Monetary Policy in South Africa on the Threshold of a New Era

Sandra Mollentze

Department of Economics, University of Pretoria

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1 INTRODUCTION

Since the establishment of the South African Reserve Bank (SARB) on 17 December 1920, the country's monetary policy has experienced some major changes. The approach to monetary policy took a new turn particularly during the 1970s. In the process, the philosophy, style and methods of monetary policy came to be fundamentally changed. As in other market economies, the new South African attitude was at bottom an attempt to move away from direct controls. In contrast with the predominantly direct monetary controls of the late 1960s and the 1970s, the new controls almost exclusively relied on market-related policy measures. This change in South Africa was thus in keeping with a similar international movement which had been launched, *inter alia*, by the dismantling of the Bretton Woods system of fixed exchange rates and the oil price shocks of the 1970s. Other causal factors were the spreading Monetarist way of thought and the scrapping of exchange controls. All these were directly or indirectly linked with the accelerating inflation taking place at the time.

The purpose of this monograph is to examine how the nature of monetary policy application has changed in South Africa. I first consider the philosophical development of monetary policy, that is, the way in which the logic of monetary action has changed. This includes a theoretical framework for monetary policy, as well as its objectives and macroeconomic role. Monetary policy is thus analysed according to the various phases through which it has passed in South Africa since the Second World War. This is followed by a discussion of monetary policy during the past decade, which may be called the Stals era in the history of central bank policy in South Africa.

2 HISTORY OF MONETARY POLICY IN SOUTH AFRICA

2.1 The Phases of Monetary Policy since the Second Word War

The Commission of Inquiry into the Monetary System and Monetary Policy in South Africa (the De Kock Commission Report, RP 70/1984) found that monetary policy had moved through five distinctive phases since the Second World War (RSA, 1984: 144). The first three phases cover the period between the end of the war and the year 1965.

The fourth phase runs from 1965 to 1980, when mainly direct controls were in use. The following period, phase five, was a time of systematic transition from direct control measures to a more market-related monetary policy. When the De Kock Report was submitted to and accepted by government in 1985, its recommendations had effectively been in operation a couple of years already.

The *de facto* abolition of the control system based on liquid assets had, practically speaking, taken place in 1982. The sixth phase, considered to have begun with the official acceptance of the De Kock Report in 1985, was therefore in principle not really different from the preceding one. The above-mentioned phases may be extended to include a seventh phase beginning in 1989, when Dr CL Stals was appointed Governor of the SARB. This event came to represent a distinctive philosophy and policy of monetary control in the so-called new South Africa, embodied by the government's adoption of *the Macro-Economic Strategy of Growth, Employment and Redistribution*, or the GEAR document, in 1996. These seven policy phases are next briefly considered in turn.

2.1.1 *The first phase: A conventional approach to money and credit*

The period between 1925 and 1932 had experienced two liquidity crises, namely, the National Bank crisis of 1922-1924 and the general crises that preceded the abandonment of the Gold Standard at the end of 1932. Truu (1968: 119) described the effects of these crises as follows: "On both occasions the Reserve Bank was called upon to exercise its function as the bank of rediscount and banker of last resort."

The abrogation of the convertibility of cash and deposit money into gold, and the depreciation of the South African pound led to a large increase in liquidity: "The overall liquidity of the economy remained at such a high level that no active central or commercial bank credit was necessary to finance the country's [1939-1945] war effort" (Truu, 1968: 120). Similar high levels of liquidity were also present during a number of years after the war had ended in 1945.

The De Kock Commission's first phase of monetary policy covered more or less the first post-war decade. During this period, the approach to monetary policy rested on two basic premises, namely:

- Money (coin, bank notes and demand deposits) was seen as a unique financial asset which played a strategic role in the determination of the total demand for goods and services; and
- The Reserve Bank and the commercial banks were considered to be the only financial institutions that could "create" money on a multiple scale. According to the conventional view, bank credit and money could significantly affect output, income, prices and the balance of payments, and should be controlled in the interest of general economic stability. Furthermore, the fixed exchange rates of the Bretton Woods system were to be maintained (RSA, 1984: 144).

2.1.2 *The second phase: The rise of conservative Keynesianism during the late 1950s and the 1960s*

During this phase, monetary policy came to be jointly influenced from two sources in particular: Keynesian theory and macroeconomic quantification, in the form of National Accounting under the leadership of Kuznets. The emphasis during this period fell mainly on the effective control of aggregate money demand. In South Africa, this period was also characterised by Monetarist elements, albeit to a limited extent. The stock of money was considered more important in South Africa at the time than in many other parts of the world under the influence of Keynes. The stress on the money supply and its economic implications naturally support the Monetarist line of thinking. However, at the time no thought was given yet to the Monetarist practice of targeting monetary aggregates. Elements that *were* emphasised included the prominent role of the money supply, in particular, its following aspects:

- Increased money supply was considered a necessary condition for increased expenditure, income and prices;
- The general view was that the money supply may have a significant effect on interest rates, which in turn could influence investment and consumption;
- The authorities saw a casual link between an increase in the money supply and the general availability of credit; and
- The notion that changes in the money supply could directly affect expenditure was also generally accepted.

Monetary policy was mainly directed at the capacity of commercial banks to create credit and money. The Reserve Bank therefore tried to control the total money stock by controlling the cash reserves and liquid assets of the commercial banks. Rediscounting and moral suasion were the chief instruments of monetary policy during this phase. Exchange rate stability too, was of great importance under the Bretton Woods system (RSA, 1984: 144).

2.1.3 *The third phase: The Technical Committee approach between 1961 and 1964*

This phase represented a reaction, especially by the American economists Gurley and Shaw and the Radcliffe Committee in the United Kingdom, to the monetary theories of the late 1950s. As a broad generalisation of their views, both Gurley and Shaw and the Radcliffe Committee, denied that "money" as a financial asset possessed any unique properties that would make changes in the money supply decisive in determining the nature of economic events. The views of the Radcliffe Committee in particular, may be seen as the acme -

though marked by scepticism - of the economic importance of the money supply, as perceived by the monetary authorities.

In 1961 a Technical Committee was appointed in South Africa to advise the authorities with regard to making desirable changes to the laws governing banks and building societies. The ensuing *Report of the Technical Committee on Banking and Building Society Legislation,* published in 1961, formed the basis of the new Banks Act of 1965. This amounted to a new monetary policy approach that rejected both the conventional and the revolutionary (Gurley and Shaw) approaches outlined above.

The Committee recommended the following dual approach to monetary policy:

- It is necessary to recognise the fact that apart from "money" there are also large quantities of "near-money" in the economy. New-money was defined as deposits and other financial assets that are close substitutes for money, and can be converted into money conveniently, quickly and without significant risk of capital loss;

- It is also necessary to accept the fact that apart from the commercial banks, there are also many other deposit-taking institutions in South Africa, like merchant banks, discount houses, hire purchase banks and general banks, that can also take part in the process of creating money or near-money on a multiple scale (Truu, 1968: 123).

The new Banks Act of 1965 prescribed a uniform set of statutory financial requirements for all banking institutions, which however differed in respect of the banks' short, medium and long-term liabilities to the public. Near-banks were thus drawn into the ambit of the Reserve Bank's monetary policy too. Moreover, the definition of the "liquid assets" to be held by banking institutions was narrowed down, and the Reserve Bank was empowered to vary the percentage liquid assets that *all* so-called monetary banking institutions (not just the commercial banks) had to observe in relation to their liabilities.

Money was considered an important determinant of interest rates and total expenditure. In contrast with the Monetarist view, however, money was not deemed the main cause of price movements. Changes in the rate of growth of the money supply were also not seen as the main cause of changes in economic activity or the rate of inflation. In keeping with this outlook, the Committee did not recommend the adoption of monetary targets. The maintenance of stable exchange rates under the Bretton Woods system of parity values, however, remained an important consideration in the application of monetary policy.

The Committee thought it necessary for the authorities to monitor and organise the activities of financial institutions outside the banking sector, as well as the general run of events in financial markets. Control by means of liquid assets was to replace control by means of cash reserves. The capacity of banks to create credit was therefore said to be determined by their total holdings of liquid assets, in contrast with their cash reserves only (RSA, 1984: 146).

2.1.4 *The fourth phase: The use of non-market or "direct" monetary control measures during the period*

The Technical Committee Report of 1964 chiefly dealt with the envisaged Banks Act of 1965. The details of the Committee's underlying approach to monetary policy were, however, neither set out in the report nor applied in practice. The 1960s and early 1970s were still dominated by Keynesian ideas, which meant that fiscal policy was mainly used in the pursuit of macroeconomic objectives. The immediate post-war view that monetary policy should only play an "accommodating" role, in other words, create no more than the necessary monetary "room" for fiscal policy to prevent a return of pre-war unemployment, was however replaced by the view that monetary policy also had a supportive role to play. Dr Stals (1997b: 4) has described the application of this policy as follows:

> Under the influence of the Keynesian demand management approach, monetary policy was seen as a useful instrument to be used by the authorities to depress demand in times of an excessive rise in total real expenditure on goods and services, or to stimulate real demand in times of recessionary conditions.

However, the denial that the supply of money is important and lack of belief in the efficacy of interest rate changes, both continued to prevail. The upshot was that various countries, including the United Kingdom and South Africa, in the latter part of the 1960s resorted to such direct instruments as credit ceilings, which limited the availability of credit from conventional sources (banks and building societies), on the assumption that this would immediately restrict the propensity to spend of private decision-takers.

The direct monetary controls in use between 1965 and 1980, included not only ceilings on bank credit to the private sector, but deposit rate control, foreign exchange control and outright control of hire-purchase and consumer credit. At times, the banks were also requested to be selective in their credit extension (RSA, 1984: 147).

Market-related methods of monetary control, like open-market operations and other kinds of intervention in financial markets by the central bank, were seldom used. Public debt management and financing the budget deficit before borrowing, sometimes also served to impede the objectives of monetary policy. The Bank Rate was rarely changed, and the Reserve Bank's rediscounting policy was likewise not considered an important policy instrument. Interest rates played a comparatively minor role in monetary policy and were at times kept below the market level.

The main practical reason for the limited use of market-related control measures, was the relatively underdeveloped state of South Africa's financial markets. Furthermore, the authorities wanted to avoid large increases in "politically sensitive" interest rates, for example, in the case of agricultural credit, mortgage loans, export credit as well as credit to the South African government itself. Thus, the volume of certain kinds of "socially desirable" credit, like building society bond loans and cash advances to the Land Bank, were to be kept high and the cost thereof low.

During this phase, the monetary authorities had to contend with intermittent crises in world financial markets, which ultimately led to the Smithsonian realignment of currencies in December 1971, as well as the collapse of the Bretton Woods System. Various exchange rate linkages were tried. With the acceptance of the De Kock Commission's First Interim Report in January 1979, South Africa however introduced an exchange rate system of controlled floating.

2.1.5 *The fifth phase: Transition to a more market-related monetary policy during the period 1980 to 1985*

During the 1980s the role of monetary policy changed significantly in most countries. The fifth phase of South Africa's monetary policy was characterised by the changeover from a predominantly direct to an increasingly market-related monetary dispensation.

This demand management-based approach however fell out of favour during the early 1980s, mainly on account of rising evidence that attempted counter-cyclical monetary policy in fact led to greater instability in financial markets and aggregate economic activity. The idea of a compromise between the Keynesian and Monetarist models had found expression in 1979, after the acceptance of the First Interim Report on Exchange Rates by the Commission of Inquiry into the Monetary System and Monetary Policy in South Africa, under the chairmanship of Dr GPC De Kock. Its theoretical foundation was described by Dr De Kock himself as a combination of conservative Keynesian demand management (embodied in the recommendation that demand management should be used to

maintain a sound balance-of-payments position) and pragmatic Monetarism (evident from the importance attached to controlling the money supply and setting targets for the stock of money). During his term of office as Reserve Bank Governor, from 1981 to 1989, Dr De Kock was very active in the pursuit of short-term stabilisation policy.

The fifth phase effectively started in the early 1980s with the abolition of direct control measures like fixed deposit rates and bank credit ceilings. From December 1980, the monetary authorities deliberately started to pursue a policy of allowing interest rates to vary more readily as the forces of demand and supply changed in the market. Gradually direct controls were replaced by more market-oriented measures.

During this phase the recommendations of the De Kock Commission Report were largely accepted. Although the monetary authorities thus came to use more market-related policy instruments (RSA, 1984: 148), they failed to publish the details of their intermediate targets pertaining to the growth of the money supply. Dr De Kock meant to apply these flexibly and with great discretion, according to his own view of economic conditions. De Wet (1995: 577) criticised this approach as follows:

> The new monetary control system has been marketed as part of a free-market philosophy. In essence, it has however only replaced one form of intervention, namely direct intervention, by another, namely indirect intervention. The basic shortcoming of any intervention, namely that it is only as good as the judgement of the policymakers, who the ordinary people, has not yet been addressed (translation).

2.1.6 *The sixth phase: Further implementation of the De Kock Commission's recommendations*

During the early 1980s the recommendations of the De Kock Commission of Inquiry into the Monetary System and Monetary Policy in South Africa were put into operation. The outstanding characteristic of the Commission's proposed network was its basically market-oriented nature. This market-oriented framework recommended by the Commission was meant to make an important contribution to the following objectives (RSA, 1984: A10):

- The moderation and stabilisation of monetary aggregates;
- more effective control of disintermediation and other contingencies related to the velocity of circulation of money;
- the maintenance of realistic and market-related interest rates; and

- the establishment of realistic and market-related spot and forward exchange rates.

The goals, targets and instruments of this market-oriented policy were an integral part of the Commission's envisaged framework, and are addressed later on (part 4) in this essay.

In his Budget Speech of March 1986, the Minister of Finance announced the government's acceptance of the De Kock Commission's important recommendation that the Reserve Bank, with the concurrence of the Minister of Finance, adopt specific target growth rates for one or more defined monetary aggregates (e.g. M1, M2, M3). The main reason for the introduction of monetary targeting, would be to support the policy of the monetary authorities to control the money supply with a view to combating inflation.

The Commission recommended that the following instruments be used: public debt management including government borrowing, open-market operations by the Reserve Bank, the discount and general accommodation policy of the Reserve Bank, and Reserve Bank intervention in spot and forward foreign exchange markets. The use of these policy instruments would moreover at times be supported by such quasi-market instruments as changes in the cash reserve requirements of banks and building societies (*QB*, March 1986: 37-8).

For the greater part of this period, the fight against inflation was – at least in principle – said to be the prime objective of monetary policy. However, temporary priority shifts did take place during the years 1985 to 1987, when the promotion of economic recovery and growth was raised to the main goal of monetary policy. Mohr (1986: 23) did in fact express serious misgivings about the Commission's predisposition to approach inflation in a vacuum, for example: "Having accepted that there are also other objectives of monetary policy, the Commission has nevertheless failed to weigh the costs of inflation against the costs of the possible non-attainment of the other objectives."

In actual fact, the application of monetary policy during Dr De Kock's term as Governor, did in fact in the short run also react to other factors and influences (*inter alia* the balance of payments, exchange rate behaviour, the level of foreign reserves and even the dollar price of gold). When the economy cooled down strongly in 1986 (after the foreign debt crisis of 1985), the Reserve Bank again actively followed a policy of reducing the upward pressure on interest rates, in order to stimulate economic growth. The counterpart of this was the creation of large cash reserves for the banks. At the time, the banks no longer had any excess cash reserves, which meant that reserves were created solely in order to meet the banks' need for cash. That need increased as the banks' assets and

liabilities expanded. The latter was in turn a consequence of an expansionist monetary policy. This accommodating policy continued until March 1988, when the Reserve Bank put an end to it and raised the Bank Rate by one percentage point (*QB*, March 1988: 36).

Controlling inflation then became the foremost policy objective again. On the view that inflation could not happen without a rapid increase in the supply of money, the Bank Rate was regularly increased during 1988 and 1989. It was believed at the time that a higher Bank Rate would have the necessary dampening effect.

2.1.7 *The seventh phase: The application of monetary policy after the appointment of Dr C L Stals as Governor of the South African Reserve Bank in August 1989*

In some ways the philosophy of monetary policy did not appear to change with the appointment of Dr C L Stals as Reserve Bank Governor. He himself described the philosophy as follows (Stals, 1997d: 7): "The Reserve Bank's policy is a 'monetarist' approach based on the direct control of the money supply." Thus, there was at first no essential change in the Reserve Bank's attitude towards its intervention in the money market after Dr Stals had succeeded Dr De Kock. The Reserve Bank continued to influence the total "money market shortage" by its open-market policy, and at times laid down quite strict conditions for accommodating the banks (SARB *Governor's Address*, August 1990: 6-12).

Dr Stals did, however, distinguish between his own policy and that of Dr De Kock, especially with regard to the following two points:

(i) Monetary stability is to be the sole target; and
(ii) The Central Bank desires independence, rather than just a good understanding and policy co-ordination with the Treasury.

The way in which this approach was manifested in practice, also changed. Dr Stals (1997f: 3) explained this change in approach as follows: "The deliberations of the De Kock Commission took place in an overall socio-political and economic environment that was completely different from what we have to contend with in South Africa today."

South African economists came to be tried and tested by external shocks after President PW Botha's "Rubicon" speech in August 1985. Dr Stals (1992: 3) refers to some of these shocks: "... the adverse effects of the sanctions, the

boycotts, the disinvestment campaign and the withdrawal of foreign loan funds, coupled with social upheaval and labour unrest in the domestic economy."

The De Kock Commission had not foreseen that the environment of monetary policy would be characterised by the effects of the sanctions campaign and the other problems mentioned above.

The biggest difference between the respective approaches of Dr De Kock and Dr Stals was that the Reserve Bank now pursued only one monetary policy objective, namely the defence of the (internal and external) value of the South African currency unit (SARB, Annual Economic Report, 1991: 33). Subsequently the reference to the "internal and external" value of the rand was dropped, and it does not appear in the final Constitution of South Africa (Act 200: 1993). The reason for this is presumably to be found in the well-known argument that the successful maintenance of the domestic purchasing power of a currency unit may in fact require – or accompany – an adjustment in its external value (its exchange ratio *vis-à-vis* foreign currencies). The latter is moreover determined by international events beyond the control of the domestic monetary authorities. A noticeable change in monetary policy therefore took place in the 1990s, which came to be directed almost exclusively at the achievement and maintenance of greater monetary discipline. The Reserve Bank's mission statement represents a striving for monetary and financial stability as its medium-term objective, with the following main components (Stals, 1992: 1-2 and ABSA Bank, 1995: 3):

- Reducing the rate of increase of the money stock in order to serve general price stability;
- moderate rates of increase of bank credit at levels lower than the inflation rate;
- in order to give effect to these objectives, the interest rate level must be higher than the rate of inflation;
- the maintenance of gold and foreign exchange reserves at a level that would cover at least three months' imports;
- a stable rand exchange rate;
- efficient money, capital and foreign exchange markets; and
- well-organised banks and other financial institutions.

This policy model was subsequently modified in order to exclude the following elements (Stals, 1997d: 9):

- To support maximum sustainable economic growth and development; and
- to hold the rate of inflation at low levels (protecting the value of the monetary unit).

The South African monetary policy model was mainly linked with the growth of the M3 money stock (a broad definition of money), and predetermined targets for an acceptable rate of growth of the money supply was seen as an intermediate objective. It was based on the assumption that, over time, there is a causal relationship between growth of the money supply and inflation. "Controlling money supply is seen as an intermediate objective in reaching the ultimate objective of controlling inflation" (Stals, 1997f: 3-4).

The successful implementation of this model would, *ceteris paribus*, result in a low inflation rate, which should in turn mean a more stable rand exchange rate. In such an environment of financial stability, it would be easier to achieve the maximum sustainable rate of economic growth and development. Although one obstacle would thus be remove, this could obviously not guarantee success.

Once inflation is present in the economic system, inflationary expectations may also set in, and attempts to combat it can actually cause more inflationary pressure, for example, by rising costs brought about by high interest rates. The elasticity of expectations is important too. In 1946 John Hicks developed the theory of adaptive expectations, that analysed inflation in terms of the elasticity of expectations. According to that, expectations can influence inflation in three ways:

(i) If the coefficient of elasticity is equal to one (unity), then the future rate of inflation will be unchanged;
(ii) If the coefficient is relatively elastic, then future inflation will accelerate; and
(iii) If the coefficient is relatively inelastic, then inflation will take place at a lower rate in future (Truu and Contogiannis, 1987: 177).

It is therefore important to eliminate inflationary expectations. According to Stals (1993b: 15):

> It is far easier to anchor inflationary expectations by holding inflation close to zero. The alternative, a belief that prices will rise year after year, reinforces the muddle that keeps inflation alive and does so much economic damage by distorting the free market's signals. Until everybody learns to hate inflation, it will not stay buried.

This approach does however not necessarily have popular policy implications, seeing that it is perforce accompanied by high – mainly unwelcome– interest rate levels. Stals (1990b: 2) puts the basic options: "A time comes when we either have to accept higher rates of interest, or a rising rate of inflation. We cannot avoid both."

He makes the point that combating inflation must remain the most important goal of monetary policy. The Reserve Bank's targets for the money supply, its acceptable limits for the increase in bank credit to the private sector, the rand exchange rate, the level of gold and other foreign exchange reserves and the associated interest rate level, were thus combined into a policy-mix where they would all protect the domestic and foreign value of the monetary unit (Stals, 1991: 3)

Other factors, too, appeared to influence Stals's anti-inflation campaign and its timing. This meant that monetary policy could not be used to pursue multiple economic objectives. According to Dr Stals (1993: 5): "The objective of monetary policy, namely to protect the value of the currency, should ... not be disrupted by the changing phases of the business cycle."

He refers to the disappearance of the traditional trade-off between inflation and unemployment in the Phillips Curve model. In the long term, inflation prevents optimal economic growth and raises the level of unemployment. Dr Stals (1993b: 6) defends this philosophy in the following terms: "To fight inflation is not to pauperise people, but rather to give millions of unemployed in this country a decent chance of earning a decent living in a stable financial environment."

There is no doubt that inflation would ultimately be checked by a sufficient contraction of the money supply. It is almost certain too, that an inefficient way of fighting inflation would give rise to great sacrifice in real terms. Dr Stals (1990a: 3) warns that too rigid an approach would cause some unacceptable social costs: "... the social cost in terms of recession and unemployment will be too high for the system to bear".

The causes of inflation are complex. Dr Stals (1990b: 3) expresses the matter as follows: "Depending on the causes of inflation and the nature of the inflationary process in the economy, a wide array of measures must be used to contain this problem." It is partly a monetary phenomenon and partly the result of real economic activity. It is possible to reduce the rate of inflation in South Africa only if a disciplined monetary and fiscal policy is pursued, and this would have to be supported by additional measures, like competitive markets. A counter-inflationary programme, with monetary policy in the vanguard, is therefore accepted as a medium and long-term policy that will only have the desired effects after an unavoidable time lag.

However, if the monetary authority is not supported by means of disciplined fiscal and wage policies, the following result is to be expected (Stals, 1990a: 3) "The central bank is compelled to create the money required to accommodate

the inflation created by the unharmonised fiscal and/or wage policies." This is an evident infringement of central bank independence.

Economic growth is not a target of monetary policy, but the Reserve Bank regards a stable fiscal environment as the prerequisite for optimal economic growth and development. The Reserve Bank's long-term perspective regarding its monetary policy measures, is therefore primarily related to the creation of a financial environment conducive to a higher economic growth rate.

Conditions had however changed during the past few years, and South Africa had become reintegrated with the international community. After the establishment of the Government of National Unity in April 1994, South Africa was again welcomed to international forums like the United Nations, the Bretton Woods institutions (IMF and World Bank), the Organisation of African Unity and the (British) Commonwealth. At the same time, South Africa became a party to more liberal international trade agreements as a result of the Uruguay round negotiations of the World Trade Organisation.

The world with which South Africa thus became reintegrated, was rather different from that of the late 1970s and the early 1980s. Developments in the fields of electronics and communication technology and the transformation of a mainly manufacturing and trade-related economy into one where the emphasis now fell on services and information, served increasingly to integrate the financial markets of the world. In most countries this gave rise to the large-scale liberalisation of domestic and foreign financial markets, causing exchange controls to be abandoned in many cases. The integration of South Africa with these world markets caused prices on the Johannesburg Stock Exchange to react to events elsewhere in the world with almost immediate effect.

Furthermore, the South African banking sector had to be restructred, *inter alia*, to make provision for thousands of informal savings clubs (Stokvels) and for so-called community banking. Dr Stals (1997f: 6) described the resulting pressure on the Reserve Bank as follows: "There is even pressure on the Reserve Bank to legalise fraudulent pyramid schemes such as those that recently brought the country of Albania to anarchy."

This changed environment did however not render the targets set out in the De Kock Commission Report invalid. According to Stals (1997f: 6): "... the main objective of monetary policy as defined by the De Kock Commission is as important and warranted today as it was in the mid-eighties." In this changed environment, monetary stability is even more important than before, and the rate of inflation should thus be brought into line with those of South Africa's main trading partners.

The surroundings in which monetary policy was embodied, changed considerably during this period. The mission of the monetary authority now became the defense of the internal and external value of the rand. But South Africa has to contend with large-scale unemployment and other socio-economic issues. Dr Stals thus increasingly came to take note of these problems too, something that is capable of affecting monetary policy. This aspect of the matter is discussed next.

3 MONETARY POLICY IN THE "NEW" SOUTH AFRICA SINCE 1994

South Africa must at present contend with a great variety of socio-economic problems that might have an effect on the implementation of monetary policy. In this context, the first topic discussed is the importance of an independent central bank, particularly in the light of a changing philosophy, to be discussed after that.

3.1 Independence of the South African Reserve Bank

Since the Reserve Bank was founded in 1920, its main task was to develop the local money and capital markets, as well as a banking system independent of the Bank of England. For the first ten years after foundation, its functions and policy application were rather limited. Legislation that facilitated the extension of credit, was passed by amendments to the so-called Currency and Banking Act in 1928 and 1930. A more fundamental change to the statutory powers of the Reserve Bank was made possible by the passing of the South African Reserve Bank Act of 1944. Further amendments to the act were made with a view to facilitating the application of monetary policy. The end product of such changes was the Reserve Bank Act of 1989. In terms of section 3 of the Act, it is today the task of the Bank "... to pursue as its primary objective monetary stability and balanced economic growth in the Republic, and in order to achieve these objectives the Bank shall influence the total monetary demand in the economy through the exercise of control over the money supply and over availability of credit" (Stals, 1993a: 4).

The Reserve Bank was therefore given a measure of autonomy in the execution of its powers. The Reserve Bank Act and the new Constitution of the Republic of South Africa determine that: "The South African Reserve Bank, in pursuit of its primary objective, must perform its functions independently and without fear, favour or prejudice, but there must be regular consultation between the Bank and the Cabinet member responsible for national financial matters" (RSA, 1996: 99).

The Reserve Bank is thus theoretically competent to pursue an effective monetary policy. This has also been stipulated in Division 9 of the report on the Reconstruction and Development Programme (RDP):

> The Constitution asserts the need for the independence of the South African Reserve Bank, so as to ensure that it is insulated from partisan interference and is accountable to the broader goals of reconstruction and development. The main function of the Reserve Bank are to maintain the value of the currency, to keep inflation relatively low, and to ensure the safety and soundness of the financial system.

Eijffinger (1997: xi) puts the difference between central bank **autonomy** and **independence** in the following terms:

> Central bank autonomy refers to a relationship between the central bank and the government, which can be compared to the relationship between the judiciary and government. The judiciary can rule only on the basis of laws provided by legislature, and it can be forced to rule differently only through a change of the law ... In fact, central bank independence refers to three areas in which the influence of government must be excluded or drastically curtailed:
> - independence in personal matters;
> - financial autonomy;
> - policy independence.
>
> Policy independence is related to the manoeuvering room given to the central bank in the formulation and execution of monetary policy.

Seen against this background, it is important that financial stability should also be maintained during the terms of office of successive political parties with different policy objectives, that may accede to power. According to Dr Stals (1996: 2):

> Financial stability ... should in the democratic political system of periodic election, stretch beyond the duration of successive governments. It is *inter alia* for this reason that central banks need some autonomy for the execution of their duties.

Central banks have the right and the ability to create money. Policy changes may also have a multiple effect on the money creation of private banks. This is one of the main reasons why the central bank is accountable to Parliament and why profits are transferred to the Treasury. The right to create money makes the central bank a powerful institution which may easily be misused. The central bank does, however, not function in isolation. The central bank's mandate to

create money must always be used in the national interest. Dr Stals (1993c: 2) has issued the following warning: "... the power to create money can easily be abused, not only by politicians, but also by sectoral pressure groups in the economy for the promotion of sectional and selfish objectives."

In terms of the Reserve Bank Act, the Bank must make regular reports to Parliament. "The Governor of the Reserve Bank holds regular discussions with the Minister of Finance, and appears before the Parliamentary Standing Committee of Finance from time to time" (Stals, 1997d: 3). A special relationship therefore exists between the central bank and the government, which is treated with great circumspection. Dr Stals points to the probable consequences if it were not treated in this way (1993c: 1): "If abused, the power to create money can easily destroy the economy of a country, and in the process destroy the central bank and the government."

Decision-taking by the Bank is therefore not a completely independent issue. Schmulow and Greyling (1996: 75) comment: "No matter how deeply enshrined the independence of the Central Bank is in the law, it will always be subject to the influence of the political conditions within which it finds itself."

A central bank cannot operate in isolation in a modern democracy, and its policy forms part of a broader macroeconomic policy. This ultimately affects the independence of the central bank itself (Wessels, 1996: 2). Dr Stals, too, refers to it as follows: "... a central bank can only be as independent as the government of the day wants it to be." Central bank policy is at least partly determined by general economic conditions, which again depend on general government policy. The government allows the central bank no more than to operate within certain limits.

It is therefore necessary to strike a balance between the various economic and socio-political constraints to which monetary policy is subject. On the one hand, there is the striving for financial stability, taken to be the main objective of monetary policy. On the other hand, pressure may be brought to bear on the Reserve Bank to take into account also the effect of its pursuit of price stability on the maintenance of high levels of economic growth and employment, as well as an acceptable balance of payments position and avoidance of political instability. Whenever multiple objectives exist, a compromise has to be struck seeing that these objectives may well clash with one another, especially in the short run.

Dr Stals (1993c: 5) refers to the role of government as follows: "... the degree of autonomy that the central bank will be able to procure for itself will depend a lot on non-formal relations and on traditions, on the goodwill that can be solicited

from the government of the day, and on the support that the public in general will be prepared to lend to its efforts."

The quest for a more independent monetary policy demands an unambiguous framework within which it is to take place, a clear-cut definition of the means by which monetary policy is applied, greater transparency of policy objectives and procedures, and responsibility on the part of central banks. This is necessary for both short and long-term financial stability (CREFSA, 1995: 28-30).

Wessels (1996: 64-5) argues that an independent central bank does not undermine the democratic process, but rather amounts to a necessary condition for its achievement. It is precisely when the central bank function to control the money supply is separated from the characteristic instability of politics, that the central bank can implement an effective monetary policy that would promote economic as well as political stability.

3.2 A different philosophy in the new South Africa

The role of the Reserve Bank has changed considerably since the new South Africa came about in 1994. Both the Reserve Bank Act (Act 90 of 1989) and the new Constitution (Act 200 of 1993) are now in force. Schmulow and Greyling (1996: 1987) have made the following speculative comment:

> For possibly the first time in the history of its existence, the Bank will find itself charged with a socio-political role. From now on, bank policy will be interpreted in an entirely different light.

At present the ANC government takes the formal position that the Reserve Bank is responsible for monetary stability alone, and should not attempt to play a social and/or political role. It remains to be seen whether this will be any different after the appointment of Mr Tito Mboweni as the new Governor of the Reserve Bank in 1999.

The recommendations of the De Kock Commission were based on a policy model of monetary targeting. Monetary decision-taking then revolves around changes in the money supply. This model worked well during South Africa's economic isolation. Dr Stals (1997f: 7) however expressed his misgivings about the operation of the model in the new South Africa: "It is doubtful however, if this model is still the most effective strategy to maintain in the new environment."

For example: it became more difficult to control the money supply in an environment characterised by a growing number of foreign banks, and where

South African banks have greater access to banks situated abroad. In addition, the demand for credit in South Africa is now probably less sensitive to interest rate changes than before. The relation between changes in the money supply and ultimate price changes is also weaker today, on account of the increased volume of transactions in financial markets, particularly in the short term. As in many other countries, the demand for money in the longer term cannot be satisfactorily explained and forecast by means of the explanatory variables used in the econometric models dealing with the demand for money.

As the anchor of monetary policy, the supply of money has therefore become less important. According to Dr Stals (1997f: 8), South Africa was not yet ready for direct inflationary targeting. (An inflation target between 3 and 6 per cent for the year 2002 was later introduced by Mr Mboweni; *QB* June 2000: 60.) At the same time, insufficient foreign exchange reserves ruled out the adoption of an exchange rate target. The two factors thus caused a wide range of monetary indicators to be used in taking monetary policy decisions. These indicators included the extension of bank credit, the level of interest rates, changes in the level of foreign exchange reserves, exchange rate changes as well as actual and expected changes in the rate of inflation. This however implies that the application of monetary policy came to depend on discretionary decision-taking and thus became unpredictable.

South Africa was, still is, involved in major political and social reforms. Non-economic factors thus have great influence on the economy. Dr Stals (1994: 2) refers to the implications hereof: "These non-economic factors can obviously not be ignored by economic policy makers, and can easily push the economy in directions very different from the projected route based on past experience."

The government's initial macroeconomic strategy was based on the Reconstruction and Development Programme (RDP). With its emphasis on meeting the social needs of the economically disadvantaged, without recognition of limited resources, this was not a very realistic strategy and touched off a great deal of criticism. Arising from it, the government supplemented the RDP in June 1996 with its Macroeconomic growth strategy, generally knows as the GEAR ("Growth, Employment and Redistribution") strategy. GEAR objectives include the following (RSA, 1996: 1):

- annual economic growth of 6.1 per cent by the year 2000;
- job creation for 409 000 workers per year by 2000; with projected unemployment rate of 37 per cent by that year;
- an exchange rate policy to keep the real effective rate stable on a competitive level;
- stable monetary policy that would prevent inflation from rising;

- further steps to effect the gradual relaxation of exchange control.

In summary, the GEAR document contains the following comment on its simultaneous policy objectives (RSA, 1996: 10): "The main objective of monetary policy will continue to be maintenance of financial stability and the reduction of the inflation rate... low inflation is an important requirement for higher economic growth, the creation of employment opportunities and a more equitable distribution of income." With changing economic conditions, the GEAR objectives are however also being revised.

With regard to politics, South Africa is now again a full member of the United Nations and the Commonwealth, and has rejoined the OAU and the UN Economic Commission for Africa. In the economic field, South Africa is again a full member of the IMF and the World Bank, and has joined the African Development Bank. A number of multilateral agreements have also been concluded in the regional context.

On the negative side, South Africa has done little to address its unemployment problem. Almost one million employment opportunities have been lost since the height of the employment cycle in 1989. Between September 1996 and September 1999, total employment in the non-agricultural sectors of the formal economy fell from 5.2 million to 4.8 million workers. Whatever growth took place in the economy, was mainly the result of new technology, capital investment and increased productivity – not the creation of new jobs. At present some 22 to 37 per cent (depending on the definition used) of the economically active population is unemployed. High levels of unemployment also play a part in South Africa's upsurge of crime and violence (SARB *Annual Economic Report* 2000: 20).

There is a danger that the authorities may take decisions that are politically expedient, but do not necessarily serve the ends of monetary policy. To reduce inflation is desirable in itself and would therefore be politically popular too. However, as soon as the policy causes economic activity to contract thus reducing job creation, political pressure to stimulate the economy again is likely to increase. Greater unemployment may be even more unpopular than inflation.

Social development and restructuring are likely to put greater pressure on public funds in South Africa, causing the national debt to increase. In drawing up its monetary policy, the Reserve Bank will have to take note of such a development and its potentially inflationary consequences.

In its turn, the government must seek to bring about socio-political stability, for without it, the outflow of capital and its negative impact on productivity and

foreign investment cannot be avoided. Moreover, the co-operation of government is necessary to reduce inflation by means of strict discipline on the national debt.

The dilemma does exist that the urgent basic needs of the population cannot be met by the government in the short run, and increased pressure may then be brought to bear on the Reserve Bank to disregard its traditional stability objectives, in order to artificially stimulate the economy.

Most probably, the resultant increase in inflation would then give rise to further problems as well. Inflation has multiple consequences, almost invariably harmful. Inflationary expectations may in turn have a negative impact on economic activity. Falling economic growth is again likely to cause more social instability.

Today financial stability is an accepted precondition for economic growth and it therefore also represents a basic condition for the reconstruction and development of a country. People are discouraged from saving in an environment characterised by high inflation, scarce resources are not efficiently allocated, international trade and foreign investment will be negatively affected too. Dr Stals (1993b: 2) made the following observation in this context:

> If South Africa wants to achieve its objectives of:
> - maximum economic standards of living for all the people of the country; and
> - a stable transition to a fully democratic society;
>
> then we shall have to maintain general financial stability in the country.

Limited funds for investment however remains a problem. Dr Stals (1993b: 1) refers to it as follows: "... we came to the conclusion that it will be extremely difficult for South Africa to generate the financial resources that will be required for the economic development programme without severe stress on financial stability."

Schmulow and Greyling (1996: 179) have summarised the situation thus: "The challenge therefore is to strike a balance between the demands of a developing economy, and the continuous need for financial austerity."

The pursuit of a monetary policy that would run counter to a country's broad macroeconomic policy, cannot be long continued by the central bank, seeing that"... the loss of credibility and the aversion of government to such conduct, if it exists, will prohibit the bank from following such a policy for any length of time" (Wessels, 1996: 64).

Dr Stals refers to a number of problem areas in the South African economy that would obstruct the achievement of the GEAR objectives. These are:

- The insufficient level of saving in the economy. This makes South Africa dependent on foreign investment capital in order to expand its productive capacity;
- a high marginal propensity to import, particularly when new investment takes place in the industrial sector. The chronically low levels of foreign exchange reserves renders the country vulnerable to current account deficits in an environment characterised by unsteady capital movements;
- rigid labour market conditions. In spite of an unemployment rate of some 30 per cent of the labour force, workers persist in wage demands that exceed productivity and are above the inflation rate;
- deficient competiveness, which is aggravated when the South African inflation rate exceeds those of its international competitors;
- surging crime and violence;
- the need to improve administrative skills in the public sector. Improved education and training is an important element of the GEAR; and
- large-scale corruption in both public and private sector activities.

Multiple objectives are therefore a conspicuous necessity for the successful application of macroeconomic policy in South Africa. Dr Stals (1997o : 3) sketches the strategy required as follows: "South Africa's economic policies must, at this stage, maintain good balance between the process of globalisation, the satisfaction of dire basic needs of the domestic population, and the desire to assist in the economic development of the region."

Wessels (1993: 42) however cautions that multiple policy objectives expose monetary policy to politically motivated intervention: "multiple policy objectives leave the central bank open for political pressures, create scope for detrimental short term trade-offs between goals, and complicate the evaluation of a central bank's success because of a lack of transparency and accountability."

Successful participation in foreign exchange markets may lead to a capital inflow large enough to enable the South African economy also to implement and develop social programmes. This would however be subject to discipline typical of internationally responsible investment behaviour. This would include the necessary monetary and fiscal discipline, more labour market flexibility and improved international competiveness.

The new challenges that the Reserve Bank must face, are likely to include the need to neutralise occasional government mistakes, should the latter resort to politically popular decision-taking. Under these conditions, it is vitally

important for the central bank to have a measure of independence, necessary to pursue an efficient policy that would meet the requirements of economic and political stability.

4 OPERATION OF THE SOUTH AFRICAN MONETARY SYSTEM

Having in broad outline discussed the historical development of economic thought on monetary control in South Africa, the emphasis now shifts to the modern view of the South African monetary system, and thus the manner in which monetary policy is applied in practice today.

The essence of the current application of monetary policy, was expressed in the final report of the De Kock Commission of Inquiry into the operation of the monetary system and monetary policy in South Africa. The refinements and adjustments to the original policy design have been published in various issues of the SA Reserve Bank *Quarterly Bulletin.*

Apart from changes to the application of monetary policy, new legal requirements to promote financial stability were put into effect in 1991. The main reason that caused banking in the 1990s to appear a great deal different from that in the 1980s, was the implementation of the Deposit-Taking Institutions Act from 1 February 1991. This act (Act 94 of 1990), now again known as the Banks Act, served to consolidate, amend and extend the Banks Act of 1965 and the Building Societies Act of 1986. The basic objectives of the new act are to protect the interests of depositors and to maintain the integrity of financial intermediation by deposit-taking institutions (SARB, *Annual Economic Report 1991*: 34).

The Banks Act was meanwhile changed to make provision for the "informal banking sector" which had arisen in economically less developed communities. The Banks Act now makes provision for informal savings clubs ("Stokvels") outside normal banking regulation and supervision, however, without access to Reserve Bank accommodation (Stals, 1997a: 7).

Together with this and other changes to the techniques of monetary control, the style of monetary policy was also adjusted. As public debt management and the Reserve Bank's open-market operations became more sophisticated, greater use was made of these instruments to influence accommodation of banks at the discount window. The conditions of accommodation were thus adapted from time to time to changed economic conditions and the short-term policy objectives of the monetary authorities.

4.1 Policy Objectives and Instruments

Macroeconomic policy is usually aimed at the promotion of economic growth and development, the creation of more employment, the improvement of living standards and reducing the skewness of income distribution between the respective participants in economic activity. Monetary policy, as a component of a larger macroeconomic policy, plays an important role in this context. In the new South Africa, and according to the GEAR strategy, monetary policy is expected to create a stable financial environment conducive to the pursuit of overall economic activity.

As already mentioned in the previous section, the broad principle on which monetary policy is based in practice, rest on the recommendations of the De Kock Commission Report. These hold that the primary objectives of monetary policy are in agreement with general economic policy, namely, the following (RSA, 1984: A10):

- Relative stability of the price level;
- balance of payments equilibrium, together with the maintenance of the foreign value of the monetary unit and a satisfactory level of net and gross gold and other foreign reserves;
- optimal and stable economic growth; and
- a high and relatively stable level of employment of economic resources in general.

The Commission, however, stressed that price stability is its most important long-term objective, in which context low and stable growth of the money supply is considered to be of great importance. The Commission thus recommended that "...in the long run the primary objective of monetary policy in South Africa should be the maintenance of reasonable stability of the domestic price level, with of course, an effective measure of freedom for relative prices to change (RSA, 1984: 142).

The last-mentioned aspect of the matter was strongly supported by Dr Stals, who initially raised it to the formal reason for pursuing an active monetary policy: "A stable financial environment is a precondition for sustainable economic development (Stals, 1997f: 2).

The intermediate objectives endorsed by the Commission included, amongst other things, the determination of an annual target range for one or more selected indicators of the money supply. Although the Commission thus recommended the introduction of monetary targeting, the monetary authority

was to use its own discretion to determine acceptable interest and exchange rate levels.

In the pursuit of these desiderata, monetary policy under Dr De Kock, and in some ways more so under Dr Stals, encompassed the following broad elements:

- Certain predetermined guidelines for the growth of the money supply;
- given these guidelines, later also some other considerations, the Reserve Bank would mainly use its interest rate policy to keep the growth of the money supply within the permitted guidelines. In other words, the Reserve Bank sought to influence the demand for money by means of its interest rate policy;
- a successful interest rate policy should at the same time keep the rate of increase of the bank credit extended to the private sector within acceptable limits; and
- the Reserve Bank's monetary policy objectives should be supported by a reasonably stable exchange rate, as well as an acceptable level of net foreign exchange reserves controlled by the Reserve Bank.

The Commission made the following recommendations with respect to the instruments of monetary policy (RSA, 1984: A14):

- the use of direct controls should be avoided as far as possible;
- market-related instruments should rather be used; and
- in exceptional circumstances, the latter may be assisted by semi-market-related instruments.

The following were the market-related instruments recommended by the Commission (RSA, 1984: 173):

- Public debt management (including public borrowing policy);
- open-market operations by the Reserve Bank;
- the discount rate and general accommodation policy of the Reserve Bank; and
- the exchange rate policy of and intervention by the Reserve Bank in the spot and forward currency markets.

The Commission further recommended that the liquid asset system of monetary control be replaced by a cash reserve system. Cash reserve requirements had already been used as a policy instrument since the 1930s.

4.2 The Classic Cash Reserve System

The recommendation of the De Kock Commission that the liquid asset system of controlling bank credit be replaced by a cash reserve system, is of fundamental significance. However, liquid asset requirements would remain a supplementary limit on monetary expansion, even though cash reserve requirements would be the main limiting factor (RSA, 1984: 181).

South Africa had been systematically switching over to a so-called cash reserve system of controlling the money supply since 1981. Here the Reserve Bank would make use of policy instruments like open-market operations to influence the total cash reserve holdings of the private banks (RSA, 1984: 181).

The essence of the classic cash reserve system, however, is that it tries to control the money stock by manipulating the Bank rate. Discount rate policy therefore plays a decisive role in the context. By directly affecting market interest rates, bank credit as well as the supply of money, only in the final analysis would cash reserves be affected too. If need be, open-market operations may be used to drive banks to the discount window.

The operation of the system has been summarised as follows (De Wet *et al.*, 1995: 579):

> "An increase in the bank rate will not, in the first instance, force the banks to borrow less through this window, provided they increase their lending rates. However, the subsequent increase in their lending rates will, theoretically, decrease the demand for credit, the equilibrium amount of credit supplied, the volume of bank deposits and the amount of money in the economic system, and eventually also the amount of borrowing by the banks of the discount window."

In the past, the required cash reserves of the banks were regularly adjusted in the form of the banks' deposits with the Reserve Bank, but under the present control system.of cash reserves these are changed only in exceptional cases. From 1991 until March 1998, only short-term liabilities were subject to a supplementary minimum cash reserve requirement. Today (since March 1998), required cash reserves are 2.5 per cent of the banks' total liabilities to the public. Banking institutions are now also allowed a so-called average maintenance period of 30 or 31 days to comply with the requirement. The amount that the banks borrow at the central bank varies from day to day, but not on account of changed liabilities to the public. It is easy for the banks to meet the above-mentioned requirement. Other factors (than their required reserves) influence their actual cash reserves much more in the shorter term. As in other developed financial

systems, the central bank in South Africa has normally also ways and means of supplying the banks with the cash reserves that they should or would like to hold.

An instrument that is becoming increasingly important is the capital adequacy requirement. The preservation of solvency is one of the most important goals of banking supervision. A bank's capital must serve as a buffer and absorb losses. Capital adequacy is recognised as an important and integral part of banking supervision. This means that banks must hold a minimum amount of share capital and reserves. A bank's capital and reserves serve as a buffer against possible losses, which means that shareholders, not depositors, bear the losses. Capital requirements represent a specified percentage of the bank's risk-weighted assets and off-balance sheet activities. The risk-related weights vary between 0 and 100 per cent. The overall capital adequacy ratio was raised from 4.5 per cent in 1991 to 8 per cent in 1995, according to the recommendations of the 1988 Committee on Bank Regulation and Supervision of the Bank of International Settlements. South African banking institutions do not normally experience difficulties in connection with this rule, and hold as much as 11 per cent of their assets as adequacy cover in their books.

The operation of the Reserve Bank's accommodation policy is discussed next, as an example of a uniquely South African monetary policy.

4.3 Reserve Bank Accommodation and the Money Market Shortage

Monetary policy instruments in South Africa operate by either restricting or expanding the equilibrium quantity of money in the system. Given the present techniques of monetary control, there is no supply-side limit on the amount of credit and hence the quantity of money that the banks can supply to the non-bank sector, seeing that they can always obtain the necessary cash reserves with the Reserve Bank to cover any additional credit they may wish to extend.

Open-market operations, public debt management and intervention in the spot and forward foreign exchange markets, influence the amount of cash (or high-powered money) in the economic system, known as the liquidity of the banking sector. It is in this way that the monetary authorities make sure that, in order to meet the cash reserve requirements, the banks are compelled to borrow cash from the Reserve Bank. Seeing that the Reserve Bank in the last resort always supplies all the credit that the banking sector may need, neither this policy nor the cash reserve requirement amounts to a real limit on the process of credit and money creation. Rather, it represents the channels by means of which the Reserve Bank keeps itself informed of conditions in the money market. The sole limit on the process of money creation is the effect of the repurchasing

interest rate (and, where applicable, the marginal lending rate) on the level of interest rates in general. When the bank's marginal borrowing costs rise, they must raise their lending rates to maintain a positive profit margin. Market interest rates will then adjust to the rates determined by the Reserve Bank within the framework of its accommodation policy. An increase in the banks' lending rates will therefore raise the structure of interest rates and thus, via the transmission mechanism, damp down the demand for money with a negative impact on expenditure, production and the demand for liquidity.

The demand for money is a positive function of real income and a negative function of the real market interest rate. The negative effect of the real market interest rate on the demand for money may be seen as a normal element of cost, while the positive effect of aggregate production reflects a normal transaction requirement.

4.3.1 *The meaning of accommodation by the South African Reserve Bank*

Accommodation by the Reserve Bank might have meant that the financial needs of all parties seeking credit would, directly or indirectly, be met by the Reserve Bank. It might then have taken on the shape of, say, loans made by the SARB or assets bought by the Bank. These assets would not necessarily have been domestic or financial assets. Parties that might in principle be accommodated, include the banking institutions, the South African financial system, the Land and Agricultural Bank or any other public sector institutions, the Reserve Bank's own employees, as well as foreign governments and other non-South African entities (Meijer, 1997a: 1).

Accommodation in the narrower and conventional sense, however, refers only to South African banking institutions, that is, institutions registered under the Banks Act (Act No 94 of 1990) or the Mutual Banks Act (Act No 124 of 1993).

Any assets bought by the Reserve Bank from domestic private banks and non-bank entities in the course of its daily activities, raise the cash balances, that is, the cash reserves of South African banks. This will then reduce the banks' need of accommodation accordingly.

The total amount of refinancing assistance made available to the banks daily, is generally known as the money market shortage. It is published on a daily basis and regarded as an indicator of the condition in the money market. It is however not an accurate measure of real money market conditions, seeing that it does not take into account other methods of Reserve Bank intervention, like the volume of open-market operations.

4.3.2 *Means of refinancing accommodation*

There are various ways how central banks may accommodate private banking institutions. The automatic and unconditional manner in which accommodation was provided by the Reserve Bank, was a special feature of the South African system before 9 March 1998 (Meijer, 1997a: 7).

Accommodation is important because it activates the Reserve Bank's discount policy. Discount policy consisted of deliberate changes to the terms and conditions on which accommodation was made available. Seeing that accommodation in the South African context is available automatically, unconditionally (except for its interest cost) and to the full amount of the shortfall in banks' total cash reserves, changes in the interest cost of accommodation could be changed when the Bank rate (now the repurchase or repo rate) and related refinancing rates changed; this caused the general interest rate level in the economy to vary. This would again influence a wide range of expenditures and prices in the economy via the operation of the transmission mechanism.

In the application of monetary policy, it is necessary to take account of the demand-determined nature of the money stock. This implies that the cash reserves of banking institutions are adapted to the level of their reserve requirements, not *vice versa*. A demand-determined money stock means that the instruments of a restrictive monetary policy will be effective only to the extent that they affect the determinants of the demand for money. This again means that the direct effect on the quantity of money of measures like open-market operations, financing the treasury or increased bank reserve requirements, is often of a relatively limited nature. Sometimes it rather causes distortion and reduced effectiveness in the financial system.

The role of the changing money market shortage, if only for signalling to the market, is limited by the extent that the monetary authorities have less than complete daily, or even long-term, control over the size of the shortage. This in turn derives from the Reserve Bank's limited powers to accurately forecast and control the state of net foreign reserves, the public debt, banknotes in circulation and budgetary transactions (Meijer, 1997b: 36).

Dr Meijer (1997b: 40-41) identified the following shortcomings of the South African economic system, as it was before 9 March 1998:

- The huge and chronic indebtedness of the banking system (particularly the four largest clearing banks) at the Reserve Bank discount window was

unnatural and unhealthy, and probably served to weaken competition between the banks;

- The level of and changes in the money market shortage as an information system (or signalling device) often made no impact on the market interest level; at times it even appeared to cause perverse movements of market interest rates. Had better control of the shortage been possible, the Reserve Bank's policy would have been more transparent which would also have improved communication between the various markets.
- Observed movements in market interest rates told the Reserve Bank little of changed market conditions. Because money market rates were anchored to the Bank rate, they moved relatively little. Yet, they would usually change as expectations about the Reserve Bank's behaviour changed. Changes would therefore not necessarily reflect the market's own perceptions, but rather what the market thought that Reserve Bank policy might be.
- Such expectations sometimes caused the treasury bill tender and market rates to be above the Bank rate. This might again have been wrongly interpreted as evidence of collusion between the banks, and as attempts by the banks to increase their profit to the Reserve Bank's disadvantage at the discount window. This might have provoked some ill-founded retaliation.
- A relative shortage of securities that guaranteed access to first-tier accommodation, could lead to abnormally large gaps between the rates and yields on these securities (e.g. treasury bills) *vis-à-vis* other market instruments. A high concentration of eligible financial assets in the portfolios of private banks, could prevent the markets for such instruments from operating with complete freedom; and
- the absence of explicit penalty rates for selective accommodation at the discount window, might have been yet another shortcoming. Penalty rates may serve as an indication of central bank disapproval of the credit expansion practiced by private banking institutions. It may also help to raise the level of interest rates in general (Meijer, 1997a: 40-41). The last-mentioned feature was in fact addressed in the new system by means of the marginal lending rate.

In general however, the Reserve Bank does in fact have reasonable control of interest rate levels, and its comparatively conservative interest rate policy during the past decade or so, undoubtedly contributed to the fall of the inflation rate from double figures to a single one. But compared to its main trading partners, inflation in South Africa still remains too high.

4.3.3 *New accommodation procedures in South Africa*

The methods and instruments of active monetary policy were drastically changed as from 9 March 1998. However, at present the classic cash reserve system is still used to control credit extension. Open-market operations and other instruments are then used to drive – or force – private banking institutions to avail themselves of central bank accommodation (rediscounting facilities) in order to give effect to the central bank's interest rate policy. The banks' pursuit of maximum profit would, for example, spontaneously cause them to react to any increase in the central bank's repurchase rate by raising their own lending rates.

There is now a worldwide tendency to influence interest rates in a more indirect way. For example: Instead of offering overnight loans at the discount window, central banks today conclude repurchase agreements with private banking institutions according to a tender system. This effectively allows banks to borrow short term funds against the pledge of financial securities. In this case, the central bank influences the market interest level by means of its influence on the tender rate.

Dr Stals (1997f: 10) gives the following main reason for the change: "The South African Reserve Bank will also have to introduce greater flexibility in the operating procedures for the implementation of monetary policy if we want to cope with the volatile international capital flows, exchange rate changes, and financial asset price movements."

Therefore, today there exists a more adjustable accommodation facility in the form of regular repurchase transactions between the Reserve Bank and its clients in the banking sector. Thus, private banks have the opportunity to regularly (in principle at least once every working day) tender for central bank funds by means of repurchase agreements. This allows the banks greater freedom and incentive, actively to manage their own state of liquidity in a more efficient manner than before. The term of a repurchase transaction is normally one week, but it may vary according to the needs of the banks and the policy of the Reserve Bank. Tenders are covered by eligible securities, which include government bonds, treasury bills, Reserve Bank debentures and Land Bank bills.

The traditional accommodation at the discount window still exists today, (by way of the marginal lending facility) to provide the banks with a further source of funds in the management of their liquidity positions. The lending rate on such funds, however, usually includes a significant premium *vis-à-vis* the fluctuating interest rate normally determined by the repurchase tender on a daily basis.

Although these developments have considerably changed the previous, rather mechanical way of Reserve Bank accommodation, essentially the matter remains the same as in the past: the Reserve Bank still employs the money market shortage to compel the private banks to make use of its accommodation facilities. A tender rate that is too low would naturally not be acceptable, which implies that the rate of accommodation is not fixed but fluctuates between certain limits.

It is however a step closer to a more market-related rate, seeing that banks compete with each other by means of their respective tender rates. This should cause the "room" in the money market, as the banks themselves experience it, to emerge more clearly. The marginal lending facility supplies overnight loans against the securities mentioned above. This rate will normally be the upper limit or ceiling on overnight rates. If the banks were forced to make use of the marginal lending facility to a large extent and for a long period of time, then the marginal lending rate might in principle become an important determinant of the general interest rate level. However, the more important function of the marginal lending facility is that of a safety valve, while the marginal lending rate should transmit regular "signals" to the market.

4.4 Money Supply Guidelines

According to the recommendations of the De Kock Commission with regard to monetary targeting in 1986, monetary targets were a feature of South Africa's monetary economy. In this context, interest rates were said to be indirectly manipulated, with a view to achieving certain monetary targets, for example, minimum and maximum growth rates for one or more monetary aggregates. However, the South African Reserve Bank never accepted these growth rates as rigid rules. The actual rate of growth of the money supply was thus often allowed to move outside the limits set by the target growth rates.

Against this background, the word "targets" was replaced by the term "guidelines" in 1991. Thus: "(T)he change in terminology from 'monetary targets' to 'monetary guidelines' aimed to make clear that the guidelines were meant to convey the authorities' views as to what should happen to the growth rate in the prevailing economic conditions, rather than as a firm forecast of the rate of monetary expansion that was to be achieved at all costs" (SARB *QB*, March 1991: 25).

The first experience of money supply targets in 1986 was, however, unfavourable, and the money supply rate was well below its target level, which indicated that the South African economy remained in a state of recession rather longer than had been thought when the target rate was set. The demand for

credit fell markedly during the recession of 1984/1985 and interest rates were even lower than expected; it thus became necessary to stimulate the growth of the money supply sufficiently. The resulting deceleration ultimately led to a bankers' acceptance rate of 8.9 per cent and a prime overdraft rate of 12 per cent at the end of 1986. The supply of money however continued to grow at less than the target rate (see Table 1).

Economic activity began to recover again in 1987, and the growth of the money supply accelerated to such an extent that the prime overdraft rate was raised to 18 per cent. In spite of this, money supply targets were continuously exceeded. These targets were then adjusted downwards for the following year, and interest rates kept high (SARB, *QB*, various issues).

In the light of the high growth rate of the money supply in 1988 (27 per cent) and given that inflation at one stage rose to more than 20 per cent, Dr Stals's new monetary control model was applied with a firm sense of purpose (Stals, 1997a: 3-4). The money supply thus also came to move between its guidelines during the second half of 1990.

At this juncture it was central bank policy to curb domestic demand and growth of the money supply by means of high interest rates, in an attempt to protect and replete the country's gold and foreign exchange reserves. This policy was also based on the belief that continued monetary discipline would significantly reduce inflation.

Table 1 Money Supply Guidelines in South Africa

Year	Percentage changes (%)	Target range (%)
1986	10.3	16-20
1987	13.1	14-18
1988	25.5	12-16
1989	24.6	14-18
1990	15.6	11-15
1991	14.8	8-12
1992	8.3	7-10
1993	7.01	6-9
1994	15.72	6-9
1995	15.16	6-10
1996	13.61	6-10
1997	17.15	6-10
1998	14.55	6-10
1999	10.15	6-10

Sources: Dornbusch & Fischer, 1995: 419 and SARB *QB*, various issues

The money supply guidelines were in fact met for most of 1992 and 1993, as a result of the long recession at the time. Concurrently, the inflation rate fell drastically to single figures in 1993 and afterwards. South Africa's gold and foreign exchange reserves continued to decline, but due to the weak demand for funds and falling inflation, the South African Reserve Bank lowered interest rates in both 1992 and 1993. Towards the end of 1993, the economy began to show signs of revival, while the growth of the money supply continued to move within the guidelines (Stals, 1997e: 2).

As already mentioned, the rate of inflation fell below 10 per cent in 1993 and remained there. In 1999, consumer prices rose by 5.2 per cent, the lowest figure since 1972.

The policy model used in South Africa since 1986 was reasonably successful. This model was based on the assumption that there exists, over time, a positive relation between the rate of growth of the money supply and inflation. In recent years, the growth rate of the money supply should have been between 6 and 10 per cent, in the Reserve Bank's opinion. In fact however, it averaged 15 per cent during 1994, 1995 and 1996. But those years were characterised by political and economic reform, and the gradual reintegration of South Africa in the international economy. The liberalisation of the foreign exchange market in South Africa, the entry of more than 50 foreign banks into South Africa's financial markets and the easier access of South African banks to foreign funds, changed the patterns of financial capital flows and banking activities. More people were absorbed in the market economy, where they earned regular income and opened bank accounts for the first time. This caused the Reserve Bank's conventional instruments to be less effective in controlling domestic liquidity.

The effect of the increased money supply on the rate of inflation was however relatively minor. The inflation rate was actually further reduced after the turning point of 5.5 per cent during the twelve months ending April 1996. The sharp depreciation of the rand after February 1995, however, caused inflation to accelerate again; together with the more rapid increase in the money supply, the inflation rate rose to 9.8 per cent for the twelve months ending February 1997 (Stals, 1997c: 2). It then declined again to 6.9 and 5.2 per cent for 1998 and 1999, respectively, According to Reserve Bank forecasts, inflation is expected to be 5.5 per cent, on average, during the period 1999 to 2003.

An important counterpart of the growth of the money supply was the steady rate of increase of credit extension by monetary banks to the private sector, which fluctuated around the level of 16 to 17 per cent in 1995 (until 1998). In spite of the high interest rates maintained since November 1995, the rate of increase of bank credit to the private sector remained high. This indicates that the demand

for credit was less interest-elastic than expected, possibly on account of the socio-political changes during recent years (Stals, 1997e: 3). Observed changes in total credit supply should in the nature of things always be seen as the net result of reactions to interest rate changes and simultaneous shifts in the demand for credit (movements along and of the demand schedule, as a result of which both the shape and position of the curve may change).

There is good reason to assume that the shape and position of the curve are continuously subject to random, seasonal and cyclical, as well as long term and structural changes.

The rate of growth of credit extension was even higher during 1997 and 1998, at times almost 20 per cent. Initially the demand for credit was strengthened by rising consumer and investor confidence, as the fear of political instability dissipated and economic growth improved. On the supply side, banks promoted the use of credit facilities, while retailers encouraged consumers to increase their spending by means of credit cards. Eventually, however, growth in money supply and credit extension somewhat declined and expectations of lower prime overdraft rates set in.

Dr Stals referred to the monetary targeting proposed by the De Kock Commission as follows (1996: 9): "The model for monetary policy, introduced by the De Kock Commission of Inquiry into Monetary Policy in the mid-eighties, was never intended to be a rigid money rule for monetary policy, but fitted the situation well in serving as the most important indicator or reflection of current developments of underlying potential inflationary pressures in the economy."

Dr Stals also makes the point that the size of the M3 monetary aggregate may no longer be a useful anchor of monetary policy, if South Africa becomes more and more integrated with world markets, and especially if other countries question the use of this indicator. Therefore, the Reserve Bank has come to take into account a wider range of indicators in making decisions about the use of monetary policy instruments. However, the changes in the size of the money stock still carry the greatest weight. Furthermore, since March 1998 the guidelines for the average desired rate of growth of the money supply have been expressed over a period of three years, no longer just one year.

The Governor of the Reserve Bank referred to the control of the money supply as follows (Stals, 1996: 10): "It is becoming increasingly more difficult for the Reserve Bank to control the money supply." One reason for it is the widening access of South African banks to foreign liquidity sources. The implementation of monetary policy in such an environment has therefore become a great deal

more complex. Other countries did however not use their financial openness as a reason why targeting is no longer seen to be satisfactory. Stability of the aggregate demand-for-money function is important in this context.

4.5 Interest Rates

There are several theories of interest rate determination. For example, according to the Classical line of thought, the equilibrium level is brought about by the interaction of saving and investment. The Keynesian school again views interest rates as the interaction between the demand for and the supply of money. In a market economy interest rates are normally determined by the interaction between the demand for and the supply of loanable funds.

In South Africa, too, interest rates are determined by the underlying conditions of demand and supply. It has been characteristic of market conditions during the past few years, that the demand for loanable funds has chronically exceeded the relatively small supply. This is a fundamental cause of the relatively high interest rate levels in the recent past. Total domestic saving is today less than 20 per cent of the gross domestic product (GDP). On the other hand, the government needs for example some 5 per cent of the GDP to finance its budget deficit, which leaves only 15 per cent of savings for investment. According to Dr Stals (1997r: 2), the country however needs investment of at least 25 per cent of the GDP to support sufficient production capacity and employment to meet the needs of a growing population. High interest rates should encourage the inflow of foreign capital. It should also serve as a disincentive to suppress the high demand for funds.

On the surface, the level of interest rates is market-related, determined by demand and supply. Interest rates could however have been quite different, if the Reserve Bank had not existed and intervened in the market. South African interest rates are therefore not determined by the market alone. The accommodation policy of the Reserve Bank performs the function of lender of last resort, with few exceptions. If there is a money market shortage (which is normally the case), banks will make use of Reserve Bank accommodation. They are accommodated by means of the new repurchasing agreements, at a repurchase rate designed to contain an element of cost to discourage (or stimulate) bank lending. Banks are normally unwilling to absorb the additional cost themselves, when there occurs a significant increase in their rate of accommodation. The lending rates of the banking will then adjust to the rate of accommodation, as will the market interest rate structure in general. Ultimately, however, it is the demand for money that is adjusted to the higher interest. The supply of money adjusts itself to the demand for money, which in turn reacts to the rates of accommodation determined by the central bank.

Changes in market interest rates also react to changed expectations concerning possible accommodation rate changes. The new method of tendering for repurchasing agreements, however, means a more strongly market determined rate of interest, in the sense that the tender rate itself is guided and managed by the Reserve Bank, rather than prescribed without further ado. The Reserve Bank can however still influence tender rates to a significant extent, in the sense that a tender rate which is too low (or too high) will fall outside the limit (quantity available for banks to tender for funds). Banks can then be compelled to tender at a higher (or lower) rate. The rate established in this way is therefore again a rate determined by the Bank – although more indirectly– or at least a rate approved by the Bank. In addition to that, the overnight facilities, at the marginal lending rate amongst other things, are still in place. Like other central banks, the Reserve Bank remains directly and indirectly in control of the level of interest rates.

Interest rates are thus determined by the market forces of demand and supply, but can be influenced by monetary policy too. On the one hand, the increase in bank credit intensifies the pressure on the money supply and thus leads to higher interest rates. On the other hand, higher interest rates again attract more short-term capital from the rest of the world and thus increases the amount of liquidity to be sterilised if the central bank is to retain its hold on the situation. It can of course be very difficult for the monetary authority to find the right balance in this environment. Credit supply however remains demand-determined by interest rates, as influenced by the Reserve Bank. Liquidity by itself plays no role in this.

As South African financial markets are increasingly integrated with the international financial system, the relation between South African and foreign interest rates rises in importance. Local interest rates that are too low will ultimately be reflected by a weak currency unit, thus causing further depreciation of the rand. On the other hand, local interest rates that are too high, will attract a high level of speculative short-term capital from abroad leading to an undesirable appreciation of the rand and/or an unhealthy expansion of domestic liquidity (SARB, *Ordinary Annual General Meeting of Shareholders*, 1997: 3).

In the last analysis, South African interest rates may in effect be said to be market determined. But it is not a perfectly competitive interest rate structure, seeing that the Reserve Bank continues to have an influence on the rates. The new method of accommodation, however, amounts to a step closer to more market related rates than in the past.

4.6 Exchange Control

Exchange control is described as the administrative control by the Reserve Bank of the buying and selling of foreign exchange. Exchange control is thus the attempt by the monetary authority to control the demand for foreign exchange, in order to protect the country's gold and foreign currency reserves (RSA, 1984: A35).

As in many other countries, exchange control was introduced in South Africa at the outbreak of the Second World War. Several elements thereof are still in operation today, and it is therefore important to consider this aspect of the matter too.

The South African pound came into being as an international monetary unit in 1911. On 14 February 1961, the South African pound was converted into the rand at the rate of two rand per pound. During the same year exchange control was introduced for non-residents. This gave rise to a dual exchange rate system. De Kock (in Lange and Van Wyk, 1979: 37) explained its origin as follows:

> (The) decline in reserves was proceeding a bit too rapidly at one stage, so we thought we would slow down the process by temporarily blocking the rand proceeds realised by non-residents ... That is how "blocked rand", later renamed "securities rand", came into existence. We never thought at the time we were instituting a dual exchange rate system.

According to this, non-residents could only invest in certain securities on the Johannesburg Stock Exchange at the blocked rand rate (lower than the commercial rate). These securities would only be sold to other non-residents.

The value of the rand was initially fixed subject to the Bretton Woods system. When the Bretton Woods system came to an end on 14 February 1971, South Africa did not yet have a well developed foreign exchange market at that stage, and various unsuccessful attempts were made to tie the rand to the British pound and the US dollar respectively. At the same time the Reserve Bank imposed complete exchange control on South African residents.

The De Kock Commission recommended the adoption of a managed but basically market determined exchange rate for current account and loan transactions (the "commercial" rand) and a freely floating exchange rate for other capital account transactions (the "financial" rand) (RSA, 1984: 128).
In 1979 a managed floating exchange rate system was set up, as recommended by the De Kock Commission. In addition, the blocked rand was replaced by the financial rand, whose value was determined by the demand and supply of non-

residents. The ultimate goal of the De Kock Commission was however a single managed-floating exchange rate system, without any exchange control over residents. The financial rand was in fact first abolished in 1983, but brought back again in September 1985. In February 1993 the financial rand and exchange control over non-residents were both abolished.

In 1985 South Africa experienced a financial crisis, caused by factors such as the sanctions campaign against South Africa and cancellation of its foreign debt. This is why the financial rand was restored in September 1985. When sanctions were dropped after the elections of 1994, the country's international economic relations started returning to normal once more. Under the circumstances, it became possible for the Reserve Bank to abolish the financial rand. Today South Africa has therefore a single exchange rate system of managed floating where the Reserve Bank may intervene in both spot and forward markets as the buyer and seller of foreign exchange. Exchange controls on permanent residents persist, whose determinations have however been made less restrictive on a number of occasions.

The South African forward market was however liberalised only in 1983, and is therefore still in an early stage of development. Although South African banks do operate in the foreign exchange market, certain problems remain. For example, foreign banks are sometimes unwilling to accept South African rand deposits, which inhibits the development of a large-scale forward market. Furthermore, exchange control regulations (on residents) still persist, and only approved currency dealers (usually the large banks) may hold deposits with foreign banks without special permission by the South African monetary authorities. The South African Reserve Bank stipulates what the maximum amount of these deposits may be (at present R750 000 per private individual). Lastly, the Reserve Bank still plays an important role in the forward market (Fourie *et al.*, 1999: 228).

With the establishment of the new Government of National Unity in 1994, the abolition of exchange control was adopted as a policy objective. At that stage, South Africa's official reserves were however insufficient to realise this goal. A gradual process of phasing out existing exchange control measures was introduced in its place.

Dr Stals thus stated (1997d: 1): "When the Government of National Unity came into power in April 1994, it was accepted as a policy objective to remove the exchange controls ... At the centre of the South African programme for financial reform is the gradual phasing out of exchange controls."

During the following three years, various steps were taken towards the realisation of the above-mentioned programme (Stals, 1997e: 2), as a result, the exchange system is today less regulated than before. The Minister of Finance, Mr T Manuel, referred to the goal of relaxing these measures in his 1997/98 budget speech as follows (RSA, 1997: 6): "The package of exchange control reforms placed before this House today moves South Africa to a system with a positive rather than negative bias... The objective is to reach a point where there is equality of treatment between residents in relation to inflows and outflows of capital."

The Minister thus made the point that South Africa has today a free foreign exchange system with a number of temporary exceptions, rather than a controlled system with a few special concessions. South Africans may now diversify their portfolios to include foreign assets too.

Dr Stals has pointed out that it is no longer possible for central banks to determine an effective market exchange rate, particularly in view of the limited foreign exchange at their disposal. The foreign exchange market is highly disciplined and capital flows are controlled by market forces. Mistakes by governments and central banks can possibly precipitate a capital outflow. Dr Stals defended the approach to gradually (rather than immediately) abolish exchange control measures in the following terms: "It will be fatal for a country to liberalise its financial systems and to encourage the integration of its domestic financial markets into the global system, and then to baulk at the discipline of these markets" (Stals, 1997c: 8).

Dr Stals (1996: 14) also referred to the complexity that the Reserve Bank would have to contend with, if it were attempted to find an exchange rate anchor: "In the present global environment, where foreign exchange rate transactions arising from capital movements are seventy times as big as gross turnovers for current balance of payments transactions, it is extremely difficult to decide what the appropriate exchange rate for any currency should be, particularly in the short term."

In such an environment, any reference to an under- or an overevaluation of the rand should be interpreted with great circumspection. As it is not possible for the monetary authorities to decide what the equilibrium exchange rate ought to be, it would therefore be hazardous to fix the exchange rate at an artificial level. The gradual abolition of exchange control is then the right policy to follow.

5 THE TRANSMISSION MECHANISM IN SOUTH AFRICA

The South African monetary system is not very much different from those of the main industrial countries. Briefly put, South Africa has a comparatively well developed financial system. The South African Reserve Bank has a good worldwide reputation, and its immediate past Governor, Dr CL Stals, also enjoyed widespread international approval for the way that the country's monetary policy was conducted. It is therefore not strange that central bankers consider that monetary transmission mechanisms and channels should be relevant in South Africa too. Much of the international research done in this field is therefore also of interest in our particular case.

However, so far little empirical research has been done on the various transmission channels of monetary policy in South Africa. Because of the complexity and interaction of a large number of variables, such research may in fact not prove to be practicable. Various relationships would have to be disaggregated microeconomically, which would be a major study in its own right. Moreover, the necessary data are not readily available. In the few cases where such data do exist, this is so for only the last few years.

Although econometric testing of the various channels of monetary transmission in South Africa has been limited, central bankers agree that results from other financially developed countries are also relevant for South Africa. This therefore confirms the ultimate validity of an expansionary monetary policy which is designed to stimulate the economy – and *vice versa*. As in other similar cases, with a great deal of effort it should be possible to conduct a study of at least some of the monetary transmission mechanisms in South Africa. But in view of the complexity of such an undertaking, this study accepts the practical experience of central bankers and next discusses those few aspects of the matter which have indeed been examined in South Africa.

5.1 Inflation and Time Lags

As pointed out above, the purpose of monetary policy is to protect the value of the monetary unit. This task is complicated by the long and variable time lags between the manipulation of monetary policy measures and the ultimate effect thereof on inflation. The lag between monetary policy changes and their full impact on inflation may be up to two and a half years in South Africa. This means that monetary policy decisions must be future-related, and that the policy makers need information that can indicate how inflation is likely to develop in the future (*QB*, December 1997).

These lags in the monetary sector of the South African economy, have important consequences for the nature of the policy chosen and its effective transmission to the real sector of the economy. Higher interest rates will cause inflation to rise in the short run, seeing that one of the components of the South African Consumer Price Index is the mortgage rate, or part of the home owners' cost of living. (That is why the new CPIX index was introduced as a measure of inflationary pressure - excluding interest costs on home loans. The CPIX for both metropolitan and other urban areas is used). The purpose of higher interest rates is, however, to reduce inflation by means of their effect on saving and consumption, in the medium to long term.

Concerning the relation between the money stock and inflation, the monetary aggregate M3 is taken to be a leading indicator of inflation. As in other countries, an expansionary monetary policy is associated here with an increased money supply and, ultimately, higher rates of inflation (*QB*, March 1998).

5.2 Investment

South Africa's poor investment record during the 1980s and the first half of the 1990s, is one of the main causes of the limited increase in the country's growth potential. Fixed investment (capital formation) in relation to the GDP fell from 27.8 per cent in 1981 to 14.7 per cent in 1993. Since then it has risen somewhat to 16.5 per cent in 1998, but declined in 1999 to 14.9 per cent (*QB*, September 2000).

Although investment represents only 20 per cent of the GDP, it is an important determinant of economic growth. Since the late 1960s, the annual growth rate of gross fixed investment in South Africa, measured in real terms, has significantly declined, from approximately 8 per cent in the 1960s to an average figure of less than one per cent during the 1980s and early 1990s. The level of investment expenditure is much lower than the 25 per cent considered to be the condition for a sustained high economic growth rate (*QB*, March 1998).

Since 1980 there has also generally been a continued lagged relationship between long-term interest rates and fixed investment.

The importance of investment is stressed in the government's GEAR document. The tax concessions to encourage investment and the relaxation of exchange control, should encourage investment to the extent that this reduces the user cost of capital. This is naturally subject to other risk factors that also play an important part in the decision to invest.

6 FACTORS AFFECTING THE TRANSMISSION MECHANISM IN SOUTH AFRICA

The transmission mechanism is one of the most important components of the economic system, as it determines the connection between the monetary and real sectors of the economy. There is continuous interaction between these two sectors. The manner in which this interaction takes place is of cardinal importance in the application of monetary policy. The ultimate realisation of the policy objectives set up for the economy, is largely dependent on the successful transmission of monetary impulses to its real sector. The most important factors in the transmission of monetary policy in South Africa are briefly considered below.

6.1 Socio-Political Goals

South Africa is at present in a process of transition, in the sense that it has adopted a new political dispensation, with its own policy goals. Moreover, the country today has access to foreign markets – financial and other – from which it was largely excluded before. South Africa has an open and developing economy. In any event, it is now operating in a completely changed politico-economic environment, which will ultimately influence the efficiency of monetary policy too.

Taking a critical view, Truu (1997: 31) has described the social goals of the government as follows:"... an ill-sorted core (private property rights, central decision-taking) and a dirigiste environment where the state means to shape the economy in its own image of the good society."

One factor in particular, namely the new political dispensation, means that there are specific goals to be addressed. Socio-economic programmes of affirmative action are now much in evidence. As these programmes are mainly launched by various government departments, they belong to fiscal rather than monetary policy. Economic progress has however often been rather limited and important policy objectives have not been reached. The prime example is widespread unemployment that continues to be high. In October 1999 the official unemployment rate was 23.3 per cent (*QB*, September 2000).

One may therefore expect increased pressure on monetary policy to address such issues. The problem of unemployment is however not really resolved in this way, seeing that one of its main causes is the strongly negative effect that trade unions have on job creation (e.g. by wage increases that exceed productivity increases). By itself, monetary policy cannot therefore do away with

unemployment. The problems of unemployment however extend beyond economic boundaries, particularly by causing high levels of crime.

6.2 Interest Rate Elasticity

The transmission mechanism operates round interest rates that react to policy changes, which in turn influences portfolios composed of a wide range of assets as well as current expenditure. Production, too, is ultimately affected.

In a speech, Dr Stals (1997f: 8) said that the demand for credit in South Africa has probably become less sensitive to interest rate changes. In addition, the relation between changes in the money supply and ultimate price changes also seems weaker now than before, on account of the large volume of transactions in the financial markets.

Reduced interest rate elasticity of expenditure is today a worldwide phenomenon. Ultimately it also influences the successful transmission of monetary policy.

6.3 Expectations

Expectations, too, ultimately influence policy transmission; in an extreme case, they could even make monetary policy completely ineffective. The modern rational expectations theory seems particularly relevant to South Africa, where markets – especially the labour market – are very rigid with regard to price wage changes. Prices (wages) do move upwards, but not downwards. Therefore, the extent to which rational expectations will have an impact, depends on the extent to which price rigidities are present in the various markets.

Inflationary expectations are another strong presence in South African markets. Here they are not constant but vary according to different market conditions. This is also related to changes in monetary policy, and rather complicates its application.

A large measure of rigidity is associated with the determination of interest rates in South Africa. Expectations also play a large part in this context. Market interest rates thus react to expected changes in the future rate of accommodation – determined by Reserve Bank policy.

All this ultimately affects simple market-related determination of variables and makes the transmission of monetary policy less effective. Optimal resource allocation should therefore not be expected in such an imperfect environment.

6.4 Changes in Capital Markets

Important changes have taken place in South Africa's capital markets. As mentioned above, South Africa is once more integrated with international capital markets which obviously affects domestic markets too. All variables that play a part in foreign markets, therefore eventually also have an impact on domestic markets. In the present context, it is particularly important what has happened in the capital markets. There are now rather more markets and financial instruments than before, impinging on the successful transmission of monetary policy. In such an environment, it is more difficult to control the demand for money. Moreover, financial markets are of a more speculative nature, characterised by great international capital flows. That, however, means more unstable financial markets – with negative implications for exchange rate stability.

6.5 Time Lags

The nature of the time lags encountered there, clearly plays a part in determining the efficiency of a country's monetary policy too.

Dr Meijer has referred to the effect of time lags in the following terms:

> Prime among these are the lags in effect of monetary policy measures, and the fact that these measures tend to affect the "real" economy (physical production levels, and employment) before making themselves felt in the inflation rates...these factors complicate the task of deciding on the appropriate stance of monetary policy as at any given point of time (Falkena, Fourie and Kok, 1995: 373).

South Africa has well developed financial markets, where a wide range of assets are traded, though exchange controls are still in place in respect of foreign assets held by South African residents. The fact that South Africa is a developing country, also means that its economy is subject to several structural problems and cannot – pure and simple– be compared with the developed countries of the world. As a result, the transmission of policy does also not take place as efficiently here as in a developed country.

7 EPILOGUE

Hicks has made the point that monetary theory is less abstract than most other economic theory, adding: "It belongs to economic history, in a way that economic theory does not always belong to economic history" (Hicks, 1977:

45). If this is true of monetary theory, it is no less true of monetary policy. Therefore, to look for a single or simple conclusion in the present case, would be to search for the proverbial will-o'-the-wisp.

Instead, Truu (2000: 342) has pointed out the following: "With the passage of time, as the monetary philosophy of the De Kock era shaded into that of the Stals era, monetary policy also changed and will no doubt continue to do so under the new dispensation at the Reserve Bank." This monograph has mainly been an analytical survey of monetary (or Reserve Bank) policy in South Africa after the Second World War until the end of the twentieth century - call its last decade the Stals era. This has been a time when monetary policy changes were piecemeal rather than wholesale, being progressively adapted to a more market-related economic system. At the beginning of the twenty-first century, the South African Reserve Bank now finds itself under a new management too, and one may call it the threshold of the Mboweni era.

It is already evident that new policies must be expected in the new era. After the liberalisation of the South African financial markets and the reintegration of the South African economy in the world financial markets, money supply targeting became ineffective. The Reserve Bank therefore shifted from its original emphasis on monetary aggregates to a broad range of intermediate targets. This "eclectic" approach involved the public announcement of guidelines for the growth of the broad money supply, augmented by regular broad-based assessments of economic conditions and the outlook for inflation. From there, it was a small step to formal inflation targeting. Thus the Reserve Bank *Annual Economic Report 2000* (51) contained the following statement: "The introduction of inflation targeting was partly influenced by structural changes in the financial system in recent years which altered the transmission mechanism in the economy and weakened the more stable relationships that had previously existed between changes in the money supply and bank credit extension on the one hand, and in nominal spending on goods and services and prices on the other hand". Given that the government has now introduced an inflation target, it is also imperative for the Reserve Bank to have the appropriate institutional framework to implement inflation targeting. Therefore, the manner in which monetary policy is conducted should be analysed anew for its successful application in an inflation target environment. The forward looking nature of an inflation targeting framework implies that the central bank must have access to both a serviceable inflation forecasting model and policy instruments that affect the inflation forecast with reasonable accuracy. Although allowance will have to be made for the effects of serious supply shocks (like another traumatic increase in the international price of crude oil in 2000) it is ironic that the Reserve Bank has to contend with this already in the first year of its new monetary policy framework. Skilful monetary management remains essential.

For it is the efficiency and credibility with which monetary policy is conducted that determine the success thereof in reaching its ultimate objective.

ENDNOTE

This monograph is based on the author's DCom thesis at the University of Pretoria "Die toepassing van monetêre beleid met spesifieke verwysing na die werking van die transmissiemeganisme", obtainable at: http://www.ais.up.ac.za.

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