating of central bank independence (legal and actual) determined for South Africa by Cukierman (Cukierman,1992) changed and what are the reasons for the changes if any ?
5. To what extent is the degree of legal independence in South Africa, different from that of other emerging market economies that target inflation?

The research will fin[illegible]e of independence of the South African Central Bank and whether this supports the existence of an inflation targeting regime. It will also gain insights about whether given the fact that South Africa is an emerging market economy, it has been able to maintain the independence of the central bank.

CHAPTER 4

4 Research Methodology

4.1 Research Design

The purpose of the research was to evaluate the degree of operational independence of the South African Reserve Bank (SARB). The evaluation was conducted by assessing both legal and actual independence. As already stated the discrepancy that may exist between legal and actual independence in emerging markets requires that both aspects of independence be assessed. Assessing the independence of the central bank is a highly subjective exercise due to the inherent subjectivity of the process involved in evaluation. In an effort to limit the subjectivity of the study, the researcher used a triangulation approach (Welman and Kruger, 2005). In doing so, the research findings were corroborated by at least three different approaches in assessing the independence of the central bank.

In his book, Creswell (1994) states that the concept of triangulation is based on the assumption that any bias inherent in a particular data source, investigator, and method would be neutralised when used in conjunction with other data sources, investigators and methods. The process of triangulation provided an opportunity to evaluate independence using several data sources and approaches.

Three approaches that were based on qualitative analysis were used to evaluate the independence of the South African Reserve Bank:

- A pre-defined was used to assess legal independence. In this case the index was used as the tool for evaluation
- Structured interviews with identified economists to assess actual independence were used; and
- Finally, a structured interview with a representative from the South African Reserve Bank was used to assess actual independence. The responses to the structured interview were used to allocate scores based on a scoring used by Cukierman (Cukierman, 1992), which gives an indication of actual independence.

The bias which may have been inherent had one methodology or data source been used was largely minimised by adopting this approach. The details of the three methodologies used in assessing the independence of the South African Reserve Bank are outlined below.

In the literature review reference was made to the usefulness of governor turnover as a proxy for actual independence in EMEs (Cukierman, 1992). For the purposes of this research, governor turnover will not be used. The period (post implementation of IT in SA) that will be looked at when assessing independence is not long enough to assess turnover and the governor in office has not changed in South African since the implementation of IT. It is thus not appropriate to use governor turnover as a proxy.

4.2 Legal Indep

The first approach in evaluating the independence of SARB involved assessing legal independence using a predefined index using parameters as shown in Table 2 below. The index used was the Cukierman Index (Cukierman, 1992). As previously stated the index is the most extensively used in evaluating legal independence of central banks. It thus also provided an opportunity to compare previous ratings with current ratings.

This assessment was based on the framework of the Cukierman index, which stipulates a number of parameters affecting legal independence. These parameters included the following:

- appointment and dismissal of the governor;
- policy formulation;
- the objectives of the central bank and
- limitations on the ability of the central bank to lend to government.

The index was used to assess whether and how any of the above parameters have been provided for in the law. The outcome of the rating of each of the above parameters was used to determine the overall legal independence rating for SARB.

Table 2: Legal Variables Based on Cukierman Index – (Source: Cukierman, 1992)

Parameter	**Variables**
Chief Executive Officer (Governor)	Term of office
	Who appoints Governor?
	Provision for dismissal

	ed to hold another office?
Policy Formulation	Who formulates monetary policy?
	Resolution of conflict
	Role in formulation of government budget
Objectives of Central Bank	What is the objective of the central bank?
Limitations on Lending	Limitation on non-securitised lending
	Limitation on securitised lending
	Who decides on terms of lending?
	How wide is the circle of potential borrowers?
	Type of limit on borrowing if it does exist
	Maturity of loans
	Restriction on interest rates
	Prohibition on lending in primary market

The data source for this part of the research was the South African Reserve Bank Act 90 of 1989 as well as the Constitution of the Republic of South Africa. Based on the details given in both the Central Bank Act and the Constitution each of the parameters stated above was evaluated based on the provisions in the law. The details of the variables assessed under each parameter are given in table 2 above.

Based on the provision for the specific variable in the law a numerical code was given to each variable (see Appendix 1 for details on the coding per variable). In instances where the law did not provide enough information for the variable to be assessed no numerical code was assigned to the variable. The numerical code assigned to each variable ranged from 0 to 1. With 0 indicating least independence and 1 indicating most independence i.e. the codes are set such that a higher number indicates a stronger mandate and greater independence for the bank (Cukie coding or value given to each variable within each parameter by Cukierman (1992) when the index was developed are attached in the Appendix 1.

Once a numerical code had been assigned to each of the sixteen variables, an aggregation was carried out in an attempt to come to a single final numerical score for legal independence for SARB. This first level of aggregation reduced the number of variables from sixteen to eight:

- The four “Governor” variables were aggregated into a single variable, each with equal weighting
- The three policy formulation variables were aggregated into a single parameter , each with equal weighting
- The last four “Limitations on Lending” variables were also aggregated into a single variable called “Limitations on Lending – Miscellaneous” in which they had an equal weighting.

At this point the variables had been reduced to eight but a single numerical score was still required. The next level of aggregation reduced the variables into a single numerical score representing the independence of the central bank. The following weighting (see Table 3) was used to aggregate the score of the remaining 8 variables. The weighting used for each variable is based on work done by Cukierman (Cukierman, 1992).

Table 3: Weights U ource: Cukierman,1992)

Variable	**Weighting**
Governor	0.20
Policy Formulation	0.15
Objectives	0.15
Limitations on lending - Advances	0.15
Limitations on lending - Securitised	0.10
Limitations on Lending – Who decides	0.10
Limitations on lending - Borrowers	0.05
Limitations on Lending - Miscellaneous	0.10
Total	**1.00**

The second aggregation resulted in a single numerical score of legal independence between 0 and 1 in which 0 indicated least independent and 1 indicated most independent. Where there was no rating for a specific variable the weighting of the variable was distributed by weight to the other variables that did have a rating. This ensured that the weighting of the variable always totalled up to 1.

The final score that was arrived at for legal independence for SARB was then compared with previous ratings for SARB. The previous ratings were arrived at in a study conducted by Cukierman in 1992 in which he looked at the period from 1950-1989. The comparison allowed for insight into whether the law had changed significantly since the last assessment was done in 1989, especially since this was prior to the introduction of formal inflation targeting.

Finally the legal independence score was compared with that of two other emerging economies, Brazil and Chile, who like South Africa have adopted formal inflation targ the legal independence score of South Africa compares with those of other emerging markets that are inflation targeters. Chile is seen as the “poster child of inflation targeting” (Miskhin,2004) largely due the great success it has had in lowering inflation to levels found in developing countries.

4.3 Actual Independence - Structured Interview with SARB

The second approach involved conducting a structured interview with a representative of the South African Reserve Bank. The representative needed to hold a senior position within the bank, who was preferably a member of the Monetary Policy Committee and was in a position to respond to the questions. The questionnaire (see Appendix 2) in this instance was based on a questionnaire developed by Cukierman (Cukierman, 1992) and used to evaluate the independence of the central banks of numerous countries. In Cukierman’s study the questionnaire was sent to governors in numerous central banks who were asked to respond. Based on the responses to the questionnaire, numerical scores were assigned to specific responses (see Appendix 3) and as is the case with legal independence an aggregate numerical score was obtained for actual independence.

A request was sent by mail by the researcher to one of the executive general managers at the Bank indicating the purpose of the study and the nature of the questions that would be asked. The interview based on a structured set of questions (see Appendix 2) was then conducted with the Chief Economist in the bank, who is also t [illegible] ment. The interview was lasted for just over an hour.

The responses to the questions posed in the interview were recorded and transcribed. Based on the responses given to each question a numerical code between 0 and 1 (0 indicating least independent and 1 most independent) was assigned to each response and the score were aggregated to give a final score of actual independence.

4.4 Actual Independence - Structured Interviews (Economists)

The third and final approach for assessing central bank independence involved structured interviews with subject matter experts, in this case economists in both the private and the public sector. The purpose of the interviews was to assess the views of a number of economists on several aspects that impact on the independence of the central bank.

Welman and Kruger (2005) states that structured interviews are based on a collection of questions from a previously compiled questionnaire. A collection of questions was compiled (see Appendix 5) prior to the interviews, this was used during the interview sessions and the responses were recorded and later transcribed. As required for structured interviews all interviewees were asked the same questions based on the questionnaire. This provided an opportunity to compare the responses from the different interviewees to questions regarding several aspects that relate to the independence of the central bank.

In compiling the questionnaire, the researcher initially approached the International Monetary Fund to request a copy of a questionnaire used with representatives from central banks in a 2005 survey conducted to assess central bank independence in a number of countries. The researcher wanted to use the questionnaire as a basis for an interview questionnaire to be used for interviews with economists in South Africa. Access to this document was however refused by the IMF, stating that the document was confidential.

The researcher opted to compile the questionnaire based on the extensive literature available on central bank independence. Upon reviewing the literature, specific aspects that were essential in the independence of the central bank were identified and these formed the basis of the questionnaire. Questions were posed to assess the actual independence of the South African central bank. The interviewees were informed that the questions particularly referred to the period from February 2000 when inflation targeting was formally adopted in South Africa. The respondents were asked to state their opinion on different aspects of the central bank's implementation of monetary policy within that period.

4.4.1 Population

The population of the study comprised economists in South Africa both in the private sector as well as academic sector. The research aimed to evaluate actual central bank independence and determine whether significant discrepancies existed between the law and actual monetary policy implementation in S [illegible] ject matter experts with regards to monetary policy and how this is implemented and are therefore qualified to objectively answer questions which will assist in determining the level of actual independence of the South African central bank.

4.4.2 Sampling

The sampling method that was used for the research was non-probability purposive sampling (Welman and Kruger, 2005). This type of sampling is used to deliberately obtain units of analysis in such a manner that the sample may be regarded as representative of the entire population (Welman and Kruger, 2005, p. 63). Due to time constraints the researcher could only interview a specific number of economists and make assumptions about the representativeness of their opinions. In the academic sector, academic institutions within Gauteng with Schools of Economics were identified. The schools were limited to Gauteng as this was where the researcher was based.

An email request was sent to the Head of Department in each school requesting that they assist the researcher in identifying individuals within their faculty who may have an interest in the topic of research and would be willing to be interviewed. Upon receipt of a response, communication was established directly with the faculty member and the interview conducted. Where the head of department did not respond, the researcher used the school's website to identify faculty members who may have an interest in monetary policy and made contact with them directly by email. In the private sector, the researcher identified companies that employed economists. These individuals were then contacted directly l equest interviews. If no response was received by email, the individuals would be contacted telephonically.

In total eleven economists were interviewed in both the public sector and the private sector. Four economists were from the academic sector and seven from the private sector (see Appendix 4, for the names of economists interviewed). The inclusion of economists from both sectors ensured that divergent views are captured.

4.4.3 Data Collection and Analysis

As already mentioned the data for this part of the analysis was collected through structured interviews. The interviews were approximately 45 minutes long and the responses were recorded and then transcribed. Data obtained from the interviews was then analysed using content analysis to identify a common theme in the responses if it did exist with regards to the independence of the South African Reserve Bank.

CHAPTER 5

5 Results

As already indicated, the research will evaluate the independence of the South African Reserve Bank by assessing both legal and actual independence. The first set of results relates to legal independence and reports on the results gathered using the Cukierman Index as a tool for assessment. The second set of results relates to actual independence and the results reported on here are based on interviews conducted with both SARB and a number of economists within South Africa. It is critical to bear in mind that SARB has only been afforded instrument (operational) independence and does not have goal independence. This assessment, both from a legal and actual perspective thus relates to operational independence.

5.1 Assessment of Legal Central Bank Independence

The assessment of legal independence covers the period from 1990 to date. Using the Cukierman index, the extent to which the South African Reserve Bank Act 90 of 1989 and the Constitution of the Republic of South Africa afford legal independence to SARB is assessed. As stated in the methodology, the following parameters are assessed :

1. Aspects relating to the Chief Executive Officer or the Governor of the bank;
2. Policy Formulation within the bank;
3. Objectives of the bank; and

4. Limitations o

The second set of results presented compares the legal independence scores established for South Africa in the period 1990-2006 (current evaluation period) with scores obtained at in a previous assessment for the period 1950-1989 conducted by Cukierman (Cukierman, 1992). The third and final set of results compares the results obtained for SARB's legal independence in the current assessment with those of two other countries (Brazil and Chile) that are also inflation targeters and are emerging markets. The comparison is based on a legal independence assessment of the two country's Central Banks conducted in 2005 .

5.1.1 Assessment of Legal Central Bank Independence (1990-2006)

i. Chief Executive Officer or Governor of the Bank

The first set of characteristics looks at issues relating to the governor of the reserve bank. It looks at how the governor is appointed, the term of office as well as any provision with regards to his dismissal.

Table 4: Governor Scores for SARB

Description of variable	**Cukierman Coding**	**SARB Act Score**	**Comments**
Term of office of CEO		**0.50**	The term of office of the governor of the South African Reserve Bank is stipulated in the Act as five years, hence a score of 0.5 is given for this variable
Over 8 years	1.00		
6 to 8 years	0.75		
5 years	0.50		
4 years	0.25		
Under 4 years or at discretion of appointer	0.00		
Who appoints CEO?		**0.00**	According to the Act, the governor is appointed by the President of the Republic of South Africa after consultation with the Minister of Finance and the Board of the South African Reserve Bank. Although the Act makes provision for consultation with the board and the
Board of central bank	1.00		
A council of central bank board, executive branch and legislative branch	0.75		
Legislative Branch	0.50		

Executive Branch	0.25		Minister of Finance, the final decision is still made by a single person, the President in this case. This variable evaluates who makes the final decision in the appointment and in the South African case it is the President, hence as score of 0.00 is given for this variable.
Decision of one or two members of executive branch (e.g. Prime Minister or Minister of Finance)	0.00		
Provisions for dismissal of CEO		**1.00**	The Act does not refer to any formal procedures or otherwise which may be followed for the dismissal of the governor, hence a score of 1.00 has been given for this variable.
No provision for dismissal	1.00		
Only for reasons not related to policy	0.83		
At the discretion of central bank board	0.67		
At legislature's discretion	0.50		
Unconditional dismissal possible by legislature	0.33		
At executive's discretion	0.17		
Unconditional dismissal possible by executive	0.00		
Is CEO allowed hold another office?		**0.50**	With regard to holding other office in government by the governor, the Act makes it clear that this is prohibited. It however, provides for either the President or the Minister of finance to approve the appointment of the governor to any other position if deemed necessary. The score given for the variable with regards to holding other office in government is 0.50. In South Africa though the
No	1.00		
Only with permission from executive branch	0.50		
No rule against CEO holding another office	0.00		

			permission does not have to be given by the whole executive branch and only rests with the President or the Minister of Finance who are however part of the executive branch.

ii. Policy Formulation in the bank

The variables looked at in this regard seek to assess the level of independence that SARB has in terms of monetary policy formulation. Policy formulation is based on a target or goal that is given to them by government and thus an assessment of independence relates to the freedom they have in putting together policies, based on the mandate from government.

Table 5: Policy Formulation Scores for SARB

Description of variable	**Cukierman Coding**	**SARB Act Score**	**Comments**
Who formulates monetary policy		**N/A**	Both the Act and the Constitution make no reference to who is responsible for formulating monetary policy in South Africa. This makes it impossible to evaluate the policy formulation variable in terms of the Act, hence no score has been allocated for this
Bank alone	1.00		
Bank participates but has little influence	0.66		
Bank only advises government	0.33		
Bank has no say	0.00		
Who has the final word in resolution of conflict?		**N/A**	The Act does not address the resolution of conflict between SARB and government either, once again
The bank, on issues clearly defined in the law as	1.00		

its objectives			undermining the ability to assess the variable relating to conflict resolution. The Act does refer to actions which may be taken by the Minister of Finance in cases where there is non-compliance with the Act on the part of the bank. This however, does not address issues around conflicting polices or objectives between the two parties and how these would be resolved and simply points to non-compliance on the part of the bank. Once again no score is given for the variable relating to conflict resolution.
Government on policy issues not clearly defined as the bank's goals or in the case of conflict within the bank	0.80		
A council of the central bank, executive branch and legislative branch	0.60		
The legislature on policy issues	0.40		
The executive branch on policy issues subject due process and possible protest by the bank	0.20		
The executive branch has unconditional priority	0.00		
Role in Government Budget Process		**N/A**	No mention is made in the Act of the role that the Reserve Bank plays with regards to Government 's budget process either, and thus once again this variable cannot be evaluated
Yes	1		
No	0		

iii. Objectives of the bank

This variable assesses the objective of the South African Reserve Bank as stated in the Act.

Table 6: Bank Objectives Scores for SARB

Description of variable	Cukierman Coding	SARB Act Score	Comments
Objectives of the bank		**0.40**	The score given to the South African Central Bank with regards to their stated objective in the Act is 0.40. This score indicates that price stability is the one goal, with potentially conflicting objectives. The Act stipulates that "the primary objective of the Bank shall be to protect the value of the currency of the Republic in the interest of balanced and sustainable economic growth in the Republic" (Reserve Bank Act, 1989, section 3). Although the Act does not explicitly stipulate price stability, the protection of the value of the currency is assumed to translate to price stability. The Act clearly alludes to a primary objective but does not exclude economic growth as part of the objective of the bank although not primary and economic growth is potentially an objective that is in conflict with price stability.
Price stability is the major or only objective in the charter, and the central bank has the final word in case of conflict with other government objectives	1.00		
Price stability is the only objective	0.80		
Price stability is the one goal, with other compatible objectives, such as a stable banking system	0.60		
Price stability is the one goal, with potentially conflicting objectives, such as full employment	0.40		
No objectives stated in the bank charter	0.20		
Stated objectives do not include price stability	0.00		

iv. Limitations on Lending to the Government

This variable assesses the extent to which the South African Reserve Bank is allowed, through the Act to lend money to the government and the form this takes if it does happen.

Table 7: Limitation on Lending to Government Scores for SARB

Description of variable	**Cukierman Coding**	**SARB Act Score**	**Comments**
Advances (Limitation on non-securitised lending)		**0.33**	Section 13 (f) of the Act stipulates that the Bank is “prohibited from holding government stocks which have been acquired directly from the Treasury by subscription to new issues, the conversion of existing issues or otherwise, a sum exceeding its paid-up capital and reserve funds plus one third of its liabilities to the public”. This can be viewed as a limit or condition on what the Bank can lend to government.
Advances to government prohibited	1.00		
Advances permitted, but with strict limits (e.g. up to 15 percent of government revenue	0.66		
Advances permitted and the limits are loose (e.g. over 15 percent of government revenue)	0.33		
No legal limits on lending	0.00		
Securitised Lending		**0.33**	See note above
Not permitted	1.00		
Permitted but with strict limits (e.g. up to 15 percent of government revenue)	0.66		

Permitted and the limits are loose (e.g. over 15 percent of government revenue)	0.33		
No legal limits on lending	0.00		
Terms of lending (Maturity, Interest , Amount)		**0.33**	The terms of lending are agreed upon between the bank and government and not explicitly stated in the Act
Controlled by the bank	1.00		
Specified by the bank charter	0.66		
Agreed between the central bank and the executive	0.33		
Decided by the executive branch alone	0.00		
Potential Borrowers from the bank		**0.00**	In terms of potential borrowers from the bank, the Act does not explicitly exclude anyone from accessing non-securitised loans from the bank . It does however state the fact that only government or the bank's employees can have access to securitised loans from the bank. The score given to the variable that seeks to evaluate how widely the bank can lend is 0.00, as generally no one is excluded from borrowing from the bank
Only the central government	1.00		
All levels of government	0.66		
Those mentioned above and public enterprises	0.33		
All of the above and private sector	0.00		
Limitation on central bank lending defined in		**0.66**	As already stated, the limit that SARB has in term of government bonds in can purchase are defined in terms of its capital and liabilities to the public, hence a score of 0.66 is given.
Absolute cash amount	1.00		
Percentage of CB capital or other liabilities	0.66		
Percentage of government revenues	0.33		

Percentage of government expenditures	0.00		
Maturity of loans		**1.00**	Section 13 (d) of the Act stipulates that the bank is prohibited from "buying, discounting or re-discounting bills of exchange or promissory notes drawn or issued for commercial and industrial purposes, which have a maturity exceeding 120 days". Section 13 (e) states a similar thing but this applies to those issued for agricultural purposes with a maturity date exceeding 6 months. The bank thus has a limit of maximum limit of 6 months on the maturity of its loans. The score given for the variable on maturity of loans is thus 1.00
Limited to maximum of 6 months	1.00		
Limited to maximum of 1 year	0.66		
Limited to maximum of more than 1 year	0.33		
No legal upper bounds on maturity of CB loans	0.00		
Interest rates on loans to government		**0.25**	The South African Reserve Bank Act does not make any provision with regards to the interest rate that may be charged to government. It however also does not legally stipulate that no interest rate should be charged to government when they do borrow from the bank. The variable on the interest rate on loans to government has been given a score of 0.25
At market rates	1.00		
Cannot be lower than a certain floor	0.75		
Cannot exceed a certain ceiling	0.50		
No explicit legal provisions regarding interest rates	0.25		
Law stipulates no interest rate charge	0.00		
Central bank prohibited from buying or selling government securities in the primary market?		**0.00**	The final variable in this category which looks at the limits on lending to government is the prohibition of the central bank from buying or selling government
Yes	1.00		

No	0.00		securities in the primary market. The South African Reserve Bank Act does not explicitly prohibit this and thus the score given to this variable in 0.00

v. Aggregated Legal Independence (1990 - 2006)

Through a process of aggregation, an overall score of legal independence is obtained for SARB as depicted in the table below.

Table 8: Aggregate Legal Independence Score for SARB

Description of variable	Weight	SARB Act Score	Adjusted Score
Central Bank Governor	0.24	0.50	0.12
Policy Formulation	N/A	N/A	N/A
Objectives of the Bank	0.18	0.40	0.07
Limitations on lending - Advances	0.18	0.00	0.06
Limitations on lending - Securitised	0.12	0.00	0.04
Limitations on lending – Lending Terms	0.12	0.33	0.04
Limitations on lending – Potential Borrowers	0.06	0.00	0.00
Limitation on lending - miscellaneous	0.12	0.48	0.06
Aggregate Legal Independence Score			**0.38**

The overall legal independence score for the South African Reserve Bank for the period under review was determined at 0.38.

5.1.2 Comparison of Legal Independence for SARB with previous ratings

An assessment of the legal independence of the South African Reserve Bank was conducted by Cukierman (1992) using the same instrument used in the current study. The assessment looked at the period from 1950-1989. Results from that assessment and the current study are given in the table below.

Table 9: Legal Central Bank Index for SARB (1950-2006)

Period	Governor Variables				Policy Formulation Variables			Objective Variable	Limitations on Lending Variables								Aggregate Legal CBI
	Office Term	Who Appoints	Dismiss	Other Offices	Who Formulates	Final Authority	Role in Budget	CB Objective	Advances	Securitised Lending	Lending Terms	Potential Borrowers	Type of Limit	Loan Maturity	Interest Rates	Primary Market	
1950 - 1959	0.50	0.00	0.83	0.50	n/a	n/a	0.00	0.20	0.00	0.00	0.33	1.00	n/a	1.00	0.25	0.00	0.25
1960 - 1971	0.50	0.00	0.83	0.50	n/a	n/a	0.00	0.20	0.00	0.00	0.33	1.00	n/a	1.00	0.25	0.00	0.25
1972-1979	0.50	0.00	0.83	0.50	n/a	n/a	0.00	0.20	0.00	0.00	0.33	1.00	n/a	1.00	0.25	0.00	0.25
1980 - 1989	0.50	0.00	0.83	0.50	n/a	n/a	0.00	0.20	0.00	0.00	0.33	1.00	n/a	1.00	0.25	0.00	0.25
1990 - 2006	0.50	0.00	1.00	0.50	n/a	n/a	0.00	0.40	0.33	0.33	0.33	0.00	0.66	1.00	0.25	0.00	0.38

5.1.3 Comparison with other Emerging Economies

To further assess the legal independence of the South African Reserve Bank, it is compared with that of central banks in other emerging market countries that, like South Africa, have implemented inflation targeting. This provides a basis for evaluating the extent of legal independence afforded to SARB compared with its emerging market peers that have similar monetary policy (Inflation Targeting) as South Africa but also potentially face the same challenges with regards to the implementation of such policies. The two countries that South Africa will be compared against are Chile and Brazil. Both countries implemented inflation targeting in 1999, a year earlier than South Africa (Batini*, et al*, 2005).

Table 10: Comparison of SARB's Legal CBI with Brazil and Chile

Description of variable	**South Africa**	**Brazil**	**Chile**
Central Bank Governor	**0.5**	**0.56**	**0.71**
Term of office	0.5	0.75	0.5
Who Appoints	0.00	0.5	0.5
Dismissal	1	1	0.83
Other Offices	0.5	0	1
Central Bank Primary Objective	**0.4**	**0**	**0.6**
Objective	0.4	0	0.6
Policy Formulation	**n/a**	**0.37**	**0.75**
Who Formulates	n/a	0.67	1
Final Authority on conflict resolution	n/a	0.4	1
Role in Budget	n/a	0	0
Limitations on Lending	**0.33**	**0.60**	**1.00**
Advances	0.33	0.67	1
Securitised Lending	0.33	0.33	1
Lending Terms	0.33	1	n/a
Potential Borrowers	0.00	0.33	n/a
Type of limit	0.66	0.33	n/a

Loan Maturity		0.33	n/a
Interest Rates	0.25	0.25	n/a
Primary Market	0.00	1	1
Aggregate Legal Independence	**0.38**	**0.47**	**0.84**

The data (see Table 10 above) relating to the legal independence of the two countries is based on an assessment conducted by Jacome and Vazquez (2005) in which they used the Cukierman Index. Brazil and Chile’s assessment was conducted for the period 1990-2002. In the current study no attempt is made to establish whether the status of the law with regards to the two central banks has changed since the paper referred to above was published in April 2005.

5.2 Assessment of Actual Central Bank Independence

The next set of results presented assesses the actual independence of SARB. Legal independence dealt with in the previous section assessed the independence of SARB conferred by the law. Actual independence attempts to assess to what extent the Reserve Bank is able to operate independently in practice. In their study Cukierman *et al* (1992) concluded that there exists larger divergences between actual practice and the law in developing countries compared with industrialised countries. The assessment of actual independence thus forms a critical part of the assessment of central bank independence for South Africa, being an emerging market economy.

The results of this assessment are presented in two sets of data. The first set is based the responses received from a senior official within SARB and scores have been allocated to the response as explained in the methodology. The second set of results looks at responses to interviews conducted with a number of economists in South Africa, both in the private and academic sector. Presented here are the views of the interviewed economists on how the SARB is perceived to be operating, given the legal independence conferred to it by the Act.

5.2.1 Interview with the South African Reserve Bank

The interview was conducted with the Head of the Research Department who is also the Chief Economist and a member of the Monetary Policy Committee. Some of the variables captured here are similar to those that underlie legal variables but the emphasis here is on practice rather than the law. Below are the scores given to each variable based on the responses to the questions posed in the interview:

Table 11: Actual CBI Index Scores for SARB

Description of variable	**Numerical Coding**	**SARB Score**	**Comments**
Tenure of central bank CEO overlap with political authorities		**0.0**	This parameter looks at how significant the overlap is between the tenure of office of the Reserve Bank Governor and that of government or political authorities. In South Africa, the term of office of the governor is 5 years and 4 years for government. This represents a significant overlap in the tenure between the governor and the government, hence a score of 0 has been allocated.
Little overlap	1.0		
Some overlap	0.5		
Substantial overlap	0.0		
Limitations on lending practice		**0.33**	Limits on lending exist but seem moderately loose
Tight	1.00		

Moderately tight	0.66		
Moderately loose	0.33		
Loose or nonexistent	0.00		
Resolution of conflict		**0.5**	There is no provision in the law for the resolution of conflict between the central bank and government. It would seem that conflicts are resolved on an informal basis and that the number of conflicts in the recent past have been very limited. There is no evidence of the resolution of conflict either favouring the government or the central bank.
Some clear cases of resolution in favour of bank	1.0		
All other cases	0.5		
Resolution in favour of government in all cases	0.0		
Financial Independence			
Determination of the central bank's budget		**1.0**	The budget of the Reserve Bank is solely determined by the bank, however the bank is required to table its financial results to parliament.
Mostly central bank	1.0		
Mixture of bank and executive or legislative branches	0.5		
Mostly executive or legislative branches	0.0		
Determination of the salaries of high bank officials and the allocation of bank profits		**1.0**	The salaries of the senior official within the bank are determined by a sub-committee of the board of directors and are not by government.
Mostly by bank or fixed by law	1.0		
Mixture of bank and executive or legislative branches	0.5		

Mostly executive or legislative branches	0.00		
Intermediary Policy Targets		**0.00**	The bank has no intermediate targets in the form of monetary stocks or interest rates. Monetary stocks are simply observed in as far as they could possibly impact the inflation target, but are not explicitly targeted.
Quantitative monetary stock targets			
Such target exists; good adherence	1.00		
Such target exists; mixed adherence	0.66		
Such target exists; poor adherence	0.33		
No stock targets	0.00		
Formal or informal interest rate targets		**1.00**	The interest rate is simply used as an instrument to effect the inflation target and is not explicitly targeted
No	1.00		
Yes	0.00		
Actual priority given to price stability		**1.00**	Price stability is given first priority and the exchange rate is left to the market forces with not intervention at all in that regard.
First priority	1.00		
First priority assigned to a fixed exchange rate	0.66		
Price or exchange rate stability are among the bank's objective, but not first priority	0.33		
No mention of price or exchange rate objectives	0.00		
Function as development bank, granting credit at subsidy rates		**0.66**	The bank can grant credit to government and any other companies where it holds a share. This however has not been exercised to a large extent by the central
No	1.00		

To some extent	0.66		bank
Yes	0.33		
Central bank heavily involved in granting subsidised credit	0.00		

Table 12: Aggregate Actual Central Bank Independence Score

Description of variable	**Weight**	**SARB Act Score**	**Adjusted Score**
Tenure Overlap	0.10	0.00	0.00
Limitations on lending	0.20	0.33	0.07
Resolution of conflict	0.10	0.50	0.05
Financial Independence	0.10	1.00	0.1
Intermediate Targets	0.15	1.00	0.15
Priority to price stability	0.15	1.00	0.15
Subsidised Credits	0.20	0.66	0.13
Aggregate Actual Independence Score	**1.00**		**0.65**

The aggregate Actual Central Bank Independence score for the South African Reserve Bank is 0.65.

5.2.2 Interviews with Economists

The next set of results is derived from interviews that were conducted with economists to assess their views with regards to specific aspects that impact on the independence of the South African Reserve Bank in implementing monetary policy. Eleven economists were interviewed, four from the academic sector and seven from the private sector. Based on their professional knowledge, the economists were asked to relate their opinions on monetary policy and implementation thereof post the implementation of inflation targeting in South Africa.

Table 13: Summary of response given by economists in the interviews

Question asked	**Responses from Interviewees**
The Act stipulates that 50% (Governor, three Deputy Governors and three directors) of the board will be appointed by the President, do you believe this is ideal and has it not impacted on the independence of the board or resulted in government having influence in the operations of the bank? Please elaborate	• This is not an issue – even though the governor and the board are appointed by the President, they are answerable to parliament and therefore neither the President nor the Minister of Finance can have direct influence on the operation of the board. Over the years an ideal harmony has existed in the relationship between the board of the bank, the President as well as the Minister of Finance. • There is no clear alternative of any other person that could be tasked with appointing the governor and some of the members of the board. It thus only makes sense for the governor and some of the members of the board to be appointed by the President. Previously moves were made to change the Act, so

	different sectors like trade unions could be represented but this was not popular. • Maybe it has, but it is difficult to say. The extent to which the government has influence on the operations of the board depends on personal relations and personalities within the bank as well as within government. • No, there seems to be no impact on the independence of the central bank and it has proven to be largely independent. Fiscal policy is seen as the responsibility of government, and monetary policy as the responsibility of the Reserve Bank. They may from time to time comment on each other's policies but in general there seems to be a clear demarcation of responsibility and no one attempts to take over the responsibility of the other. • Technically, government is the majority shareholders in the Reserve Bank. One thus cannot see a major problem with government being responsible for appointing the governor as well as some members of the board. It is important to realise that they have operational independence and not carte blanche to do whatever they want. It is not logical for CB to be completely independent and thus this arrangement makes sense. • The role of government in appointing the governor and the some members of the board is not an issue at all. The Constitution gives enough operational independence to the Reserve Bank and thus in cases of interference by government, it can be used to challenge that. • The governor and the board have been largely independent of government or

	political influence • The President should ideally appoint some of the members of the board , there is no better way of doing this either than the manner in which it is currently done in the country
The current governor is a former politician, has this in anyway sacrificed the independence of the central bank? Please elaborate.	• Not all, he has gone out of his way to stress his independence from politicians and trade union movements and that he is following policies that are not based on political popularity. Contrary to most people's expectations he has proven to be his own man. This was clearly shown by his decision to hike interest rates hin 2002, despite being under a lot of criticism . Concerns were raised by the market when the Congress of South African Trade Unions (Cosatu) marched to the Reserve Bank and he accepted a memorandum from the Union. He however, has not allowed himself to be influenced, and publicly and vocally displays his independence. • The governor has not in any way attempted to follow party lines. Having said that, it is important to point out that he followed the thrust of government's economic policy and thus his approach fitted in with ANC economic policy. The answer to this question thus almost seems self-contradictory. He has followed ANC policy but it would appear that he has been given room to operate independently. In essence he has been told what to do and left to do it. • No, his being a former politician has not impacted negatively on operational independence of the bank. The governor has followed his legal mandate. He

	might still engage in his free time as a member of the ANC, but operationally he has been independent. He also has not precluded going back to politics. • The governor has shown himself to be independent. The inflation figures show that inflation has been controlled during his time, although this may have been largely driven by exchange rate or the value of the rand. He is not easily swayed or intimated by politicians. • Concerns existed in the market when he was appointed since he was a former labour minister, but when observing actual behaviour, he has proven to be independent. In retrospect, the Reserve Bank has done a lot right and proven to be largely independent. • He has proven to be independent and has not allowed his political affiliation to impact on the operations of the bank. Markets were initially concerned about his appointment due to a number of reasons. Chris Stals, his predecessor had received a number of accolades and was seen as largely independent, hence the market was not comfortable with the new person coming in. Looking back. The change has been good. In 1999 when he took over, Tito Mboweni, categorically stated that he would not use reserves to defend the value of the rand, this went a long way in establishing credibility and respect in the market. • It was difficult for economists to accept Tito Mboweni's appointment at that stage. Governors are usually appointed from the ranks of either academics or the financial sector or within the Central Bank itself and he did not represent any of

	these institutions. He was also young and very out-spoken. The governor has done the right things and has wonderful support structures around him. • The governor has been independent and has been seen by the market as such. Market perceptions are critical. He does not always agree with government on certain policies. Governors usually come through the ranks of the bank or have some economics background and he was not any of these, hence the initial concerns expressed by the market.
The Act stipulates that the primary objective of SARB is to protect the value of the currency in the interest of balanced and sustainable economic growth – The Act does not explicitly mention price stability in the objective – is this an issue ? In your opinion has the inclusion of economic growth (although not primary objective) in any manner affected decisions that relate to price stability within SARB – should this be part of SARB's objective?	• Price stability and protecting the value of the currency mean the same thing. The exchange rate is the price of foreign currency and the Reserve bank has interpreted this objective appropriately and although not explicitly mentioned, the objective is about price stability. One has to make up one's mind whether one is going to look after price stability or chase economic growth and thus the inclusion of economic growth in the objective may not be ideal. It is possible to reach some compromise and allow some level of inflation, however South Africa's economic growth history shows that inflation and real growth are inversely correlated. • The Act and Constitution pre-dated the implementation of inflation targeting, hence the wording has not been changed to explicitly mention price stability. The governor at some point wanted it to be updated to be in line with IT but amending the Constitution would have opened a can of worms, hence the governor took his foot off the pedal with regards to this. He stated that inflation targeting is not fully mandated by the Constitution. Ideally South Africa needs to change its approach to inflation

	targeting to accommodate the balance between inflation and economic growth that the Constitution makes reference to. The Constitution should not be changed to accommodate inflation targeting. The current approach to inflation targeting is too rigid. South Africa needs to adopt a flexible approach to inflation targeting and take into account its effect on output. When conducting inflation targeting we need to be aware that there are other elements affected by monetary policy like exchange rates and output , we cannot be in denial about its effect on these factors. Strict monetary policy was necessary to gain credibility in the market but has now largely been established. • The fact that price stability is not explicitly mentioned is an issue , the Act does not speak to the new policy (Inflation Targeting) and has not been updated but this has to be evaluated in the way that we are seeing the implementation of monetary policy. The Reserve Bank has not tried to influence the value of the currency but has rather concentrated its efforts on price stability. There is no sense in trying to influence the rand as the bank is so minute in comparison to the international market. • The important thing is for the bank to have one policy variable – they cannot follow more than one objective. The mentioning of growth in the objective is an acknowledgement that price stability provides the foundation for achieving good growth. The Reserve Bank has interpreted its objective correctly, to achieve price stability and in doing that will achieve growth. There are those who believe we should not be looking at growth, monetary theory suggests that they cannot look at

	growth and inflation at the same time • Inflation Targeting places high emphasis on price stability and not enough on growth and job creation. South Africa should be focusing on GDP growth and employment. Furthermore, the current measure that is used (CPIX) is not a core measurement that strips out things like the petrol price which the central bank has no control over. The central bank should be targeting a core measurement of inflation, this is only fair. Unfortunately, SARB cannot have direct influence on fiscal policy but there should be lot more co-ordination between fiscal and monetary policy. The Reserve bank should not be insensitive to economic growth and employment. • The two objectives i.e. price stability and economic growth are mutually exclusive. The public, politicians, some economists and business people expect too much from the Reserve Bank in growing the economy. This responsibility sits primarily with the private sector and for the politicians to create an environment for the private sector to do this. Ideally, economic growth should not be mentioned as part of the objective of the Reserve Bank, the focus should only be on price stability, which will in turn on its own influence economic growth. An expansionary fiscal policy may boost the economy on the short term but this is not sustainable.
In the last six years are there any government policies that have come into direct conflict with SARB's objective (price stability)? Please elaborate?	• There have not been any policies on the part of government that seem to have come into conflict with the objectives of the Reserve Bank. It is said sometimes that there is only one reason for the existence of the central bank and that is to allow government to borrow money, however in the South African context the concerted

effort by government to reduce the deficit has taken stress off the governor. Any potential conflict has been eliminated by tight fiscal management. The current government though is unlikely to put pressure on the Reserve Bank to monetise their debt even if the deficit was increased significantly.

- The existence of conflict means government wants to remove the inflation targeting regime, this has certainly not been the case but there has been a contradiction in policies. The contradiction has emerged due to necessary tensions that arise in any democratic governance. The decision by government to spend R600 billion on infrastructure development can be viwed as fiscal expansion which may be inflationary. State enterprises like Eskom and Telkom which have to fund this expansion have to raise funds through increased prices, which may also be inflationary. The increase in salaries that politicians and public servants receive could also be seen as fuelling inflation but the public sector needs to offer appropriate salaries to retain skills. The contradiction between monetary and fiscal policy is an extremely healthy one.
- Governments continued support of administered prices can be seen as potentially inflationary
- Traditionally monetary policy has been impacted negatively by high government deficit - this has not been the case of late in South Africa. Fiscal Policy has been largely supportive of monetary policy. Even if it was not, the Reserve Bank has an instrument (interest rate) in its disposal that it can use to counter any inflationary

	effects that an expansionary fiscal policy may have. Thus the central bank can be tougher on interest rates, if government puts in place policies that are not supportive of the inflation target. It perhaps from a welfare perspective that the increase in interest rates would not be acceptable. Government has used its influence through administrative prices to ensure that the increase in these prices is maintained within the inflation target through both regulators as well as moral persuasion. The government could, however, remove some of the administrative prices and allow the market to determine the prices. • The personal income tax relief that government has given to South Africans may have been inflationary. The stimulus to the economy due to increased consumer spending as a result of a rise in disposable income can be seen as inflationary. Furthermore, the social grants and welfare grants that government has been handing out have increased the level of spending amongst consumers. • The government's reluctance to address the skills shortage in the country has led to a shortage in skills supply which has raised salaries demanded by some professionals. The industry Setas established by government to address skill shortages have not delivered either. Maintaining the deficit as low as possible has however, contributed positively to the inflation maintaining low inflation. • Politicians are always in conflict with the central bank, it happens all the time. At first glance South Africa's fiscal policy seems restrictive but further analysis reveals that it is actually expansionary. Government spending has increased significantly over the

	years in many different spheres. Current labour laws make it very difficult for South Africa to be competitive from a cost perspective and this may be inflationary. Overall however, the government has not done anything that radically goes against what the central bank is trying to achieve.
Please rank the following in order of importance in determining monetary policy in South Africa (Price Stability, High level of employment, Stability of exchange rate, Foreign Exchange Reserve and Equilibrium in Current Account Balance)	• Price Stability has been the first priority of the Reserve Bank. The bank has pursued price stability in the belief that lower inflation results in an environment conducive to economic growth. Their approach has been relatively flexible for the sake of achieving the other such as the stability of the exchange rate and economic growth. • Price stability has received first priority, second has been the level of foreign exchange reserves. Employment, stability of exchange rate and current account have been third, fourth and fifth respectively in order of priority. It is important to note that the Pareto principle has been at play here, the bank has placed 80% of it priority on price stability and rest of the attributes have shared the remaining 20%. • Order of priority staring from the highest to lowest in priority: price stability, reserves, exchange rate, level of employment, equilibrium in current account balance. • Price stability has been given first priority. However, the bank has not disregarded other parameters like employment and economic growth in pursuing its priority. In the long term, they are concerned about unemployment and acknowledge that short-term rises in inflation will not bring about employment in the long term. • Price stability has been given primary priority by the Reserve Bank. It is not the bank's responsibility to create jobs. They need to need to ensure that they create an

	environment in which there low is inflation for a sustainable period. • Price stability has ultimate always received first priority in the bank except in 2001 when efforts were made to get rid of the net open forward book (of foreign exchange reserves) accumulated in the1990s. Even at this point the bank was under specific instructions from the government to get rid of the book. Employment has been second on their list of priorities as they view economic growth as an important aspect of what they do. • Order of priority starting from the highest to lowest in priority: price stability, foreign reserve , current account, stability of exchange rate and level of employment • Order of priority staring from the highest to lowest in priority: price stability, exchange rate, current account, reserves, level of unemployment
The Act provides for the provision of unsecured loans by SARB to government – Do you believe that this is an issue and that this should not be the case?	• This is not an issue at all, government borrowing has largely been from institutions and small portion from off-shore funders. The current government does not apply pressure on the Reserve Bank to monetise their debt. • Government debt does not directly impact inflation, the issue is how one finances it and it is inflationary if the central bank is expected to monetise it. This however would not be an issue in South Africa as government would have to borrow at an interest rate determined by the market. • Theoretically, no limit exists and the government could ask the Reserve Bank to print money to fund their debt. Practically though the government is unlikely to do this as the markets in South Africa are such that they will punish the government for this

	• It is possible for the government to ask the Reserve Bank to print money but in South Africa, the financial market acts as the police and would not allow this to take place and would balance any attempt by government to increase inflation by printing money. Economists in South Africa monitor state debt all the time and make projections about where it is going, this ensures constant pressure on the part of government. Currently, the Bank is not funding the state but rather using state debt instruments. The real funder of the state is the private sector including institutions and banks. • At the end of the day, the Bank still makes the final decision about whether they will finance government debt or not. The government cannot insist that they do so as they would be transgressing the Constitution which guarantees the independence of the Reserve Bank to make decisions on such matters. • Given the fact that government has been decreasing the budget deficit over time, it is unlikely that they would request the Reserve Bank to monetise their debt. The fact that this is not explicitly stated in the Act is thus not an issue
SARB currently does not have goal independence but has instrument independence – Do you believe they should have goal independence as well?	• The current arrangement is appropriate. Reserve Bank cannot be a law unto itself. It is sensible for the sake of co-ordination between fiscal and monetary policy that you have broadly the same thinking about what is appropriate inflation for the country. The lack of goal independence ensures that the goal they are given by government is in line with other government policies. • One cannot have a central bank that wants to set its own objectives. The bank must

	have economic goals in line with that of treasury and government. • In a democratic society, the Bank cannot have goal independence. The goal of the Bank must be set by people elected to run the country, in this case government is represented by minister of finance. This provides the right balance between those setting the target and those responsible for achieving the target. • The decision on the inflation target is a consultative process that government engages in and thus it cannot be the responsibility of the Bank alone. The inflation targeting Committee comes up with a recommendation and gives it to the minister of finance and this is announced to the country. Announcing the target allows the market to monitor the performance of the bank against the specified target. • This is not an issue at all. Government engages in a transparent and consultative process when deciding on the targets. It is only legitimate for government to stipulate the target rather than for the central bank to determine the goal themselves. The government must set and announce the target so the market can give its opinion on the matter. • Balance is required between the policies of the central bank and government, hence it is appropriate for government to determine the goal. What is important is how independently the bank is allowed to interpret the goal without interference from government. Goals need to be decided by someone elected by the people but independence is required in implementation of the goals. Operational independence is critical for proper functioning of policy implementation.

	• If the bank is allowed to set its own goal, it may change the goal posts upon realising that they cannot achieve the target. This would severely compromise their credibility in the market and would bring into question their accountability. • The goal should be set by people elected into government but is it critical that the goal is not impacted upon by short term political/business cycles. The bank's operational independence ensures that this short-term approach to inflation is addressed and that the country has a long-term view on inflation.
On a scale of 1 to 5, where 1 = least independent and 5 = highly independent, how would you rate SARB's independence overall and why?	• 5 - Independence as defined by instrument independence, but they are no completely blind to the plight of the poor or economic growth • 5 - there has been no sign that they are being driven to Act at a particular time by political forces outside own ambit • 4 - government still has some influence • 4 - foreign investors don't doubt the independence of the bank - numerous occasions since 2000 where they have established credibility with the international market • 4 - largely independent • 4- reasonably independent

CHAPTER 6

6 Discussion of Results

6.1 Assessment of Legal Central Bank Independence

6.1.1 Legal Central Bank Independence (1990-2006)

i. Chief Executive Officer or Governor of the Bank

Cukierman (1992, p. 372) states that “central banks in which the legal term of office of the CEO is longer and in which the executive branch has little or no legal authority in the appointment or dismissal of the governor are classified as more independent on the CEO dimension”. According to Cukierman (1992) the governor’s term of appointment is far more important in developing countries than it is in developed countries. He identifies much closer links between the length of the term of office and the decrease in inflation rate in developing countries than between legal independence and the rate of inflation.

SARB scored an aggregate score of 0.5 in this dimension. The rating is particular impacted by the role of the President in the appointment of the governor. In South Africa, the decision on who is appointed as the governor lies with the President, although provision is made for consultation with other stakeholders. Based on the Cukierman Index, the lack of collective decision-making on the appointment of the governor is seen as a threat to the independence of the central bank. This is largely due to the potential influence a single individual may have on the person appointed. If appointed by a collective, individual [illegible]das on behalf of specific groups in society. Government's involvement in appointing the governor is frowned upon based on the index. It places a premium on the appointment of such persons by an independent board of the central bank. This is clearly not the case in South Africa, with the government significantly influencing who is appointed.

On the other hand though, the Act makes no provision for the dismissal of the governor, which the index views as a positive influence on level of independence. The lack of provision for dismissal is seen as probably discouraging meddling or interference by government. The final variable under this parameter assesses the extent to which the governor is allowed to hold any other office in government. Where the law prohibits this, the central bank is viewed as more independent. If the governor holds any other government office, his decisions may be unduly influenced. The South African Act does not go far enough in prohibiting this, although it states that the governor may not hold any other office in government, he may be expected to do so if the appointment has been approved by the President.

It important to note, however, that the Act does prohibit the appointment of individuals that are either Ministers or Deputy Ministers or members of parliament or a provincial legislature (Reserve Bank Act, 1989, section 3bA and 3c). This provision could be interpreted as limiting political influence on the operations of the bank.

The South African F t of emphasis on the role of the President and perhaps to some extent the government in making decisions that relate to the governor. In his paper Wessels (2006) also makes reference to the considerable influence that the government has on the appointment of the governor and the board. In his speech on central bank independence the governor, Tito Mboweni, in October 2000, corroborated this view when he stated that “By means of these appointments, the government, of course, does, as some would argue, have an effective say in the policies of the bank”.

ii. Policy Formulation in the bank

Central banks with wider authority to formulate monetary policy, and are able resist the executive branch in cases of conflict are classified as more independent on the policy formulation parameter (Cukierman,1992). The South African Reserve Bank Act does not make provision for the formulation of policy or the resolution of conflict in the Act. This parameter could thus not be assessed with regards to South Africa. This leaves a significant vacuum in terms of how conflict would be dealt with, legally, should it arise between the two institutions. SARB does however, as provided for in the Constitution have the authority to make decisions over the instruments they use to effect monetary policy (instrument independence) but the target of monetary policy (goal independence) is determined by government. In his paper on the independence of the South African Reserve Bank, Wessels (2004, p. 155), states that “it is then regarded as that the bank has full independence to apply its range or mix of arget in an unconstrained way”.

iii. Objective of the bank

The critical importance of the unambiguous declaration of the primary goal of the central bank as price stability in an inflation targeting regime cannot be understated (Wessels, 2006). In his definition of IT, Mishkin (2004) makes explicit reference to the existence of institutional commitment to price stability as the primary goal of monetary policy. Thus a central bank in which the main objective of monetary policy is price stability is classified as being more independent on the objective parameter compared to central banks with other objectives in addition to price stability (Cukierman, 1992).

Furthermore, a distinction is also made between goals considered to be compatible with price stability such as the stability of financial systems and those which are considered incompatible with it, for example unemployment or economic growth. This parameter assesses the extent to which the bank is allowed to singly focus on price stability without being distracted by other issues or objectives that may compromise price stability. Cukierman (1992, p. 377) says that in “Rogoff’s terminology it measures how strong the conservative bias of the central bank is embodied in the law”.

The South African Reserve Bank Act does not explicitly mention price stability as the primary objective. It does however refer to the objective as protecting the value of the curre protecting the internal purchasing power of the currency (Wessels, 2006), which equates to containing inflation or price stability. Both the Constitution and the Act pre-dated the implementation of an inflation targeting regime in South Africa, and have thus not been amended to explicitly reflect the new mandate of the regime.

The reference in the Act to economic growth, potentially undermines the independence of the bank and brings into question the existence of an objective that is in conflict with price stability. In the literature review, a single monetary target was identified as critical to the implementation of IT (Masson *et al*, 1998) . Although not stated as the primary objective, the Act refers to economic growth as a potential outcome from price stability. Economic growth is viewed as incompatible with an inflation targeting regime and should thus ideally not be mentioned as part of the objective of a central bank that is an inflation targeter. It is critical though to point out that economic growth is not stated as a primary objective of the bank in the Act, and that it is merely seen as an outcome of price stability. The achievement of the primary goal (price stability) is seen as contributing to the achievement of economic growth in South Africa.

iv. Limitations on Lending to the Government

It is crucial for central banks to avoid direct financing of the government's budget or any other activities as this may be inflationary in the long run (Wessels, 2004). The stricter the limitation on lending to government, the more independent the bank (Cukierman, 1992). The South African Reserve Bank Act gives provision for the bank to lend money to the government as well other companies the ban cified in the Act on the amount of money that government can borrow but are viewed as not stringent or explicit enough. The lack of explicit limits can be interpreted as giving government the upper hand and that it may be able to influence the bank to monetise its debt without limitations. In his speech in 2000, the governor, Tito Mboweni, highlighted this issue when he said "serious consideration in the revision of the Reserve Bank Act needs to be given to removing this potentially dangerous provision".

Banks where the limit is defined as an absolute cash amount are viewed as more independent. In South Africa, the limit is not defined as such. The mentioning of some form of limit should however be viewed as positive for the Bank's autonomy.

The spectrum of institutions that are allowed to borrow from the central bank is also evaluated under this parameter. The narrower the set of institutions allowed to borrow from the bank the more independent the bank is perceived (Cukierman, 1992). In South Africa the Act provides for both the government and other institutions that the central bank has shares in to borrow from the bank. The institutions that the bank has shares in may also have shareholders from the private sector. This can be interpreted as including the private sector in its realm of potential borrowers.

In instances where the law explicitly mentions that government should borrow at the market rate, the bank is viewed as highly independent (Cukierman, 1992).

This is not the case ot explicitly state the rate at which government can borrow from the Bank. This raises concerns around the likelihood that the bank may give loans to government at a discounted rate that is not market determined. Finally, this parameter looks at whether the central bank is allowed to buy government securities in the primary market and views the prohibition of this as a reflection of a more independent central bank. In the South African context, there is no explicit prohibition of the central bank from buying government securities in the primary market is mentioned in the Act.

v. Aggregate Legal Independence (1990 - 2006)

The aggregated measure of legal independence for South African Central Bank based on the Reserve Bank Act is 0.38. The rate seems rather low on a scale between 0 and 1. This gives a reflection of an Act that does not go far enough in making provisions that will ensure the autonomy of the bank. As indicated in the literature review, the Act is viewed as the level of independence that lawmakers wanted to confer on the central bank but may not necessarily reflect how independent the central bank is. Although the South African Reserve Bank Act has scored rather low in the legal independence dimension, one needs to compare the score with that of actual independence, which in emerging markets is more appropriate. The section below will look at how the legal rating compares with previous ratings for the Bank as well as that of other central banks in emerging markets that are inflation targeters.

6.1.2 Compar

The aggregate legal independence of the South African Reserve Bank has remained largely consistent since the 1950s. The assessment conducted in this study indicates a change in the overall index from 0.25 to 0.38. This is an indication of an improvement in the level independence afforded by the Act to the central bank. The biggest contributor to the change in the aggregate index seems to be the score given to the objective of the central bank. It has changed from 0.2 to 0.6. In the previous ratings, the Act did not have any specific objectives for the central bank hence a score of 0.2 was given. The Act now stipulates that the primary objective of the bank is to protect the value of the currency in the interest of economic growth (Reserve Bank Act, 1989, section 3). There has been a clear realisation by the lawmakers of the importance of explicitly stating the primary objective.

Another change is observed with regards to entities that can potentially borrow from the bank. In the assessment conducted for the periods 1959-1980, a score of 1.00 was given for this variable and in this study, the variable was given a score of 0.00. A score of 1.00 indicates that the bank was only allowed to lend to government, which is not the case in the current Act. The current Act stipulates that the bank can lend to government as well as any other institutions it has shareholding in, which may also have private share ownership.

In both assessment [illegible] eriod 1950-1989 and the one conducted for 1990-2006, no rating could be assigned to the policy formulation variables.

Another observable change in the scores over the period relates to the score given to the provision for dismissal. The assessment conducted in 1992 gave a score of 0.83 towards this, which indicated that there was provision in the Act for dismissal but only for reasons not relating to policy. No reference to any provisions for dismissal could be identified in this latest assessment, hence a score of 1.00 has been given for this variable. In the previous assessments no rating was given for the type of limit that the bank has with regards to lending money to the government. The prohibition as stated in section 13 (f) on the act that refers to government bonds is viewed as a type of limit on government lending, hence this has been given a score of 0.33

As already stated, the process of assessing legal independence involves a subjective interpretation of laws. In certain areas, the difference observed between the two assessments conducted for SARB may be attributed to this and not necessarily an actual change in the law.

6.1.3 Comparison with other Emerging Economies

The comparison of overall legal independence between the three countries, clearly shows Chile as the most legally independent, with an overall score of 0.84 and South Africa as the least legally independent with an overall score of 0.38. Brazil has a score that is slightly higher than South Africa’s at 0.47.

It is important to hig en rather successful in its implementation of inflation targeting. Chile’s central bank managed to lower inflation rates from above 20% to around 2% since the implementation of inflation targeting (Mishkin, 2004). In the same paper, Miskhin (2004) attributes Chile’s success in the implementation of IT to the development of the already identified pre-requisites of IT. On the other hand, Brazil has struggled in achieving its inflation target. The inflation rate exceeded the target by 4 and 3.5 percentage points respectively in 2001 and 2002. The target was finally achieved in 2003 (Mishkin, 2004).

Chile scores the highest in each of the five categories except in terms of the bank’s objective where it is on par with South Africa. Once again, South Africa cannot be evaluated concerning policy formulation as this is not addressed in the Act. South Africa’s score is particularly low in terms of the variable on limitations of lending to central government where it score 0.33 compared to 0.60 and 1.00 for Brazil and Chile respectively. The possibility of monetising debt by the central government, is seen as one of the major threats to inflation targeting in emerging markets. Both Chile and Brazil seem to have addressed this issue to some extent by making provision in their legal framework for this to be controlled while South Africa seem to still be lagging. Although the score for the Chilean Reserve Bank is 1.00 for the variable on limitations to lending to government, the bank’s Act does not provide for the opportunity to assess some of the variables in this category like the type of limit and lending terms.

The South African C tween the three countries that does not refer to the variables that relate to the category on policy formulation. Both Brazil and Chile’s Act would seem to have this explicitly referred to. In Chile’s case the decision on monetary policy formulation lies solely with the Reserve Bank, while in Brazil’s case the executive branch makes the decision on exchange rate policy.

Furthermore, in Chile, the central bank has final authority over conflict resolution with the government but in Brazil’s case the government has final authority. In South Africa there are no conflict resolution mechanism provided for in the Act.

The score for the stated objective for Brazil is 0.00 which indicates that the objective does not refer to price stability at all, this is clearly not ideal for a country that is an inflation targeter. This is in contrast to both South Africa’s and Chile’s which although making reference to other compatible objectives does make explicit reference to price stability with a score of 0.4 and 0.6 respectively for this category. South Africa and Chile both refer to other objectives as well in addition to price stability.

Overall Chile seems to be rather advanced compared to both South Africa and Brazil in terms of provision of legal independence for the central bank in its laws. As already mentioned, an assessment of actual independence has not been conducted for the two countries (Brazil and Chile) in this study. It would be particularly interesting to compare the level of legal independence in Chile, which seems rather ce that the central bank enjoys in that country.

6.2 Assessment of Actual Central Bank Independence

6.2.1 Interview with the South African Reserve Bank

The actual independent of SARB is assessed here by looking at a number of variables that could impact its independence. As already mentioned the assessment is based on responses from a representative of the Bank with knowledge on monetary policy and implementation thereof.

i. Tenure Overlap

This variable assesses the extent to which the term of office of the governor coincides with that of government. The higher the degree of overlap between the turnover of government and the governor, the less independent the central bank. Central bank government appointments are supposed not to be linked to political appointments and the overlap in the turnover would clearly provide an opportunity for politicians to appoint governors they can influence when they come into office. There is significant overlap between the term of office of the governor and the government in South Africa, 5 and 4 years respectively. In South Africa where the decision on the appointment of the governor rests with the President, this can be seen as an area of concern, which may reflect a lack of independence. The current governor was appointed in 1999 and his term renewed in 2004. Prior to that, the governor Chris Stals had been in office nded in September 1999. It would seem that although elections for government are held every 4 years, in practice this has not had an impact on the turnover of the governor. It is important to point out though, that in South Africa, in both terms, the governors and the political party leading government did not change and that the lack of interference with the governor may be due to that.

ii. Limitations on lending

The limitations on lending to government are very loose. The respondent did indicate that the Act states that the Bank may not hold “ stocks of the Government of the Republic which have been acquired directly from the Treasury by subscription to new issues, the conversion of existing issues or otherwise, a sum exceeding its paid-up capital and reserve fund plus one third of its liabilities to the public in the Republic” (Reserve Bank Act, par. 13f). This is interpreted as imposing some limit on the funding that the bank can give to government, but it does not go far enough. A risk exists that the bank may be expected to fund government deficit.

The bank has for the past five years not been faced with this as government has been bringing the budget deficit down significantly. In his paper Genberg (2002) alludes to the fact that fiscal authorities need to commit to restraining budget deficits as this ensures that there is no fiscal dominance. The government deficit has come down from about 1.9% of GDP in 2001 to 0.1% of GDP in 2006 (SARB Quarterly Bulletin, June 2006). \ nding, it has largely been sourced from the market through issuing of bonds.

iii. Resolution of conflict

This variable assesses to what extent conflicts between the government and the board have been resolved in favour of the government of the board. Where conflicts are always resolved in favour of the government, the Bank is seen as less independent. There have been no major conflicts between the Bank and the government. In effect, government is viewed as having been largely supportive of the policies of the Bank. There are also bilateral committees between the government and the bank that sit from time to time to resolve any conflict which may arise. Furthermore, the locus of control between the bank and the government seems to be clear. The role of the government in determining the inflation target is also seen as contributing to the healthy relationship, as the Bank is seen as carrying out a mandate that it has been given by government. It would thus be rather nonsensical for government to implement policies that are in direct contradiction with a target they have set.

iv. Financial Independence

To be free of government interference, a central bank needs to have full authority over its internal budgetary matters, and must not be held responsible for fiscal losses (Wessels, 2004). SARB has full control over its budget, and the salaries of its senior officials are determined by the board and not by government. The South African central bank thus is significantly f k does however have to transfer a specified portion of their profits to government but the bank has enough financial resources to be able to make decisions without interference from government.

v. Intermediary Policy Targets

The presence of intermediary policy targets like the interest rate could have an impact on the long-term price stability target that a central bank has. The bank may engage in activities that seek to achieve an interest rate target in the short term, but which may be inflationary in the long term. The interest rate is not targeted at all by the bank but is rather used as an instrument to effect monetary policy. Monetary stocks are not explicitly targeted either but are monitored on an on-going basis to the extent that they may have an impact on inflation in the long term.

vi. Actual priority given to price stability

This variable looks at the extent to which price stability is actually given priority. SARB gives clear first priority to price stability as this is seen as critical to the objective of the bank. It is acknowledged that this is largely done in the hope that it will create an environment where there can be economic growth and therefore increased levels of employment. The Bank does not, however, have explicit policies which will directly have an impact on the level of economic growth or employment. The Reserve Bank clearly states that they cannot directly influence the exchange rate as this is a phenomenon that is determined by foreign markets which have significa to the foreign exchange reserves that the Reserve Bank has. The bank thus does not attempt to interfere with the value of the currency by manipulating its reserves.

vii. Function as development bank

The bank does not provide developmental funding to any institution. Wessels (2004) states that the previous governor, Chris Stals clearly stated that the bank was withdrawing from all direct government-type financing activities by not granting credit to the Land Bank and special export financing facilities as used to be the case in the past. This position is being continued by the current governor.

viii. Aggregate Actual Independence

The aggregate actual independence score for the South African Reserve Bank is much higher than that obtained on the legal CBI index. The actual CBI index is 0.65, compared with the legal CBI index which is 0.38. This translates to a higher independence score for SARB on actual independence compared to legal independence. The interpretation is that the law does not go far enough in making provision for the independence of the central bank but that in practice the bank enjoys significant levels of independence. For an emerging market like South Africa, this is unusual as typically, these countries have higher scores of legal independence compared to actual independence. This suggests that in practice there is far less interference by the government in the operations of the bank. The literature suggests that in most emerging market countries, the lependence compared to legal independence, South Africa would seem to be behaving like a developed country in this regard.

6.2.2 Interviews with Economists

i. The governor of the Reserve Bank and the board

Most of the respondents agreed that at the time that the current governor, Tito Mboweni, assumed the role, the market was uncomfortable with his appointment. The market raised concerns about the fact that he was a former politician and a minister of labour. He was also seen as an individual who would try to advance the views of the African National Congress rather than what makes economic sense. One of the respondents indicated that internationally, governors are usually appointed within the ranks of either academics, the financial sector or the central bank itself and the Act stipulates that “The governor shall be a person of tested banking experience” (Reserve Bank Act, 1989, section 4b). The current governor did not conform to any of these at the time of his appointment.

However, a common theme emerged through all the respondents that indicated that the governor had, over time, proven to be largely independent of government. Some of the respondents indicate that his appointment was at a time when the independence of the central bank was enshrined in the Constitution and that this facilitated ensuring that he operated independently.

None of the respondents believes that his political affiliation has had an impact on the operational independence of the Reserve Bank, at least not publicly so. One of the respondents said that the governor “has proven to be his own man” and that he is not “easily swayed or manipulated”. Another respondent said he “has not followed directly or covertly party lines”. All these are indications of the high level of independence that the respondents have observed through his actions over time. In his response, one of the economists indicated that the independence enjoyed by the bank has also been largely due to the fact that both the Presidency and the Government has not changed since 2000. He raises concerns about the likelihood that when there is change in the Presidency, the independence of the bank may be threatened, as the new incumbents may bring about new policy frameworks that may be in conflict with the objectives of the bank.

The role of the President in the appointment of some of the members of the board and the governor was seen as acceptable and not impacting on the independence of the bank. This view is in contrast to Cukierman’s, in which he identifies government’s involvement as compromising independence (Cukierman, 1992). No other institution was identified by the respondents as more suitable than the President in appointing 50% of the board. The presence of shareholder representatives was seen as sufficient to ensure that Government does not unduly influence proceedings within the Bank. One of the respondents indicated that the role of the P [illegible] and the governors would ensure that the electorate has confidence in the policies instituted by the central bank. The fact that the accountability of the bank was to parliament, rather than to the President, was seen as sufficient to ensure that the he does not influence proceedings at an individual level.

ii. Objective of the bank

Most respondents believe that the fact that the objective of the central bank is stated as protecting the value of the currency, is not an issue as it has been interpreted appropriately by the bank, as meaning price stability. One of the respondents indicated that the inclusion of economic growth as part of the objective is an acknowledgement that price stability provides the foundation for achieving economic growth. The bank is seen as instrumental in creating an ideal environment for economic growth but that they cannot pursue growth and inflation at the same time.

Another view was expressed that indicated that the drafters of the Constitution clearly understood that output growth was as important as inflation targeting and that the monetary policy frame should be structured to “marry the mandate of the Constitution” rather than the Constitution “marrying the mandate of an inflation targeting regime”. In a country like South Africa, inflation targeting is seen as placing too much emphasis on price stability and very little on growth and development.

However, ar [illegible] he inclusion of economic growth in the objective of the bank may raise inappropriate expectations from the public, about the role of the bank as far as economic growth is concerned. The respondent stated that ideally, economic growth should not be included in the objective of the bank. He further indicated that the role of the bank should be purely to maintain price stability. This view is corroborated by the literature review, in which price stability is identified as the only objective that central banks that are inflation targeters should have (Masson *et al*, 1998).

One respondent though alluded to the fact that price stability is not explicitly mentioned in the Act and that this is an issue. He indicated that this should be reviewed and explicitly stated in the Act, as the inflation targeting regime is currently not fully mandated by the Constitution. The Act stipulates the objective of the bank as protecting the value of the currency. Protecting the value of the currency is, however, generally viewed as synonymous to price stability.

iii. Conflict Resolution

Genberg (2002, p. 5) suggests that “it is essential that other government policies, such as budgetary and exchange rate policies, are consistent with the pursuit of price stability”. Generally, there is agreement by the respondents that there have not been any major policies implemented by government that have come into direct conflict with the objective (price stability) of tl mentation of an inflation targeting regime in the country.

Respondents do however acknowledge that invariably some contradiction may sometimes exist between what the Reserve Bank wants to achieve and what Government hopes to achieve, but that this is a healthy contradiction. Reference is made to the current R600 billion that will be spent by government in infrastructure development that will result in fiscal expansion which may be inflationary. Most respondents allude to the fact that the decision by government to significantly reduce the budget deficit has largely ensured that very little conflict exists between fiscal and monetary policy.

There are, however, some policies which government still has in place which may be seen as inflationary and thus may come into direct conflict with the objective of the bank. These include the following:

- Administered prices – Masson *et al* (1998) identified administered prices as an important component of aggregate prices in emerging markets. They allude to the fact that the presence of administered prices requires a high degree of coordination between monetary and fiscal authorities than in industrial countered where these prices are largely determine by the market.
- Lack of commitment on the side of government to introduce competition in sectors like telecoms, electricity and transport, which has seen consumers paying high prices for these services.

- Labou [illegible] d in labour not being competitively priced has had some inflationary pressures.
- Lack of commitment in addressing the supply side concerns with regards to skills leading to a skills shortage in the market which has seen higher salaries being demanded due to insufficient supply.

There seems to be agreement that, in general, there has been a lack of conflict due to government's continued commitment to the inflation targeting regime. Respondents indicate that the consistent decrease in the government deficit has taken out the stress of the Bank being the lender of last resort to government further enhancing the good relations between Government and the Bank. It would be seen as nonsensical for government to tell the Reserve bank that it has a specific inflation target, and then contrary to that engage in activities that conflict with that mandate given to the Bank. Based on this, respondents believe that the lack of provision for resolution of conflict between the government and the Bank in South Africa is not an issue in the near term.

iv. Actual priority given to price stability

All the respondents indicated that in implementing monetary policy the central government has actually given price stability first priority and that this is not merely an objective stated in the law. There was no question at all about the level of commitment to price stability by the central bank and this was the view expressed by almost all the economists. Stability of the exchange were both seen as the second most prioritised item, while the high level of unemployment was believed to be the least important for the Reserve Bank. To indicate the level of attention believed to be given to price stability by the bank, one of the respondents said that they were applying the Pareto principle to the four above-mentioned variables: 80% of the time and attention of the bank is given to price stability with the rest of the attributes (exchange rate, foreign reserves and unemployment) only receiving 20% of the attention.

The actions taken by the Reserve Bank many times to bring down inflation, using interest rates as an instrument, were seen to have been largely indicative of their commitment to price stability in the long run. Respondents alluded to instances where the bank had increased interest rates when they believed that there would be an inflationary increase in the horizon. This was done, despite fierce protests from quarters like the unions and other economists.

v. Lending to government

Although the fact that the Act does not provide for prohibit to what the Reserve Bank from lending money to government, this is largely not regarded as point of concern. The consistent decrease in the budget deficit by government is viewed as a clear commitment not to overspend and therefore unlikely to result in monetisation of government debt. Furthermore, respondents allude to the fact that government has been using the ca and had not made any attempt in the last six years to have their debt monetised by the Reserve Bank.

Given the fact that South Africa has a vibrant and healthy financial market, respondents believe that the market would respond to correct any attempt by Government to have their debt monetised. The financial market is seen to play a pivotal role in ensuring that government does not place undue pressure on the Reserve Bank. Respondents believe that Government will continue to use the domestic private sector to fund its debt or alternatively use off-shore capital markets.

One responded also indicated that, the Constitution guarantees the independence of the Reserve Bank and that therefore the bank retains the right not to fund the government if they feel this is inappropriate.

vi. Goal Independence vs. Instrument Independence

All respondents indicated that the current arrangement where the bank does not have goal independence is ideal. In the literature review, lack of goal independence was also identified as not crucial for successful implementation of IT (Amato and Gerlach, 2002; Angeriz and Arestis, 2005). The respondents made reference to the fact that, if the bank was free to decide on its own goal, it would lack accountability and it could move its goal posts. The lack of goal independence ensured that they were still accountable to the electorate through governmrnt.

Government’ e Reserve Bank is in line with other policies in the country is seen as crucial.

Although government makes the final decision on the goal, the process they go thorough is seen as consultative and not imposed. In his paper , van den Heerver (2001, p. 173) refers to the fact that “technical consultation between the Reserve Bank and the National Treasury will inform the process of deciding on the target, which is to be reviewed every two years”. This provides an opportunity for different stakeholders to share their opinion on what the target should be and ensure that it is in line with other government goals. The current arrangement is seen as ideal as it lends credibility to the process.

vii. Overall rating of independence of SARB

Most of the respondents rated the instrument independence of the central bank at a level of 4 out of 5, with only two out of the eleven respondents giving it a rating of 5. This is an indication of the significantly high level of instrument independence they believe the South African Reserve Bank has. The rating was based on how they have observed the bank implementing monetary policy since the implementation of inflation targeting and not based on what in stipulated in the law.

6.3 Comparisor g ndependence score

The literature review makes reference to the differences that have been observed between legal and actual independence in emerging markets like South Africa. Evidence exists that suggests that in emerging markets central banks usually have a higher legal independence score while actual independence is actually much lower due to interference from politicians in the operations of the bank.

South Africa seems to be an anomaly in this regard, given the fact that it is also an emerging market and yet the aggregate legal independence score established in this study for the SARB is 0.38, and 0.65 for actual independence. Significant differences do exist between the legal and the actual independence score but it is important to note that, in South Africa's case the actual independence score is higher. In the South African context, the politicians afford a lot more independence to the central bank than is stipulated in the law, a phenomenon that is unusual in emerging markets.

Significant differences in the actual and legal independence of the bank relate to the following:

- The South African Reserve Bank Act does not explicitly allude to some of the variables that are critical in assessing legal central bank independence. These include variables relating to responsibility for policy formulation as well as parameters for conflict resolution. Based on the index used, the lack of reference to the above in the Act compromises the final lega ank. In assessing actual independence, it is very clear that there has not been any major conflict between government and the bank and that government has been largely supportive of the policies of the bank. Furthermore, government has not at any point compelled the bank to monetise its debt, but has used the private sector for this. In making decisions about monetary policy, the Reserve Bank has been left to do this independently, evidence is corroborated by the interviews with the economists.

- The assessment of actual independence reveals extensive financial independence afforded to the bank in practice. Decisions on both the budget as well as the salaries of the bank's senior staff are the prerogative of the board and there is no interference from the government. This lends itself to significantly high scores when assessing financial independence. Given the lack of prohibition on lending to government in the law, the financial independence significantly improves the bank's actual independence.
- In the Act, the inclusion of economic growth in the objective of the bank results in a lower score for the variable that relates to this. Based on the actual practice of the central bank, it has been established, both through the interviews with the Reserve Bank and the economists that the bank has without fail given first priority to price stability. This confirms that, although the Act refers to economic growth, of primary importance to the bank is achieving price stability. Once again, when evaluated purely

based on the [illegible] on this aspect but when assessing the actual practice it scores very high.

The above, articulates some of the reasons why the discrepancy exists between the score obtained for actual and legal independence. Furthermore, it explains why a higher score was obtained for actual independence as compared to legal independence.

7 Conclusion

7.1 Concluding Remarks

The purpose of the research was to evaluate the independence of the South African Central Bank, given the importance of CBI in the context of an inflation targeting regime. Furthermore, suggestions were made about the potential challenges that may be faced by South Africa in maintaining CBI, given the fact that it is an emerging market. Numerous factors were identified that literature has identified as potential hindrances in this regard.

Using several approaches, the researcher attempted to answer the following questions relating to the independence of SARB:

1. To what extent is the South African Central Bank legally independent?
2. To what extent is the South African Central Bank actually independent?
3. To what degree are the discrepancies between legal independence and actual independence in South Africa?
4. To what extent has the rating of central bank independence (legal and actual) determined for South Africa by Cukierman (Cukierman,1992) changed and what are the reasons for the change if it any?
5. To what extent is the degree of legal independence in South Africa, different from that of other emerging market economies that target inflation?

1. To what exte Bank legally independent ?

SARB's overall rating with regards to legal independence can be viewed as rather low with a score of 0.38. Several reasons are highlighted in chapter 6 as to why this is the case. Based on this score, one arrives at a conclusion that the South African Central Bank has rather limited legal independence. This means the law does not go far enough in providing for regulations that will ensure that the bank is free from political interference. As stated by Wagner (1999), a lack of independence may result in inflationary bias resulting in politicians using monetary policy to influence the election outcomes.

Conclusion on the overall independence of a central bank cannot only be based on its legal independence alone. Although SARB has a low rating in terms of legal independence, this should not necessarily be interpreted as a lack of independence in practice. Wagner (2000) makes reference to the fact that in itself legal independence is not a sufficient condition for a truly independent central bank. The low score does however raise concerns about the limited legal recourse for the bank. A situation which, given the opportunity, politicians may use to their benefit.

2. To what extent is the South African Central Bank actually independent ?

It is without doubt that the South African Centrally Bank appears to be largely independent when one assesses actual independence. The 0.65 score obtained on the actual indep verall rating given by the economists interviewed is testimony to this. In the motivation for this research, it was pointed out that in practice, central banks in emerging markets are likely to have a lower actual independence score compared to the legal independence score, this is clearly not the case in South Africa.

One concludes that the current government has made significant effort in ensuring that the bank is granted independence in practice. In his paper, van den Heerver (2001, p. 175) states that "a tradition of independence has been developed in recent years" in South Africa. Although the law falls short in its provision for independence, in practice the bank is independent. Given the context of an emerging market, this is critical for South Africa.

One of the economists interviewed alluded to the fact that the market's perception of SARB's independence drives sentiment in the market. This perception is informed by their assessment of actual independence rather than legal independence. The continued perception that SARB as independent in practice by the market can only have positive effects for the South African economy.

3. To what degree are the discrepancies between legal independence and actual independence in South Africa ?

As predicted by the literature, the is clear evidence of the differences that exists between legal and actual independence in South Africa. The discrepancies can however be viewed as positive for the South African Reserve Bank as they amount to a significantly higher independence in practice than is provided for in the law. An observa was that “Formal central bank independence may not even be necessary for a successful monetary policy. If the government’s overall economic policy is sound, and the public understands what the central bank can and cannot do, then the central banker will be able to carry out an inflation targeting strategy without formal independence”. It is perhaps this statement that provides an insight into why the inflation targeting strategy in South Africa has been relatively successful despite the low legal independence.

4. To what extent has CBI changed and what are the reasons for the change if any ?

Inflation targeting was only introduced in South Africa in 2000. Given the established importance of CBI , the research sought to establish to what extent had there been changes if any in the law with regards to this. Comparison with previous ratings reveals an improvement in the independence afforded by the bank in the law. Interpretation of this as an actual improvement in the law, should be done with caution as the differences may simple be as a result of the different interpretations by the researchers rather than actual change. Reference was made to the subjective nature of the assessment of central bank independence and this needs to be taken into account.

5. To what exte ndence in South Africa, different from that of other emerging market economies that target inflation ?

Comparison of South Africa’s independence with other emerging markets could only be made from a legal perspective. Based on this South Africa seems to be lagging behind both Chile and Brazil. One concludes that, other emerging markets have conferred by law more independence to their central banks compared to South Africa. Once again this raises questions about whether this also translates into actual independence. Given the differences between actual and legal independence scores in South Africa, a comparison of actual independence between the three countries would be of interest.

7.2 Research Limitations

A number of limitations existed in this research. In its nature the concept of central bank independence is difficult to measure due to the subjectivity that exists in the process of assessment. The process involves interpretation of laws which is a subjective process. Also, according to Cukierman (1992), central bank laws are usually incomplete and do not always explicitly specify the limits of authority. This was found to be the case with the South African Central Bank Act as well. Certain aspects which help determine the level independence are not addressed, making it difficult to evaluate the Act in that regard. The assessment of legal independence required that only what is written in the Act should be evaluated and any practices that are not explicitly stated in the law, therefore cannot be evaluated.

The differences that exist between legal and actual independence especially in emerging markets presents an even bigger challenge. A high score of legal independence is not necessarily a reflection of high actual independence. Measuring actual independence is even more subjective as it looks at informal arrangements (Cukierman, 1992). This makes conclusive insights about the level of independence of central banks rather challenging.

In measuring actual independence the researcher used a sample of economists, in Gauteng who may not necessarily be representative of the general view of economists in the c [illegible] ed towards economists in the private sector, which may potentially distort results.

The inherent bias that exists in evaluating the independence of the central bank has already been alluded to. The researcher has tried to eliminate this by using a number of methodologies and data sources to reach conclusions about the bank's independence. The diversity of the methodologies and data sources used, does to a large extent address the issue of subjectivity.

7.3 Recommendations

From a legal perspective, South Africa needs to do a lot more to ensure that aspects that impact the independence of the central bank are explicitly addressed in the law. Although the Constitution states that the " The South African Reserve Bank, in pursuit of its primary objective, must perform its function independently and without fear, favour or prejudice…", the Act does is not explicit enough in addressing specific issues. Some of the issues that need to be addressed include:

- clear and concise mechanism for conflict resolution between the government and the central bank
- clear repayment terms for government debt
- look at the possibility of ensuing that the length of the term of office of the governor is longer than that of political authorities
- explore the possibility of ensuring that the decision on the appointment of the governor is joint-decision between the government and the board and not only the President as is currently the case.

Largely, South Africa has performed well in terms of actual independence. Administered prices are perhaps one of the areas that government needs to look into and ensure that these are largely market driven. The same can be said for industries like telecommunication and electricity.

7.4 Recommendations for further research

In the interviews with the economists, questions were raised about the extent to which the current independence enjoyed by SARB is a function of the current Government or President rather than the fact that it is enshrined in the Constitution. Since the implementation of IT in South Africa in 2000, the Government, President, Minister of Finance and the Governor have not changed. One wonders whether the harmonious relationship between these parties is as a result of the particular relationships and personalities involved and not because of the law.

In 2008, the current President will not be able stand for a third term and the governors term will be up for renewal. An investigation of the level of independence both legal and actual after this period would be interesting. It would provide an opportunity to assess whether the current independence was largely due to personalities rather than the legal framework. Furthermore, with the intended increase in infrastructure spending by government, the possibility that conflicts may arise between the two parties is high and an investigation of how conflict will be resolved when the Bank is actually pressurised by government would be of interest.

This research did not look at the comparison of actual independence between South African and other emerging markets. Given the importance of actual independence, an attempt to compare South Africa with these countries would be a useful exercise. It would provide insight into how South Africa is performing compared with its peers who are also inflation targeters.

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Appendix 1: Variables, Weights and Numerical coding for Legal Independence Scores (Source: Cukierman, 1992)

Variable number	Description of variable	Weight	Numerical Coding
1	**Chief Executive Officer (Governor)**	**0.20**	
	a) Term of office		
	Over 8 years		1.00
	6 to 8 years		0.75
	5 years		0.50
	4 years		0.25
	Under 4 years or at discretion of appointer		0.00
	b) Who appoints CEO?		
	Board of central bank		1.00
	A council of central bank board, , executive branch and legislative branch		0.75
	Legislature		0.50
	Executive collectively (e.g. council of ministers)		0.25
	One or two members of executive branch		0.00
	c) Dismissal		
	No provision for dismissal		1.00
	Only for reasons not related to policy		0.83
	At the discretion of central bank board		0.67
	At legislature’s discretion		0.50
	Unconditional dismissal possible by legislature		0.33
	At executive’s discretion		0.17
	Unconditional dismissal possible by executive		0.00
	d) May CEO hold other office in government		
	No		1.00
	Only with permission from the executive branch		0.50
	No rule against CEO holding another office		0.00

2	**Policy Fo**	**0.15**	
	a) Who formulates monetary policy		
	Bank alone		1.00
	Bank participates but has little influence		0.67
	Bank only advises government		0.33
	Bank has no say		0.00
	b) Who has the final word in resolution of conflict?		
	The bank, on issues clearly defined in the law as its objectives		1.00
	Government on policy issues not clearly defined as the bank's goals or in the case of conflict within the bank		0.80
	A council of the central bank, executive branch and legislative branch		0.60
	The legislature on policy issues		0.40
	The executive branch on policy issues subject due process and possible protest by the bank		0.20
	The executive branch has unconditional priority		0.00
3	**Objectives**	**0.15**	
	Price stability is the major or only objective in the charter, and the central bank has the final word in case of conflict with other government objectives		1.00
	Price stability is the only objective		0.80
	Price stability is the one goal, with other compatible objectives, such as a stable banking system		0.60
	Price stability is the one goal, with potentially conflicting objectives, such as full employment		0.40
	No objectives stated in the bank charter		0.20
	Stated objectives do not include price stability		0.00

4	**Limitatio**		
	a) Advances (Limitation on nonsecuritised lending)	**0.15**	
	No advances permitted		1.00
	Advances permitted, but with strict limits (e.g. up to 15 percent of government revenue		0.67
	Advances permitted and the limits are loose (e.g. over 15 percent of government revenue)		0.33
	No legal limits on lending		0.00
	b) Securitised Lending	**0.10**	
	Not permitted		1.00
	Permitted but with strict limits (e.g. up to 15 percent of government revenue)		0.67
	Permitted and the limits are loose (e.g. over 15 percent of government revenue)		0.33
	No legal limits on lending		0.00
	c) Terms of lending (Maturity, Interest , Amount)	**0.10**	
	Controlled by the bank		1.00
	Specified by the bank charter		0.67
	Agreed between the central bank and the executive		0.33
	Decided by the executive branch alone		0.00
	d) Potential Borrowers from the bank	**0.05**	
	Only the central government		1.00
	All levels of government		0.67
	Those mentioned above and public enterprises		0.33
	Public sector and private sector		0.00
	e)Limitation on central bank lending defined in	**0.025**	
	Currency Accounts		1.00
	Shares of central bank demand liabilities or capital		0.67
	Shares of government revenue		0.33

	Shares of		0.00
	f) Maturity of loans	**0.025**	
	Within 6 months		1.00
	Within 1 year		0.67
	More than 1 year		0.33
	No mention of maturity in law		0.00
	g) Interest rates on loans must be	**0.025**	
	Above minimum rates		1.00
	At market rates		0.67
	Below maximum rates		0.33
	No interest on government borrowing from the bank		0.00
	h) Central bank prohibited from buying or selling government securities in the primary market?	**0.025**	
	Yes		1.00
	No		0.00

Appendix 2: Questionnaire for interview with representative from SARB

1. What is the term of office of high officials of the South African Reserve Bank and does this overlap with the term of office of government
2. Is there a legal limit on the nominal amount of government borrowings from SARB?
3. Are the provisions in the law for the resolution of policy conflicts between the SARB and the government? Please elaborate
4. Who determines the budget of the SARB?
5. Who determines the salaries of high officials of the bank and the allocation of profits?
6. Is the resolution of policy conflicts between the SARB and government usually done informally or by appealing to the law?
7. What is the actual priority assigned to price stability? Is first priority assigned to price stability or a fixed exchange rate
8. Please rank the following in order of importance in determining monetary policy in South Africa
    i. Price Stability
    ii. High level of employment
    iii. Stability of exchange rate
    iv. Foreign Exchange Reserves
    v. Equilibrium in the current account balance
9. Does SARB use monetary stock targets and to what extent are they adhered to?
10. Are there any informal or formal interest rate targets?
11. Does SARB function as a development bank, granting credit at subsidy rates?

Appendix 3: Variable or Actual Independence Scores (Source: Cukierman, 1992)

Variable number	Description of variable	Weight	Numerical Coding
1	**Tenure of central bank CEO overlap with political authorities**	0.10	
	Little overlap		1.0
	Some overlap		0.5
	Substantial overlap		0.0
2	**Limitations on lending practice**	0.20	
	Tight		1.00
	Moderately tight		0.66
	Moderately loose		0.33
	Loose or nonexistent		0.00
3	**Resolution of conflict**	0.10	
	Some clear cases of resolution in favour of bank		1.0
	Resolution in favour of government in all cases		0.0
	All other case		0.5
4	**Financial Independence**	0.10	
	a) Determination of the central bank's budget		
	Mostly central bank		1.0
	Mixture of bank and executive or legislative branches		0.5
	Mostly executive or legislative branches		0.0
	b) Determination of the salaries of high bank officials and the allocation of bank profits		
	Mostly by bank or fixed by law		1.0
	Mixture of bank and executive or legislative branches		0.5
	Mostly executive or legislative branches		0.00
5	**Intermediary Policy Targets**	0.15	
	a) Quantitative monetary stock targets		
	Such target exists; good adherence		1.00
	Such target exists; mixed adherence		0.66

	Such targe		0.33
	No stock targets		0.00
	b) Formal or informal interest rate targets		
	No		1.00
	Yes		0.00
6	**Actual priority given to price stability**	**0.15**	
	First priority		1.00
	First priority assigned to a fixed exchange rate		0.66
	Price or exchange rate stability are among the bank's objective, but not first priority		0.33
	No mention of price or exchange rate objectives		0.00
7	**Function as development bank, granting credit at subsidy rates**	**0.20**	
	No		1.00
	To some extent		0.66
	Yes		0.33
	CB heavily involved in granting subsidised credit		0.00

Appendix 4: List of Economists Interviewed

Name of Interviewee	**Position**
1. Rudolf Gouws	Chief Economist, Rand Merchant Bank
2. Ettienne Le Roux	Economist, Rand Merchant Bank
3. Professor P.H. van Eeghen	Associate Professor, School of Economics, University of South Africa
4. Dennis Dykes	Chief Economist, Nedbank
5. Colen Garrow	Chief Economist, Brait
6. Kenneth Creamer	Lecturer, School of Economics, University of the Witwatersrand
7. Chris Malikane	Lecturer, School of Economics, University of the Witwatersrand
8. Professor Simon Roberts	Professor, School of Economics, University of the Witwatersrand
9. Mike Schussler	Chief Economist, T-Sec
10. Dawie Roodt	Chief Economist, Efficient Group
11. Tony Twine	Economist, Econometrix

Appendix 5: Questionnaire used in interviews with economists

1. Governor and The board

a. The Act stipulates that 50% (Governor, three Deputy Governors and three directors) of the board will be appointed by the President – do you believe this is ideal and has it not impacted on the independence of the board or resulted in government having influence in the operations of the bank? Please elaborate

b. The current governor is a former politician, has this in anyway sacrificed the independence of the central bank? Please elaborate

2. Policy Formulation and Conflict Resolution

a. The Act stipulates that the primary objective of SARB is to protect the value of the currency in the interest of balanced and sustainable economic growth – The Act does not explicitly mention price stability in the objective – is this an issue ? In your opinion has the inclusion of economic growth (although not primary objective) in any manner affected decisions that relate to price stability within SARB – should this be part of SARB’s objective?

b. In the last six years are there any government policies that have come into direct conflict with SARB’s objective (price stability)? Please elaborate?

3. Actual priority given to price stability

Please rank the following in order of importance in determining monetary policy in South Africa

i. Price Stability

ii. High level of employment

iii. Stability of exchange rate

iv. Foreign exchange reserves

v. Equilibrium in current account balance

4. **Lending to Government**
    a. The Act provides for the provision of unsecured loans by SARB to government – Do you believe that this is an issue and that this should not be the case?
    b. To the best of your knowledge how has government been funding its deficit in the last 6 years

5. **SARB currently does not have goal independence but has instrument independence – Do you believe they should have goal independence as well?**

6. **Are there any other actions or policies, not referred to above in both government and SARB in the past six years that have deviated from the law?**

7. **On a scale of 1 to 5, where 1 = least independent and 5 = highly independent, how would you rate SARB's independence overall and why?**