



South African Reserve Bank

FINANCIAL MARKETS DEPARTMENT

A consultative paper on:

**Modifications to the Money Market Operations of the
South African Reserve Bank**

December 2004

MODIFICATIONS TO THE MONEY MARKET OPERATIONS OF THE SOUTH AFRICAN RESERVE BANK

A consultative paper by the South African Reserve Bank:

This paper reviews the objectives and broad functioning of the Reserve Bank's operations in the domestic money market and proposes some modifications.

It is being issued for public consultation. Comments are invited and should be sent by 31 January 2005 to:

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Further copies of the paper are available on the Reserve Bank's website at www.reservebank.co.za

The Reserve Bank stands ready to discuss these issues with interested parties.

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1. INTRODUCTION

- 1.1 The Reserve Bank announced in a press release on 3 June 2004 that it is currently reviewing its operations in the domestic money market and assessing the functioning of the money market in general.
- 1.2 Following the announcement, the Reserve Bank has embarked on a series of discussions with its major counterparties participating in its refinancing operations in order to obtain their views and ideas on how these procedures and related issues could be improved upon.
- 1.3 A money market survey was also conducted by means of a questionnaire distributed among all the major participants in the domestic market.
- 1.4 This consultation paper represents the outcome of the discussions held with various institutions as well as the suggestions and issues raised in the questionnaire by the participants in the survey. The Reserve Bank has also studied the operational frameworks of various other central banks to ensure that our operational framework develops in line with best international practice. Lessons learnt in this regard are incorporated in this consultation paper.
- 1.5 The Reserve Bank last announced certain changes to its refinancing procedures in April 2001 (which became effective in September 2001) aimed at improving the efficiency of its monetary policy implementation

framework. Whilst the Reserve Bank is generally satisfied with the changes implemented in September 2001, various changes have occurred since then which warrant a re-evaluation of the existing processes. One recent such development is the elimination in February 2004 of the Reserve Bank's oversold foreign exchange forward book, which had a major impact on money market liquidity in the past.

- 1.6 This paper, which is issued for public consultation, sets out the Reserve Bank's proposed modifications to the refinancing system and asks for comment from interested parties. In the light of comments received, the Reserve Bank will issue a further notification on the implementation details.

2. PURPOSE

- 2.1 The purpose of the Reserve Bank's operations in the domestic money market is to implement the Monetary Policy Committee's (MPC) interest rate decisions while meeting the banks' combined liquidity needs, and so contributing to the stability of the banking system as a whole. At the core of this process lies the fact that a central bank, as the ultimate provider of liquidity in the banking system, exerts control over the supply of funds in the interbank market. Central banks have the ability to determine the conditions that equilibrate supply and demand of funds in the interbank market. Hence, they can directly influence short-term rates in the money market and hence the structure

of interest rates across the financial system. This forms one of the principal transmission channels by which monetary policy impacts on the economy, including movements in the general price level. The proposals made in this paper will not change this basic framework for the Reserve Bank's money market operations.

2.2 The purpose of this consultation paper is to obtain the views and suggestions of market participants on proposals for the modification of certain aspects pertaining to the Reserve Bank's accommodation/refinancing system in order to:

2.2.1 Streamline our refinancing operations to make them simpler and more transparent. The aim is to have an efficient, safe and flexible framework for liquidity management in the money market, including access to and use of central bank money;

2.2.2 Encourage the banks to take more responsibility for managing their own individual liquidity needs in the market and thereby test their credit-standing in the market on a regular basis (in line with the philosophy of Basel II); and

2.2.3 Promote a more active money market in South Africa, as more active trading amongst money market participants should promote more liquid and deeper money markets, benefiting the country's financial infrastructure as a whole by way of improving the price discovery

mechanism through enlarged competition among regular players in the interbank money market.

Before focussing on the envisaged changes to the refinancing system, the current procedures warrant a brief summary.

3. CURRENT MONEY MARKET OPERATIONS

- 3.1 The Reserve Bank currently aims to supply liquidity to the banks to enable them to hold required cash reserve deposits with the Bank and to provide them with sufficient funds to square off their positions at the end of each settlement day.
- 3.2 The liquidity requirement is re-estimated each week and the required amount is provided at the main weekly repo auction, usually conducted on Wednesdays at 12:00. The transactions have a maturity of seven days. The Reserve Bank's estimation of the liquidity requirement is not disclosed prior to the auctions, which means that the banks do not know what their collective need is.
- 3.3 The amount supplied at the main repo auction is limited to the estimated liquidity requirement. Should the combined bids exceed the estimated liquidity requirement, the latter amount is allocated to the banks on a pro rata basis i.e. they each receive a similar percentage of the amounts bid with the total allocation equal to the estimated liquidity requirement. However, should the banks tender for a smaller amount

than the estimated liquidity requirement, they are then provided with their individual bids which means that the total amount allocated would be smaller than the estimated required amount.

- 3.4 Funds at the weekly repo auction are provided at the repo rate as determined by the Monetary Policy Committee (MPC). This ensures that market rates are anchored to the policy rate, which is the way in which monetary policy is implemented.
- 3.5 For some years up until 2003, a huge structural money market surplus first needed to be drained in order to create a meaningful liquidity requirement in the domestic market. This liquidity overhang was largely associated with losses encountered (at times) on the Reserve Bank's oversold foreign exchange forward position (forward book). The subsequent expansionary impact on money market liquidity was neutralised through various so called "open market operations" namely: SARB debentures, long term reverse repo transactions, foreign exchange swaps and money market foreign exchange swaps with counter dollar deposits, which at one stage reached a level of more than R50 billion. The structural surplus has declined substantially in recent months owing mainly to: the partial settlement of the Gold and Foreign Exchange Contingency Reserve account (GFECRA) by the National Treasury; the outright selling of securities from the Reserve Bank's bond portfolio; as well as the recovery in the exchange rate of the rand which has generated profits on the forward book. The

oversold foreign exchange forward position was squared-off in February 2004 which means that the forward book will no longer be an important factor in liquidity management. In the past, it has often complicated the banks' own liquidity calculations because they could not reliably determine what amounts of liquidity would be drained by the Reserve Bank in order to sterilise the expansions related to the losses on the forward book. Having dealt with this important structural constraint, the Reserve Bank feels that it can now introduce measures which it believes will encourage banks to take more responsibility for managing their own individual liquidity needs.

- 3.6 If in practice the amount supplied in the main weekly repo auction turns out to fall short or exceed the banks' combined liquidity need by more than R100 million, the Reserve Bank generally squares off this position at the end of each settlement day through supplementary auctions. A supplementary repo auction is announced to provide additional liquidity to the banks or any excess liquidity is drained by means of a supplementary reverse repo auction. These overnight operations are conducted at the repo rate, i.e. without penalty, because the shortfalls/surpluses normally arise due to under/over-estimation of the market's liquidity needs by the Reserve Bank. The Reserve Bank may occasionally impose a penalty, by leaving the banks to resort to the final clearing mechanism where short positions are funded at 150 basis points above the repo rate and surpluses absorbed at 150 basis points below the repo rate. Final clearing auctions are available to the banks

at their discretion. They may typically decide to utilise this facility if the final position at square-off time is less than R100 million, because the Reserve Bank will then refrain from offering supplementary clearing auctions. Should the banks fail to avail themselves of the final clearing facility, any shortfalls on their settlement accounts are automatically squared at the marginal lending rate i.e. at 500 basis points above the repo rate. Surpluses on their settlement accounts attract no interest.

- 3.7 If during the week, it turns out that the actual liquidity need varies substantially from the calculated requirement (i.e. the amount allotted at the weekly main repo auction) the Reserve Bank will steer the overall need back towards the target by supplying or draining liquidity overnight through the use of foreign exchange swaps.
- 3.8 Besides the facilities described above, the banks also have automatic recourse to their cash reserve balances at the Reserve Bank, provided that they comply with the minimum daily average amounts which need to be kept on these accounts over each maintenance period. The proposals made in this document imply more extensive use of their cash reserve accounts by the banks as the Reserve Bank may not continue providing regular supplementary square-off facilities in future.
- 3.9 The Bank is of the opinion that a major disincentive for the development of the depth and breadth of the interbank market lies in the Bank's practice to square-off the banks virtually every day by

means of a supplementary repo/reverse repo auction (i.e. at the prevailing repo rate). This practice dampens the banks' responsibility to participate more actively in the interbank market, because of the assurance that the Reserve Bank will either accept any surplus cash or finance any shortfall at the repo rate. The banks tend to rely on the Reserve Bank as their main source of liquidity and to supply their needs, rather than taking responsibility for managing their own liquidity. They are not as exposed as they ideally should be to the discipline of the market. Rather than interacting with each other in the markets, they deal individually with the Bank. This tends to reduce the liquidity of the money market and may impair its price-discovery mechanism.

4. PROPOSED CHANGES

- 4.1 It is proposed that the supplementary square-off facility be abolished as a regular feature, but that the Reserve Bank should maintain the option to conduct a supplementary square-off auction if some unexpected developments cause a large shift in liquidity conditions, or in the case of a substantial over- or under estimation of the market's liquidity needs by the Bank. However, such supplementary operations would only be conducted on infrequent occasions, where the Bank considered them necessary to assist the orderly functioning of the market.

- 4.2 Consideration is also being given to abolishing the marginal lending facility (MLF). Since its inception the MLF has seldom, if ever, been used for monetary policy purposes. It is mainly used for the automatic

funding of banks' short positions on their SAMOS settlement accounts at the end of the settlement cycle. This happens mainly owing to administrative errors on the side of the banks and the amounts involved are small and insignificant.

- 4.3 Should both the supplementary square-off and marginal lending facilities be abolished, it would mean that besides the main weekly repo auction, banks will still have access to their cash reserve balances at the Reserve Bank (averaging of reserve requirements) and the final clearing (penal) facilities which are currently set at a spread of 150 basis points above (final clearing repo) or below (final clearing reverse repo) the repo rate. The Reserve Bank's final clearing facilities closely resemble the deposit and lending standing facilities of the European Central Bank (ECB). These standing facilities effectively form an interest rate corridor within which the interbank overnight rate fluctuates. The ceiling of the corridor is a Lombard-type credit facility referred to as the lending rate (which resembles the Reserve Bank's final clearing repo rate). The floor represents a deposit facility (which resembles the Reserve Bank's final clearing reverse repo rate) and this rate is earned by the banks on overnight deposits with the central bank.
- 4.4 The interest rate corridor provides central banks with a mechanism effectively to limit movements in the interbank overnight rate, which in turn governs other short and medium term interest rates. The interbank overnight rate can only fluctuate inside the corridor because,

given efficient clearing and settlement procedures, no bank with an end-of-day short position needs to finance such a shortage at a rate higher than the lending rate, i.e. the final clearing repo rate in our case. Similarly, no long position needs to earn a rate lower than the deposit rate (the final clearing reverse repo rate in South Africa).

- 4.5 The width of the interest rate corridor depends on underlying market conditions. For example, pressures experienced in several foreign exchange markets during the late nineties have led various central banks to accept greater day-to-day movement in interbank overnight rates. Hence, the corridor has been widened in some countries. In South Africa, the corridor was originally set at a spread of ± 150 basis points in September 2001. Financial conditions have stabilised since then and it is consequently proposed that the said spread with the repo rate be narrowed to ± 50 basis points. At a repo rate of 7,50 per cent this means that the final clearing reverse repo rate be set at 7,00 per cent and the final clearing repo rate at 8,00 percent. It is believed that a narrower corridor will eliminate undue large fluctuations in overnight rates, especially the high volatility sometimes observed in the overnight interest rates on foreign exchange forward transactions. However, the corridor must also be wide enough to facilitate a more efficient functioning of the interbank market. Although the standing facilities will be available to the banks at their discretion, the Reserve Bank will not allow any abuse of these facilities. It consequently does not intend that

use of these facilities should form part of a bank's routine liquidity management.

- 4.6 Since September 2001, the Reserve Bank discontinued disclosing its estimated liquidity requirement to the banks at the announcement of its weekly main repo auctions which means that the banks do not know the size of their collective need. The idea was to create some uncertainty among the banks regarding the overall liquidity position in the market, forcing them to trade their positions actively in the interbank market without relying passively on the Reserve Bank to ultimately deal with the final square-off position at its repo rate. This envisaged incentive for improving the functioning of the interbank market did not materialise as anticipated. It is consequently proposed that the Reserve Bank should announce its estimate of the liquidity requirement for the coming week including also the expected range of the liquidity requirement during the week, before the main repo auction is conducted on Wednesdays. The banks should then be invited to tender for the amount they actually require and the full amount tendered will be allocated to them irrespective whether the combined amount tendered exceeds or falls short of the Reserve Bank's average liquidity estimate for the week. The onus therefore strongly remains with the banks to estimate their own cash flows. Surpluses/shortfalls which may arise during the daily settlements will not be accommodated by the Reserve Bank. Instead, the banks are expected to rely on their cash reserve balances to deposit any surpluses or to finance any

shortfalls. The Reserve Bank will only consider fine-tuning operations if, as described in paragraph 4.1 above, some unexpected developments cause a large shift in liquidity conditions, or in the case of a substantial over- or under estimation of the market's liquidity needs by the Bank. However, such operations might be conducted more often towards the end of the maintenance periods in order to assist the banks to comply with the averaging of their cash reserves. Fine-tuning may take the form of offering a supplementary clearing facility by the Bank or may include trading in instruments such as forex swaps, SARB debentures or other securities, either outright or on repo. The banks will therefore in future first have recourse to their cash reserve balances and thereafter to the standing facilities at the Reserve Bank i.e. at penalty rates.

- 4.7 To assist banks in managing their liquidity in line with these proposals, it is also proposed that the range of liquid eligible assets for collateral in all refinancing auctions be extended to also include "government guaranteed" securities. Although, in principle, the current pool of eligible securities is more than sufficient (owing to the inclusion of all government bonds), banks prefer assets with shorter outstanding maturities due to their lower market risk exposures. This proposal implies that bonds issued by Trans-Caledon Tunnel Association (TCTA) and government guaranteed bonds issued by Transnet would be included in the liquid asset category.

- 4.8 To enhance its communication with the market and its monitoring of market developments, the Reserve Bank proposes to establish a Money Market Liaison Group (MMLG) chaired by the Deputy Governor of the Reserve Bank responsible for financial markets and comprising representatives of the full range of institutions participating in the money market. The MMLG will meet two or three times a year (and additionally as needed) and will provide a forum for all interested parties to review and discuss developments in the structure, functioning and effectiveness of the domestic money markets on a regular basis.

5. SUMMARY OF RECOMMENDATIONS

It is recommended that:

- 5.1 The supplementary refinancing facility as a **regular** daily square-off facility for the banks be abolished. Supplementary square-off auctions will only be conducted on infrequent occasions, for instance if unexpected developments cause a large shift in liquidity conditions.
- 5.2 The marginal lending facility be abolished.
- 5.3 The spread between the repo rate and the final clearing rates be reduced from the current ± 150 basis points to ± 50 basis points.

- 5.4 The Reserve Bank resumes announcing its estimated liquidity requirement and the estimated range of the liquidity requirement for the coming week, prior to the main weekly repo auctions. The full amount tendered for by the banks will then be allocated to them.

- 5.5 The range of liquid eligible assets for collateral be extended to all government guaranteed securities.

- 5.6 A Money Market Liaison Group be formed, chaired by the Reserve Bank, to review market developments on a regular basis.