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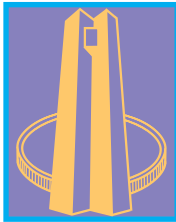

South African Reserve Bank

The viability of implementing an inflation targeting monetary policy framework in South Africa

by A.J.H. Casteleijn

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The viability of implementing an inflation targeting monetary policy framework in South Africa[1)]

by A.J.H. Casteleijn

A number of countries have successfully adopted inflation targeting monetary policy frameworks in recent years. It is a framework based on hitting an inflation target, and if it is considered that the target is going to be missed, then determining whether a change in policy stance is called for. The purpose of this paper is to briefly assess the viability of implementing an inflation targeting monetary policy framework in South Africa. The main conclusion is that a fully-fledged inflation targeting framework would ensure better co-ordination of monetary and fiscal policy and greater economic policy credibility. There are, however, two important caveats: approval of an explicit inflation targeting framework by government through the Minister of Finance and provision for a lead time of two to three years as part of the implementation strategy.

Introduction

Significant success has been achieved with the monetary policy model of the South African Reserve Bank during the past decade. However, important structural changes in the South African financial system in recent years have altered the transmission mechanism and weakened the more stable relationships that previously existed between changes in the money supply and in bank credit extension, on the one hand, and in nominal spending on goods and services and in prices on the other hand. Changes in the monetary aggregates have for the time being lost some of their usefulness as the most important indicators of possible future trends in inflation, and therefore also as an anchor for monetary policy decisions.

The Reserve Bank has tentatively assumed a goal of maintaining inflation at a level that would be more or less in line with the average rate of inflation in the economies of South Africa's major trading partners and international competitors. In the current international inflation environment this translates into an inflation rate of between 1 and 5 per cent per annum. The Governor of the South African Reserve Bank has, however, stated that South Africa could under ideal circumstances gradually move towards targeting inflation directly: "In the [altered] situation, South Africa has to consider more seriously the introduction of inflation targets as an anchor for monetary policy purposes" (see Stals 1999).

The paper briefly reviews the general prerequisites that still need to be met before a fully-fledged inflation targeting framework could be successfully introduced in South Africa and more specifically, the elements of inflation targeting that could possibly be adopted successfully beforehand. In the first part of the case study, recent monetary policy developments and new operational procedures are discussed. The scope for adopting inflation targeting in South Africa in the near future, the applicability of inflation targeting and possible conflicts with other policy objectives will be addressed within the context of what is currently regarded as being the most suitable approach towards inflation targeting in developing countries. The potential advantages and concerns in adopting an inflation targeting monetary policy framework will then be discussed. Finally, the necessary prerequisites for the successful implementation of inflation targeting in South Africa will be identified and the elements of inflation targeting that could be adopted beforehand will be discussed

Recent developments

Monetary policy in South Africa

The Reserve Bank's monetary policy is aimed at creating an environment of financial stability, which is conducive to economic growth in the medium to long term. The monetary policy objective therefore is an intermediate objective and is deemed to be a necessary but not sufficient precondition for economic growth and employment creation. The growth and employment objectives fall within the ambit of the South African government's macroeconomic strategy, *Growth, Employment and Redistribution* (GEAR).

Inflation distorts investment and savings decisions, raises the risk premium in long-term interest rates and undermines the allocative efficiency of the price mechanism (see Duisenberg, 1999a). The focus of monetary policy on the single objective of price stability is crucial to convince savers and investors that, in taking their decisions, they do not need to factor in a large inflation risk. To this end, monetary policy operates primarily on the demand side of the economy and in this sense policy

[1)] A previous version of this paper was presented at a five-day workshop on the Choice of Intermediate Monetary Policy Targets in Industrial, Transitional and Developing Economies at the Bank of England's Centre for Central Banking Studies from 16 - 20 November 1998. The author is grateful for comments by Sunil Sharma and for valuable contributions made by colleagues in the Economics Department of the South African Reserve Bank (SARB). However, the views expressed in this paper are those of the author and do not necessarily represent those of the SARB.

has an important but more indirect role in allowing the economy to achieve its longer-term growth potential. This involves ensuring that demand in the economy grows roughly in line with the capacity of the economy to meet the demand. The pursuit of price stability in the rest of the world and the success achieved by many countries in bringing their inflation rates down to low levels, has left South Africa with no alternative but to bring its inflation in step with that of the rest of the world (see Van der Merwe, 1997). Price stability is at the core of the "stability culture" which is being established throughout Europe. In the words of Duisenberg (1999b): "Monetary policy cannot be used to solve structural problems, such as the unacceptably high level of unemployment in the euro area. Structural problems call for structural solutions, in this case measures targeted at making labour and product markets work more flexibly. The best contribution the European Central Bank's monetary policy can make in this context is to maintain price stability. In this way one of the conditions for sustainable growth in incomes and employment is created. As important as this is, it should be realised that jobs are created by firms which are confident about the future and not by central banks." If South Africa does not achieve price stability in the coming years, market adjustments to compensate for inflation differentials are inevitable. Such adjustments could include repeated large disruptive capital outflows, a depreciating rand and high interest rate levels.

Low inflation is almost universally accepted as the ultimate objective of monetary policy – not as an end in itself, but as the means whereby monetary policy can contribute to solid economic performance. It is absolutely essential for any central bank entrusted with the task of keeping prices stable to analyse and monitor the developments of monetary aggregates closely (see Duisenberg, 1999a). To achieve this objective, the Reserve Bank designed a monetary policy framework which was anchored by the setting of guidelines for growth in the broad money supply (M3). This approach is based on the presumption that a stable relationship exists between changes in the money supply and macroeconomic variables, including nominal GDP. Within this monetary policy framework the Reserve Bank succeeded in bringing inflation down to more acceptable levels.

Broad money supply targets were announced for the first time in the second half of 1985 for the period starting in the last quarter of 1985. The Commission of Inquiry into the Monetary System and Monetary Policy in South Africa had recommended the implementation of monetary targeting with a reasonable measure of flexibility (Commission 1984). In the first quarter of each year, target ranges for M3 growth were announced. The target ranges, also referred to in recent years as "guidelines", were afforded a high priority in monetary policy. In recent years the M3 money supply increased at rates consistently higher than the indicated guideline ranges for growth, but inflation nevertheless declined, contradicting previous expectations.

Considerable uncertainties have arisen about the behaviour of the velocities of circulation of the various monetary aggregates and there were difficulties with forecasting the relationship between money growth, nominal income growth and inflation. As in other countries which moved through periods of stabilisation from high to low inflation, the relationship between money growth and nominal income growth observed in South Africa during periods of high inflation, changed with declining inflation. Lower inflation and positive real returns on deposit-type investments contributed in restoring money's property as a store of value, thereby encouraging the community to hold an increased portion of overall wealth in the form of bank deposits. Although growth in M3 was brought within the target range in 1992 and undershot the target range in 1993, the target was substantially overshot in subsequent years before declining again to within the target range in February 1999 (as can be seen from Table 1 and Graph 1).

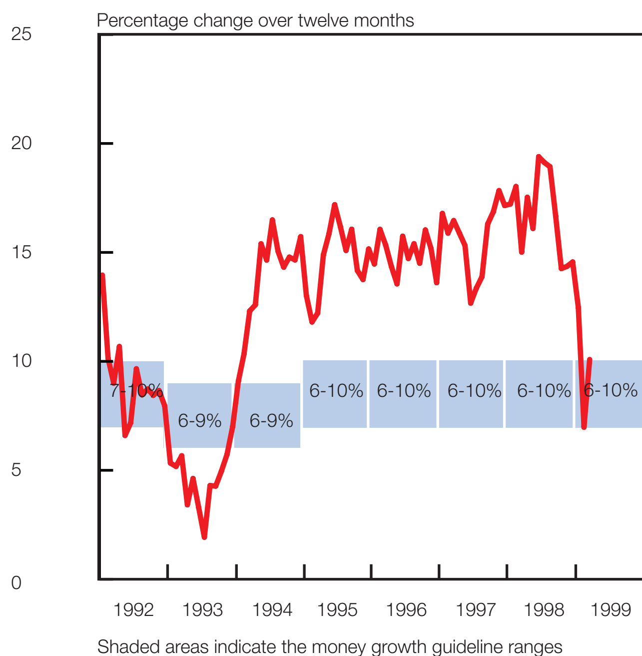
The growing integration of the global financial markets, the attendant increase in non-resident participation in the domestic financial markets following the liberalisation of South Africa's capital market, the gradual relaxation of exchange controls and the extension of banking services to the previously unbanked, significantly changed the relationship between M3 and the gross domestic product. Graph 2 illustrates the ratio of M3 to gross domestic product from 1981 onwards. The relationships between M3 and the demand for goods and services, and, with time lags, prices, that existed before, were altered by far-reaching structural changes in the South African economy. As a result, the Reserve Bank has shifted the emphasis of its monetary policy model from movements in the money supply to using a "package" of economic indicators as a guideline for taking monetary policy decisions.

Table 1. M3 money supply guidelines, actual outcome and inflation

Per cent

Year	Lower limit	Upper limit	Out-come	CPI	Core CPI
1986	16	20	10,1	18,6	22,6
1987	14	18	15,5	16,1	16,6
1988......	12	16	26,5	12,9	13,7
1989......	14	18	23,5	14,7	12,8
1990......	11	15	12,0	14,4	15,3
1991......	8	12	14,7	15,3	18,9
1992......	7	10	8,8	13,9	16,8
1993......	6	9	5,6	9,7	12,6
1994......	6	9	14,6	9,0	8,9
1995......	6	10	14,3	8,7	7,9
1996......	6	10	15,2	7,4	7,4
1997......	6	10	17,4	8,6	8,8
1998......	6	10	14,3	6,9	7,5

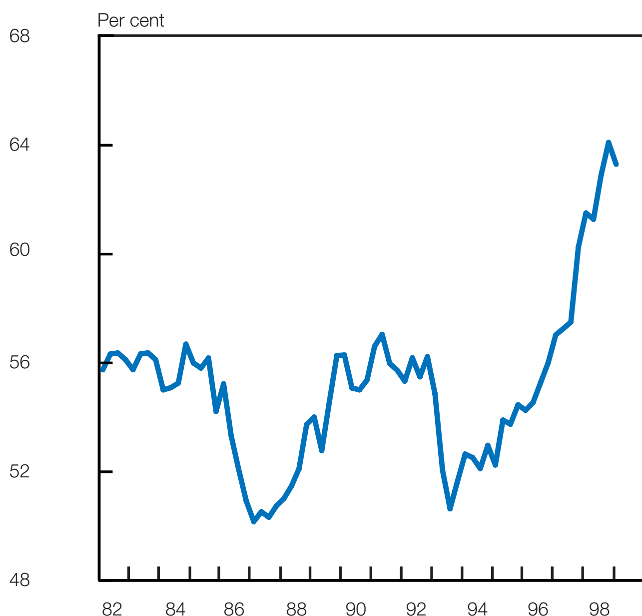
Graph 1: M3 money supply



Shaded areas indicate the money growth guideline ranges

The eclectic approach followed by the Bank does not entail setting a formal inflation target for monetary policy purposes. The Bank nevertheless on 7 March 1998 indicated a range of between 1 and 5 per cent per year as an inflation objective that would be taken into consideration when formulating monetary policy. Guidelines for the growth in M3 and bank credit extension were also announced on the same date. However, the guidelines for the growth in M3 of between 6 and 10 per cent were no longer defined over a time horizon of only one year, but for three years instead. Such an average growth rate in M3 was expected to contain inflation without inhibiting stronger economic growth. As from 1998 the intermediate objective of the Reserve Bank has been to bring the average level over the next three years in the rate of increase in M3, measured over successive twelve-month periods, down to within the guideline range of 6 to 10 per cent.

Graph 2: M3 as percentage of gross domestic product



Central banks in several countries such as New Zealand, the United Kingdom and Sweden encountered similar problems with the instability of money-to-aggregate-income ratios. These countries abandoned the use of monetary “targets” or “guidelines” as part of their overall macroeconomic policy strategies and introduced inflation targeting monetary policy frameworks. However, the European Central Bank’s stability-oriented monetary policy strategy rests on two “pillars” (see Duisenberg, 1999a): The first pillar is a prominent role for money which is still deemed to be important on account of the essentially monetary origins of inflation over the longer term. The second pillar of the European Central Bank’s monetary policy strategy is a broadly based assessment of the outlook for price developments and the risks to price stability in the euro area as a whole. The European Central Bank has followed a different approach by recognising that it is important, parallel with the assessment of monetary growth, to look at a wide range of financial and other economic indicators, including economic forecasts.

The South African Reserve Bank moved from monetary targeting to a more eclectic approach. Besides movements in the money supply components (M1, M2 and M3) the package includes bank credit extension; the yield curve and interest rates; the current and capital account of the balance of payments; changes in the gold and foreign exchange reserves; movements in the exchange rate of the rand; and actual and expected movements in the rate of inflation. Certain indicators can in a sense be regarded as intermediate targets of policy. The eclectic approach also recognises the fact that inflationary pressures in the economy will be affected by certain non-financial developments such as changes in nominal labour remuneration and nominal unit labour costs and the gap between potential and actual domestic output.

Structural changes in South Africa’s financial markets

The South African financial markets are more advanced than those of many other “emerging economies”. Nevertheless, steps are continuously taken to ensure that the country maintains a competitive advantage in the quality and sophistication of its financial infrastructural arrangements. The largely self-regulated private exchanges effected significant changes during 1996 and 1997 aimed

at making them globally competitive and more amenable to the mobilisation of capital for development purposes. Important changes more recently introduced to reinforce integration into the international financial network involved the further liberalisation of exchange control measures and an offer to the World Trade Organisation (WTO) regarding the liberalisation of trade in financial and other services. The offer to the WTO inter alia addresses access to the South African insurance, banking and other financial services markets and the equal treatment of domestic and foreign service providers. The member countries of the Southern African Development Community (SADC) are also co-operating with one another to harmonise their financial infrastructural frameworks as a first step towards integrating the capital markets in the region.

Modernisation of the financial markets has been primarily focused on risk reduction through improving the clearing and settlement infrastructure. These system changes will bring South Africa in line with international best practice and conform to the G-30 recommendations for electronic settlement. During the first half of 1998 the introduction of new financial instruments broadened the variety of alternatives and aligned the financial product range in South Africa more closely with that of international financial markets. The new financial instruments originated mostly in the market for derivatives. The interest rate futures contracts traded on the South African Futures Exchange were expanded to include futures contracts and options on futures contracts for more government bonds in order to extend the coverage of the yield curve.

New operational procedures in the money and capital markets

The Reserve Bank implemented new procedures on 9 March 1998 to regulate liquidity in the money market. With the new arrangements, the Reserve Bank changed its operational procedures from a virtually automatic accommodation of banks' liquidity needs, to a repurchase-based auction system whereby banks tender on a daily basis for a given amount of liquidity determined by the Reserve Bank. The Reserve Bank sought to improve the efficiency of its monetary policy measures by changing the procedures for providing liquidity to the banking system.

Under the previous system of accommodation, the Reserve Bank managed liquidity largely by creating shortages in the money market through open market transactions in government securities, spot and forward foreign exchange transactions and the transfer of government balances between the Exchequer Account with the Reserve Bank and Tax and Loan Accounts with the private banks. The liquidity shortages so created were accommodated, unconditionally and automatically, through borrowing against collateral from the Reserve Bank at rates determined by the Bank.

Money market interest rates tended to be unresponsive to changes in the amount borrowed from the Reserve Bank. Hence, in the absence of changes in Bank rate, the impact of tighter liquidity conditions did not occur through a change in borrowing costs along the money market yield curve. Because of the rigidity of money market interest rates with respect to changes in liquidity conditions, the Reserve Bank experienced difficulties when attempting to signal its views on interest rates to market participants through variations in the liquidity shortage. This essentially left the Bank with a somewhat blunt policy instrument, i.e. officially announced changes in Bank rate and other official lending rates.

Under the new arrangements, the Reserve Bank provides liquidity to the money market through a daily auction where banks are allowed to tender for central bank funds through repurchase transactions. The Reserve Bank estimates the overall liquidity requirement of the market on a daily basis, allowing the Bank the opportunity to signal to the market its views on ruling interest rates by pre-announcing the extent to which it is prepared to meet the estimated liquidity requirement. Although variable, tender-determined rates are the norm, the Reserve Bank reserves the right to supply liquidity in the form of repurchase transactions at a fixed rate. The amount of liquidity provided at a fixed rate can also deviate from the estimated requirement for a specific day.

Another feature of the new money market operational procedures was the introduction of a marginal lending facility to provide liquidity needs in excess of those satisfied through the repurchase facility. Overnight loans or loans for a few days are provided to banks at a pre-announced marginal lending rate against the collateral of central government bonds, Treasury bills, Reserve Bank debentures and Land Bank bills. The marginal lending rate was initially intended to form an upper limit to the repurchase rate, but subsequently became linked to the repurchase rate with a pre-announced margin which is changed from time to time.

The fiscal policy posture has in recent years supported the objective of price stability and relieved the burden on monetary policy by reducing some of the upward pressure on interest rates. The working relationship between the Reserve Bank and the Department of Finance was also meaningfully rationalised by the appointment of a panel of market-makers in government bonds. These market-makers, which are registered banking institutions, enjoy exclusive dealing rights with the government in respect of all domestic government bond issues. The appointment of the market-makers (or primary dealers) relieved the Reserve Bank of the obligation to act as a broker for the government. The potential conflict between the Bank's monetary policy responsibilities, which at times would require high interest rates, and its duties to fund the government deficit at the lowest possible cost, was effectively removed.

Changes to the internal decision-making structure of the Bank

Some important changes were introduced during the past year in the internal decision-making structure of the Bank. The functions of the Governors' Committee, a sub-committee of the Board of the Bank, have been redefined to distinguish clearly between its responsibilities with regard to monetary policy, and those pertaining to the administration of the Bank.

The former General Managers' Committee, consisting of the top administrative management of the Bank, has been replaced by three functional committees:

- the Monetary Policy Implementation Committee (MPIC), responsible for the development and implementation of monetary policy, mainly by co-ordinating the Bank's operations in the money and capital markets and in the market for foreign exchange;
- the Currency, Payment and Financial Systems Committee, responsible for the monitoring and administration of the national payment system, the provision of banknotes and coin and other instruments of payment, and the supervision and regulation of banking institutions; and
- the Management Committee, with the task of co-ordinating and monitoring the internal administration of the Bank.

All three committees advise and make inputs to the Governors' Committee on aspects of monetary policy in the broadest sense, directed towards the maintenance of overall sound and stable financial conditions. Each one of the committees is headed by a Deputy Governor to ensure that the work of the committees and the Governors' Committee will be fully integrated. The MPIC is headed by the Deputy Governor responsible for the Bank's domestic money and capital market and foreign exchange market operations and other members comprise the senior officials of the relevant departments. The other Deputy Governors may also attend MPIC meetings. In addition, the Economics Adviser to the Governors serves as a link between the Governors' Committee and the MPIC. It remains the responsibility of the Governors' Committee to obtain final direction from the Board of Directors for all the activities of the Bank.

The scope for implementing an inflation targeting monetary policy

An inflation targeting framework is more difficult to implement than a monetary framework based on targeting money growth or a more discretionary framework. In the words of Jonsson (1999): "The forward looking nature of an inflation targeting framework implies that the central bank must have access to both a decent inflation forecasting model and policy instruments that affect the inflation forecast with reasonable precision." The Reserve Bank has to date been of the opinion that South Africa has yet to reach the stage where a fully-fledged inflation targeting framework could be incorporated into its overall macroeconomic strategy. The adoption of an inflation target implies greater reliance on forward indicators of inflation and a continuous assessment of the relationship between the instruments of monetary policy and the inflation target. Aspects such as the required comprehensive forecasting framework and the increased volatility in international financial flows would appear to preclude the immediate adoption of an explicit inflation target. The policy credibility which was achieved by the monetary and fiscal authorities in the stabilisation process could easily be impaired by an unsuccessful premature adoption of direct inflation targeting. However, there are a number of other relevant issues which need to be considered when deciding whether an inflation targeting framework can be implemented successfully in South Africa.

South Africa's re-emergence into the global economy

South African institutions broadened their activities into foreign markets as the successful transition to an all-inclusive democratic system of government opened South African markets to active participation by foreign competitors. The South African authorities actively encouraged the process of integration into the international financial and trading network by means of trade and industrial policy reforms, organisational and regulatory changes in the financial markets and the gradual relaxation of exchange controls. Previously highly protective, inward-orientated trade and industrial policies were restructured to enable the economy to compete effectively in export markets.

Because most international investors classify South Africa as an emerging market, the country is often affected when financial stability appears to be under threat in some of the other economies included in the emerging-markets category. The South African economy could not escape all of the adverse consequences of the developments in certain emerging markets. For a smaller economy such as South Africa, the choice is straightforward – either to share in the major benefits, but then also in the periodic adversities, of the global financial integration process, or to insulate the economy from the rest of the world, and be dependent on the limited resources and opportunities available in the country for its own economic development. In view of an extremely low level of domestic saving, South Africa has no option other than to participate actively in the process of financial globalisation. Only as a participant in the global market will it be possible for the country to attract significant foreign investment that is required for more sustained economic growth.

In 1998 South Africa experienced the full force of the volatility of the international financial markets. Despite large disinvestment in bonds, non-residents still increased their overall holdings of South African securities by R32 billion during the year as a result of increased holdings of shares acquired through the Johannesburg Stock Exchange. The abrupt change in non-resident portfolio investment in South African bonds spilled over into the market for foreign exchange. The exchange rate

of the rand, which was relatively stable throughout 1997 and the first four months of 1998, depreciated by 16,4 per cent from the end of April 1998 to 31 December 1998. The emerging-market financial crises in 1998 also led to an increase in interest rates and yields in the South African financial markets and from April to August 1998 the daily average yield on long-term government bonds rose by 742 basis points to a high of 20,09 per cent.

South Africa experienced similar circumstances in 1996 and on both occasions, that is in 1996 and again in 1998, the Bank succeeded in restoring financial stability in a relatively short period of time, but not without painful adjustment and a high social cost in terms of low economic growth and significant job losses. These financial flows are largely the result of South Africa's re-emergence into the global economy, but as mentioned earlier, important structural changes in the South African financial system in recent years also weakened the more stable relationships that previously existed between changes in the money supply and bank credit extension, nominal spending on goods and services, and prices.

The high rates of increase in the money supply and in bank credit extension in recent years were at least partly related to the almost explosive increases in the turnovers in the major financial markets. Consequently, changes in the monetary aggregates for the time being lost some of their usefulness as the most important indicators of possible future trends in inflation, and therefore also as an anchor for monetary policy. Although part of the increases in the money supply and in bank credit extension can be directly linked to increased financial market activity, South Africans have nevertheless still been relying excessively on the creation of money to finance their transactions in the real economy and in the financial markets. However, the use of bank credit for the financing of investment in financial assets or in the property market has not yet created undue upward pressure on asset prices as has been the case in some other countries.

Considering the effects of the structural changes in the South African economy and their effect on the relationship between money growth and nominal income growth and inflation, the question arises as to what the potential advantages would be in adopting an explicit inflation targeting framework rather than the eclectic course the Bank is at this stage following.

Potential advantages of an inflation targeting framework

Inflation targeting has been successfully implemented in a number of countries and has enabled them to sustain low inflation levels after having been subjected to high and volatile inflation previously. Using an intermediate variable such as money supply to guide policy is mostly inferior to feeding back directly from the final target variable (see Haldane, 1995).

Whereas most forms of targeting involve operational or intermediate variables, inflation targets are defined in terms of the final objective of monetary policy. Furthermore, according to Jonsson (1999): "In many emerging market economies, the currency has been attacked precisely because the central banks have had an implicit or explicit exchange rate objective that was not perceived as credible [...] to the extent that the adoption of inflation targeting signals a clear commitment to allow the exchange rate to float [...] such a regime might contribute to more stable foreign exchange and capital markets." In a fully-fledged inflation targeting framework the target is the goal of policy. Various extensive analyses of central banks' experience with inflation targets in recent years compare inflation targeting with alternative monetary policy frameworks and conclude that inflation targeting is superior to the alternative targeting approaches considered (see Bernanke and Mishkin, 1997; Mishkin, 1998; and Bernanke, Laubach, Mishkin and Posen, 1998).

Inflation targeting strengthens a central bank's accountability and "accountability and the need to explain deviations from targets should promote transparency, allowing the public to understand the basis for monetary policy decisions, and thus to form more accurate expectations" (see Fischer, 1997). Members of the public are able to monitor whether a numerical target has been achieved and transparency is improved if the monetary authorities explain the extent to which they have been able to reach their objectives. Transparency reduces the uncertainty about a central bank's preferences and this leads to a lower expected rate of inflation (see Eijffinger et al, 1998). This also implies that members of the public are familiar with the inflation target and the specific inflation measures serving as target variables. Setting a credible inflation target tends to reduce inflation expectations as economic agents begin to factor lower inflation into pricing decisions.

Although inflation targeting increases the central bank's accountability, it does not necessarily imply a loss of monetary policy independence. According to De Haan et al: "Democratic accountability should not necessarily be regarded as a restrictive mechanism limiting the independent position of the central bank but, on the contrary, can be seen as a validating mechanism legitimising the independent position of the central bank." Depending on how the target is set and to what extent an inflation target is consistent with other government policies, an inflation targeting approach can significantly improve the co-ordination between fiscal and monetary policy. Furthermore, monetary policy transparency helps economic agents solve the signal extraction problem of whether it is incompetence or under-handedness that is driving policy decisions (see Briault, Haldane and King, 1995). In a fully-fledged inflation targeting framework, inflation targets are transparent and help to enhance the credibility of the central bank. Countries with inflation targeting frameworks appear to be more successful in improving the communication of monetary policy to the public. This, in turn, improves the accuracy and co-ordination of inflation expectations and reduces the risk premia on investment in these countries, implying a lower path for long-term interest rates (see Jonsson).

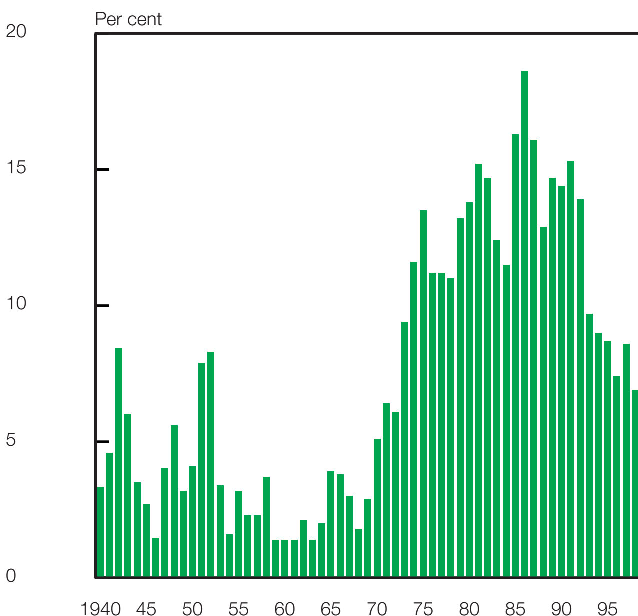
Possible concerns about an inflation targeting framework

Prices may vary because of non-monetary factors beyond the control of central banks, thereby damaging the credibility of a central bank committed to an inflation targeting approach. The inflation forecast can be regarded as the intermediate target within an inflation targeting framework but forecasting the effects of a central bank's actions on the inflation rate is subject to a large margin of error given the long policy lags and the often uncertain effects of monetary policy on inflation. If inflation forecasts prove to be erroneous, a central bank could then possibly have acted even if prices rose only for temporary reasons. In cases where inflation forecasts are inaccurate, publishing the forecast could obscure rather than clarify what the central bank's ultimate objective is.

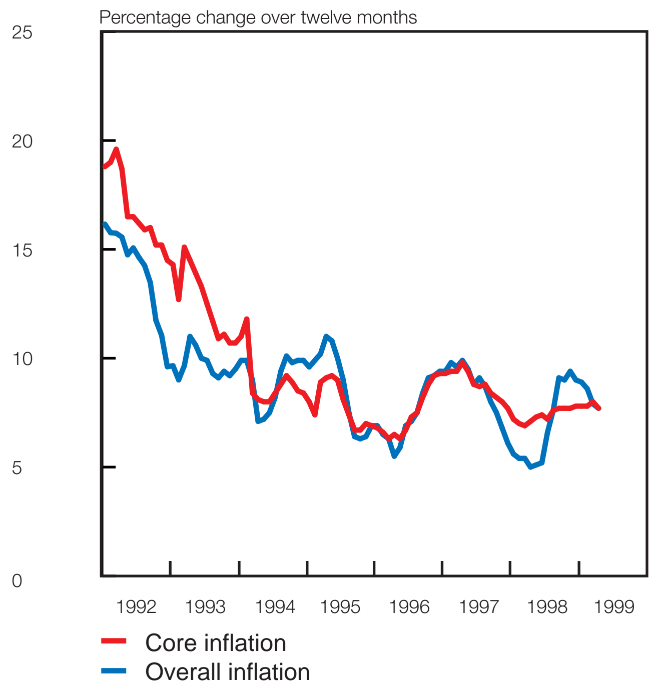
In almost all cases where inflation targeting has been adopted, disinflation had commenced well before the introduction of the new framework, making a more comprehensive assessment of its impact difficult. Countries that implemented inflation targeting did so from a fairly low base and at a time when all the advanced economies began experiencing lower rates of inflation. Furthermore, certain economists argue that generalised inflationary pressures have yet to test inflation targeting frameworks in a number of these countries.

The South African economy has experienced sustained high inflation rates in the past three decades, as illustrated in the accompanying graph. The marked inflationary bias of the South African economy is rooted in the continued (and in certain instances increasing) rigidities that persist in many product and factor markets, and in the continued although declining fiscal deficit. However, as the economy began opening up significantly, comprehensive structural reforms were undertaken which exposed many sectors to foreign competition. In 1993 the year-on-year change in the consumer price index dropped below 10 per cent for the first time since 1973. The downward trend in consumer inflation, which had commenced in 1992 continued until 1997 when inflation accelerated again to a year-on-year level of 8,6 per cent. However, a consumer price inflation rate of 6,9 per cent was recorded for 1998 as a whole, which is the lowest annual rate since 1972.

Graph 3: Consumer price inflation in South Africa



Graph 4: Consumer prices



The inflation objective in South Africa is currently expressed in terms of the core inflation rate, but should a fully-fledged inflation target be adopted, serious consideration would have to be given to choosing the most appropriate index (see Stals, 1998). In the words of Yates (1995): "If policy does not control what private agents perceive to be inflation, regardless of whether economists think the target theoretically kosher, policy will not be credible". There has been a fairly close correlation over the past three years between overall consumer price increases and core inflation and the close correlation is expected to remain intact over the first half of 1999.

It could be asserted on the basis of the fairly close correlation between increases in core and headline inflation that either inflation measure could be targeted. A headline inflation target would nevertheless make monetary policy more transparent, is more familiar to the public and can be measured more accurately than core or underlying inflation.

However, an important limitation of headline inflation is its susceptibility to specific one-off disturbances that are unrelated to the inflation process (see Berg and Grottheim, 1998). Core inflation (i.e. the change in the overall consumer price index excluding the prices of certain foodstuffs, interest rates on mortgage bonds, overdrafts and personal loans, and indirect taxes) which excludes volatile sub-component price series that are perceived to distort the headline inflation index would seem to be a better alternative, but Berg and Grottheim point out that it is a measure with which the general public is less familiar. Other price measures used to monitor immediate price pressures are the production price index and GDP deflator. A broad price index which includes wholesale and retail prices as well as share prices and the prices of real estate, although useful for monitoring economy-wide inflationary pressures, has proved to be very volatile.

Associated with the announcement of inflation targets, there is usually a statement (either embodied in a public statement(s) by the central bank or mandated by law) to the effect that control of inflation is the "primary" or "overriding" goal of monetary policy and that the central bank will be held accountable for meeting the inflation targets. The degree to which inflation targeting central banks are held accountable for the actual inflation outcomes varies considerably. However, inflation targets in these countries can and have been adjusted to accommodate supply shocks or other exogenous changes in the inflation rate outside the central banks' control. The essential issue, of course, is how performance criteria are to be determined. Who should set them – those whose performance is being judged, or those to whom accountability is required? Many central bankers still decide on their own targets for inflation or money supply, or do so in consultation with finance ministers alone. Finance ministers are generally not required to consult with political or economic interest groups in determining fiscal targets.

There is a strong case for broadening participation in setting macro-policy targets. A significant body of opinion in South Africa, due to successive years of mostly tight monetary policy aimed at achieving price stability, has deemed the Reserve Bank to have scant concern for real output and employment growth. Adopting an inflation targeting approach without broadening participation in setting macro-policy targets and with even less room for manoeuvring than monetary targeting, may strengthen these perceptions. These targets and the policy instruments used to achieve them impact directly on the lives and welfare of all ordinary people because of the fact that they are macroeconomic. As a result, macroeconomic choices are matters of broad social and political interest, rather than the concern of one or two institutions and a few technocrats. In any event, powerful interest groups can prevent targets being met. If agreement on goals is developed before the fact, leaders of such groups become jointly responsible for meeting them (see Leape et al, 1998).

If participation is to be broadened, then whom should it include? Certainly, the role of parliament and parliamentary parties in macroeconomic policy could be strengthened. But in certain respects South Africa is a deeply divided society and, as the aftermath of the adoption of GEAR and the debates over labour market reforms have illustrated, macroeconomic and related policy debates remain the locus of some of the most important differences of opinion. For South Africa to benefit from recently re-established global economic linkages, it is important that credibility be enhanced with internationally mobile investors by demonstrating ongoing commitment to economic policies that will ensure profitability. Broader social involvement in macroeconomic policy formulation and a more participatory policy process could enhance the flexibility needed when the downside of globalisation makes itself felt and international investors depart temporarily from South Africa. Approval of an explicit inflation targeting framework by government through the Minister of Finance could be an important step in enhancing macroeconomic policy credibility by virtue of an inflation targeting framework being a more transparent approach.

Prerequisites for inflation targeting

A fully-fledged inflation targeting framework requires that the central bank be endowed by the political authorities with a clear mandate to pursue the ultimate objective of price stability (see Masson et al, 1997). Inflation targeting not only calls for a high degree of central bank independence, but also for a reasonable degree of credibility, including a clear, joint commitment to the inflation target objective of the monetary and fiscal authorities.

In all the countries that have inflation targeting monetary policy frameworks, price stability is the overriding objective of monetary policy and the policy is implemented via the inflation target. The objective of price stability is framed in terms of a numerical inflation target made known to the public. The central bank is committed to achieving and maintaining the numerical target. The ultimate objective is usually specified as a target band for inflation as measured by the percentage change in the consumer price index. The central bank chooses its operational framework to meet the target and the midpoint of the target band is always a low, but positive number. Targeters usually aim above zero to take account of measurement bias (see Rich, 1998).

Another important prerequisite identified by Masson et al is the existence of a well-developed financial market (1997). The monetary authorities also need access to policy instruments that are effective in influencing the economy and the money and capital markets must be sufficiently developed to react appropriately to their use. An already low level of inflation and fiscal rectitude are other important prerequisites and in most countries where inflation targeting was introduced inflation had been brought below 10 per cent and nearer 5 per cent on a more or less consistent basis. However, to the extent that an inflation target is set

by mutual agreement between monetary and fiscal authorities, the South African Reserve Bank and the Department of Finance will have to work closely together to achieve the objective.

Possible conflicts with other policy objectives

In terms of the prerequisites for inflation targeting identified by Masson et al (1997) South Africa would at first appear to have met most. The South African Reserve Bank is endowed with the mandate to protect the value of the rand and the policy instruments at its disposal constitute an appropriate framework for effective monetary policy operations. South Africa has well-developed financial markets, well-managed banking institutions and its money and capital markets are relatively sophisticated. Furthermore, core inflation has been fluctuating between 7 and 9 per cent since 1994 and the annual average estimate is expected to be 7 per cent in 1999.

The government regularly acknowledges the importance of the South African Reserve Bank's freedom to act in determining monetary policy, and the government's GEAR strategy also sets specific intermediate inflation targets. By law, the Bank has considerable independence in setting and conducting monetary policy[2]. Monetary policy and the Reserve Bank operate primarily on the demand side of the economy and in this sense monetary policy has an important but essentially "background" role in allowing the South African economy to achieve its longer-term growth potential. This involves ensuring that demand in the economy grows reasonably in line with the capacity of the economy to meet that demand.

The fact that monetary policy in South Africa is aimed primarily at achieving and maintaining price stability is opposed by some labour organisations in particular. Some of the pressure to follow a more growth-oriented policy approach also comes from the business sector. Certain labour organisations and sections of the business sector favour monetary policy goals aimed at stimulating economic activity and reducing unemployment over that of dampening inflation. There is recurring pressure on the Reserve Bank from these groups to follow an easier monetary policy. As in other countries that experience similar pressures, they tend to weaken public support for the policy and create expectations that the policy may in fact change. The Bank's focus on the single objective of price stability as the key to sustained long-term economic growth is regarded in many of these circles as being at the expense of job creation and economic growth.

The Bank has nevertheless for many years placed emphasis on the fight against inflation and has achieved a large measure of success and credibility in its policy pursuits (as is evident from the decline in inflation and inflation expectations). The weight of recent international evidence would suggest that by adopting a credible, fully-fledged inflation target the Bank could more consistently achieve the objective of getting economic agents to factor in lower inflation into pricing decisions. Furthermore, it would appear from experience elsewhere that a fully-fledged inflation targeting approach which includes formal agreements between the Reserve Bank and the central government regarding government's expenditure framework, would significantly enhance the co-ordination between fiscal and monetary policy.

Elements of inflation targeting that could already be implemented successfully

In order to inform the public about the operational framework employed for meeting their inflation targets, central banks with inflation targets publish monetary policy or inflation reports which provide reviews of recent monetary developments and, more importantly, forecasts of inflation and real growth. The reports also discuss the various factors that may cause a change in the inflation rate. The reports explain the forecasts that in most cases cover periods up to 2½ years ahead. In some inflation reports confidence intervals are placed around mean forecasts. All these central banks also monitor the inflation expectations of market participants (see Rich, 1999).

To assess inflationary trends more accurately the Reserve Bank at the end of 1996 commenced with the compilation of an *Inflation Report* for submission to the Bank's Board of Directors. The *Report* includes analyses of the consumer and production price indices and their various components, monetary and credit aggregates, the shape of the yield curve, unit labour costs, wage settlements, demand pressures, capacity utilisation and fiscal policy. The *Inflation Report* is more concise than those of inflation targeting countries and is not distributed externally at this stage. As a first step towards a fully-fledged inflation targeting framework, the effectiveness of the Bank's current framework could be strengthened by increasing the transparency of monetary policy decision-making. The Bank could commence with the compilation and publication of a more comprehensive inflation report including a survey of inflation expectations. The report would have to be enhanced to include a more comprehensive inflation forecast and would have to become the Bank's most important policy document. In this way the Bank could publicly disclose its longer-term monetary policy objectives and its assessment of the future economic outcome. To ensure that economic agents do not factor unnecessary inflation biases into their expectations, the inflation report could be framed in clear straightforward language (see Haldane ,1995).

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[2] According to the index of the independence of central banks constructed by Cukierman et al (1992) South Africa's score was 0,64 within an index range of 0 (minimum independence) to 1 (maximum independence). However, the Reserve Bank's independence was legally established in terms of Article 224(2) of the 1996 Constitution of the Republic of South Africa and subsequent amendments to the Reserve Bank Act. According to South Africa's Constitution the Reserve Bank can perform its functions independently without fear, favour or prejudice; but there must be regular consultation between the Bank and the Cabinet member (Minister of Finance) responsible for national financial matters.

Inflation targeting monetary policy frameworks incorporate the best aspects of an eclectic approach by "looking at everything" with the more focused objective of distilling the expected path of future inflation. As is the case in other inflation targeting countries this is to a large extent already achieved by detailed disaggregated analyses of all relevant variables and wider deliberation within the MPIC. Immediate inflationary pressures are already monitored through the consumer price index, core inflation and the production price index. Capacity utilisation and unemployment indicate near-term inflation whereas medium-term inflation indicators are wages, import prices and exchange rate movements. The inflation forecasts could, however, be significantly improved. The Bank could also undertake a comprehensive survey of inflation expectations or, as in the case of certain countries, have the survey conducted on its behalf.

Certain central banks with inflation targeting frameworks have reconstituted their executive boards and have further amended the legislative framework to enhance central bank independence, accountability and transparency. Although the Reserve Bank has changed its internal management structure to enhance operational efficiency, any changes to the composition of its Board of Directors and possibly to the Governors' Monetary Policy Committee would have to await broader consensus and approval by government through the Minister of Finance to implement an inflation targeting framework. Only then would it be feasible to consider appropriate changes to the legislative and managerial framework in the light of the greater transparency and accountability called for by a fully-fledged inflation targeting framework.

Concluding remarks

High inflation expectations and consequent hedging and other evasive actions can be minimised only by a consistent counter-inflation monetary policy stance. Although the South African monetary authorities have for a number of years followed a counter-inflation monetary policy stance and have achieved significant success in bringing the inflation rate to lower levels, the experience of a number of inflation targeting countries suggests that by adopting a fully–fledged inflation targeting framework, better co-ordination of monetary and fiscal policy and greater economic policy credibility could be ensured.

An inflation targeting framework would give a clear signal that the Bank and the Department of Finance are committed to the same objective. However, the adoption of such a framework would have to be approached carefully, would require certain preconditions being met and entail specific procedures. The Bank would, for example, have to inform the government what the ideal fiscal policy should be to match an identified inflation target. Clearly, in the South African scenario, this would ideally require broad consensus and approval of an explicit inflation targeting framework by government through the Minister of Finance.

Given the importance of accurate inflation forecasts in an inflation targeting monetary policy framework, the Bank could in the interim refine and strengthen its forecasting framework and commence a survey of inflation expectations. The Bank's forecasting and modelling procedures could be expanded away from an overriding emphasis on a long-term comprehensive econometric model to the range of appropriate models required for an inflation targeting framework. The Bank's more comprehensive forecasts would have to become public knowledge once the targeting framework is adopted. In the event of broad consensus being reached and Ministerial approval being given for the adoption of an inflation targeting framework, the recently announced changes to the internal decision-making structure of the Bank would have to be extended to incorporate a wider, more transparent decision-making structure along the lines of those of inflation targeting central banks. Similarly, the Bank's economists would also have to be brought closer to the centre of policy making by restructuring divisions so that those dealing with economic analysis and those dealing with the analysis of financial markets work closer together. Analysis would then more closely match the Bank's market operations.

It would be prudent to announce a lead time of two to three years for the implementation of a fully-fledged inflation targeting approach given the new operational procedures in the money and capital markets, the levels of co-ordination that would have to be established between monetary and fiscal policies and the ongoing significant structural changes in the economy related to South Africa's re-emergence into the global economy. A sufficient lead time would also give the South African Reserve Bank and the Department of Finance the opportunity of acquiring more experience and knowledge for a full understanding of an inflation targeting framework (see Berg and Gröttheim, 1998).

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