

An analysis of inflation from a central banking perspective: The South African experience since 1921

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INTRODUCTION

As an emerging-market economy, the South African experience with inflation from the perspective of the central bank over an extended period provides an interesting insight into monetary policy successes and failures for similar economies. A reflection on the South African experience shows clearly that policy approaches should be discarded and replaced by more suitable policy frameworks whenever circumstances change.

Reliable inflation data for South Africa are published as far back as 1921³, thereby coinciding with the establishment of the SA Reserve Bank (the Bank), although rudimentary data on price levels are available from well before 1921. South Africa's problems with accelerating inflation since the 1970s are well documented (see for instance De Kock, 1981; De Kock, 1984; Republiek van Suid-Afrika, 1985; Rupert, 1974a; Rupert, 1974b; or Stals, 1989). This paper shows that South Africa also suffered earlier periods of inflation (e.g. during and after World War II), while various parts (or regions) of what constitutes today the Republic of South Africa have experienced problems with inflation, rising prices or currency depreciation well before 1921. The first example of early inflation in South Africa was caused by currency depreciation. At the time of the second British annexation of the Cape in 1806, the Dutch riksdaalder ('riksdollar') served as the major local currency in circulation. During the tenure of the Duke of Caledon, Governor of the Cape Colony from 1807 to 1811, and the Duke of Cradock, Governor from 1811 to 1814, riksdaalder notes in circulation were increased by nearly 50 per cent (Engelbrecht, 1987: 29). As could be expected under circumstances of increasing currency in circulation, the value of the riksdaalder in comparison to the UK pound sterling and in terms of its purchasing power declined from 4 shillings in 1806 to 1 shilling and 5½ pennies in 1825 (or 1/6, according to Die Huisgenoot, 1938: 43), a decline in value of 4,86 per cent per annum, with a concomitant increase in the prices of consumer goods (Engelbrecht, 1987: 29).

As is the case during most periods of sustained currency depreciation or inflation, this period also produced 'winners' and 'losers'. Local officials whose salaries were paid in riksdaallers suffered hardship, while senior officials whose salaries were paid in UK pound sterling were protected against the depreciation in the value of the currency and the concomitant increase in the prices of consumer goods (Engelbrecht, 1987: 29). Domestic producers were in the same position as local officials earning

riksdollars. The problem of the riksdollar's declining value led to its gradual withdrawal from circulation from 1827, with the final withdrawal in 1841, when UK pound sterling became the only legal tender in the Cape Colony (Engelbrecht, 1987: 33).

Secondly, domestic spending financed by bank credit during World War I resulted in domestic price increases in South Africa (De Kock, 1954: 9). De Kock (1954: 9) mentions that the index of retail prices covering food, fuel, light, rent and sundries increased at an average rate of nearly 15 per cent per annum in the period 1914 to 1920.

This paper commences with a discussion of the establishment of the Bank in Section 2. Sections 3 to 13 consider various phases since 1921 and the Bank's policy successes and failures in containing inflation. Section 14 highlights initiatives of the Bank aimed at improving communication since the adoption of an inflation target in 2000. The conclusions follow in Section 15.

ESTABLISHMENT OF THE BANK

The first bank established in South Africa was the Lombaard Bank in Cape Town, which opened its doors for business on 23 April 1793 (Arndt, 1928: 191). Although this bank was fully-owned by the Cape Colonial Government, it was established with commercial activities in mind (Arndt, 1928: 191), and was not envisaged to function in any way as a central bank. This bank was closed in 1842, inter alia, as it did not meet the banking requirements of the Cape Colony at the time.

The earliest proposals for the establishment of a central bank in South Africa were made as far back as 1879 by the Afrikaner Bond, a political party in the then Cape Colony (D'Assonville, 1999: 203; De Kock, 1954: 3; SA Reserve Bank, 1971: 9). Following on the proposals of the Afrikaner Bond, a banking and financial crisis in the then Cape Colony in 1890 and 1891 once again gave rise to calls for the establishment of a central bank (SA Reserve Bank, [S.a.]: 1). A newspaper in the Cape Colony, De Paarl, published at the time a series of articles on the advisability of the establishment of a central bank (SA Reserve Bank, [S.a.]: 1), presumably for the then Cape Colony. These articles might be related to the earlier calls of the Afrikaner Bond, in as much as its founding leader, the Reverend Dr S J du Toit, was editor of the newspaper from 1890 to 1896 (D'Assonville, 1999: 125). In this series of articles, the advantages of a central bank were explained, inter alia, as stability in the circulation of banknotes, interest rate stability,

encouragement of trade, and serving the best interests of the government and the public in times of crisis (SA Reserve Bank, [S.a.]: 1). A draft charter for a domestic central bank was also published.

In 1911 the advantages of a central bank was again advocated by Mr M Grosclaude, who proposed the establishment of such a bank for the newly formed Union of South Africa (SA Reserve Bank, [S.a.]: 1). The matter was also raised in 1912 by Mr J Postmus (SA Reserve Bank, [S.a.]: 1), at the time an Inspector of the Netherlands Bank of South Africa. It is noteworthy that Mr Postmus was appointed as Deputy Governor of the Bank on 1 January 1927, and with effect from 1 January 1932 as the Bank's second Governor (Meiring, 1994: 163).

In the absence of a central bank (i.e. before 1921 in South Africa), commercial banks printed banknotes for issue (see for instance SA Reserve Bank, [S.a.]: 1). Such notes were backed fully by gold in terms of a gold standard, i.e. the notes could be converted into gold at a fixed conversion rate. At the time of the establishment of the Bank, the power of commercial banks to issue banknotes was internationally a long-established practice, albeit under 'review', as banks of issue (as central banks were initially known) were established in various countries, particularly in Europe, in the nineteenth century (SA Reserve Bank, [S.a.]: 1).

During the Great War (as World War I was initially known) the South African currency remained on a gold standard and commercial banks were obliged to redeem their notes for gold (De Kock, 1954: 11). In terms of this arrangement the domestic currency was pegged to the British currency (UK pound sterling), which in turn was pegged to the US dollar and, therefore, the gold price, in each instance at a fixed rate of conversion. This arrangement ended in March 1919 when the peg of UK pound sterling to the US dollar was suspended, with pound sterling depreciating against the US dollar and gold (Gelb, 1989: 54). As a result, gold obtained in South Africa through the conversion of banknotes at commercial banks could be sold at a premium in London (SA Reserve Bank, 1971: 10). At the same time, domestic commercial banks had to buy gold at the same premium in London to provide the necessary backing for their banknotes in issue in terms of the gold standard applied in South Africa. In reaction to the call on government by the commercial banks to be released of this obligation to 'trade at a loss', a Gold Conference was convened in Pretoria in October 1919 (De Kock, 1954: 11).

One of the resolutions of the Gold Conference was to request government to introduce one uniform Bank Act for the country (De Kock, 1954: 13), as no such legislation had been introduced since the unification of the country in 1910. Following on this proposal, the Government engaged the services of Mr H Strakosch (later Sir Henry), a British banker, who was instrumental in a proposal that a domestic central bank should be established (De Kock, 1954: 14; see also Gelb, 1989: 48). This culminated in the Currency and Banking Act, No 31 of 1920, which provided, inter alia, for the establishment of a central bank with the power to issue domestic banknotes (De Kock, 1954: 23; Engelbrecht, 1987: 95 and 96; Mboweni, 2000: 1; SA Reserve Bank, 1971: 11 and 12). The Bank opened on 30 June 1921 (SA Reserve Bank, 1971: 12) and issued its first banknotes to the public on 19 April 1922 (SA Reserve Bank, 1971: 22). Commercial banks were subsequently instructed to cease issuing or re-issuing their own banknotes with effect from 30 June 1922.

Opposition was voiced to the establishment of a central bank at the time, in as far as '[a] fairly prevalent view seems to have been that because of the highly centralised nature of South African banking at the time, a central bank would serve no useful purpose' (SA Reserve Bank, 1971: 12). It is of interest to note that Mr H C Jorrison, at the time the General Manager of the Netherlands Bank of South Africa, held the view that it was not an opportune time to establish a central bank (De Kock, 1954: 13), but nevertheless accepted an appointment as the first Deputy Governor of the Reserve Bank in January 1921 (Meiring, 1994: 125). Similarly, Mr J P Gibson was strongly opposed to the establishment of a central bank, but nevertheless accepted a position as an elected non-executive member of the Board of the Bank upon its establishment (Meiring, 1994: 94).

The name chosen for the central bank of South Africa, the SA Reserve Bank, reflects reference to the Federal Reserve System in the United States of America (US). De Kock states that '[t]he features which the South African Reserve Bank had in common with the Federal Reserve Banks at that time were ... [inter alia]... [t]he designation of Reserve Bank, which had previously been adopted only in the United States ...' (1954: 38). Subsequently, the word Reserve has been used in the names of the central banks of Peru (albeit in Spanish, Reserva), established in 1922; New Zealand, established in 1933; El Salvador (albeit in Spanish, Reserva), established in 1934; India (1935); Australia (1945); Malawi (1964); Zimbabwe (originally the central bank of Rhodesia) (1964); Fiji (1973); Vanuatu (1980); and Tonga (1989).

By 1921 the majority of central banks had private shareholders (or stockholders as they were called at the time), and the same approach was adopted for the Bank. Internationally governments started nationalising central banks in the 1930s and 1940s (De Kock, 1956: 312), but the ownership structure of the South African Reserve Bank has not been changed. It is still a juristic person in terms of its own Act, which provides for private shareholders. Currently only nine central banks have shareholders other than their respective governments, i.e. Austria, Belgium, Greece, Italy, Japan, Pakistan, South Africa, Switzerland and the US (Lybek and Morris, 2004: 7).

Since its inception, the following people served as governors of the Reserve Bank (see for instance Meiring, 1994, or Stals, 1996):

- Mr W H Clegg, 17 December 1920 to 31 December 1931;
- Mr (later Dr) J Postmus, 1 January 1932 to 30 June 1945;
- Dr M H de Kock, 1 July 1945 to 30 June 1962;
- Mr (later Dr) G Rissik, 1 July 1962 to 30 June 1967;
- Dr T W de Jongh, 1 July 1967 to 31 December 1980;
- Dr G P C de Kock, 1 January 1981 to 7 August 1989 (the only person to die whilst still serving as Governor);
- Dr C L Stals, 8 August 1989 to 7 August 1999; and
- Mr T T Mboweni, since 8 August 1999.

Over the period 1921 to 2007 average prices, as reflected by changes in the CPI, increased considerably in South Africa. In terms of an index with 1922 = 100, the index value for 2007 is 9 728,4, representing an average increase of some 5,5 per cent per annum. Put differently, the implication is that the purchasing power of R1,00 in 1922 was only some 1,1 cents in 2007. At the same time, the price of an average basket of goods and services that sold for the equivalent of R1,00 in 1922, was about R97,28 in 2007.

GOLD STANDARD: 1921 TO 1932⁴

The initial policy aim of the Bank was to ensure South Africa's return to a gold standard, as the non-convertibility of the currency in the true sense of the word (into gold specie or coin) was seen as a temporary arrangement. The country was nominally on a gold standard, but the system was effectively suspended. The Bank could, on behalf of Government, issue gold certificates in exchange for gold and banknotes, but declare the certificates non-convertible (SA Reserve Bank, 1971: 26).

South Africa reintroduced the gold standard at the pre-war conversion rate on 18 May 1925. This put the South African pound on par value with the UK pound sterling, as the United Kingdom (UK) returned to a gold standard on 25 April 1925, also at the pre-war conversion rate to the US currency (Sloman, 1994: 607). Sloman (1994: 607) is highly critical of the decision of the UK to restore the gold standard at the previous conversion rate, as its adoption required the introduction of deflationary policies in the UK. Similar conditions applied to South Africa. The use of a gold standard domestically and internationally was underscored at the time by ‘... the general belief and conviction ... that exchange rate stability was of paramount importance for the maintenance of international confidence and the conduct of international trade ...’ (De Kock, 1956: 123).

The UK suspended the gold standard on 21 September 1931 (De Kock, 1956: 142) in the midst of the Great Depression (see for instance Parkin, 2003: 722 for background on the Depression). South Africa had to consider whether it should retain or abandon its own gold standard. The three alternatives available to South Africa were to (i) retain the gold standard independently from the UK; (ii) depreciate the domestic currency and link it to a higher gold price (i.e. a revision of the conversion rate underpinning the gold standard); or (iii) peg the domestic currency to the UK pound sterling, rather than to gold.

The South African authorities elected the first option and retained convertibility of banknotes for gold and the free export and import of gold. This resulted in an immediate speculative capital outflow from South Africa. The Bank had to sell most of its foreign currency holdings in order to meet the demand for gold, causing a loss of some £ 1,5 million for the Bank. This loss exceeded the Bank’s reserves built up over the preceding 10 years by some £ 400 000, which had to be written down against its capital fund of £ 1 million. The prescription at the time that the Bank had to publish a weekly statement of assets and liabilities, rather than a monthly statement as is currently the case, implied that the extent of growing losses were released publicly on a weekly basis. Maintaining the gold standard not only exacerbated the consequences of the depression, but mounting losses of the Bank also raised questions about its continued financial viability. These concerns forced the Minister of Finance towards the end of October 1931 to confirm in a statement that government would guarantee the Bank’s solvability and liquidity. In a present-day environment of operational autonomy for central banks, the issuance of a statement of this nature will place such autonomy in serious jeopardy. If a central bank cannot ensure its own financial viability, it can

hardly be argued that it should be afforded the autonomy to conduct its operations without interference from the government, for whose account those operations will be. Under such conditions the government will rightly have the authority to insist on steps to limit its potential financial exposure, emanating from the central bank operations.

All sectors of the economy other than gold mining (gold exports realised a higher international price than before) suffered severe hardship owing to declines in international demand and the appreciation of the domestic currency, relative to the value of UK pound sterling, the currency of South Africa's major trading partner country. In addition, South African agriculture also suffered the consequences of a drought in 1932, while '[t]he farming community ... [was also] ... increasingly burdened by the rising real value of debt entered into during the more prosperous "twenties"' (SA Reserve Bank, 1971: 36) in an environment of declining prices.

The gold standard controversy duly developed into a political tussle, with government supporting it and the Parliamentary opposition favouring its abolition (SA Reserve Bank: 1971: 34). The economic hardship resulted in dwindling support for the government's economic policy until the matter came to a conclusion on 21 December 1932, when a viable political alternative in the form of a coalition opposition party aiming at the abolition of the gold standard was announced. Owing to an expectation that the new political party could unseat the government and therefore change the policy on the gold standard, renewed demand for gold emerged. This forced government to abolish the convertibility of banknotes into gold from 28 December 1932 (SA Reserve Bank, 1971: 37). Inconvertibility was seen as a temporary emergency measure, evidenced by the fact that South African banknotes carried a nominal promise of convertibility until 1992 (Van Rensburg, 2003: 295).

Looking back after more than 70 years on the final abolition of the gold standard, the speed at which developments took place is somewhat surprising. Within seven days after the announcement on 21 December 1932, the gold standard was abolished. This period included Christmas and Boxing Day (currently 26 December is known as the Day of Goodwill public holiday in South Africa), which were at the time also two public holidays in South Africa. It seems fair to conclude that the central bank and Government must have had some prior contingency planning in place which could simply be implemented after 21 December 1921. This makes the lack of clear policy direction after the abolition of the gold standard, explained in the next section, even less understandable.

As is evident in tables A1 and B1 in Appendices A and B, South Africa experienced deflation from 1921 to 1932, with prices declining on average by some 3,3 per cent per annum, but with a very sharp decline of 4,5 per cent in 1932. Low inflation or relative price stability were not achieved, but rather moderate deflation – which was the objective of the policy, i.e. to restore price levels to those prevailing before the Great War. The prime overdraft rate of commercial banks fluctuated around 7 per cent (Republic of South Africa, 1985: 106), while the margin between Bank rate (the rediscount rate for commercial banks at the Bank at the time) and the minimum overdraft rate of commercial banks ranged from 0,75 to 1,6 per cent (Republic of South Africa, 1985: 106). As the rate of inflation declined on average by some 3,3 per cent per annum, it implies that the real average minimum overdraft rate was slightly above 10 per cent per annum. If 1932 is considered in isolation, the real minimum lending rate of commercial banks was 11,8 per cent, which aggravated the difficulties caused by the Great Depression and the maintenance of the gold standard.

AFTER THE GOLD STANDARD: 1933 TO 1938⁵

Owing to the abolition of the gold standard it was necessary to consider an alternative monetary policy approach for South Africa. It was decided by the monetary authorities⁶ ‘... to leave the future monetary policy of the country to be determined by Parliament ...’ (De Kock, 1954: 191), due to reconvene early in 1933. Today such a decision would certainly be viewed as abandoning responsibility for policy formulation and implementation by the relevant authorities. Parliament passed in March 1933 the Currency and Exchanges Act, No 9 of 1933, which linked the value of the domestic currency to that of UK pound sterling.

South Africa’s domestic economic conditions and international economic relations at the time shows that ‘... the abandonment of the gold standard and the depreciation of the South African pound to the level of sterling were decidedly beneficial to the Union’ (De Kock, 1954: 212). The improvement in general economic conditions gave rise to the question whether the Bank would be able to control inflation successfully, as ‘... commercial banks ... no longer had to avail themselves of the credit facilities of the Reserve Bank. Had the Bank deemed it necessary to raise its discount rate in order to restrict credit, it would ... have experienced great difficulty in making the higher rate effective’ (De Kock: 1954: 233). De Kock (1956: 123) states that the Bank and central banks

internationally increased their focus on the control of credit to stabilise the price level after the abolition of the gold standard⁷.

Prices increased on average by 0,6 per cent per annum between 1933 and 1938. The average minimum overdraft rate of commercial banks was about 5,5 per cent, with a constant margin of 2 percentage points between this rate and Bank rate maintained for a period of 10 years from 1935 (Republic of South Africa, 1985: 106). The average real minimum lending rate was therefore about 4,9 per cent. Despite the Bank's problems with restricting credit, it achieved the maintenance of relative price stability.

WORLD WAR II: 1939 TO 1945⁸

At the outbreak of World War II, South Africa retained its membership of the Sterling Area, established in 1933 after the abolition of the gold standard. Exchange control measures imposed in terms of the Sterling Area agreement permitted free international payments between member countries, but payments to countries outside the Area required permission from the exchange control authorities. This arrangement, i.e. the first introduction of a form of exchange control in South Africa, forms the foundation of the country's current system of exchange control.

The South African authorities supplemented monetary policy with an extensive system of direct control measures to curb inflationary pressures during the War. Under these circumstances the inflation suffered by South Africa at the time is described by De Kock as '... the suppressed rather than the open variety ... [which] ... brought with it the disadvantages of the former rather than the latter' (1954: 268). Inflation as measured in terms of actual price increases, rather than as measured in terms of shortages during the period of control, increased substantially in the period after the relaxation of the control measures.

The South African experience with direct controls during and after World War II was subsequently also suffered by other countries. An example is the US, where the government introduced an incomes policy on 15 August 1971 and maintained controls until 30 April 1974 (Kosters, 1977: 121). Consumer price inflation accelerated to a level of 12,2 per cent in the eight months after 30 April 1974 (Kosters, 1977: 122). As often happens during a period of direct controls interfering with the functioning of the market mechanism of supply and demand, shortages were also reported in the US (Kosters, 1977: 188). This brings to mind Goodhart's law, which states that '[c]ontrolling a symptom of a problem or only one

part of the problem will not cure the problem: it will simply mean that the part that is being controlled now becomes a poor indicator of the problem' (Sloman, 1994: 753). The implication is obvious: as is the case with sound monetary policy following on a period of persistent high inflation, an incomes policy is also not a painless solution to solve an inflation problem. In this case the cost is reflected in shortages during the period of control, rather than in increases in interest rates, and subsequent price increases after the abolition of control.

The Bank's enabling legislation, the Currency and Banking Act, No 31 of 1920, as amended, was replaced by the SA Reserve Bank Act, No 29 of 1944, which consolidated matters pertaining to the Bank. At the time the National Party (which was in power in 1931/2 and supported the maintenance of the gold standard) was in opposition in Parliament and advocated extensive direct government control of the Bank. This view was not supported by the Parliamentary majority and the Bank's autonomy was retained in the Act of 1944.

Inflation was at an average annual rate of about 4,1 per cent, but price increases were suppressed by control measures, implying that the rate of inflation cannot be used as a true reflection of inflationary conditions in the economy. However, it seems that the authorities were generally not successful in achieving the overarching objective of relative price stability.

THE IMMEDIATE POST-WAR PERIOD: 1946 TO 1954⁹

The domestic economy was generally sound at the end of World War II, but South Africa experienced some consequences of inflationary pressures emanating from control measures adopted during the War. At the time monetary policy was based on two conventional premises, i.e. money '... was a unique financial asset which played a strategic role in the determination of the total demand for goods and services. And the second was that the SA Reserve Bank and the commercial banks ... were the only financial institutions which could create money ... [while] ... bank credit and money exerted an important influence on ... prices and the balance of payments, and needed to be controlled in the interests of general economic stability and ... to maintain stable exchange rates under the Bretton Woods system' (Republic of South Africa, 1985: 144) of fixed but adjustable exchange rates, introduced after World War II. This system eventually collapsed in [1971](#) when the [US](#) suspended the convertibility of the US dollar into gold (see for instance Braithwaite and Drahos, 2000; or McAleese, 2004: 5).

A significant step in the development of South Africa's financial structure occurred in 1949, with the establishment of the National Finance Corporation (NFC), which commenced operations on 20 September 1949 (Republiek van Suid-Afrika, 1985: 113; see also De Kock, 1956: 171). The purpose of establishing the NFC was to develop a domestic money market and to ensure optimal capital utilisation in South Africa. Its liquidity was guaranteed in terms of an agreement that the Bank will discount its Treasury bills as and when required, at the rates at which the NFC acquired the bills. This implied that the Bank performed a '... function of lender of last resort, being called upon to grant accommodation to the Government and the commercial banks only after all the other sources have been exhausted through the medium of the National Finance Corporation' (De Kock, 1956: 171).

According to De Kock (1956: 98) the function of lender of last resort flows from the central bank's function as bank of rediscount. It is defined as '... the assumption of the responsibility of meeting, directly or indirectly, all reasonable demands for accommodation from commercial banks, discount houses and other credit institutions, subject to certain terms and conditions which constitute the discount rate policy of the central bank' (De Kock, 1956: 98). Judged against the backdrop of current central banking refinancing activities within a classical system of cash reserve requirements for commercial banks, this description of the lender-of-last-resort function entails normal central banking discounting to banks. The meaning of lender of last resort has seemingly changed over time, and has recently been described by Mishkin as a system of providing '... reserves to banks when no one else would, thereby preventing bank and financial panics' (2004: 402). This happened in South Africa as early as early as 1921, when the Bank provided special assistance to the National Bank (SA Reserve Bank, 1971: 23).

It seems that a clarification of the meaning of lender-of-last-resort assistance is necessary. Different meanings are attached to these words in different jurisdictions. Some jurisdictions describe such lending as the refinancing by the central bank of temporary liquidity requirements of the banking system. In certain other jurisdictions these words refer to emergency central bank assistance to banks in distress. Clarification of terminology is important for the sound functioning of financial systems. It seems that emergency liquidity assistance might be a more appropriate description of this responsibility of central banks.

Inflation averaged 4,4 per cent per annum, implying that the average real minimum lending rate was about 1 per cent, depending on the specific year in the period considered. As was pointed out by the Governor at the time (SA Reserve Bank, 1971: 56), monetary policy was generally less than successful in supporting relative price stability, and higher real interest rates were perhaps necessary.

THE LATE FIFTIES: 1955 TO 1960¹⁰

As was the case in many other countries in the late fifties, South Africa also implemented Keynesian policies aimed at stabilising economic activity. In South Africa's case '... the official approach ... was, in effect, a form of conservative Keynesianism which contained important elements of what later came to be known as monetarism. This was evident, for example, from the important role assigned to the money supply' (Republic of South Africa, 1985: 144). Despite the importance attached to changes in the money supply and its influence on investment and spending, '... no thought was given during this phase to setting either published or unpublished targets for M1, M2, cash base or any other monetary aggregate' (Republic of South Africa, 1985: 144). South Africa was part of the world-wide Bretton Woods system of fixed but adjustable exchange rates and the Sterling Area. Against this backdrop the Bank considered all available economic data in its decision, but exchange rate stability enjoyed a high priority among the goals set for monetary policy.

From 1946 the minimum overdraft rates of commercial banks were set at a margin of 1,5 percentage points above Bank rate, in terms of an agreement between the Bank and the commercial banks. This margin was changed to 2 percentage points in March 1958. Maintaining this margin enabled the Bank to exert a direct influence over the rates charged by commercial banks. Bank rate moved between 4 per cent and 4,5 per cent, with the average minimum overdraft rate at 6 per cent for this period. Inflation was at an average annual rate of about 2,3 per cent, implying that the average real minimum lending rate was about 3,7 per cent. Monetary policy therefore achieved the objective of relative price stability.

THE EARLY SIXTIES¹¹

South Africa introduced a new decimal currency system in 1961, replacing the previous system comprising pounds, shillings and pennies (£/s/d). South Africa introduced a system of rands and cents, with an

official conversion rate of £1 = R2. This followed on the report of the Decimal Coinage Commission submitted on 1 August 1958 and the acceptance of its recommendation of the introduction of a 10-shilling (= R1) and cent system, owing to the fact that it would allow easier conversion from the previous system. The rand as name for the currency comes from Witwatersrand (the White Water Ridge), the shelf of gold in the Transvaal on which Johannesburg was established (Wordorigins Archive, [S.a.]).

Following political events in Sharpeville on 21 March 1960 (see for instance Reeves, [S.a.]), South Africa experienced large outflows of foreign capital, mainly in the form of the sale of shares of local companies listed on the domestic securities exchange. Such outflows could not be covered by the small surplus on the current account of the balance of payments. This resulted in an expansion of the exchange control measures introduced in terms of the Sterling Area agreement, as South Africa left not only the Commonwealth when the country became the independent Republic of South Africa on 31 May 1961, but also the Sterling Area. Restrictions were placed on foreign investment by residents to limit the outflow of capital, accompanied by the introduction of the securities rand in terms of which the sales proceeds of domestic securities had to be retained in South Africa, and could only be used for reinvestment in domestic securities. The securities rand system evolved over time into the financial rand system, which became the cornerstone of a system of exchange control over non-residents.

This period is also characterised by a unique development at the Bank. Currently the SA Reserve Bank Act, No 90 of 1989, as amended, stipulates in Section 7 that '[t]he Governor shall preside at the meetings of the Board ... [but] ... the Minister ... [of Finance] ... may designate any other director to act as chairman of the Board during the Minister's pleasure'. Similar provision was made in the SA Reserve Bank Act of 1944 and the Minister of Finance exercised this option in 1962 (Rossouw, 2004: 1101). During the latter part of 1962 and most of 1963 the Governor did not serve as chair of the Board of the Bank, as Dr M H de Kock, the previous Governor, was appointed as Chairperson of the Board after stepping down from his previous position on 30 June 1962. This decision to split the responsibilities was soon found not to be in the best interests of the Bank and this practice was ended in 1963 (Rossouw, 2004: 1102). Complicating factors, for instance, were (i) the question whether the Governor or the Chairperson should address the annual general meeting of the Bank's stockholders on monetary policy; and (ii) a lack of clarity on the split in decision-making authority between the

Chairperson and the Governor. The option of such a split in responsibilities is still available to the Minister of Finance, but has since not been used.

From March 1958 the minimum overdraft rates of commercial banks were retained at a margin of 2 percentage points above Bank rate. As in the preceding period, the maintenance of this margin enabled the Bank to exert direct influence over the rates of commercial banks. Bank rate averaged about 4 per cent, but moved between 3,75 per cent and 5 per cent, with a concomitant movement in the minimum overdraft rate, averaging at 6 per cent. Inflation was at an average annual rate of about 1,6 per cent, implying that the average real minimum lending rate was about 4,4 per cent. Relative price stability was therefore achieved during this period.

DIRECT CONTROLS: 1965 TO 1980¹²

By 1965 the world was still characterised by the Bretton Woods system of fixed (but adjustable) exchange rates, with the US dollar as anchor for the exchange rate system and convertible into gold at a fixed price of US\$35/oz. The exchange rates of various countries could be adjusted in terms of the Bretton Woods system of fixed but adjustable exchange rates by means of devaluations or revaluations (Mohr and Fourie, 2004: 436). However, this ‘... system came under immense pressure during the late 1960s and eventually broke down in 1971, when the major industrialised countries switched to a system of floating currencies ...’ (Mohr and Fourie, 2004: 436). The main problem was that the US dollar could not be devalued against other currencies, while no pressure for revaluation could be imposed on other countries. Following the breakdown of the Bretton Woods system, the Bank had to establish a new exchange rate framework for the country. The authorities pegged the exchange rate, albeit at varying levels after formal devaluations in December 1971 and in September 1975, initially to UK pound sterling, then to the US dollar, then a peg to a basket of currencies, and again to the US dollar before a system of managed floating was introduced from January 1979.

The Bank introduced the use of credit controls, credit ceilings and deposit rate control to limit credit demand (SA Reserve Bank, 1971: 66). As inflationary pressures continued to increase, further initiatives were introduced in July and August 1966 to curb inflation. These additional initiatives included, inter alia, fiscal measures aimed at curbing demand, the relaxation of import control and an increase in Bank rate to 6 per cent (SA Reserve Bank, 1971: 67). This system of direct controls in South

Africa was supported by a comprehensive system of exchange control (SA Reserve Bank, 2005a) which allowed foreign investments by South African residents only in exceptional circumstances.

Interest rates were adjusted on a number of occasions, but owing to the extensive use of direct controls, rates were not at the market clearing level, i.e. where the demand for loanable funds were in equilibrium with the supply of such funds. Owing to the use of direct controls the demand for loanable funds was artificially contained and interest rates accordingly did not reflect the market equilibrium position.

Direct controls and the general approach to monetary policy, including adjustments to Bank rate, did not achieve the desired outcome: low inflation as measured by changes in the CPI. Inflation accelerated between 1965 and 1980: '[i]nflation established itself firmly between the levels of 10 and 20 percent, and the natural development of financial markets was suppressed by the need for direct controls over banks and other financial institutions' (Stals, 1996). Although 1965 to 1980 are taken as one period in this analysis owing to the use of direct controls, in respect of inflation it should be split into two sub-periods: up to 1973, when inflation was at single digits, and from 1974 to 1980, when South Africa suffered sustained double-digit inflation, which continued in the 1980s.

Between 1965 and 1973 inflation was at an average annual rate of about 4,6 per cent, but accelerated sharply from 1968 to the end of this sub-period, implying that the average real minimum lending rate was about 3,4 per cent. Monetary policy therefore achieved relative price stability during this sub-period, but failed to address the acceleration in inflation. This is confirmed by the fact that the domestic inflation problem already received attention by the mid-sixties.

The Council of the Economic Society of South Africa decided on 1 April 1966 to arrange a conference on accelerating inflation (Richards, 1967: 278). The conference was hosted on 24 and 25 August 1967 in Johannesburg (Richards, 1967: 278). A debate on the definition to be used for the type of inflation suffered by South Africa in the late 1960s is recorded in the conference proceedings, as different delegates used different definitions (see for instance Du Plessis, 1967: 365; Samuels, 1967: 341; or Van der Horst, 1967: 323). Hobart Houghton stated that '[t]he main strength of the inflation of our time was that we expected it to continue ...' (1967: 292). This view was supported by Samuels, who stated that '... once the market's expectations ... are broken, the

problems of the transition to a non-inflationary era will become progressively easier. The eradication of inflationary expectations will not be easy' (1967: 355). Reflecting on this conference some 40 years later, the reaction is that the issues remain the same, only the names of the conferences considering them change.

The second sub-period (1974 to 1980) deals with inflation accelerating to a level above 10 per cent per annum and staying at that level for a sustained period – in this case until 1992, as is highlighted below. Inflation was at an average annual rate of about 12,1 per cent, but continued to accelerate sharply towards the end of this sub-period, while the average real minimum lending rate of commercial banks was about minus 4,1 per cent. Monetary policy, therefore, did not contain inflation during this sub-period, while direct controls resulted in the adoption of interest rates obviously too low in comparison to the general rate of increase in the price level.

The movement from direct controls to a market-oriented monetary policy associated with the appointment of Dr G P C de Kock as Governor with effect from 1 January 1981, were announced at the Bank's sixtieth ordinary meeting of stockholders held on Tuesday, 26 August 1980 (De Jongh, 1980: 10).

STUBBORNLY HIGH INFLATION: 1981 TO 1985¹³

After the unsatisfactory experience with direct controls since 1965, the Bank implemented from 1 September 1980 market-oriented monetary economic policy. Casteleijn describes monetary policy in the early 1980s as a '... mixed system during transition ...' (2001: 5; see also Nel, 1993: 120). Gidlow (1995: 4) describes this period (and the period 1985 to 1989) as one of a market-oriented mixture of conservative Keynesian demand management and monetarism, with the focus on discretionary demand management. Despite further amendments to the conduct of monetary policy in South Africa since 1981, the Bank has not departed from the principle of market-oriented monetary policy.

The period under review is characterised by three important events. First, in terms of the political system of constituencies electing representatives to Parliament used in South Africa at the time, the National Party (the same party mentioned earlier in this paper) government faced a crucial by-election in the Primrose constituency on Thursday, 29 November 1984. From August 1984, interest rates were at a new record-high level, with the prime overdraft rate at 25 per cent (SA Reserwebank, 1985: 26),

which resulted in widespread domestic unhappiness about the macroeconomic management of the economy and, in particular, the conduct of monetary policy. The Bank dropped interest rates ten days before the by-election, mentioning as reasons for the decision ‘... the cooling-down of the economy and the improvement in the balance of payments and the exchange rate of the rand ... [and] ... a general downward movement in short-term rates’ (SA Reserve Bank, 1984: 13 and 14). The Bank increased rates to their previous levels on 8 January 1985 (SA Reserve Bank, 1985: 16).

This temporary drop of interest rates subsequently became known as the Primrose prime incident, as it was generally regarded as a move to alleviate pressure on the ruling party. Already at the time of the drop in rates, it was stated that ‘... there is no escaping the fact that ... [the] ... cut in prime interest rates was most likely the opportunity cost of the National Party winning the Primrose by-election. Despite Reserve Bank Governor Gerhard de Kock’s firm denial, this obvious political manoeuvre has all the signs of a quick fix ...’ (Financial Mail, 1984: 35). At the time, this incident placed in serious jeopardy the ability of the Bank to conduct autonomous monetary policy. This gave rise to serious doubts about the future conduct of monetary policy, owing to uncertainty whether statements by the Bank could be taken on face value after this incident: evidence therefore of a time inconsistency problem (see for instance Barro and Gordon, 1983a; Barro and Gordon, 1983b; or Kydland and Prescott, 1977). It also reminds of the existence of a political business cycle, i.e. the alignment of policy decisions with election cycles (Nordhaus, 1975).

Secondly, South Africa's balance-of-payments situation deteriorated progressively during 1985, and capital outflows increased substantially after the Rubicon¹⁴ speech of Mr P W Botha, the President of the country at the time, on 15 August 1985 (see for instance Finweek, 2006: 21). The country did not exercise exchange control over non-residents at the time, owing to the earlier abolition of the financial rand¹⁵. Expectations of important announcements changing the South African political dispensation, at the time characterised by a system of apartheid, did not materialise. The speech was described by the African National Conference, at the time the major liberation movement in exile, as ‘... an arrogant reaffirmation by P W Botha that the apartheid system will continue unchanged ... [Botha] ... prescribed the same solutions which have produced the crisis that is now devouring the lives of our people daily. In particular, while falsely and cynically claiming to be a democrat,

he scorned the very notion of the right of all South Africans to vote for the government of their choice' (Tambo, 1985).

From an economic perspective, the Rubicon speech was a turning point for the worse, as it was seen as an entrenchment of an unacceptable political system, rather than a new dawn for South Africa. It resulted not only in an outflow of foreign capital from South Africa, but foreign credit lines were also withdrawn, with South African borrowers unable to refinance their foreign short-term borrowing. On 28 August 1985 the temporary closure of the foreign exchange market was announced. On 1 September 1985 South Africa announced a moratorium on the repayment of its foreign debts and the reintroduction of the financial rand, i.e. exchange control over residents. This was followed by debt rescheduling agreements, with the final tranche of rescheduled debt repaid only on 15 August 2001, when '... the arrangements for the repayment of loans in terms of the Debt Standstill Agreements concluded from 1985 onwards, were ended. On that date, the final authorisation was issued for the repayment of all the outstanding capital on loans in the standstill net. This brought to an end an unfortunate part of our history. South Africa has, however, meticulously honoured all the capital redemption schedules and interest payments on this indebtedness in accordance with the agreements made with foreign creditors' (Mboweni, 2001).

Thirdly, the final report of The Commission of inquiry into the monetary system and monetary policy of South Africa (De Kock Commission) was published in 1985 (Republic of South Africa, 1985), encompassing a comprehensive review of monetary policy and financial institutions in South Africa. The Commission recommended far-reaching amendments to the conduct of monetary policy, which was adopted and implemented from 1986. In view of the Primrose prime incident described above, it is noteworthy that the Commission's assessment of the Bank was that the intention of the legislator in establishing the Bank was '[t]o ensure the Bank's independence and particularly its freedom from party political pressure. In this respect the Commission has found no evidence that the intentions of the legislator have not been realised. The Bank jealously guards its reputation for objectively formulating and applying monetary policy in the interest of the whole community' (Republic of South Africa, 1985: 253). Stating this less than one year after the Primrose prime incident implies that the commissioners either had selective memory or no memory at all.

The Commission made a number of recommendations on the autonomy of the Bank, the most noteworthy of which is that '[w]hile the Reserve

Bank and the Treasury acting tighter as the monetary authorities [own emphasis] should jointly share the responsibility for broad monetary policy ... the Reserve Bank ... should primarily be charged with the responsibility for maintaining monetary stability and protecting the internal and external value of the currency. To perform this task effectively, the Bank should be ensured of considerable independence in matters of monetary policy – subject to only the constraints of the broad policy framework laid down by the Government’ (Republic of South Africa, 1985: 253). Two issues in this quotation justify further comment:

- the Commission propagated the notion of the monetary authorities with joint responsibility for monetary policy, whereas subsequent developments have shown that better policy results are obtained when the government (or the Minister of Finance) sets, or sets jointly with the central bank, the monetary policy goal, but allows the central bank operational independence to achieve the goal; and
- the Commission recommended that the Bank ‘... should primarily be charged with ... protecting the internal and external value of the currency’ (Republic of South Africa, 1985: 253). When a mission for the Bank was formulated for the first time in 1990, it referred to the objective of protecting the internal and external value of the rand. This objective, albeit in a revised format (protect the value of the currency) is also contained in the Constitution of South Africa, Act 108 of 1996.

Owing to the adoption of a market-related monetary policy model, domestic interest rates not only changed more frequently, but the domestic economy was also characterised by nominal rates at a higher level than before. Although these changes should be expected in view of a policy focus changing from direct controls to a market approach, such movements made financial planning increasingly difficult and uncertain for businesses and households, with claims that the Bank kept rates at artificially high levels. These claims were refuted from time to time by the Bank (see for instance De Kock, 1981: 10). As inflation was at an average annual rate of about 14 per cent, monetary policy did not achieve the objective of relative price stability.

THE PERIOD 1986 TO 1989¹⁶

In the 1986 budget speech it was announced that Government had accepted the recommendations of the De Kock Commission. One of the implications was that the Bank would set specific growth targets for one or more of the money supply aggregates (Du Plessis, 1986). The Bank adopted low-profile, adjustable money-supply growth targets rather than

fixed targets, as the latter would not have allowed discretion in the application of monetary policy if not achieved. The target set by March 1986 was to keep the growth rate of the broadly-defined M3 money supply between 16 and 20 per cent between the fourth quarter of 1983 and the fourth quarter of 1984 (Gidlow, 1995: 25). However, in the first year of following a money-supply growth target, the Bank already realised that the growth rates of the M3 money supply is subject to large swings in the velocity of circulation of money. Whereas the growth in M3 over the period was 10,1 per cent, its effective growth, i.e. M3 multiplied by its velocity, amounted to 18,4 per cent.

This period is characterised by a problem similar in nature (but slightly different in application) to the Primrose prime incident, although this latter occurrence is not as well known. In 1988 Government accepted the Proposed Action Plan for Combating Inflation, prepared by the Economic Advisory Council of the State President (Stals, 1989: 10). In terms of this action plan, inflation had to be addressed with a broad spectrum of measures, including restraint in respect of government expenditure. The implicit understanding was that all important prices in the economy and wages should be retained at current levels – in effect therefore a low-key control approach. The wage focus naturally included salaries and wages of civil servants, and the focus on important prices not to be increased also encompassed the level of interest rates.

Gidlow mentions that the discretionary policy followed at the time by the Bank ‘... kan op die mees doeltreffende wyse toegepas word in ‘n milieu waar die sentrale bank volkome onafhanklik is. Dit was in 1988 byvoorbeeld nie die geval nie toe die owerhede moeilikheid ondervind het om rentekoerse hoër op te stoot op ‘n tydstip toe die betalingsbalansposisie en inflasionistiese druk versleg het’ [... can be applied most effectively if the central bank has complete autonomy. This was for instance not the case in 1988 when the authorities experienced difficulty in increasing interest rates at a time when the balance-of-payments position deteriorated and inflationary pressures increased¹⁷] (Gidlow, 1995: 9).

As inflation was at an average annual rate of about 15,6 per cent, monetary policy did not achieve the objective of relative price stability between 1986 and 1989. The final pronouncement on the period 1985 to 1989 indeed comes in the form of a statement in the Governor’s Address of 1989, i.e. ‘[d]uring the period 1985 – 1987 ... [i]nflation was ... not regarded as South Africa’s main economic problem’ (Stals, 1989: 9).

The tone for monetary policy in the 1990s was actually set by the Governor on Tuesday, 29 August 1989. Dr C L Stals was appointed Governor of the Bank on 8 August 1989, after the previous Governor passed away on 7 August 1989. The Bank's sixty-ninth ordinary general meeting of shareholders was held on 29 August 1989. This meeting was the first ever referred to as a meeting of shareholders of the Bank. Use of this term was brought about by the adoption of the SA Reserve Bank Act of 1989, as Sections 1 and 14 of the SA Reserve Bank Act of 1944, as well as the regulations framed under Section 23 of that Act, referred to stockholders of the Bank, and it had ordinary general meetings of stockholders, rather than shareholders, until 1988. The revised Act (which is still in place at the time of completion of this paper) makes reference to shareholders.

The Governor announced a renewed initiative to contain inflation, which remained stubbornly high during the 1980s. It was explained that '[a]t a time when most of the industrial countries of the world pursued strong anti-inflationary policies, South Africa was pre-occupied with short-term economic problems ... [and] ... [i]nflation was at that stage not regarded as South Africa's main economic problem ... [but] ... the main emphasis of monetary policy has ... [now] ... been switched to the curtailment of inflation ... In the circumstances it can no longer be regarded as appropriate to continue to accommodate price increases through large increases in Bank credit and in the monetary policy' (Stals, 1989: 10). The view was that '[t]hrough a disciplined monetary and fiscal policy approach ... it will be possible to reduce the rate of inflation in South Africa over the next few years' (Stals, 1989: 10). Padayachee (2001: 753) states that the Bank had no real autonomy before 1989. The Bank managed to regain its autonomy in the conduct of monetary policy after 1989.

The renewed focus on containing inflation resulted in a typical time inconsistency problem in South Africa (see for instance Barro and Gordon, 1983a; Barro and Gordon, 1983b; or Kydland and Prescott, 1977). Given a period of double-digit inflation that commenced in 1974 and numerous previous announcements of intentions to contain inflation in the ensuing period that was not implemented successfully, it is no wonder that the announcement of 1989 was not believed. The result was three years of stagflation until 1992, characterised by double digit inflation and negative economic growth rates. By 1993 the policy started bearing fruit, with a general declining trend in inflation since that date.

Owing to factors such as international financial integration, growth in the money supply lost its usefulness domestically and internationally as an anchor for money policy by the early 1990s (Casteleijn 2001: 6; see also Rossouw, 2005). It was time for a new approach. South Africa replaced money supply growth targets with money supply growth guidelines in the early 1990s, which was replaced, in turn, by eclectic monetary policy in 1996 (Van der Merwe, 1997: 2).

On 13 March 1998 the Bank replaced Bank rate as its refinancing rate for banks with a repurchase (repo) rate (Van der Merwe, 1997: 2 and 3), the rate still in use. A variable repo rate was initially adopted, as it permitted leeway for the Bank to signal its intentions to the market. When South Africa developed liquidity problems during May 1998, following similar problems in other emerging-market economies, it became obvious that the variable repo rate did not respond with enough flexibility to the changed circumstances. The Bank accordingly fixed the repo rate for a limited period of time. Fixing was subsequently abandoned in favour of a variable repo rate, but in an attempt to prevent nervousness over the millennium change-over period, the Bank again fixed the repo rate late in 1999. As this approach has delivered the desired results since then, the policy of fixing the repo rate has been retained.

Without abandoning eclectic monetary policy, the Bank decided in March 1998 that it would strive to align domestic inflation with the rates of inflation in South Africa's major trading-partner countries, implying an informal inflation goal of 1 to 5 per cent (Casteleijn, 2001: 6). The main disadvantage of this approach was '... that it could not be expected to elicit the same commitment to policy co-ordination that would follow if the government had formally endorsed or set the target' (Casteleijn, 2001: 6). Khabo states that '... while Chris Stals was successful in fighting inflation, he was accused of lack of transparency' (2002: 151).

Since 1990 the autonomy of the central bank was also restored, as problems such as the Primrose prime incident were not repeated. The Bank did not adjust interest rates at the time of the first democratic elections in April 1994 or at the time of subsequent general elections. After the elections in 1994 South Africa embarked on a policy of gradual abolition of exchange control. In as much as sound monetary policy is pursued, exchange control is no longer required to protect the economy against the negative consequences of bad policy. With the abolition of the financial rand in 1995 practically all exchange control arrangements in respect of non-residents were abolished. This was subsequently followed

by the relaxation of exchange control for residents and domestic juristic persons. One such step was the announcement of an amnesty for residents (other than juristic persons) who had previously contravened exchange control.

The Minister of Finance announced an exchange control and related tax amnesty on 26 February 2003 (Manual, 2003). In response to the amnesty, nearly 43 000 South African residents submitted amnesty applications, disclosing illegal foreign assets amounting to R 45,0 billion. South Africa's mid-year population estimate in 2004 was 46,6 million people, implying that nearly 1 out of every 1 000 South Africans had illegal assets abroad, despite the application of strict exchange control restrictions over residents since 1961. In addition, South Africa's legal foreign assets as at 31 December 2002 were underreported by some 7 per cent if these illegal assets are taken into consideration (Rossouw, 2008). This experience shows that South Africa's exchange control measures can hardly be regarded as a resounding success.

The gradual abolition of exchange control is not universally supported. As a case in point is Epstein (2002), who argues for the stricter enforcement of the system of exchange control, rather than any gradual relaxation. Epstein (2002) also favours the introduction of other measures to insulate the domestic economy from global pressures, e.g. the introduction of transaction taxes on international transactions. The best-known of such proposals is a Tobin tax, i.e. the introduction of a small tax on capital transactions in foreign currencies, aimed at reducing the attractiveness of such transactions for speculative purposes. Epstein (2002) states that a policy of increased international isolation will allow the central bank the freedom to focus on the important goal of domestic employment creation.

Average annual inflation was about 9,9 per cent during the period 1990 to 1999, while the prime overdraft rates of banks were retained at a level of 3,5 percentage points, initially above Bank rate and subsequently above the repo rate. The average annual real prime rate was at a level of 8,3 per cent. As inflation started off at a level of 14,4 per cent per annum, the trend in inflation rather than its average level, is a better indication of the success of monetary policy over this period. Based on this criterion, monetary policy achieved its goal of a new beginning, as inflation ended the period at an annual rate of 5,2 per cent, a level not seen since 1967 when annual inflation was 5,7 per cent. This experience shows that persistent strict monetary policy over a prolonged period is required to contain sustained high inflation once it has become entrenched in an

economy. No painless policy options are available to force the rate of inflation to a structurally lower level.

INFLATION TARGETING: MONETARY POLICY SINCE 2000

On 23 February 2000, the Minister of Finance announced the adoption of inflation targeting as a monetary policy framework for South Africa (see South Africa, 2000 in this regard). This announcement confirmed the adoption of a rules-based monetary policy framework, thereby limiting the scope for time inconsistency problems in the implementation of monetary policy. The South African government is responsible for setting and adjusting the target. The target is specified in terms of changes in CPIX, which has the somewhat cumbersome specification of changes in the CPI for metropolitan and other urban areas excluding changes in the interest costs of mortgage bonds (Mboweni, 2005b; see also Van der Merwe, 2004). At the time of the announcement of the target, it was set for achievement for the first time by 2002, as changes in interest rates in South Africa generally take from 18 to 24 months to influence the underlying rate of inflation.

The specification of CPIX is somewhat problematic. The main difference between CPI and CPIX is the exclusion of changes in the interest cost of mortgage bonds, with a weight of 10,32 per cent in the overall CPI (Statistics SA, 2001). It is noteworthy that this exclusion is aimed at limiting the immediate effect of interest rate changes on the inflation figure used for targeting purposes, but that all changes in interest costs are not excluded. Changes in interest costs (of loans other than mortgage bonds) and bank charges account for a weight of 1,05 per cent in the CPI (Statistics SA, 2001), although no clear split is provided. Ideally all interest costs should be excluded from the targeted inflation rate. Secondly, the use of the word bonds in this specification might be somewhat confusing in certain English-speaking countries, as a bond can also be defined as ‘... a certificate issued by a government or a public company promising to repay borrowed money at a fixed rate of interest at a specified time’ (Soanes and Stevenson, 2004: 157). Lastly, CPIX does not cover rural areas. An alternative for South Africa could be to specify the target simply as changes in the CPI excluding interest costs to overcome these difficulties.

In its specification of the target, the South African government selected a target range rather than a specific point. Setting a specific point as a target ‘... is clear and straightforward and focuses attention, expectations and policy actions on a single numerical value ... [but] ... implies a degree of

precision which cannot realistically be expected of monetary policy, especially in a small, open economy' (Casteleijn, 2001: 8). Under the circumstances the announcement of a target range was more appropriate for South Africa, as it improved the probability of achievement by the central bank: an important precondition for the announcement of a credible inflation target. If the target is specified as a specific point, the central bank is expected to change course whenever the rate is not on target, despite expectations of movements in the rate in the near future. Of the 23 countries identified by the International Monetary Fund as inflation targeters by 2006 (Allen et al., 2006: 5), three used a single target point with no range, while eleven countries used a single target point with a range around the single point. The remaining nine countries use a target range. A narrow specification of the rate of inflation used for targeting purposes will increase the likelihood of achieving a specific target point, while a broad specification as is used in South Africa dictates the use of a target range, as many price changes can influence the rate of inflation.

In 2001 the Minister of Finance announced that '[t]he inflation target will remain an annual average increase of between 3 and 6 per cent in CPIX in 2003. For the 2004 and 2005 year, the target will be 3 to 5 per cent' (Manuel, 2001: 6). In view of subsequent negative developments, the Minister announced in 2002 that '... Governor Mboweni and I have agreed that the inflation target should remain 3 to 6 per cent for 2004. The 3 to 5 per cent target falls away until further notice' (Manuel, 2002: 4). While the Bank initially set the goal of maintaining CPIX on an annual average basis, the Minister announced in 2003 that the inflation target would in future be regarded as a continuous target to be achieved on a monthly basis (Manuel, 2003: 6). The target range of 3 to 6 per cent was still in use at the time of the completion of this paper, although actual CPIX was well in excess of the target, with a rate of 8,8 per cent recorded for January 2008.

Currently the policy of inflation targeting serves South Africa's best interests. Since the adoption of an inflation target the minimum overdraft rates of commercial banks were retained at a margin of 3,5 percentage points above the repo rate, which enables the Bank to exert a direct influence over the rates charged by commercial banks. The real repo rate averaged about 4,7 per cent between 2000 and 2007, and inflation measured in terms of changes in the CPI was at an average annual rate of about 5,4 per cent, implying that the average nominal minimum lending rate was about 13,6 per cent. Monetary policy achieved the overarching objective of relative price stability, confirmed by the fact that CPIX

remained within the target range of 3 to 6 per cent between September 2003 and April 2007. As was the case in the 1990s, the Bank retained its autonomy in the implementation of monetary policy after the adoption of an inflation-targeting monetary policy.

Despite the transparency of an inflation-targeting policy and the central bank's best efforts to improve communication as is explained below, the general public, journalists and market watchers nevertheless remain susceptible to misinterpretation of policy actions of the Bank. A case in point is the decrease in the repo rate announced by the Bank in April 2005. Some commentators interpreted this as the Bank changing its objective from inflation targeting to an exchange rate target or anchor of some or another sort. The Governor, however, explained later that '... changes in the exchange rate are important in the inflation process in South Africa. The stronger rand (at the time of the announcement in April 2005) was expected to have a direct impact on inflation through the price of imports. At the same time, there is an indirect effect through the negative impact of the strong exchange rate on the export and import-competing sectors of the economy. This resultant widening in the gap between actual and potential output would also have a moderating effect on the inflation outlook. The reduction in the repurchase rate was, therefore, not a result of a focus on the strong rand, but of the favourable inflation outlook' (Mboweni, 2005a: 6). As the Bank does not have goal independence and the Government entrusted the achievement of the inflation target to the Bank, it cannot be changed unilaterally by the Bank. It can only be changed by the South African Government by means of public announcement. Given the misinterpretation in April 2005, it is fair to conclude that the Bank faces a formidable communication challenge, as is explained in the next section.

IMPROVED COMMUNICATION BY THE BANK¹⁹

The adoption of an inflation target as a nominal anchor for South African monetary policy should have removed any time inconsistency problems in the conduct of monetary policy, as the general public, journalists and market watchers should trust announcements by the Bank that it remains committed to low inflation. Trust, credibility and confidence are enhanced by central bank communication (see for instance Mishkin, 2004: 501). As inflation targeting states clearly the central bank's intentions, '... the public is able to understand and monitor central bank actions. This improves the transparency of monetary policy, making communication with the public more effective, while providing increased discipline and accountability for central bank activities' (Aninat, 2000).

The Bank has introduced a number of initiatives to improve communication with all its stakeholders since the introduction of an inflation targeting policy framework in 2000. Wessels observes that ‘... the introduction of a numerical inflation target increased the transparency of the Bank’s policy objectives substantially, and contributed to the public’s understanding of what the Bank is explicitly held accountable for’ (2002: 978). The Governor pointed out in 2002 that ‘[i]nflation targeting has also been accompanied by major improvements in the Bank's communication with the public and markets and there has been a significant upgrade in monetary policy transparency’ (Mboweni, 2002). In the case of the Bank, the most important stakeholders are (in alphabetical order) government, labour, media, Parliament, public, and shareholders and staff members of the Bank.

The most important initiative to improve communication about the formulation of monetary policy was to entrust interest rate decisions to a Monetary Policy Committee (MPC) with responsibility for setting the repo rate (see for instance Mboweni, 1999; or SA Reserve Bank, 1999). The MPC introduced certainty about responsibility for setting the repo rate. As its meeting dates are published well in advance, any element of surprise about the timing of monetary policy decisions (although not about the decision itself) is removed. The MPC releases a detailed statement highlighting its assessment of economic conditions that led to its interest rate decision after each meeting and the decision is explained after each meeting at a media conference.

Further initiatives to improve monetary policy transparency and communication are ‘... the biannual Monetary Policy Review ... and the national and regional Monetary Policy Forums’ (Mboweni, 2002). The first Monetary Policy Review (the Review) of the Bank was published in March 2001, as ‘... part of the Reserve Bank’s attempt to broaden the understanding of the aims and conduct of monetary policy’ (SA Reserve Bank, 2005b). The Review analyses developments in and factors influencing inflation, assesses recent policy developments and considers the outlook for inflation (see for instance SA Reserve Bank, 2005b). The Review reports on the MPC’s assessment of inflation and the Bank’s inflation forecast, hence providing an ex post insight into matters deliberated by the MPC.

The first meeting of a Monetary Policy Forum was held in Pretoria on 20 March 2000 (SA Reserve Bank, 2000). Currently the Bank hosts Forums biannually in Bloemfontein, Cape Town, Durban, East London,

Kimberley, Mafikeng, Polokwane, Port Elizabeth, Pretoria and Nelspruit. These forums provide for discussions on monetary policy over a broad geographical spectrum involving a large cross-section of stakeholders, including trade union representatives, analysts, academics and the media.

The Bank published Annual Financial Statements until 2002, but reporting and disclosure in the statements increased and improved to the extent that its name was changed to Annual Report and Financial Statements in 2003 and to Annual Report in 2006. The revised name reflects its nature: in the interest of improved communication, the Bank reports on matters much broader than only its financial affairs. Owing to its approval by shareholders and its tabling in Parliament, the Annual Report attracts considerable media attention, enhancing the accuracy of reporting on the Bank. The release of the Annual Report is supported by the publication of the Governor's Address to shareholders after the annual general meeting. Currently the Governor's Address is published in six official languages in a variety of newspapers and magazines, so as to broaden its reach and make it more accessible to the public.

During 2004 the Bank introduced shareholder briefings. The management of the Bank identified the importance of briefing this group of stakeholders on occasions other than at annual ordinary general meetings. Shareholders are invited to these biennial briefings, which are hosted in three or four major cities in South Africa.

The Bank is ultimately accountable to Parliament as the representative body of all the people in South Africa, and submits its Annual Report to Parliament. The Governor meets periodically with members of the Parliamentary Portfolio Committee on Finance. In addition, during March 2007 the Board of Directors of the Bank (as represented by its Remuneration Committee chaired by a non-executive director) met with this same Parliamentary Committee to enhance accountability (Ensor, 2007: 2).

Apart from the formal external communication approaches, the Bank also employs a number of other communication channels. These include briefing sessions with media representatives and speeches by the Governor, deputy governors and other senior officials. In addition, the Bank's website is used extensively to alert the media and staff to important announcements by the Bank (www.reservebank.co.za).

The Bank has also introduced steps to improve communication with its current and retired employees since 2000. An annual general management

conference, comprising the Governor, the deputy governors, all staff at the level of assistant general manager and above, and branch managers, was introduced by the Bank in 2004. The staff magazine, Bankindaba, was revised to ensure better communication with current and former employees.

Judging from these initiatives, it is obvious that the Bank values the importance of communication supporting a policy of inflation targeting, despite the lack of international benchmarks for successful central bank communication (see for instance Blinder, [S.a.]; or Ehrmann and Fratzcher, 2004).

CONCLUSIONS ABOUT SOUTH AFRICA'S EXPERIENCE WITH INFLATION

The central finding of this paper is that the problem of inflation in South Africa has occurred in different forms and has occupied the attention of monetary authorities over many years. Inappropriate economic policy, and monetary policy in particular, contributed to conditions conducive for the development of inflationary conditions. In containing inflation there is no single solution that could be applied universally, except to state the obvious: countries (including emerging economies) should prevent unsound policies that will foster inflation.

Since the establishment of the Bank in 1921, South Africa has experienced varying degrees of success in containing or combating inflation. In the period before World War II, the Bank achieved remarkable success in containing inflation, although inappropriate policies were followed on occasion, albeit with the support of the Government or even in support of the policy stance of the Government. During and immediately after World War II the Bank was less successful in containing inflation, but regained monetary control by the late 1950s and the 1960s.

From 1968 domestic inflation started accelerating, and in the ensuing years the SA Reserve Bank seemed incapable of controlling it effectively. Reviewing the 20-year period from 1974 to 1993, however, reveals that the Bank was one of very few central banks in the world that managed to contain inflation between 10 per cent and 20 per cent per annum, without it developing into runaway inflation, as is evidenced by Table 1. This shows clearly that emerging economies suffering high inflation have no painless or costless options to contain inflation.

Table 1 Average inflation rates in developed and selected emerging economies, 1961 – 1970 to 1991 – 2000

	1961–1970	1971–1980	1981–1990	1991–2000
Developed economies	4,0	10,8	8,1	3,0
Selected emerging economies*	18,3	29,8	139,7	58,9
South Africa	2,8	10,6	15,4	9,0

* Argentina, Brazil, Bulgaria, Chile, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Korea, Malaysia, Mexico, Pakistan, Peru, Phillipines, Poland, Russia, South Africa, Thailand, Turkey and Venezuela

Sources: Adapted from Mokoena et al., 2004; authors' addition of South Africa

An ex post analysis gives the impression that the Bank followed an inflation target of between 10 and 15 per cent per annum, with monetary tightening whenever inflation breached 15 per cent, and monetary relaxation whenever inflation declined to levels slightly above 10 per cent. This was indeed not due to the policy approach, but the result of inconsistent policy application. It nevertheless confirms that the Bank all along had the tools and knowledge to contain inflation, but lacked the autonomy during this period to follow consistently policies aimed at achieving this goal. It also shows that policies should be revised when they no longer achieve the goal of low inflation. This is an important conclusion for emerging economies, as such countries could, at times, be more constrained in their monetary policy options than developed countries.

A comprehensive system of exchange controls is a precondition for inappropriate monetary policy causing sustained high domestic inflation. Without such controls domestic investors revert to foreign investments with a concomitant demand for foreign currency, leaving the central bank no choice but to adapt sound monetary policy to lower inflation to a level commensurable with the levels of inflation in industrialised countries. Emerging economies exercising exchange control should assess whether such a policy approach is a shield for inappropriate monetary policy. If this is indeed the case, a consequence will be the temptation to use such protection for sustained unsound monetary policy.

A function of lender of last resort was explicitly entrusted to the Bank after the establishment of the NFC. This function merely entails normal

central banking discounting to qualifying institutions when other sources of liquidity are not readily available. It seems that the use of this terminology has changed over time and currently describes the provision of liquidity to a bank (or the banking system) when no other options are available, with the aim of preventing bank and/or financial panics. A clarification of the lender-of-last-resort assistance function is therefore necessary. The terminology emergency liquidity assistance might be a more appropriate description of the current general understanding of the responsibility of central banks under conditions of distress lending. Such a description will also indicate clearly that this assistance is available only to banks suffering liquidity problems, and not to banks suffering solvency problems.

Since the 1990s the Bank has again been successful in containing inflation, albeit with the use of different policy models. Its current use of rules-based monetary policy and inflation targeting places South Africa squarely in the realm of orthodox policy and the Washington Consensus. The emergence of a Post-Washington Consensus (see for instance Padayachee, 2001: 746) gives rise to the question whether the Bank will retain an inflation targeting monetary policy framework. However, the framework cannot be revised by the central bank, as it was entrusted to the Bank by the South African government. Any policy amendment should accordingly also be announced by the government. Emerging economies considering the adoption of rules-based monetary policy should ensure a similar split in responsibilities.

While the current monetary policy model is retained, the South African authorities should reconsider the somewhat cumbersome specification of the inflation rate used for targeting purposes. In the interest of easier communication and the further clarification of the policy aim, an alternative for South Africa could be to specify the target simply as changes in the CPI excluding interest costs. Emerging economies considering the adoption of an inflation-targeting monetary policy regime should keep these considerations in mind when specifying their inflation rates for targeting purposes.

ENDNOTES

1. SA Reserve Bank and Department of Economics, University of Pretoria.
2. School of Development Studies, University of KwaZulu-Natal. This paper draws on research used in the completion of the PhD-

thesis of Jannie Rossouw under the supervision of Prof Vishnu Padayachee at the School of Development Studies at the University of KwaZulu-Natal (see Rossouw, 2008). The views and opinions expressed in this paper do not necessarily reflect the views and opinions of the SA Reserve Bank or any of the Universities.

3. Tables A1 and B1 in Appendices A and B highlight South Africa's experience with inflation, as measured by changes in the CPI since 1921.
4. Except where stated otherwise, this section draws on De Kock, 1954.
5. Except where stated otherwise, this section draws on SA Reserve Bank, 1971.
6. The Treasury (as it was known at the time) and the SA Reserve Bank.
7. Although this historic overview confirms an implicit or explicit focus on inflation in the conduct of central banking since the 1930s, the SA Reserve Bank's enabling legislation was changed only in 1989 to make provision for this objective. From the literature, however, it transpires that the SA Reserve Bank focused attention on mitigating inflation well before 1989 (see for instance De Kock, 1954; De Kock, 1956; or SA Reserve Bank, 1971).
8. Except where stated otherwise, this section draws on SA Reserve Bank, 1971.
9. Except where stated otherwise, this section draws on De Kock, 1954.
10. Except where stated otherwise, this section draws on SA Reserve Bank, 1971.
11. Except where stated otherwise, this section draws on SA Reserve Bank, 1971.
12. Except where stated otherwise, this section draws on Republic of South Africa, 1985.
13. Except where stated otherwise, this section draws on Stals, 1996.

14. Reference was made to the proverbial crossing of the Rubicon in the speech (the name by which it subsequently became known); a reference to [Julius Caesar](#)'s crossing of the Rubicon river in [49 BC](#). The phrase [crossing the Rubicon](#) has survived to refer to any person committing irrevocably to a risky course of action (Encyclopaedia Britannica, 2005).
15. The financial rand, which replaced the securities rand as the main measure of exchange control over non-residents, was abolished in February 1983, and with it exchange control over non-residents (Republic of South Africa, 1985: 131).
16. Except where stated otherwise, this section draws on Stals, 1996.
17. Authors' translation.
18. Except where stated otherwise, this section draws on Van der Merwe, 1999.
19. This section is based on a conference paper presented in Nicosia in March 2007 (Rossouw, 2007).

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APPENDICES

APPENDIX A

Table A1 South African annual inflation rate measured as changes in CPI, 1921 to 2007

1921	-9,5	1944	3,5	1967	3,5	1990	14,4
1922	-16,6	1945	2,7	1968	1,8	1991	15,3
1923	-3,0	1946	1,5	1969	2,9	1992	13,9
1924	1,4	1947	4,0	1970	4,1	1993	9,7
1925	-0,4	1948	5,6	1971	5,7	1994	9,0
1926	-1,5	1949	3,7	1972	6,1	1995	8,7
1927	0,6	1950	4,0	1973	9,4	1996	7,4
1928	0,0	1951	7,4	1974	11,6	1997	8,6
1929	-0,3	1952	8,7	1975	12,5	1998	6,9
1930	-2,3	1953	3,4	1976	11,2	1999	5,2
1931	-3,8	1954	1,6	1977	11,2	2000	5,4
1932	-4,5	1955	3,2	1978	11,0	2001	5,7
1933	-2,7	1956	1,9	1979	13,2	2002	9,2
1934	1,2	1957	3,0	1980	13,8	2003	5,8
1935	-0,6	1958	3,5	1981	15,2	2004	1,4
1936	0,3	1959	1,1	1982	14,7	2005	3,4
1937	2,4	1960	1,2	1983	12,4	2006	4,7
1938	3,6	1961	2,2	1984	11,5	2007	7,1
1939	0,0	1962	1,3	1985	16,3		
1940	3,3	1963	1,4	1986	18,6		
1941	4,6	1964	2,6	1987	16,1		
1942	8,4	1965	3,9	1988	12,9		
1943	6,0	1966	3,6	1989	14,7		

Sources: Statistics SA, [S.a.]

APPENDIX B

Table B1 South African CPI, 1922 = 100

1921	110,5	1944	117,1	1967	244,5	1990	2876,4
1922	100,0	1945	120,1	1968	249,4	1991	3317,5
1923	97,0	1946	121,9	1969	257,5	1992	3777,8
1924	98,4	1947	126,9	1970	268,0	1993	4144,9
1925	98,0	1948	134,2	1971	283,2	1994	4515,4
1926	96,5	1949	139,2	1972	301,6	1995	4907,4
1927	97,0	1950	144,7	1973	330,5	1996	5268,3
1928	97,2	1951	155,4	1974	368,8	1997	5721,2
1929	96,8	1952	168,9	1975	415,1	1998	6114,9
1930	94,6	1953	174,8	1976	460,9	1999	6431,7
1931	91,1	1954	178,0	1977	512,3	2000	6775,1
1932	87,0	1955	183,6	1978	569,3	2001	7161,4
1933	84,7	1956	187,1	1979	645,0	2002	7817,7
1934	85,9	1957	192,7	1980	733,1	2003	8275,7
1935	85,4	1958	199,4	1981	844,9	2004	8390,4
1936	85,6	1959	201,7	1982	968,6	2005	8675,7
1937	87,7	1960	204,1	1983	1087,8	2006	9083,5
1938	90,9	1961	208,5	1984	1213,1	2007	9728,4
1939	90,8	1962	211,2	1985	1410,8		
1940	94,0	1963	213,9	1986	1674,0		
1941	98,3	1964	219,4	1987	1944,5		
1942	106,5	1965	228,1	1988	2193,0		
1943	113,0	1966	236,3	1989	2516,1		

Sources: Statistics SA, [S.a.]