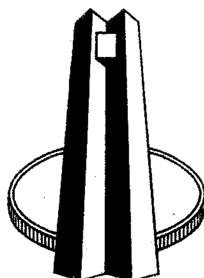
Exchange rate management policies in South Africa: Recent experience and prospects

By E.J. van der Merwe

Occasional Paper No. 9

March 1996



South African Reserve Bank
Suid-Afrikaanse Reserwebank

Exchange rate management policies in South Africa: Recent experience and prospects

By E.J. van der Merwe

A paper prepared for the United Nations
Economic Commission for Africa

The views expressed in this paper are those of the author
and do not necessarily represent those of the
South African Reserve Bank

Contents

1. Introduction **1**

2. Historical background since the second world war **1**
- 2.1 The period 1945 to 1971 1
- 2.2 The period 1971 to 1979 2
- 2.3 The period 1979 to 1985 3
- 2.4 The period 1985 to 1994 7
- 2.5 The period 1994 to 1995 8

3. Current and prospective exchange rate system **9**
- 3.1 Determination of exchange rates 9
- 3.2 Exchange control in South Africa 10
- 3.3 Prospective changes to exchange rate system 11

4. Institutional arrangements **12**

5. Common monetary area **13**

6. Macro-economic effectiveness of the exchange rate system **15**
- 6.1 Spot exchange rates 15
- 6.2 Forward market 17
- 6.3 Exchange control 17
- 6.4 Common Monetary Area 19

7. Macro-economic impact of changes in the external value of the rand **20**

8. Conclusion **22**

9. References **23**

Enquiries relating to this *Paper* should be addressed to:

The Head
Economics Department
S.A. Reserve Bank
PO Box 427
Pretoria
0001

ISBN 0-9584059-1-3

Exchange rate management policies in South Africa: Recent experience and prospects

1. Introduction

The determination of exchange rates, like other prices, can either be left to market forces or be done administratively. At the one extreme, a country can adopt a freely floating regime where the exchange rate is allowed to be determined entirely by market forces. Under such a system the authorities do not intervene in the currency market in order to influence the exchange rate. They may, however, influence it indirectly by applying other policy measures. This extreme form of a freely floating exchange rate system has not been implemented by any country in the world for a prolonged period of time.

At the other extreme, monetary authorities may commit themselves to keeping the exchange rate fixed. This was, for instance, the case under the gold standard before 1914, when governments defined their currency units in terms of a physical quantity of gold which was not meant to be altered under ordinary circumstances, i.e. short of war or other serious political and economic developments. Under the gold standard, the exchange value of the currency fluctuated in the market within a narrow band around parity, the so-called gold-import and gold-export points. Fixed exchange rate systems are still applied by some countries even today, such as Argentina and Estonia, with the backing of currency boards. However, without a universal anchor for all currencies, such as an international gold standard, no country can maintain fixed exchange rates against all currencies at the same time. At best, a country can only fix its exchange rate against one important international currency at a time, e.g. against the US dollar, or against a basket of certain currencies.

A wide variety of other possible arrangements can be found between these two extreme methods of exchange rate determination. For example, "fixed" exchange rates may be changed frequently, as under a "crawling peg" regime, or the authorities may engage in extensive management of a floating rate through regular intervention in the currency market, such as under a "dirty floating" regime. Each country must decide what system it wants to adhere to, depending on circumstances in the world at large and in its own economy.

The purpose of this paper is to describe the exchange rate system that is applied in South Africa. As a general background to this discussion, the development of the exchange rate system in South Africa since the Second World War is first examined in some detail in the next section. This is followed by an outline of the current South African exchange rate system and prospective changes to this system in section 3, and of the institutional arrangements in section 4. The next three sections deal with the Common Monetary Area, the effectiveness of the exchange rate system and the macro-economic impact of changes in the exchange rate of the rand. Finally, a few concluding observations are made in section 8.

2. Historical backgroud since the second world war

The evolution of the exchange rate system in South Africa since the Second World War can be divided into five periods, namely:

- 1945 to 1971, an era dominated by the Bretton Woods Arrangements of fixed but adjustable exchange rates;
- 1971 to 1979, eight years characterised by the disintegration of the Bretton Woods System and attempts by South Africa to maintain a relatively stable exchange rate of the rand;
- 1979 to 1985, a period of considerable reform to the exchange rate arrangements aimed at developing the market for foreign exchange and a floating exchange rate system;
- 1985 to 1994, a time span in which socio-political events forced the authorities to revert to more direct control measures to manage the exchange rate of the rand; and
- 1994 to 1995, the first two years of the new Government of National Unity during which South Africa's international financial relations were normalised and steps were taken in the development of a forward market with less Reserve Bank involvement and progressive relaxation of exchange control.

2.1 The period 1945 to 1971

As a signatory of the Bretton Woods Monetary Agreement, South Africa along with other founder members, in December 1945 became party to the system of stable but adjustable par values from the time of its inception. In accordance with this system members were obliged to maintain their exchange rates within 1 per cent on either side of stated parity rates. Only in the case of fundamental disequilibrium on a country's balance of payments was such a member allowed, with the concurrence of the International Monetary Fund, to adjust its exchange rate by more than the fixed margin.

On 18 December 1946 the initial par value of the then South African pound was established at 4,03 US dollars, equivalent to 3,58134 grams of fine gold. In the absence of an active and competitive foreign exchange market, the South African pound was pegged to the pound sterling by quoting fixed buying and selling rates for sterling. A margin of ½ per cent was maintained between the purchase and selling rates for sterling. These quoted rates had an important influence on other exchange rates because they were used to determine the exchange rates of the South African pound *vis-à-vis* these other currencies. Forward cover was provided only in sterling, based on forward rates received daily from the Bank of England.

On 19 September 1949, following the devaluation of the pound sterling, the par value of the South African pound was reduced by 30,5 per cent to 2,80 US dollars or 2,48828 grams of fine gold. This devaluation was deemed necessary at the time because of a considerable deterioration in the country's balance of payments, the need to lengthen the lives of the gold mines and the importance of encouraging an inflow of foreign capital. It was also based on expectations that the currencies of most of the other sterling area countries with which South Africa had close relations would be devalued.

The South African rand remained relatively stable in the ensuing years and its parity in terms of gold was changed only as a result of the decimalisation of the monetary unit. On 14 February 1961, when the rand took over from the pound as the basic unit of account in South Africa, the gold parity of the rand was fixed at 50 per cent of the value of the old South African pound, i.e. at 1,24414 grams of fine gold. This resulted in exchange rates of two rand being equal to one pound sterling and one rand being equal to 1,40 US dollars. The rand parity rate then remained fixed in terms of dollar up to December 1971, despite the devaluation of sterling in November 1967 and the French franc in August 1969, and the revaluation of the German mark in October 1969.

During the whole period from the Second World War until 1971 fairly restrictive foreign exchange control measures were maintained in South Africa. Foreign exchange control was first introduced in South Africa in September 1939 as part of the so-called "Emergency Finance Regulations" instituted by the United Kingdom at the outbreak of the Second World War. As a member of the sterling area, South Africa had to introduce the same exchange controls as were applied by the United Kingdom. During the 1950s the sterling area developed into a much less coherent arrangement, with the result that in 1958 South Africa abolished the distinction between residents of the sterling area and other non-residents. From that date exchange control became a measure applied predominantly in the interest of the South African economy.

At first the exchange control regulations were mainly applicable to transactions by residents. However, when domestic political disturbances gave rise to a large capital flight from South Africa in 1961, the authorities decided in June of that year to block the repatriation of foreign investments from the country. When first instituted, the Blocked Rand System prohibited non-residents from selling their South African investments to residents and other non-residents. The first concession to this system was made in March 1962, with the announcement that non-residents would be allowed to sell investments in South Africa to other non-residents through a process of arbitrage. Blocked funds could be used to buy quoted South African securities, which could be transferred and sold in London, generally at a discount. Blocked rand could not be transferred direct between non-residents. Non-residents could, however, repatriate their proceeds by buying long-term government and parastatal bonds. On maturity the proceeds from such bonds could be freely transferred overseas, provided that these securities had been held for at least five years.

Another major change to the exchange control measures was made in 1968, when a formal limit was placed on the local borrowing facilities at the disposal of South African subsidiaries of foreign companies, to an amount of 25 per cent of the foreign investment in the subsidiary. This restriction took account of the fact that South Africa was a capital-importing country with limited local financial resources, to which domestically owned enterprises could lay the first claim. The foreign investment which was used as basis for the determination of the local borrowing limit consisted of the share and other capital provided to the subsidiary by its parent, as well as approved loans, other commitments and undistributed profits of the parent company. This policy compelled foreign-controlled companies to plough back profits and to allow local participation in their capital for the purpose of complying with these requirements.

2.2 The period 1971 to 1979

The disintegration of the Bretton Woods System of fixed exchange rates forced the authorities to adjust the country's exchange rate regime. Pressures began to build up sharply from the beginning of the 1970s against this system, when the Canadian dollar began to float from June 1970, followed by the German mark and Dutch guilder in May 1971. The system finally began to break down in August 1971 when President Nixon announced that the USA dollar would no longer be convertible into gold and floating became more generalised. Under these circumstances, the Reserve Bank decided to peg the rand to the US dollar instead of sterling, because the relatively undeveloped foreign exchange market of the rand did not allow an independently floating exchange rate and most of the

country's foreign transactions were denominated in dollars.

As part of the general realignment of exchange rates in December 1971, the rand was devalued by 12,3 per cent. In June 1972 the pound sterling started to float downwards against other major currencies and in order to maintain the momentum of its balance of payments recovery, South Africa linked the rand to sterling. After floating down with the pound for about four months, the rand was once again pegged to the US dollar in October 1972, at a level which resulted in an effective appreciation of the rand against all other currencies of about 3 per cent. However, when the dollar was devalued by 10 per cent on 13 February 1973, the South African government decided not to follow this change because of a sound balance of payments position and a general economic climate that was conducive to economic growth.

In order to reflect more closely the changes in South Africa's underlying balance of payments and domestic economic situation, the authorities announced on 21 June 1974 that a policy of independent managed floating would be pursued. In accordance with this policy smaller but more frequent adjustments were made to the middle market rate of exchange with the dollar. By making seven upward and four downward adjustments to the rand-dollar rate during the period of independent managed floating from 21 June 1974 to 26 June 1975, the authorities kept the nominal effective exchange rate of the rand fairly stable.

The policy of independent managed floating worked reasonably well up to March 1975, but the strengthening of the US dollar from March and the substantial weakening of sterling beginning in April created expectations that the value of the rand would be adjusted downwards against the dollar in a series of steps. This encouraged importers to pay for their imports more promptly, exporters tended to retain their export proceeds abroad for longer periods, and the inflow of foreign capital was delayed. The authorities therefore decided to again change their exchange rate policy as from 27 June 1975 and to keep the rand-dollar rate constant for longer periods, only adjusting it when this was considered essential in the light of basic changes in the domestic or international situation. The new policy was based on a middle rand-dollar rate of $1,40 per rand, which represented a depreciation of the rand in terms of the dollar of 4,76 per cent. This change restored the rand-dollar relationship to that which had existed for many years before the Smithsonian realignment of exchange rates in December 1971.

The dollar continued to strengthen in the ensuing months and the effective exchange rate of the rand accordingly appreciated steadily. By September 1975 the underlying balance of payments position had deteriorated considerably and unfavourable leads and lags in foreign payments and receipts began to occur. There was therefore a need to introduce measures that would prevent an unduly sharp decline in economic growth, but which would strengthen the balance of payments. Under these circumstances it was decided to devalue the rand by 17,9 per cent to US$1,15 per rand on 22 September 1975. This link with the dollar was then maintained until the beginning of 1979.

In view of the relatively undeveloped foreign exchange market, the South African Reserve Bank continued to provide a form of administered forward cover in the period 1971 to 1979. This mainly took the form of cover in dollars against the rand at a fixed cost of 1 per cent per annum for both forward purchase and sale contracts. For other currencies, a foreign exchange dealer could take out the second leg of any cover that might be needed in the international foreign exchange markets. Forward cover was provided to importers for a maximum period of twelve months, which in some cases could be extended for the imports of capital goods. Forward cover was granted to exporters for a maximum period of six months, but exporters could also apply for permission to extend contracts. Cover was also provided to public corporations for future repayments of principal and interest on foreign borrowings, and authorised dealers in foreign exchange could obtain cover for the repayment of loans raised in their own names. At first all such forward cover contracts had to be arranged within seven days after the foreign transaction was concluded. This restriction was lifted on 11 August 1975.

In the years 1971 to 1979 various changes were made to the exchange control regulations, making them more restrictive or liberal, depending on domestic and international economic conditions at the time. A major change was introduced in February 1976, when the transfer procedures in respect of the sale of non-resident investments in South African securities on the Johannesburg Stock Exchange were simplified substantially and non-resident-owned security-rand balances (previously blocked-rand balances) were made freely transferable among non-residents. In March 1978 the rule which allowed the sale proceeds of government bonds purchased with securities rand to be transferred overseas at the commercial-rand rate was abolished. Both purchases and sales of government and parastatal securities had to be made at the securities-rand rate.

2.3 The period 1979 to 1985

In 1977 the State President appointed a Commission of Inquiry into the Monetary System and Monetary Policy in South Africa (the De Kock Commission), and requested the Commission to give priority to research on the exchange rate system because of the changed conditions. *An Interim Report on Exchange Rates in South Africa* was published in January 1979. In this

report the Commission reached the conclusion that the South African exchange rate system at that time had serious deficiencies. "The essence of the problem is that the present system, based as it is on relatively fixed dollar pegging in a relatively undeveloped foreign exchange market, is not conducive to the attainment of the optimum combination of economic growth, balance of payments equilibrium and internal economic stability" (1979, p. 13).

The De Kock Commission identified the following major deficiencies in the exchange rate system:

- The rand moved with the dollar for long periods at a time without taking domestic economic conditions into consideration because the rand-dollar peg was changed only infrequently. This often gave rise to speculative capital outflows.
- Large spreads existed between the mandatory buying and selling rates for foreign exchange, resulting from the absence of an active and competitive spot foreign exchange market. These profits were particularly large where banks matched their own sales and purchases in direct dealings with the public; in such cases they earned the full spread of ½ per cent.
- The forward exchange market in South Africa was heavily administered and undeveloped and even more tightly restricted by exchange control regulations and rulings than the spot market, leading to rigid forward rates that bore no relation to demand and supply factors. In view of the Reserve Bank's active involvement in the market, it was usually left with a large unbalanced book and therefore exposed to losses for the account of the government.
- A heavy reliance was placed on exchange control, which was an economically inefficient way of rationing the available foreign exchange among the various domestic uses and deferred the inflow of foreign capital.

Against this background the Commission recommended a major reform of South Africa's foreign exchange practices and policies in terms of which a unitary exchange rate system was to be developed over the long term "under which an independent and flexible rand finds its own level in well-developed and competitive spot and forward foreign exchange markets in South Africa, subject to Reserve Bank 'intervention' or 'management' by means of purchases and sales of foreign exchange (mainly US dollars), but with no exchange control over non-residents and only limited control over residents" (1979, p. 18). To set this process in motion, the Commission recommended: "as a transitional measure, the expansion of the existing dual exchange rate system in South Africa into a more developed and formal system with a managed market-determined rate for an independent and flexible 'commercial rand', and a more freely floating rate for a 'financial rand'" (1979, p. 23).

The Commission was of the opinion that such an exchange rate system would have important advantages to the South African economy, such as that:

- it would depoliticise the exchange rate;
- it would give the Reserve Bank more freedom in the management of the foreign reserves of the country;
- it would counter speculative capital movements; and
- it would allow the authorities to pursue more consistent and effective contra-cyclical or growth policies because of adjustments to the exchange value of the rand.

These proposals of the De Kock Commission were accepted by the government and from the beginning of 1979 a programme was set in motion to develop the foreign exchange market in South Africa and to make it relatively free from interference by the authorities. The first step was taken on 24 January 1979 with the abolition of the mandatory buying and selling rates for dollars which authorised foreign exchange dealers were previously required to quote in their transactions with the public. Initially, however, the Reserve Bank still quoted predetermined buying and selling rates for US dollars at which it was prepared to deal with banking institutions without limit; it merely changed these rates more frequently. At the same time the forward margin on US dollars was set at a dollar discount of 2 per cent per annum.

The Minister of Finance also announced on 24 January 1979 that the securities rand would be replaced by the financial rand. The principal reform was that non-residents were now free to use financial rand, not only to acquire quoted securities but also non-quoted equity holdings in South African companies. This change was designed to correct an imbalance in the old securities-rand market: the supply of securities rand could come from the sale of any non-resident-owned South African asset, but demand could only come from those wishing to invest in quoted South African securities.

On 21 June 1979 the market in financial rand was adjusted further with the announcement that approved foreign direct investment by South African residents would in future be routed through this market by redesignation of commercial-rand balances as financial rand. "The net effect of these reforms was to make the financial rand market considerably broader than the old securities rand market. Allowing additional inward investment by non-residents, which *ceteris paribus* would have narrowed the financial rand discount, was counterbalanced by allowing residents' access to the market for overseas investment" (Garner, p. 3).

The exchange rate of the financial rand was determined under relatively free conditions. The financial-rand rate depended mainly on the supply of and demand for financial-rand deposits, i.e. deposits

held on call, short term or long term that were owned by non-residents of the Common Monetary Area in the books of authorised banks in South Africa. These deposits were created when a non-resident sold an asset to a local resident or when funds of a capital nature became payable to a non-resident, such as inheritances from estates or distributions from trusts. The total of these assets was sometimes called the pool of financial rand, but it should be realised that the potential pool consisted of the total value of all non-resident-owned assets in South Africa.

Although the financial-rand rate was basically determined by market conditions, the financial-rand system was of course based on the exchange control rulings of the country and the Reserve Bank could interfere in the market by way of these rulings. The largest part of actual transfers, however, took place without Reserve Bank interference in accordance with the existing exchange control rulings. Non-resident holders of financial-rand balances could, without Reserve Bank authorisation, retain such balances with authorised banks against payment of the interest thereon, invest such funds in any securities quoted on the Johannesburg Stock Exchange (including gilts and semi-gilts), or invest such funds in units issued by certain unit trusts. If they did not wish to retain these balances, they could sell them to other non-residents in the market without obtaining Reserve Bank approval.

Utilisation of financial rand for any other purposes, however, required exchange control approval by way of a specific request to do so through a South African authorised dealer. This approval was normally granted for investments in commercial and industrial enterprises which involved the expansion of manufacturing capacity, the promotion of exports, the development of strategic industries, the introduction of new foreign know-how, the expansion of labour-intensive industries and import replacements, provided that such investments conformed with exchange control rulings.

At times the Reserve Bank also intervened direct in the financial-rand market by selling or purchasing financial rand to influence the financial-rand rate. Most of the intervention by the Reserve Bank was not primarily aimed at the financial-rand rate, but to protect the country's gold and other foreign reserves from negative capital flows. The financial-rand system also provided an incentive for investment in the Common Monetary Area by non-residents because these funds could be acquired at a discount compared with the cost of acquiring commercial rand.

Various other measures were introduced during 1979 and 1980 to establish a more freely floating commercial exchange rate of the rand. The first such measure was taken as early as 27 February 1979, when the Reserve Bank ceased to announce in advance its predetermined buying and selling rates for dollars. However, owing partly to difficulties in establishing a satisfactory network of communications with the other banks in the foreign exchange market, the Reserve Bank continued to deal in dollars at buying and selling rates which were, in fact, known to the other banks at all times and which were never changed during the course of the day and sometimes not for several days on end. Moreover, the Reserve Bank still maintained a fixed "spread" of 20 points between its buying and selling rates.

The next step was announced by the Minister of Finance in the House of Assembly on 4 May 1979 when he made the following statement: "In future market forces will play a greater role in determining the exchange rate of the rand. The Reserve Bank will still participate actively and continually in the market as a buyer and seller of dollars. Thereby it will not only eliminate unnecessary exchange rate fluctuations but also exert a large measure of control over movements of the rand-dollar rate. But the rates at which the Reserve Bank will deal in dollars will be freely varied in response to market forces, even during the course of the day, with due regard to policy considerations and all other relevant facts." Following this announcement, the Reserve Bank changed its dollar rates more frequently; at first somewhat sporadically during the course of a business day, but later much more regularly.

Several other steps were also taken to improve the forward exchange market during 1979 and 1980. Firstly, on 8 March 1979 the Reserve Bank started to base its forward rates on the ruling spot rate instead of on the closing spot rate of the preceding day. Secondly, the Reserve Bank extended forward cover facilities to foreign loans negotiated by the private sector with exchange control approval, but only in respect of the rand-dollar exchange risk and only for a period of one year at a time. The Reserve Bank continued to provide forward cover on all public sector loans, but the rate on forward cover against liabilities denominated in stronger currencies was set at a higher level than that in respect of the US dollar. Thirdly, the dollar discount (or rand premium) of 2 per cent per annum on the Reserve Bank's forward margin on US dollars was raised to 2½ per cent on 5 April 1979 and to 12 per cent on 18 April 1980. From this latter date the dollar discount was adjusted more regularly on the basis of changes in interest rates and other economic conditions. Finally, from 17 November 1980, the Reserve Bank began to quote a full range of forward maturities for periods of up to twelve months, instead of for only three as had previously been the case.

Although the banks were encouraged to make a forward market outside the Reserve Bank, their forward dealings were restricted by a number of limits imposed on them for prudential and exchange control purposes, namely:

- an absolute limit on the gross amount of foreign assets that they may hold, at first set at R300 million on

2 April 1979, but later increased progressively depending on circumstances at the time;

- a limit on the gross foreign liabilities of each bank equal to 10 per cent of its liabilities to the public; and
- a net open position limit for each bank, i.e. spot against forward position, of 10 per cent of the bank's capital and reserve.

Steps were also taken to increase the volume of foreign exchange transactions handled outside the Reserve Bank, in order to enable foreign exchange dealers to cope with the narrower margins between the buying and selling rates for foreign exchange. In 1979 the proceeds from sales of Krugerrand and diamonds, and from foreign loans raised by public corporations and municipalities, which still accrued directly to the Reserve Bank at that time, were channelled direct to private authorised dealers.

"During the years 1981 and 1982 conditions were not propitious to further reform of the foreign exchange market and exchange rate policy. The Bank managed the market by adjusting its buying and selling rates for dollars daily, and sometimes in the course of the day, to reflect its reading of supply and demand in the market, its own position, the state of the balance of payments, developments in overseas markets and the average effective value of the rand, ... In effect, however, the Bank was still applying a form of variable dollar pegging, as distinct from the recommended procedure of influencing a floating rate by means of buying and selling at ruling market rates" (De Kock Commission, 1985, p. 123).

Further important changes to the exchange rate system were, however, introduced during 1983 by the authorities to achieve their long-term objectives. On 7 February 1983 the Minister of Finance lifted the exchange control over non-residents and therefore abolished the dual exchange rate system. Non-resident-owned equity capital became freely transferable from the Common Monetary Area at the unitary exchange rate of the rand. Exchange control over residents was retained, as was the blocking of emigrant assets.

On 25 August 1983 the Minister of Finance announced further important changes to improve the technical functioning of both the spot and forward foreign exchange market. The measures introduced in the spot market consisted of the following decisions:

- The Reserve Bank would in future pay the South African gold mines in US dollar instead of rand for gold supplied to the market. As in the past, the gold mines were required to sell all newly produced gold bullion within thirty days of production to the Reserve Bank, who remained responsible for the marketing of the gold. From 5 September 1983 the dollar proceeds of these gold sales – representing 50 to 60 per cent of South Africa's total export proceeds at that time – flowed direct to the gold mines, resulting in a much more balanced spot foreign exchange market in South Africa.
- The Reserve Bank would no longer quote a spot exchange rate, but would influence the exchange rate by "intervention" in the foreign exchange market with a view to smoothing excessive fluctuations. The Reserve Bank's intervention in the market would take the form of purchases and sales of US dollars from and to authorised dealers, normally at the Bank's initiative, at prices quoted by the banks or agreed to.

Further changes were also introduced to encourage the development of the forward exchange market aimed at the eventual establishment of an independent forward exchange market outside the Reserve Bank, namely:

- Authorised exchange dealers were allowed to cover their forward positions on a swap basis as opposed to the previous method of providing forward cover outright. This change was brought about so that forward exchange transactions would have an influence on spot exchange rates, effectively integrating the two markets. At the beginning of the 1980s the unsatisfactory situation existed that "all purchases and sales of foreign exchange in terms of forward contracts, neither at the establishment of the contracts nor at the termination thereof, had any direct influence on the determination of the exchange rate, in spite of the fact that it directly influenced the country's foreign reserves" (Stals, April 1981). This was mainly due to the fact that outright forward cover was provided by the Reserve Bank. In accordance with the swap arrangements, an authorised dealer who, for example, sells dollars forward to a client, first has to buy the required dollars in the spot market and then sell them immediately spot and buy them forward, preferably again in the market. If the dealer is unable to conclude this second leg of the transaction in the market, he may undertake the swap transaction with the Reserve Bank. In this way, the demand for and supply of foreign exchange in the forward market at the time of the establishment of forward exchange contracts is channelled through the spot market and therefore have a direct influence on the fixing of spot exchange rates.
- A limit was placed on the maximum amount that each private dealer could buy from or sell forward to the Reserve Bank by means of swaps. For the first year, i.e. from 5 September 1983 until 31 August 1984, the total amount of this exposure for all foreign exchange dealers was fixed at US$10 billion. The intention was that this amount would be reduced progressively by one-third per year until the Reserve Bank's obligation to supply forward cover to authorised dealers would fell away on 31 August 1986. Thereafter the central bank would only intervene in the foreign exchange market on its own initiative, but would not be under any obligation to do so.
- Gold mines were allowed to sell in the forward market a part of their proceeds from the sale of gold for a maximum period of twelve months.

In the development of the foreign exchange market from a highly administered fixed exchange rate system to a more market-related managed-floating exchange rate system, certain more administrative transformations were also required. Firstly, a floating exchange rate system requires a well-functioning communication system. At the time that the decision was taken at the beginning of 1979 to reform South Africa's foreign exchange system, the communication system was still relatively undeveloped. After negotiations with the Reuters organisation, the Reuters Monitor System was introduced in South Africa in April 1979, providing information on exchange transactions on a continuous basis to the market. This was followed in June 1979 with the installation of a direct telephone system between the Reserve Bank and authorised exchange dealers. In 1982 the SWIFT system for making overseas payments was introduced, thereby doing away with the necessity of receiving confirmation letters from authorised dealers.

Secondly, the change to the new system needed considerable know-how on foreign exchange dealing in such a market, which was still fairly limited in South Africa at that time. Not only the Reserve Bank, but also private authorised dealers sent their staff for training in the more developed financial markets of Europe and the United States.

Thirdly, information services had to be developed to keep the Reserve Bank and the management of private banks informed of the major developments in the foreign exchange market. In consultation with the banks, returns were designed for the daily reporting to the Reserve Bank of information regarding all the foreign exchange transactions and foreign exchange positions of the authorised dealers.

2.4 The period 1985 to 1994

From late 1984 socio-political events hampered the development of the foreign exchange market and forced the authorities to revert to more direct control measures to manage exchange rates. As a result of the imposition of financial sanctions against the country, the Reserve Bank was forced to re-enter the foreign exchange market as an active participant under conditions of direct control measures to regulate the influence of capital flows on monetary reserves. The first backward movement was already taken in January 1985 with the announcement that the authorities would pay the gold mines only 50 per cent of the proceeds from their gold sales in US dollars, and the balance in rand. The large-scale withdrawal of foreign credit lines, which jeopardised the ability of South Africa to continue to meet its international commitments, later led to more serious restrictions in the form of a debt standstill on certain forms of foreign loans from 2 September 1985.

The temporary postponement of repayments applied to $13,6 billion of the total outstanding debt of $23,7 billion at the end of August 1985, or to 57,4 per cent. The standstill arrangements did not apply to payments for normal current transactions and specifically excluded repayments on outstanding amounts due by local importers to foreign suppliers; bonds issued on foreign stock exchanges and privately placed public-sector notes; debts to the International Monetary Fund; debts guaranteed by foreign governments or their export credit agencies; foreign loans of the South African Reserve Bank; and new loans granted after 2 September 1985 which did not replace existing loans.

Arrangements were made for amounts of maturing "affected debt" repaid by a South African debtor and not re-advanced to another borrower by an intermediating South African bank, to be deposited (in foreign currency) with the Reserve Bank by the foreign exchange dealer involved in the transaction. Such deposits had to be made with the Public Investment Commissioners from 1 January 1986. (The "Public Investment Commissioners" is a non-banking financial intermediary responsible for the investment of trust and other deposits of the public sector.)

Together with the imposition of the standstill, exchange control on capital transfers by non-residents was reintroduced in the form of financial rand, i.e. the dual exchange rate system was re-established. The ideal, however, remained to eventually move to a system where the exchange rate adjusts freely to the authorities' market-related monetary and fiscal policies.

The socio-political events also forced the authorities to postpone the plan to withdraw from the forward market. If at that time the Reserve Bank had carried on with this plan, this would probably have caused domestic parties with debt denominated in foreign currencies to repay these loans as soon as possible. This would have placed even greater pressure on the exchange rate of the rand and would have led to an even lower level of foreign reserves. If these loans were inside the so-called standstill net and had already reached their original maturity dates, they would have been transferred to restricted deposit accounts at the Public Investment Commissioners. The repayment of these foreign loans would probably have caused increases in domestic interest rates at a time when considerable uncertainty and a general lack of confidence existed about the future of the domestic economy.

On 6 December 1985 additional measures were introduced to ensure the more effective application of exchange rate and exchange control procedures. These new measures *inter alia* laid down that the gold-mining industry was again to be paid exclusively in rand for all gold bullion sold to the Reserve Bank. A second measure required that forward cover had to be taken out by exporters within seven days of shipment of the export goods concerned.

An agreement between South Africa and its principal foreign creditor banks was announced on 20

February 1986. In terms of these so-called First Interim Debt Arrangements, South Africa, on its part, stated its willingness to lift the repayment restrictions on 5 per cent of the affected debt that had already matured or would mature up to 30 June 1987. These arrangements also extended the standstill further to June 1987. Subsequently, with the conclusion of the Second and Third Interim Arrangements and the Final Arrangements with foreign creditors, the standstill arrangements were extended further to 30 June 1990, 31 December 1993 and 15 August 2001, respectively.

The final agreement was concluded with South Africa's foreign creditors on 27 September 1993 in respect of the repayment of the remaining affected debt, which amounted to $4,4 billion at the end of 1993. The following main terms were agreed by the parties concerned:

- The final arrangements would extend over the period 1 January 1994 to 15 August 2001.
- Full amortisation of the affected debt during this period, with approximately 40 per cent of the outstanding debt within the standstill net to be repaid during the first five years and the remaining 60 per cent during the last three years of the tenor of the new arrangement.
- Creditors holding debt in the form of deposits with the Public Investment Commissioners had an option to securitise such deposits; the securities concerned (in the form of notes denominated in US dollars) would be issued by the Public Investment Commissioners, take the form of bearer instruments with one repayment at maturity, and have a tenor of nine years from the date of issuance.
- The option open to creditors of converting debt into long-term loans with a maturity of 8½ years, was retained. Repayments would take place in ten equal consecutive half-yearly instalments, the first of which would be payable not earlier than four years from the date of conversion.
- The option of converting debt into South African investments via the financial-rand mechanism was retained, with the proviso that if the financial rand should be abolished, the Minister of Finance might at his discretion substitute another suitable debt-to-equity swap mechanism.
- The possibility of substituting debtors was retained, including the substitution of the Public Investment Commissioners as a debtor, as well as the right of a creditor to cede his claim to another non-resident creditor.
- A maximum interest margin on affected debt was determined of 2½ per cent over the appropriate interest, interbank or base rates applicable to the interest rates negotiated between foreign creditors and South African debtors, unless prior exchange control approval has been obtained.
- An interest margin was stipulated of 1⅛ per cent over LIBOR or other "related market rates" applicable to deposits with the Public Investment Commissioners.

In the period 1986 to 1994 various smaller changes were also made to the exchange rate system. These changes were mainly technical and included the following:

- The decision on 8 December 1988 that the Reserve Bank would again pay the gold mines in dollars for their gold production.
- The provision of preferential rates to importers and exporters on the foreign finance of their trade transactions from 12 December 1988, in order to encourage an inflow of foreign capital.
- The withdrawal of the concession allowing non-residents to purchase farms and residential property by means of financial rand from 10 August 1989.
- Adjustments made to the financial-rand system on 20 August 1990 to prevent fraudulent transactions.
- The termination of the special rand forward cover at preferential rates on import and pre-shipment export finance on 24 September 1991, because of an improvement in the capital account of the balance of payments.
- The announcement that the Reserve Bank would enter into buying and selling transactions in the financial-rand market against US dollars with South African authorised dealers from 23 March 1992, as part of the aimed withdrawal of the Reserve Bank from this market.
- The decision that from 27 November 1992 approved foreign investment would mainly have to be funded by loans obtained abroad, which would be repaid from income generated by the new investment.

2.5 The period 1994 to 1995

The final debt rescheduling agreement was the first step towards paving the way for the normalisation and expansion of the country's international financial relations, made possible by the successful change-over to a new political dispensation. The second step was taken with the re-establishment of South Africa as a borrower in the international capital markets. After having acquired credit ratings by three commissioned international rating agencies, a global bond issue of $750 million was made by the government in December 1994, followed by an issue in the Samurai market of ¥30 billion in May 1995.

A further step in the government's pursuit of full financial liberalisation and integration of the South African economy in the world economy was the abolition of the financial-rand mechanism as from 13 March 1995. In accordance with this decision, South Africa has hardly any exchange control restrictions on non-residents. This relaxation of exchange control does not extend to emigrants' blocked assets which are still controlled, and the exchange controls applicable to foreign investments by South African residents also remain in place.

In announcing this policy change, however, the Minister of Finance indicated that total foreign

investment in South Africa would be monitored closely with the specific view to gradually relaxing the exchange control applicable to residents. The first initiative in achieving this objective was the announcement, on 13 July 1995, that insurance companies, pension funds and unit trusts would henceforth be allowed to undertake foreign investments by way of asset swap arrangements that provide for the exchange with foreign investors of part of these institutions' existing asset portfolios against foreign assets. At the same time, it was announced that the Reserve Bank would in future only provide forward cover to authorised dealers against documentary evidence of foreign financing transactions. Later, i.e. on 28 September 1995, the obligation that all exports on credit had to be covered forward was also withdrawn in a further attempt to promote the forward market.

3. Current and prospective exchange rate system

3.1 Determination of exchange rates

South Africa again has a unitary exchange rate system where the spot exchange rate is essentially determined by market forces under conditions where exchange control is still exercised, but only over residents in respect of capital movements. The Reserve Bank no longer prescribes fixed buying and selling rates for dollars to be quoted by banks in their transactions with the public, neither does it quote its own predetermined buying or selling rates for spot dollars. The system is also no longer one of variable dollar pegging. Spot exchange rates for the rand are determined by supply and demand in a competitive market, subject only to Reserve Bank intervention by means of purchases and sales of dollars.

The forward market has not yet developed enough to function without active Reserve Bank participation and special arrangements still exist in this regard: the Reserve Bank determines forward rates on the basis of the spot rates and the interest rate differential between the rand and relevant foreign currencies. These forward rates are therefore only simulated market rates; being simulated they may be completely inconsistent with expected exchange rate or interest rate movements, such as would govern their determination under free conditions. In a developed forward exchange market that is relatively free from exchange control restrictions, spot exchange rates, forward exchange rates and interest rates are determined more or less simultaneously and interdependently. In such a market, changes in the forward market are quickly translated into changes in the spot market, and *vice versa.* The more or less simultaneous determination of spot rates, forward rates and interest rate differentials in a well-developed market is derived from the actions of traders, arbitrageurs and speculators. Since the expectations of arbitrageurs and speculators are not incorporated in South Africa's forward rates, a substantial depreciation of the rand together with a net oversold forward book will inevitably result in losses on forward exchange transactions of the Reserve Bank.

The Reserve Bank generally has a net oversold forward book. Various factors contribute to this net oversold position. Among these are the structure of South Africa's foreign trade, consisting of large gold exports of which only a relatively small proportion is as yet covered forward. Moreover, the forward rates quoted by the Reserve Bank, and from 1989 to 1991 the preferential rates and the low discount on long-term cover, encouraged forward covering of import transactions and of outstanding loans during a period in which the rand was expected to depreciate. The standstill arrangements introduced in 1985 also contributed to increased covering of foreign loans. In short, the imbalance on the forward book is closely related to the objective of protecting the level of the gold and other foreign reserves of the country.

As already indicated, the monetary authorities decided in July 1995 to reduce the involvement of the Reserve Bank in short-term transactions taken at the initiative of foreign exchange dealers. Since that date the Reserve Bank provides forward cover to authorised dealers only against documentary evidence of foreign finance transactions. It is left to exporters and importers of goods and services to develop a "private" forward market in conjunction with authorised dealers. The Reserve Bank may from time to time decide to participate in this market, but these transactions are then made at its own initiative.

The Reserve Bank also intervenes regularly on its own initiative in the spot foreign exchange market to influence supply and demand conditions in the market directly. In both the spot and forward market, the Reserve Bank's operations seek to smooth out undue short-term fluctuations in the exchange rate, but the Bank does not pursue any predetermined exchange rate target. Instead, it prefers to rely primarily on market forces, within the framework of the existing exchange controls and tariff protection, to determine the general level of the exchange rate. Efforts by the authorities to fix the exchange rate at an artificial and discretionary level could easily disturb the equilibrium between the rate of increase in the money supply, the level of interest rates and the exchange rate of the rand, which are all affected by the same market forces.

The Reserve Bank's operations in the foreign exchange market form an integral part of its overall monetary policy, which has the overriding objective of protecting the internal and external value of the rand. In pursuing this mission, the Reserve Bank sets upper and lower "guideline" limits for growth in the money supply as an intermediate objective. These guidelines are not applied in a rigid fashion, but provide the Reserve Bank's view of the most appropriate rate of

monetary expansion in a given year. The key operational variable of monetary policy is the general level of short-term interest rates as anchored to Bank rate, i.e. the lowest rate at which funds are advanced by the Reserve Bank to banks experiencing a cash shortfall. Once having influenced the market's short-term lending rates to a level that should guide the money supply to non-inflationary expansion, the monetary authorities basically have to accept the exchange rate of the rand as determined by supply and demand in the foreign exchange market.

In view of these broad macro-economic objectives of monetary policy, the exchange rate of the rand, and for that matter, other economic variables, are not manipulated to protect the interests of certain groups or sectors of the economy. The Reserve Bank is, for example, not prepared to manipulate the exchange rate of the rand in any way to assist the gold-mining or any other specific industry in the South African economy. Owing to the relative importance of gold exports in the country's balance of payments, sharp changes in the gold price have inevitably had a significant effect on the exchange rate of the rand. Although the Reserve Bank could in certain cases counter the influence of a temporary sharp rise in the gold price by purchasing dollars in the domestic foreign exchange market, its foreign exchange holdings were often too small to prevent a depreciation of the rand because of a declining gold price. Consequently, a sharp decrease in the gold price and a concomitant decline in the value of gold exports normally caused the exchange rate of the rand to depreciate. The resulting higher rand price of gold received by the mines under these circumstances was therefore brought about by underlying supply and demand conditions in the foreign exchange market, and not by any deliberate manipulation of the exchange rate.

The Reserve Bank's intervention in the foreign exchange market also does not attempt to bring about any structural changes in the South African economy or to effect longer-term movements in balance-of-payments transactions. Nor is it used to smooth out cyclical fluctuations, i.e. as an instrument of economic stabilisation policy. However, the Reserve Bank does regard it as justifiable to smooth out unduly large random, temporary and reversible short-term fluctuations in the exchange rate. As a short-term measure, the Reserve Bank counteracts undesirable upward or downward pressure on the exchange rate by buying or selling dollars in the domestic market for foreign exchange. Such direct intervention will cause the exchange rate to depart temporarily from the level that would have been established by the free operation of market forces. However, where the central bank sells dollars such intervention can only be undertaken within limits set by the availability of foreign reserves or credit facilities and by the willingness of the authorities to utilise the reserves for these purposes.

The Reserve Bank has to enter the market at times as a buyer of foreign exchange for the purpose of funding its own position. It often has a need for foreign exchange because of its continuous involvement in the forward exchange market.

Naturally purchases and sales by the Reserve Bank in the foreign exchange market affect the South African money market. For every transaction executed by the Reserve Bank in dollars in the foreign exchange market, there is normally a rand counterpart. Dollars purchased by the Reserve Bank with rand will increase the amount of rand liquidity available in the domestic money market. The Reserve Bank is aware of the close links between its operations in the foreign exchange market and its operations in the domestic money market, and sometimes intervenes in the foreign exchange market with the specific purpose of supplementing simultaneous actions in the money market, or to offset undesirable developments in the money market not of the Bank's own making.

In order to intervene effectively in the foreign exchange market, the Reserve Bank must stay in close contact with the market at all times. Transactions in the market are accordingly conducted every day on the Reserve Bank's own initiative. At times the Reserve Bank may deem it essential to both purchase and sell of dollars in the market to get a feeling for underlying conditions. The net effect of these types of transactions would, however, normally be negligible.

3.2 Exchange control in South Africa

Exchange control in South Africa is principally applicable to capital movements. In order to ensure that capital transfers are not disguised as current payments, limits are placed on transfers of a current nature such as travel allowances for tourists and for business purposes, subsistence allowances for educational and other purposes and gifts to non-residents.

The abolition of the financial-rand system from 13 March 1995 effectively abolished exchange control on non-residents. At present a non-resident may at any time sell foreign currency to a bank in South Africa to acquire rand for any kind of investment or current expenditure in South Africa and may at any time sell his investment in or outside South Africa and convert the rand proceeds from these transactions into freely transferable foreign currency with a bank in South Africa. As has always been the situation, any income earned on such investments is also freely transferable from South Africa. A South African entity in which non-residents own 25 per cent or more of the equity is, however, restricted with regard to the extent of its borrowing in the Common Monetary Area. The acceptance of loans from abroad also requires exchange control approval, which is normally easily forthcoming subject to considerations of maturity profile and interest charges.

Exchange control on residents and emigrants, however, remains in force. There are no restrictions on payments for imports, subject to the submission to the authorised dealers of certain confirmatory documentation such as invoices and shipping documents, as well as an import permit should this be required in terms of the regulations issued by the Directorate of Import and Export Control. The vast majority of goods are not subject to import control. No period within which payment for imports has to be made is stipulated and the granting of credit by overseas exporters is welcomed.

In respect of exports the Exchange Control Regulations stipulate that payment of the foreign currency proceeds has to be received within six months of date of shipment. Authorised dealers may allow a further six months' credit if this will lead to an expansion of exports. From the date of account of the foreign currency, such funds must be transferred to South Africa within seven days.

Investments outside the Common Monetary Area by South African residents require exchange control approval. Applications to undertake such transactions are considered on merit and are normally granted if the investments would promote exports or expand markets abroad. New portfolio or non-direct foreign investments by residents are generally prohibited. From 13 July 1995 institutional investors are allowed to invest a portion of their assets abroad through asset swap arrangements. Each application is dealt with on its own merit. In instances where the amount of capital required for foreign investment is substantial, funding of the investment must be met from foreign borrowing, to be serviced and repaid from profits earned by the new venture.

The same basic criteria apply in respect of investments in sub-Saharan Africa countries, but a slightly easier policy approach has been adopted *inter alia* in respect of payments for exports to these countries and the provision of loans for working capital.

Emigrants from South Africa may only transfer a portion of their capital as a settling-in allowance when leaving the country. Any balance exceeding the permissible transferable amount must be credited to a blocked rand account. In addition, a cash allowance equal to the normal travel allowance applicable to the new country of domicile may be granted to each emigrant. The income earned on their remaining South African assets after the date of their departure may be transferred abroad within certain prescribed limits.

3.3 Prospective changes to exchange rate system

The official view in South Africa is that exchange controls should be dismantled as soon as circumstances allow such a change, because of disadvantages inherent in the system. Amongst the many drawbacks of exchange control are that it hampers the effective application of monetary policy, deters inward foreign investment, is an economically inefficient way of rationing the available foreign exchange among the various users, and has significant direct costs. In a world economy characterised increasingly by globalisation it has also become extremely difficult to apply exchange control measures effectively. In addition, South Africa's commitment to closer economic co-operation and harmonisation in the Southern African Development Community could in future hamper the effective application of exchange control.

In view of the low level of the official reserves, the authorities are, however, of the opinion that all the exchange controls cannot be removed in one "big bang". After having applied one or other form of exchange control restrictions on residents for more than fifty years, it can reasonably be expected that such a "big-bang" approach will lead to a large outflow of capital. Without knowing the extent to which new capital will flow into the country after the abolition of exchange control, the risk of following such an approach is too large. Moreover, the uncertainties surrounding the initial effects of such a policy change on the exchange rate of the rand, interest rates, domestic prices and wages do not make this a feasible option.

Several countries have nevertheless opted to remove capital controls quickly (e.g. Argentina, Indonesia, Malaysia, New Zealand, Singapore and Uruguay). Most countries, however, have followed a more gradual approach and have relaxed controls progressively as circumstances permitted. Both these approaches have under various circumstances and in different countries succeeded or failed. The evidence suggests that the success or failure of exchange control liberalisation depended not only on the speed with which it was implemented, but more so on the credibility of supporting economic stabilisation policies.

The authorities are in favour of a gradual approach to the abolition of exchange control. A phased approach will allow the consequences of certain relaxations to be absorbed and considered by the authorities before they proceed with further measures. It should create credibility and contribute to the irreversibility of reforms. Furthermore, it should enable the economy to adjust slowly to the shocks created by the removal of capital controls that have been in place for such an extended period of time.

Another important aspect that has to be taken into consideration in a programme for the abolition of exchange control has to do with the sequence in which different exchange control measures should be removed. The least risky path towards full capital convertibility should preferably be followed. A logical sequence for the gradual removal of exchange control in South Africa could be:

- to become more lenient in approving direct foreign investments by South African residents;

- to allow insurers, pension funds, unit trusts and other institutional investors to phase in foreign investments in order to diversify their total portfolio investment;
- a progressive relaxation of all other controls on portfolio investments and current transfers by residents, only as and when the foreign reserves of the country will permit such outflows; and
- the release of blocked funds of emigrants.

As discussed above, the authorities have already embarked on the first two steps in the liberalisation of capital controls. As part of the abolition of exchange control and perhaps also an important precondition for this withdrawal, the authorities have also started to gradually reduce the role of the Reserve Bank in the forward exchange market.

The monetary authorities have sought to withdraw from the forward market gradually rather than immediately and abruptly because the last-mentioned option is regarded as too drastic and disruptive. It is felt that such a withdrawal would probably exert excessive downward pressure to bear on the foreign reserves and the exchange rate of the country, while at the same time probably causing interest rates to rise sharply. The prime objective of current policy is therefore to reduce the Reserve Bank's involvement with authorised dealers in the short-term forward market to more manageable levels. The ultimate objective of the Reserve Bank, however, is not to be involved in the forward market at all unless such involvement forms part of the Bank's overall intervention activities in the foreign exchange market.

4. Institutional arrangements

The Currency and Exchanges Act (Act No 9 of 1933) empowers the State President to issue regulations in regard to any matter directly or indirectly related to or affecting or having any bearing on currency, banking or exchanges. The State President has appointed the Minister of Finance to act on his behalf. The Minister of Finance, in turn, has delegated most of his powers to the South African Reserve Bank. In terms of this delegation of power and functions, the Reserve Bank is responsible for the day-to-day administration of exchange control, the management of the greater part of the country's gold and foreign exchange holdings, and the marketing of almost the entire gold output of the South African gold mines on international markets.

In view of this responsibility and certain deficiencies that still exist in the foreign exchange market, the Reserve Bank plays an active role in the functioning of this market. As already pointed out, the participation of the central bank arises not only from transactions concluded at its own discretion, but also at the initiative of private foreign exchange dealers. In the period 1987 to 1994 the gross turnover of the Reserve Bank in the market averaged about 13,5 per cent of total transactions. In view of the Reserve Bank's role as market-maker in the forward market, it was responsible for nearly 25 per cent of the forward contracts concluded.

The Reserve Bank administers exchange control on behalf of the Minister of Finance in terms of the basic stipulations contained in the Exchange Control Regulations, Orders and Rules of 1961 (as amended). The Exchange Control Department of the Reserve Bank enforces all exchange control in South Africa and ensures that exchange control is administered in the Common Monetary Area. (This regional arrangement is discussed in the next section.)

To assist the South African Reserve Bank in the administration of exchange control in South Africa, there are eighteen banks at present that have been appointed as authorised dealers in foreign exchange in the Republic of South Africa, while three banks are still allowed, as an interim measure, to operate as authorised dealers in the former territory of Transkei, pending the repeal of the exchange control legislation and regulations of that territory. Two travel agencies in South Africa have also been appointed as authorised dealers in foreign exchange with limited authority (their transactions are limited to travel arrangements).

The Exchange Control Rulings issued by the Exchange Control Department of the Reserve Bank set out the rules and procedures which the authorised dealers have to follow in dealing with day-to-day matters relating to exchange control. These are amended as required and supplemented by circulars. All dealings in foreign exchange must be routed through an authorised dealer. In those cases where an authorised dealer cannot approve the purchase or sale of foreign currency in terms of the authorisations set out in the Exchange Control Rulings, the application is submitted to the Reserve Bank through the head office of the authorised dealer concerned.

The banks form natural intermediaries between foreign exchange supply and demand. Nearly one-third of their net turnover in foreign exchange during 1994 was concluded with non-bank residents in South Africa to fulfil this function. At approximately 14 per cent in 1994, the transactions between South African domestic authorised foreign exchange dealers and non-residents, however, remained insignificant in comparison with the importance of these transactions in the rest of the world (van der Merwe and de Clerck, 1990, p. 35). This low proportion of international banking business was perhaps partly due to the country's exceptional position in the international community during the 1980s and the highly regulated foreign exchange market in South Africa. This seems to be confirmed by the recent more than doubling of the net turnover

of international banking business in the country from 1992 to 1994. At more than 50 per cent of the net turnover in the South African market in foreign exchange during 1994, domestic interbank business continued to be the main type of business.

The authorised dealers' transactions in foreign exchange are also restricted by a number of limits imposed on them for purposes of exchange control and general banking supervision, namely:

- An upper limit on the absolute gross amount of foreign assets of all authorised dealers of $764 million. This is basically an exchange control limit designed to protect the Reserve Bank's own foreign exchange reserves by preventing the banks from holding unduly large amounts of spot foreign exchange to cover their net forward liabilities.
- An upper limit on the gross foreign liabilities of any bank of 10 per cent of its total liabilities to the public. This is a prudential limit.
- An upper limit on the net open position of any bank in any one currency and in all foreign currencies together of 10 per cent of capital and reserves. The net open position is calculated as the sum of a bank's holdings of spot and forward exchange purchased less spot and forward exchange sold. In August 1995 the Registrar of Banks informed the banks that this limit would be increased to 15 per cent towards the end of the year in an endeavour to assist the development of the forward market. This limit is basically a prudential limit designed to protect the banks against undue exchange losses.
- An exchange control prohibition on residents' holdings of US dollars or other foreign currency balances either with South African banks or abroad.

In view of the high costs of communication from South Africa with leading banks or foreign exchange brokers, and to increase the options of domestic foreign exchange dealers in undertaking transactions, it was decided in 1983 that foreign-exchange broking should also be developed in South Africa. Four foreign-exchange broking houses were therefore established. Broking business in foreign exchange, however, experienced a major setback with the announcement of the debt standstill arrangements in September 1985. Even today, the international foreign-exchange broking firms still perform only a relatively small proportion of the transactions in the local market.

With the establishment of international foreign-exchange broking firms, the Reserve Bank laid down the following conditions under which they are allowed to operate:

- Foreign-exchange brokers must obtain the formal approval from the South African Reserve Bank before commencing with any business in the South African market.
- Each foreign-exchange broker must be incorporated as a limited liability company registered under the Companies Act (Act No 61 of 1973), and have a minimum subscribed capital of R100 000.
- Foreign-exchange brokers must always be totally independent of authorised dealers in foreign exchange in South Africa.
- Foreign-exchange brokers may not buy or sell foreign exchange for their own account, nor may they hold, borrow or lend foreign exchange.
- For every foreign exchange transaction that is negotiated through a foreign-exchange broker involving one or more South African residents, at least one of the parties must be an authorised dealer in foreign exchange.
- Foreign-exchange brokers must hold regular consultations with the South African Reserve Bank and submit a monthly report covering all their activities to the Reserve Bank.
- The Reserve Bank has reserved the right to introduce maximum margins for brokerage fees on foreign exchange transactions if this is at any time deemed necessary.
- Each foreign-exchange broking firm must keep the Reserve Bank informed of its postal address and the location of its Head Office, and must submit a list of all its shareholders and the names of the members of its Board of Directors and of its senior management staff.

5. Common monetary area

As indicated above, the exchange rate system of the rand is applicable in the Common Monetary Area, consisting of Lesotho, Namibia, South Africa and Swaziland. Before 1974 no formal arrangements on money and currency existed between South Africa on the one hand and Lesotho, Namibia and Swaziland or, for that matter, Botswana on the other hand. Common monetary and currency arrangements prevailed over the whole region and there were no restrictions on the transfer of money and capital. After Botswana, Lesotho and Swaziland attained independent national status from the United Kingdom, they started negotiations on monetary and related matters with South Africa in 1972.

These negotiations resulted in a bilateral agreement between Swaziland and South Africa in March 1974, in terms of which Swaziland was to establish a monetary authority and issue its own currency (the lilangeni), which was to circulate together with the rand in Swaziland at a fixed exchange rate on a one-to-one basis. Swaziland's note issue had to be fully backed by interest-bearing rand deposits held with the South African Reserve Bank. Swaziland's new currency was placed in circulation on 6 September 1974. During the last stages of reaching a formal agreement, Botswana decided in September 1974 to withdraw from the negotiations and announced its

intention to establish an independent national currency and its own central bank. The Rand Monetary Area Agreement, which formally came into effect on 5 December 1974, was therefore a tripartite arrangement between Lesotho, South Africa and Swaziland. Because Namibia was still administered at that time by South Africa, it also formed part of the then Rand Monetary Area.

The Rand Monetary Area was replaced by the Common Monetary Area on 1 July 1986 in terms of a Trilateral Monetary Area Agreement between Lesotho, South Africa and Swaziland. This new agreement was necessitated by a bilateral agreement concluded at the same time between Swaziland and South Africa, and accommodated the changes incorporated in this bilateral agreement. Five changes were made in the bilateral agreement. The first was the abrogation of the status of the rand as legal tender in Swaziland, and Swaziland being allowed to determine the external value of the lilangeni according to its domestic economic circumstances. Secondly, the full rand backing of lilangeni was terminated and Swaziland was no longer required to hold rand deposits in a special account with the Reserve Bank. Thirdly, both Swaziland and South Africa undertook to carry sufficient stocks of each other's currency, so as to be able to convert notes and coin presented to them. Fourthly, Swaziland was given control in handling its foreign exchange reserves and was required to meet its net requirements with its own reserve holdings. Fifthly, Swaziland was allowed to henceforth alter its foreign exchange regulations without prior consultation or having to go through the Common Monetary Commission.

In April 1989 a bilateral agreement between Lesotho and South Africa was signed. This agreement introduced two changes. One was the replacement of the requirement of full rand backing of the Lesotho currency (the loti, introduced in 1980) with equivalent reserve holdings in the form of rand assets and convertible foreign currencies in such proportions as the Central Bank of Lesotho considered appropriate. The other was symmetry of procedures in amending exchange control provisions. Each country was expected to consult the other prior to any amendments to its exchange control. If the intended amendment was of extreme urgency, then the agreement also allowed the parties to effect changes without prior consultation, but with the requirement that the other parties have to be informed of the changes.

The trilateral monetary area agreement was replaced by a Multilateral Monetary Agreement on 6 February 1992 when the Republic of Namibia formally joined the Common Monetary Area. Even before this date, Namibia was regarded and accepted as a *de facto* member of the previous arrangements. The main features of the Multilateral Monetary Agreement are:

- The South African rand serves as a *de facto* common currency that is widely used and accepted in all the participating countries. Member states, however, have the right to issue their own national currencies. Prior agreement between South Africa and the issuing government is required for the issue of a national currency. Coin and notes issued by any member should be clearly distinguishable in appearance from notes and coin of other contracting parties. (As already noted, both Swaziland and Lesotho soon availed themselves of this provision. From September 1993 Namibia also issued its own currency, the Namibian dollar. The currencies of these three countries have all been pegged to the South African rand at par since their introduction.)
- There are no restrictions on the transfer of funds, whether for current or for capital transactions in the Common Monetary Area. However, prudential investments or liquidity requirements may be prescribed for financial institutions, provided that these requirements do not discriminate in any manner against other contracting parties and that proper notification is given before the requirements are introduced. Contracting parties are also allowed to introduce measures relating to the investment of funds in domestic securities for the mobilisation of domestic resources in the interest of the development of their respective areas.
- The residents of Lesotho, Namibia and Swaziland have a right of access to the South African capital and money markets. In order to promote the orderly management of these markets, the governments of these countries must reach agreement with the South African authorities on the conditions, timing and other relevant terms in respect of the issue or conversion of public securities. In these negotiations, however, South Africa may not withhold its agreement without reasonable cause. With due regard of the need for co-operation in preserving monetary stability in the Common Monetary Area, the governments of Lesotho, Namibia and Swaziland have the right to enter into bilateral agreements with South Africa with the aim of obtaining temporary central bank facilities from the Reserve Bank on such terms as may be agreed upon at the time.
- The member countries share a common pool of foreign exchange reserves, managed by the Reserve Bank. Lesotho, Namibia and Swaziland also have the right of holding foreign reserves managed by themselves for their own immediate needs. In order to enable the South African authorities to manage the gold and other foreign reserves of South Africa, to monitor exchange control in the Common Monetary Area and to assist in determining exchange rate policy, the central banks of Swaziland, Lesotho and Namibia must provide the Reserve Bank with monthly information on balances and transactions in gold and foreign exchange by themselves and their authorised dealers, together with the applicable exchange control forms.

- The four countries apply a common exchange control policy towards the outside world. If the national interests of Lesotho, Namibia and Swaziland could be affected adversely by amendments implemented by South Africa, they are not obliged to incorporate such changes in their own exchange control provisions.
- The contracting parties must permit, through normal clearing systems, the repatriation of notes and coin issued by them which may circulate in other countries of the Common Monetary Area. The central banks of Lesotho, Namibia and Swaziland all maintain current accounts with the Reserve Bank, to which the repatriation of rand currency to South Africa is credited on a regular basis. Any rand currency surpluses held by the central banks of Lesotho, Namibia and Swaziland may be placed in the South African capital and money market or be used to purchase foreign exchange in the South African or other foreign exchange markets.
- The South African government must make compensatory payments to Lesotho and Namibia which represent an imputed return on the rand currency circulating as legal tender in their areas. This compensation is paid on the assumption that these countries could have earned an income if the rand circulating in their areas had been issued by them and had been fully invested in income-generating assets. Such payments are made in rand. The amounts are calculated as two-thirds of the average yield to redemption of domestic South African government stock with an outstanding maturity of 15 years or more in the last three months of the preceding calendar year, multiplied by the estimated amount of rand notes and coin in circulation in the country concerned. Swaziland does not receive such compensatory payments, because it suspended the use of rand as legal tender in its territory from 1986.
- The contracting parties to the agreement must co-operate with each other in the collection and exchange of statistical and other data that are required for the effective administration of the agreement and for the formulation and implementation of monetary and exchange control policies.
- Regular consultations are held with a view to reconciliation of the different member countries' interests in the formulation and implementation of the agreement. For this purpose a Common Monetary Area Commission was established, which convenes at regular intervals or at the request of any member. A technical committee also meets every quarter to solve problems of a technical nature encountered by members.
- Disputes between members which cannot be settled by them must be submitted to an arbitration tribunal, which is appointed and performs its functions in terms of agreed procedures and rules.

In terms of the bilateral agreements between South Africa and Lesotho and between South Africa and Namibia, the central banks of Lesotho and Namibia must maintain a reserve equivalent to the amount of currency that has been issued by them. This reserve may be held in the form of rand assets and freely usable foreign currencies in such proportion as these banks consider appropriate. The rand assets used for reserve purposes must consist of:

- the rand currency held by the relevant central banks; plus
- the total rand deposits held by the respective central banks in special rand deposit accounts and current accounts with the Reserve Bank, as well as call deposit accounts with the Corporation for Public Deposits (The Corporation for Public Deposits was established in 1984 to rationalise the investment of short-term surplus funds of the public sector and to enable the monetary authorities to control the investment of these funds more efficiently); plus
- South African government stock and Treasury bills held by the two central banks.

6. Macro-economic effectiveness of the exchange rate system

After having described in some detail the evolution and characteristics of the exchange rate system in operation in South Africa, this section is concerned with the macro-economic effectiveness of the determination of spot exchange rates, the working of the forward market, and the exchange control measures applied, as well as with the advantages and disadvantages of the system for the smaller members of the Common Monetary Area.

6.1 Spot exchange rates

The determination of spot exchange rates in South Africa has been depoliticised to a large extent and the rand finds its level in a relatively competitive foreign exchange market that is free from monopolistic exploitation, either by large final sellers, buyers of foreign exchange or by large banks. In view of the exchange control rulings applied by the authorities and the active participation of the Reserve Bank in the forward market, the spot exchange rate of the rand may at times be heavily influenced by the Bank. However, the Reserve Bank's ability to have a direct impact on the exchange rate of the rand is mainly restricted to the elimination of sporadic or short-term fluctuations in the external value of the currency; medium- and long-term movements in the exchange rate of the rand depend on underlying economic conditions and the supply of and demand for foreign exchange.

The spot foreign exchange market in South Africa is therefore sufficiently broad, active and competitive to

function effectively. This was also the case under the old dual exchange rate system, which was in operation in South Africa until March 1995. Under this system the determination of the exchange rate of both the commercial and financial rand was generally left to market forces, with more intervention by the authorities in the commercial than in the financial-rand market. This system was much more closely akin to the official dual exchange rate systems which existed in certain developed countries in the 1970s than to the "parallel" markets that are found in some other African countries (Garner, pp. 15 and 16). In these parallel markets the nominal official exchange rate for certain government and parastatal transactions is fixed at a higher level than that for other transactions; this last-mentioned rate is either set separately by the government or floats in the illicit parallel market.

In the final analysis, the appropriateness of a country's exchange rate system depends on the extent to which the level of its currency reflects the long-term equilibrium real exchange rate of the country, i.e. the exchange rate at which internal and external equilibrium exist in the economy. In practice, however, it is impossible to determine the equilibrium exchange rate of a currency with the currently available techniques. Generally, two approaches are normally followed to arrive at an approximate equilibrium rate. (For a more comprehensive discussion in this regard, see Wickham.) The simplest and most popular is based on the notion of relative purchasing power parity. In accordance with this approach, the equilibrium exchange rate is inversely proportional to the relative price levels of the home country to those of its trading partners, i.e. directly proportional to the relative purchasing power of the national currencies. This would have been an indisputably correct method of determining the equilibrium rate of a currency if all countries produced exactly the same goods, all goods were tradable and there were no impediments to free trade. Such conditions are, however, never satisfied. The proponents of this method claim that deviations from these ideal conditions are not so great that they will invalidate this approach, but that approximations are possible in the real world.

The application of relative purchasing power parity involves using the actual nominal exchange rate to compute relative price levels in common currency terms. Any deviation in the real exchange rate from some base value is taken as an indication that the exchange rate has diverged from its equilibrium value. The problem is, firstly, to decide on such a base period in which the economy is accepted to have been in internal and external equilibrium. Secondly, different results may be obtained with different price indices.

An alternative method of defining the equilibrium exchange rate of a currency is in terms of the relative price level of tradable to non-tradable goods. In this context, the long-term equilibrium real exchange rate would correspond to the relative price of tradable to non-tradable goods that simultaneously yields internal and external equilibrium. Internal equilibrium implies that the non-tradable goods market is cleared continuously, while external equilibrium implies that the current account deficit is financed by capital inflows on a sustainable basis. Although this method is theoretically more appealing, it poses the problem of having to choose a base period in which both internal and external equilibrium can be said to have been present. At this stage, this method cannot be applied in South Africa because of a lack of price indices separating tradable from non-tradable goods.

Calculations have been made in South Africa of the nominal and real effective exchange rate of the rand based on relative price differences between this country and its major trading partner countries. In calculating real effective exchange rate indices, the Reserve Bank has experimented with various price indices and concluded that the choice of an index is immaterial because all indices produce broadly the same results. The Reserve Bank has opted for production price indices in calculating the real effective exchange rate of the rand, because these indices compare the prices that South African producers charge relative to their counterparts in the main trading partner countries.

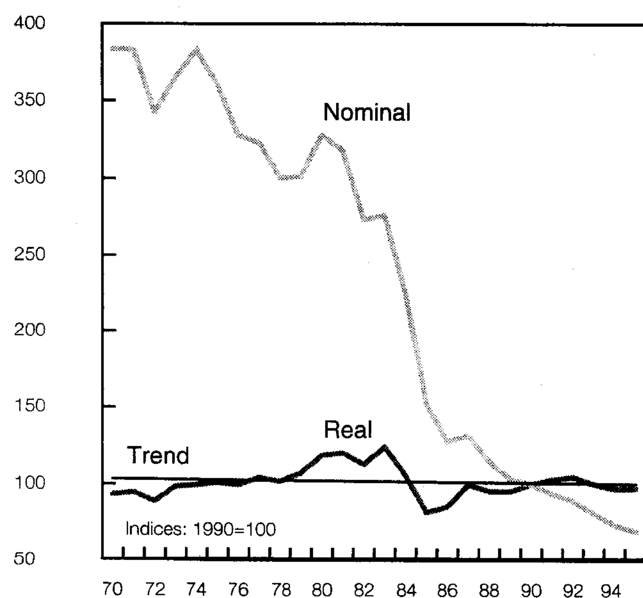
Solving the problem of finding a base period representing the long-term equilibrium exchange rate of the rand is, however, much more difficult, if not impossible. Since the beginning of the 1970s the South African economy has operated under exceptional circumstances and has experienced a large number of external and domestic real shocks. The economy could not in any years during this period or on average over a number of years, have been in equilibrium. Choosing a base period before 1970 is meaningless because a precondition for such comparisons is that the base period must not be too distant; the probable bias in the measurement of relative price changes increases rapidly with time, and comparisons with such an equilibrium exchange rate then become meaningless.

In view of this problem, an alternative measure of the effectiveness of the determination of the exchange rate of the rand would be if it remained relatively stable (in real terms) over time. In the absence of major structural changes, a reasonably stable behaviour of the real effective exchange rate of a currency can be interpreted as an effective operation of the foreign exchange market in that country. However, in the case of South Africa some structural changes have occurred in the economy since the beginning of the 1970s. Moreover, the Reserve Bank's intervention in the foreign exchange market generally dampened movements in the real effective exchange rate of the rand over time and kept

this rate more stable than it would have been under other circumstances, even after taking into account the limited powers of the Reserve Bank in this regard (Meijer, p. 5).

Despite these disadvantages and because of the deficiencies of other measures of the effectiveness of exchange rate systems, a comparison of the real exchange rate of the rand over time could provide some indication of the effectiveness of the determination of the spot exchange rate in the South African foreign exchange market. Such a comparison is provided in Graph 1, which shows that the real effective exchange rate of the rand has, in fact, been remarkably stable since the beginning of the 1970s. This long-term stability prevailed, despite major short-term shocks such as increases in the oil and gold price in 1973-74 and again in 1979-80 and the large outflow of capital from the middle of the 1980s. Although this relative stability of the real exchange rate of the rand provides some proof of the effectiveness of exchange rate determination in South Africa, it could also have been affected by other factors such as the large inflation differentials between South Africa and its major trading partners. "This may have caused relative price-level movements to 'overwhelm' all other factors that could have had an autonomous influence of their own on the nominal and real exchange rate. With the nominal exchange rate 'effectively' responding to the inflation differential only, the real exchange rate would have remained roughly constant ..." (Meijer, p. 14).

Graph 1. Nominal and real effective exchange rates of the rand



6.2 Forward market

As discussed in some detail above, various attempts have been made to improve the arrangements governing the operations of the forward exchange market in South Africa. Despite these attempts, the forward market can still only be described as highly administered, relatively under-developed, artificial and tightly restricted by exchange control rules and regulations. The Reserve Bank has therefore maintained its role as "market-maker", even though efforts have been made to make the market less heavily administered.

As a result of the Reserve Bank's involvement in the forward market, the forward rates are not determined by market forces, but basically by the rates quoted by the Reserve Bank (i.e. they are dominated by the Reserve Bank's rates). The forward rates quoted by the Reserve Bank are based on spot exchange rates and the relevant interest rate differential between South Africa and the United States. They are therefore determined under restrictive conditions which are not affected by arbitration and speculation; as such, they may be completely inconsistent with expected exchange rate or interest rate movements, such as would govern their determination under the free operation of market forces. The forward market accordingly still does not play its full part in determining spot and forward exchange rates.

Because expectations are not adequately incorporated in the forward rates, a substantial depreciation of the rand together with a net oversold forward book will inevitably result in losses on forward exchange transactions. The South African market has been characterised by both these factors. While the recent reforms in the forward market have brought a great improvement in the imbalance between the Reserve Bank's total forward sales and purchases, the central bank nevertheless still has a large net oversold forward book, which is not nearly matched by its holdings of foreign exchange reserves. With this large net oversold position and the depreciation in the nominal exchange rate of the rand, the Reserve Bank has made large losses on its forward book.

In view of these deficiencies in the operation of the forward cover system, the authorities have already embarked on a programme of gradually reducing the Reserve Bank's role in the forward market. The ultimate objective is to bring about a forward market in South Africa where both residents and non-residents are at liberty to deal freely with one another and where the forward rates basically reflect underlying supply and demand conditions, with limited Reserve Bank intervention to smooth out sporadic fluctuations.

6.3 Exchange control

The main objective of exchange control in any country, in conjunction with other monetary and fiscal measures, is to stabilise the overall balance of

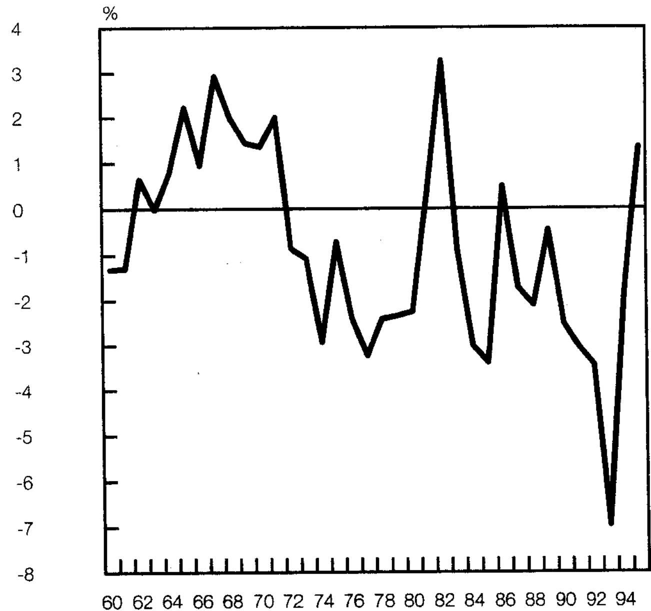
payments position. The function of exchange control is to "effectively regulate capital flows" in the sense that it must prevent large disruptive fluctuations in capital movements which could destabilise the balance of payments and the foreign currency reserves. Its function is not to fine-tune foreign payments and receipts, nor even to limit all capital movements, but to create greater stability in balance of payments transactions.

The balance of payments transactions in South Africa have generally been characterised by sharp fluctuations in the net gold and other foreign reserves, which seems to imply without further ado that exchange control was unable to stabilise the country's transactions effectively with the rest of the world. An highly variable overall balance of payments position is, however, a common characteristic of a small open economy and does not necessarily prove that exchange control was ineffective. In fact, the financial-rand system which was applied for long periods of time was definitely a significant stabilising factor, as is clearly illustrated by the sharp fluctuations in the discount between the commercial- and financial-rand rate.

Unfortunately, it is also impossible to determine the effectiveness of exchange control measures from balance of payments or international investment statistics, because most of the channels used to circumvent exchange control are not reflected in these statistics, such as underinvoicing and overinvoicing of exports and imports and transfer-pricing policies. Broad developments in the so-called "errors and omissions item" of the balance of payments should nevertheless provide some indication of the effectiveness of exchange control in South Africa. From Graph 2 it is apparent that the errors and omissions on South Africa's balance of payments were generally positive prior to 1972, except for the two years 1960 and 1961, which were affected by serious upheavals. Since 1972 the errors and omission have been negative in almost every year, and unexplained outflows were particularly large during periods of political unrest in the mid-1970s and mid-1980s and in the political transition period from 1991 to 1994. These figures therefore seem to indicate that large evasions of exchange control occurred at times.

It can therefore be concluded that capital controls in South Africa, as in most other countries, have definitely not been watertight. On the other hand, it also seems fairly obvious that exchange control measures must have had some success in regulating capital flows, in view of the often cited costs of these measures to the business sector and the economy as a whole. In a study by Kahn it was found that: "At the very least, controls raise the cost of illegal capital flows and therefore we must assume that they do have some effect. In the South African context we know that a large proportion of domestic savings is channelled through the large insurance companies (Old Mutual,

Graph 2. Errors and omissions as a ratio of total merchandise transactions



Sanlam, etc.). These institutions have been lobbying for a removal of exchange controls and it is clear that within the normal course of their portfolio diversification, a significant proportion of their assets would have been invested abroad. In this respect alone, exchange controls must have been successful from the point of view of keeping domestic savings within the country" (p. 18).

In addition to the limited effectiveness of exchange control in protecting the foreign exchange reserves of the country, various other disadvantages of exchange control can be cited, such as:

- There is a conflict between controlling capital flows and the effective application of monetary policy. Monetary policy can only operate effectively if account is taken of the close relationship that exists between money supply, interest rates and exchange rates. Experience in South Africa has shown that the application of exchange control often prevented the most desirable combination of money supply growth, interest rates and spot and forward exchange rates from being attained.
- At times the exchange control measures in South Africa also distorted domestic interest rate levels. For instance, a substantial rise in the gold price in the early 1980s under fairly restrictive capital controls led to a large increase in liquidity which, in turn, contributed to low levels of nominal and negative levels of real interest rates.
- Exchange controls have deterred inward foreign investment in South Africa. It is inherently difficult to

quantify to what extent new foreign investment has not taken place in South Africa on account of the existence of exchange control. It is generally accepted, however, that the mere fact that a country applies capital controls is a constraint on inward foreign investment, because any such country has to compete with other countries which may apply no or more liberal restrictions.

- Exchange control is an economically inefficient way of rationing the available foreign exchange among the various domestic users. When not only the size of the aggregate demand for foreign exchange, but also the composition of demand is determined by administrative discretion, the chances are that such a distribution of foreign exchange may agree less closely with the economic interests of the country than would a distribution determined by market forces.
- Exchange control has significant direct costs for the Reserve Bank and the private sector. The Reserve Bank and all authorised foreign exchange dealers have to employ a large number of people at a considerable cost to administer exchange control. Other enterprises in the private sector also incur costs because of the time devoted to dealing with exchange control matters and, in some instances, by employing outside professionals to assist in this regard. The private sector also incurs costs in waiting for exchange control approval and the spillover effects of efforts to evade capital controls.
- Exchange control prevents residents from hedging risks in other countries by exercising private portfolio diversification through the acquisition of foreign assets.

6.4 Common Monetary Area

The effectiveness of the rand exchange rate system should not only be evaluated in terms of the South African situation alone: the benefits and costs to the other members of the Common Monetary Area should also be taken into consideration. The history of the Common Monetary Area goes back over many years, moving from informal to formal arrangements. Such a long history suggests inherent viability and durability. A common currency area among closely related countries could be expected to reduce the cost of currency conversions and uncertainty about exchange rate fluctuations; it should consequently enhance the allocative efficiency of the relevant economies. It could also be a sensible arrangement for small and open economies to follow, because the costs of flexible exchange rate systems for these countries may outweigh their advantages. Many countries with relatively small economies thus prefer to peg their currencies to that of their main trading partner or to a basket of currencies of their main trading partners. In many cases this leads to greater price stability than under a flexible exchange rate system and promotes investment in the small economy.

More in particular, the main advantages for Lesotho, Namibia and Swaziland in participating in a monetary union with South Africa, are that:

- they have free access to the South African money and capital markets;
- capital and labour move freely between the countries because there is no exchange control or other restrictions;
- no foreign exchange problems arise in the servicing of foreign debt, which facilitates raising loans for development purposes from non-member countries;
- trade is promoted between member countries through the absence of any exchange risk, payment restrictions, inconvenience or additional costs of transactions;
- the close relations with South Africa have been to the benefit of macro-economic stability; and
- the countries concerned have experienced relative exchange rate stability, which might have been difficult to achieve if an independent exchange rate policy had been pursued.

Being part of a monetary union with South Africa has, without doubt, also brought about certain disadvantages for the other partners. Firstly, monetary autonomy was forfeited by the smaller members of the union to the monetary authorities in South Africa. The Reserve Bank changes the monetary policy stance in South Africa mainly because of domestic economic developments. The smaller members of the Common Monetary Area have relatively little power to influence the growth in money supply or changes in the interest rate structure. It can, however, also be argued that even if they did not form part of a monetary union with South Africa, their monetary aggregates would still have been heavily affected by changes in the monetary policy stance in South Africa.

Secondly, exchange rate policy designed to correct South Africa's overall balance of payments does not necessarily always take into account conditions in the other members of the Common Monetary Area. For example, the appreciation of the rand against the US dollar in the early 1980s had an adverse effect on the export sector of Swaziland at that time (Guma, p. 176). It is, however, doubtful whether a more sovereign exchange rate policy for Swaziland, or for that matter any of the other members, could have been pursued because of these countries' highly concentrated export sectors and close integration with the goods and financial markets in South Africa.

Finally, it can also be argued that Lesotho, Namibia and Swaziland had to give up a great part of their fiscal autonomy as a result of their agreement to form a Common Monetary Area with South Africa. If the application of monetary policy is restricted, then so is the borrowing ability of a government that wishes to look outside the union to finance a fiscal deficit. This alleged disadvantage has to be evaluated against the advantage of being able to borrow funds in the money

and capital markets of South Africa.

Policy co-ordination obviously requires all partners to forego a measure of sovereignty in the interests of maximising benefits to the region. Although South Africa has retained overall control over the rand currency and the gold and other foreign exchange reserves of the region, such control has not been autocratic or centralised. In fact, the monetary agreement between the four member countries has provided for close co-operation and consultation between the members. The ongoing consultations on monetary matters in the Common Monetary Area have not only contributed to a better understanding of economic and financial problems in the region, but also regarding matters such as political dialogue, tourism, water affairs and combined projects. The degree of monetary discretion in Lesotho, Namibia and Swaziland has probably also increased since 1974, especially their ability to control financial institutions operating within their jurisdiction. These members now also have a say over the application of foreign exchange control in their own countries. More flexibility was also introduced in the monetary union with the co-existence of bilateral arrangements alongside multilateral arrangements.

7. Macro-economic impact of changes in the external value of the rand

The econometric model of the South African Reserve Bank was used to determine the possible impact of a change in the exchange rate of the rand on domestic production, employment, inflation and the balance of payments. The econometric model consists of 160 equations, of which 85 are stochastic equations. A policy reaction function of the monetary authorities (describing interest rate movements in terms of domestic price movements and some other variables) is included in the model. All simulations made with the model are based on assumptions for certain exogenous variables, including international economic growth, world inflation, the gold price, agricultural conditions in South Africa, and current and capital spending by the South African government sector.

In order to ascertain the likely impact of a change in the external value of the rand on the economy, the Econometrics Section of the Reserve Bank's Economics Department firstly made a so-called baseline simulation of the likely developments in the South African economy based on current trends in the domestic economy and expected international developments. This was followed by an alternative simulation to take into account the effect of a once-off depreciation of 20 per cent in the rand-dollar exchange rate. Further simulations were made to determine the effect of a depreciation in the exchange rate of the rand where it forms part of a comprehensive programme of restructuring the South African economy.

In Table 1 the impact of a once-off 20 per cent depreciation in the exchange rate of the rand against the dollar is compared with the results of the baseline simulation. From this information it is apparent that such a large depreciation in the external value of the rand immediately leads to an increase in the real exports of goods and non-factor services. The exports of manufactured goods will, in particular, benefit from the depreciation of the rand because of a price elasticity of 1,20. The rise in the volume of exports contributes to higher growth in the real gross domestic product, whereas employment rises only moderately faster. The somewhat disappointing reaction of employment is probably related to the high capital intensity of the South African export sector.

As one would expect, the depreciation of the rand also leads to an immediate and substantial contraction in the real imports of goods and non-factor services in comparison with the baseline simulation. The net result of the higher exports and lower imports is a considerable improvement in the

Table 1. The impact of a depreciation of the rand on the South African economy

Differences between baseline and alternative simulations

	Year				
	1	**2**	**3**	**4**	**5**
Real gross domestic product (%)	1,4	-	-	-0,1	-0,1
Cumulative change in employment (thousands)	22	48	65	73	73
Inflation rate (%)	3,7	1,6	1,3	1,1	1,0
Volume of exports (%)	2,2	0,1	0,1	-0,1	-0,2
Volume of imports (%)	-7,6	1,2	1,0	0,7	0,8
Balance on current account (R billion)	5,8	5,7	5,2	4,5	3,6

balance on the current account of the balance of payments.

The benefits of a large depreciation in the exchange rate of the rand, however, do not last long because of the sharp rise in domestic inflation brought about by the depreciated currency. The inflation rate reacts immediately to the depreciation of the rand and continues to be substantially higher than in the baseline simulation. As a result of these sharply rising prices, the benefits gained by both exports and production begin to fade already in the second year of the simulation period and both these aggregates later increase at a lower rate than in the baseline simulation. The volume of imports also starts to increase more rapidly after the first year, but the balance on current account remains more favourable in the alternative simulation than in the baseline simulation due to the substantially larger immediate impact on imports than on exports.

In Table 2 the effect of a depreciation of the rand when it forms part of a programme of structural adjustment is compared with the baseline simulation. Two simulations were made for this comparison. In the first one (denoted as Alternative A) the real effective exchange rate of the rand was kept constant throughout the simulation period. In the second simulation (Alternative B) the depreciation in the rand-dollar exchange rate was doubled in every year of the simulation period, i.e. if a depreciation of 4 per cent in the rate of the rand against the dollar was needed in Alternative A to keep the real effective exchange rate constant, the depreciation was doubled to 8 per cent in Alternative B.

The main structural adjustments taken into account in these simulations were:

- a gradual reduction in the fiscal deficit to more sustainable levels;

Table 2. The impact of a depreciation of the rand as part of a structural adjustment programme

Differences between baseline and alternative simulations

	Year				
	1	**2**	**3**	**4**	**5**
Real gross domestic product (%)					
Alternative A	0,8	0,9	1,1	1,2	1,3
Alternative B	0,9	0,7	0,7	0,8	0,8
Impact of additional depreciation	0,1	-0,2	-0,4	-0,4	-0,5
Cumulative change in employment (thousands)					
Alternative A	36	118	223	342	474
Altternative B	37	124	221	328	451
Impact of additional depreciation	1	6	-2	-14	-23
Inflation rate (%)					
Alternative A	-1,8	-1,5	-1,2	-1,0	-0,1
Alternative B	-1,5	-0,8	0,3	1,2	2,6
Impact of additional depreciation	0,3	0,7	1,5	2,2	2,7
Volume of exports (%)					
Alternative A	-	0,2	0,3	0,3	0,3
Alternative B	0,1	0,2	0,1	0,1	0,1
Impact of additional depreciation	0,3	0,7	1,5	2,2	2,7
Volume of exports (%)					
Alternative A	-	0,2	0,3	0,3	0,3
Alternative B	0,1	0,2	0,1	0,1	0,1
Impact of additional depreciation	0,1	-	-0,2	-0,2	-0,2
Volume of imports (%)					
Alternative A	-0,4	-0,4	0,4	0,7	1,0
Alternative B	-1,7	-2,2	-1,8	-1,3	-0,3
Impact of additional depreciation	-1,3	-1,8	-2,2	-2,0	-1,3
Balance on current account (R billion)					
Alternative A	0,3	0,8	0,7	-	-0,9
Alternative B	1,8	4,6	7,7	10,9	13,4
Impact of additional depreciation	1,5	3,8	7,0	10,9	14,3

- an unchanged tax burden;
- a decline in current government expenditure as a ratio of gross domestic product;
- a decrease in government dissaving as a ratio of gross domestic product;
- an increase in the ratio of government's expenditure on capital goods to gross domestic product;
- an increase in the production capacity of the economy and a decline in the capital-output ratio, i.e. increased capital productivity;
- an increase in labour productivity;
- a decline in the import propensity and a rise in exports as a ratio of gross domestic product; and
- a decline in the propensity of households to consume and consequently higher households' saving;

The results of the simulations summarised in Table 2 show that even as part of a package of structural reforms, the beneficial effects of a decrease in the real effective exchange rate of the rand are short-lived. Although the depreciation in the external value of the rand in Alternative B initially brings about a higher growth in domestic production and employment than in Alternative A, these benefits are quickly lost because of the effect of the depreciation of the rand on domestic prices. Despite restrictive fiscal and monetary policy measures and the structural reforms undertaken in the economy, the rate of inflation accelerated rapidly in Alternative B. This higher rate of price inflation manifested itself in lower domestic production and employment than in the case where the real effective exchange rate was maintained at a constant level.

The sharp and continuous depreciation in the value of the rand in Alternative B again had a substantial effect on the volume of imports. Real imports of goods and non-factor services in Alternative B contracted throughout the simulation period relative to the baseline simulation, but the rate of contraction slowed down considerably because of the effect of the depreciation of the rand on inflation. The decline in the volume of imports was nevertheless responsible for a sharp and rising surplus on the current account of the balance of payments.

The ineffectiveness of a depreciation in the exchange rate of the rand is probably related to the uncompetitive production structure of the country. The South African economy is characterised by an oligopolistic industrial structure, where a few large enterprises operate behind a protective tariff wall which allows them to pass increased input costs on to customers. This is further aggravated by an inflexible labour market which does not reflect underlying supply and demand conditions. These problems are at present being investigated by the government to find more workable solutions.

8. Conclusion

The exchange rate system in South Africa has changed considerably since the early 1980s from a highly administrative to a more freely floating exchange rate regime. Socio-political developments in the mid-1980s for a time hampered these reforms to the foreign exchange market and forced the authorities to revert to more direct control measures to manage exchange rates. The successful transformation to a new political dispensation allowed the authorities to again embark on financial liberalisation and the integration of the South African economy into the world economy.

As a result, South Africa now has a unitary exchange rate system where the spot exchange rate is essentially determined by supply and demand in a competitive exchange market subject to Reserve Bank intervention by means of purchases and sales of US dollars. Exchange control is exercised only over residents and emigrants in respect of capital movements. In order to ensure that capital transfers are not disguised as current payments, limits are placed on some transfers of a current nature. The forward market is not yet developed enough to operate without the Reserve Bank fulfilling the role as market-maker and determining forward rates.

The Reserve Bank's operations in the foreign exchange market form an integral part of its overall monetary policy with the overriding objective of establishing a stable financial environment in support of sustainable real economic growth over the medium and longer term. The Bank does not, however, pursue any predetermined exchange rate target. It prefers instead to rely on market forces within the framework of broad monetary, fiscal and other policy measures to determine the general level of the exchange rate. The Reserve Bank's direct participation in both the spot and the forward market only seeks to smooth out undue short-term fluctuations in the exchange rate of the rand.

The functioning of the foreign exchange market is mainly regulated by the Currency and Exchanges Act (Act No. 9 of 1993) and the Exchange Control Regulations, Orders and Rules of 1961 (as amended). The Multilateral Monetary Agreement of 6 February 1992 between Lesotho, Namibia, South Africa and Swaziland and bilateral agreements between South Africa and these other members of the Common Monetary Area, determine the currency and other arrangements in the monetary union between the four countries concerned.

These institutional arrangements have led to an effective functioning of the foreign exchange market in which the rand finds its level in a relatively competitive market free from monopolistic exploitation. The remarkable stability of the real effective exchange rate of the rand since the beginning of the 1970s also

points to a market that functions in an effective manner. The forward exchange market, however, is still highly administered, relatively under-developed, and restricted by exchange control rules and regulations. This market accordingly does not fully play its part in determining spot and forward exchange rates and normally leads to large losses on the forward book of the Reserve Bank, because of the Bank's role as market-maker.

Although exchange control measures have had limited success in regulating capital flows, exchange control has not been watertight. In addition to its limited effectiveness, it also has many other drawbacks, such as that it hampers the effective application of monetary policy, deters inward foreign investment, is an economically inefficient way of rationing the available foreign exchange among the various users, and has significant direct costs. In view of the increased globalisation of financial markets and planned increased co-operation and integration of the economies in Southern Africa, it may become increasingly difficult to maintain the current exchange control regulations in South Africa.

In view of these disadvantages of exchange control, the official view in South Africa is that exchange control should be dismantled as soon as circumstances allow such a change. The authorities are, however, not in favour of removing these controls in one "big bang", but would prefer to follow a phased approach in which the consequences of certain relaxations can be absorbed and evaluated before further measures are introduced. In the sequencing of the removal of these controls the authorities also believe that the least risky path should be followed.

In addition, the monetary authorities are aiming at a gradual rather than an immediate and abrupt withdrawal from the forward market. The prime objective of current policy is to reduce the Reserve Bank's involvement in the short-term forward market with authorised dealers to more manageable levels. Ultimately, the Reserve Bank would prefer not to be involved in forward transactions unless it forms part of its overall intervention activities in the foreign exchange market.

The effectiveness of the rand exchange rate system should not be evaluated in terms of the South African situation alone: the benefits and costs to the other members of the Common Monetary Area should also be taken into consideration. Despite the fact that these other countries have forfeited monetary, exchange rate and fiscal autonomy by deciding to become members of a monetary union, their close relationship with the rand currency and financial markets in South Africa probably outweighs these disadvantages. Co-operation and consultation between members as well as other arrangements have ensured that overall control of the rand currency and foreign reserves of the area has not been autocratic or centralised.

Although the exchange rate system in South Africa as a whole has functioned relatively effectively since the early 1980s, econometric calculations indicate that a depreciation of the exchange rate of the rand only has a short-lived beneficial effect on domestic production, employment and exports, because it also leads to a rapid acceleration in inflation which quickly wipes out any benefits that might have been obtained. A depreciation of the rand, however, has a longer-lasting beneficial impact on the balance of payments on current account, because it initially leads to a sharp decline in the volume of imports. The ineffectiveness of exchange rate adjustments as a policy measure or as part of a policy package is probably related to the uncompetitive production structure of South Africa and the inflexible labour market, which leads to an inflationary response to an exchange rate depreciation.

9. References

Brown, M.: "Exchange Controls in South Africa", *FP Economic Research,* June 1995.

Commission of Inquiry into the Monetary System and Monetary Policy in South Africa: *Exchange Rates in South Africa,* (Interim Report), Government Printer, Pretoria, RP 112/1978.

Commission of Inquiry into the Monetary System and Monetary Policy in South Africa: *The Monetary System and Monetary Policy in South Africa,* Government Printer, Pretoria, RP 70/1984.

Garner, J.: "An Analysis of the Financial Rand Mechanism", *Centre for the Study of the South African Economy and International Finance,* Research Paper No 9, London School of Economics, 1994.

Gidlow, R.M.: "Forward Exchange Policy in South Africa: Guidelines for Reform", *The South African Journal of Economics,* Vol. 53, No. 3, September 1985.

Guma, X.P.: "The Rand Monetary Area Agreement", *The South African Journal of Economics,* Vol. 53, No. 2, June 1985.

Horwood, C.P.F., Minister of Finance: *Progress in the Implementation of the New Exchange Rate System,* Statement in the House of Assembly, May 1979.

Kahn, B.: "Capital Flight and Exchange Controls in South Africa", *Centre for the Study of the South African Economy and International Finance,* Research Paper No. 4, London School of Economics, 1991.

Meijer, J.H.: *Monetary Policies: The Reserve Bank's Exchange Rate Policy,* Address at the GATT Conference, Fourways, 4 October 1994.

Ramos, M.: "The Development of the Forward Exchange Market in South Africa", *Centre for the Study of the South African Economy and International Finance,* Research Paper No. 3, London School of Economics, 1991.

Ross, A.A.: "The South African Forward Exchange Market", *Investment Analysts Journal*, October 1980.

Stals, C.L.: *Integration of the Money Market and the Spot and Forward Exchange Market*, Address to the Institute of Bankers in South Africa, 28 April 1981.

Stals, C.L.: *Foreign Exchange Control in South Africa,* Address to the Johannesburg Branch of the Economic Society of South Africa, 17 May 1983.

Stals, C.L.: *The South African Foreign Exchange Market in Perspective,* Address at a Conference on Foreign Exchange, Johannesburg, 23 May 1985.

Van der Merwe, E.J.: "Forward Exchange Cover Transactions of the South African Reserve Bank", *Quarterly Bulletin*, South African Reserve Bank, March 1990.

Van der Merwe, E.J. and de Clerck, J.N.: "Activity in the South African Foreign Exchange Market", *Quarterly Bulletin,* South African Reserve Bank, September 1990.

Van der Merwe, E.J.: *Exchange Rates and Exchange Rate Policy in South Africa,* Address to the Käpstädter Wirtschaftsrunde, 7 November 1990.

Wickham, P.: "The Choice of Exchange Rate Regime in Developing Countries", *IMF Staff Papers,* Vol. 32, No. 2, June 1985.

Previous Occasional Papers

Occasional Paper No **1**, December 1990; The optimal allocation of savings in the South African economy and the role of monetary policy *by* J.A. Lombard and J.P. van den Heever.

Occasional Paper No **2**, December 1990; Notes on oil, gold and inflation.

Occasional Paper No **3**, January 1991; South Africa's balance of payments: Sources, methods and reliability *by* E.J. van der Merwe and M.C. Bester.

Occasional Paper No **4**, July 1991; South Africa's public-sector accounts 1973 to 1990.

Geleentheidspublikasie no **5**, September 1991; Suid-Afrika se nasionale rekeninge, 1946 tot 1990.

Occasional Paper No **6**, May 1993; Is South Africa in a debt trap? *by* E.J. van der Merwe.

Occasional Paper No **7**, April 1995; The framework of the public sector equations in the South African Reserve Bank's econometric model *by* M.M. Smal.

Occasional Paper No **8**, June 1995; The compilation and importance of household debt in South Africa *by* B.E. van der Walt and J.W. Prinsloo.