The South African Reserve Bank’s system of accommodation
Introduction

The main reason for the operations of the South African Reserve Bank (the Bank) in the money market is to implement the interest rate policy as determined by the Monetary Policy Committee (MPC), with the aim of achieving the Bank’s mandate of inflation targeting. In its monetary operations, the Bank endeavours to promote financial stability by managing the liquidity needs of the banking system as a whole. It also contributes to the development and efficiency of the domestic financial markets, in particular the interbank market. The Financial Markets Department uses various instruments to conduct the Bank’s monetary operations.

The monetary policy implementation framework

The Bank’s refinancing system is the main mechanism that the Bank uses for implementing its monetary policy. Through its refinancing system, the Bank provides liquidity to commercial banks that enables them to meet their daily liquidity requirements. ‘Liquidity’ in this context refers to the commercial banks’ balances at the central bank that are available to settle their transactions with one another, over and above the minimum statutory level of reserves that they have to hold. In terms of its monetary policy implementation framework, the Bank creates a liquidity requirement (or shortage) in the money market, which it then refinances at the repurchase (repo) rate; a fixed interest rate determined by the MPC.

The Bank’s repo rate influences the interest rates charged by commercial banks, the general level of interest rates in the economy and, consequently, other economic aggregates such as money supply, bank credit extension and, ultimately, the rate of inflation. The monetary policy implementation framework of the Bank can be simplified as follows:

Cash reserve requirement
Other open-market operations
Liquidity requirement (shortage) in the money market
The Bank provides liquidity at the repo rate
Banks adjust their interest rates according to changes in the repo rate

In the current refinancing system, the emphasis is on the size of the money-market shortage, as it will determine the eventual impact of the Bank’s market operations on the commercial banks’ ability to grow their balance sheets, that is, to manage credit extension. This impact is exerted in two ways. Firstly, it determines the availability and cost of commercial banks’ marginal funding requirements, that is, the funding needed for the excess asset growth on a daily basis. Secondly, banks have to hold relatively low-yielding securities to use as collateral in the Bank’s refinancing operations. Furthermore, funding that is locked into acquiring these assets also restricts the banks’ ability to extend credit.

Money-market interest rates are determined by a combination of market forces and the repo rate. Fluctuations in the demand for, and supply of, liquidity in the market can influence market rates, for example causing some interest rates to increase over the month-end and decrease again when liquidity pressures subside. Alternatively, market interest rates may not always change by exactly the same margin as a change in the repo rate, depending on factors such as the extent to which a change in the repo rate has been anticipated and priced in.

The Bank evaluates its monetary policy implementation framework on a regular basis for effectiveness and will effect refinements when necessary. The latest change was made in August 2013 when a new liquidity management strategy was approved and implemented. In terms of the new strategy, the money-market shortage should increase gradually to reflect the growth trend in the autonomous factors impacting on money-market liquidity, that is, the notes and coin in circulation outside the Bank and the required cash reserve balances of the commercial banks with the central bank at the start of the maintenance period.

Creating a liquidity shortage

To ensure that its repo rate remains effective, the Bank has to compel commercial banks to borrow a substantial amount (i.e. the liquidity requirement) from the Bank. The Bank therefore has to transact regularly in the money market to create and monitor such a shortage, that is, it has to drain excess liquidity from the money market. In addition to levying a cash reserve requirement on commercial banks, the Bank also uses various types of open-market instruments, such as SARB debentures, reverse repos, foreign-exchange swaps and the movement of public-sector funds between the market and the Bank to drain excess liquidity.

The cash reserve requirement

In terms of the Banks Act 94 of 1990, as amended (Banks Act) and the Regulations relating to Banks, commercial banks are required to hold a prescribed percentage of their total liabilities, as adjusted, in cash on their cash-reserve accounts at the Bank. This requirement is currently 2,5 per cent. However, the effective percentage held is somewhat lower because commercial banks are allowed to exclude certain liabilities from the base amount. For example, in December 2012, commercial banks’ required deposits at the Bank amounted to R62,9 billion, which was in effect only 2,0 per cent of their total liabilities to the public.

The amount of cash reserves held at the Bank is referred to as the structural liquidity requirement. This is the amount that the liquidity requirement would have been if all the other factors influencing liquidity in the money-market had a combined zero balance.

Open-market operations

In addition to the cash reserve requirement, the Bank conducts open-market operations (OMOs) to drain any excess liquidity from the market in order to ensure the appropriate liquidity requirement is maintained, which should in reality be the size of the commercial banks’ cash reserve balances held with the Bank.
One of the instruments that the Bank uses for draining excess liquidity from the market is issuing its own debentures. Market participants tender for the amounts and interest rates on SARB debentures, which are then allocated in ascending order of the interest rates bid, until the amount on tender is fully allotted. The SARB debentures currently have maturities of 7, 14, 28 and 56 days and are auctioned weekly, normally on Wednesdays. At maturity, the Bank pays each participant the nominal amount plus interest.

Another instrument that the Bank uses for draining liquidity from the market is reverse repos. The Bank sells bonds from its monetary policy portfolio (MPP) in terms of repurchase agreements, and pays the interest rates tendered by the counterparties (mostly commercial banks) on the cash that it withdraws from the market. The reverse repos currently have maturities of 7, 14, 28 and 56 days and are auctioned weekly, normally on Mondays. The amount of reverse repo transactions that the Bank can conduct is limited to the size of the bond holding in its MPP.

The Bank also uses foreign-exchange swap transactions (i.e. swapping US dollars for rands) to drain rand liquidity from the market on a temporary basis. These swaps can be conducted for maturities of up to 12 months and can be conducted for normal liquidity management or to sterilise foreign-exchange purchases. When the swaps mature, the US dollars are returned to the Bank which, in turn, delivers the rand to the counterparties. The Bank might opt to roll these swaps for future maturities when they mature. However, shorter-dated swaps are also conducted in the opposite direction, that is, to inject liquidity, and when they mature the Bank delivers the US dollars and, in return, the counterparty delivers rands to the Bank.

Estimating the daily liquidity requirement

The Bank estimates the markets’ overall liquidity requirement on a daily, weekly and monthly basis. In the weekly main refinancing operation the Bank calculates the average daily liquidity requirement of the market and this amount is then offered to the banks in the auction. To this end, it takes into consideration all transactions that either expand or contract the commercial banks’ balances at the Bank. It is important to realise that only transactions between a domestically registered commercial bank and the Bank can increase or decrease the markets’ liquidity requirements.

Transactions and transfers among the commercial banks themselves do not affect the overall liquidity requirement in the money market. From the viewpoint of the commercial banks, any factor that causes a net decrease in their cash balances at the Bank will increase the liquidity requirement and the need for refinancing. Such factors are also reflected on the balance sheet of the Bank. A general rule is that a rise in a liability item on the Bank’s balance sheet increases the liquidity requirement, whereas a rise in an asset item decreases the liquidity requirement, and vice versa. The various items on the Bank’s balance sheet that typically determine the liquidity requirement in the domestic market are changes in commercial banks’ required cash reserves, the value of the notes and coin in circulation, government spending and deposits, as well as changes in net foreign assets, domestic assets and net other assets.

The Bank is in the best position to estimate the daily liquidity requirement, firstly, because it is the sole creator and destroyer of liquidity and, secondly, because it has the best overall market information about the factors influencing liquidity.

Refinancing the liquidity requirement

Main refinancing auctions

When the Bank has drained sufficient liquidity from the money market (see the section ‘Creating a liquidity requirement’), the overall market position should reveal a significant shortage of liquidity. This liquidity requirement is funded at the main refinancing repo auctions. At these auctions, the Bank provides liquidity to the commercial banks by means of repurchase agreements in exchange for rand-denominated government bonds, Treasury bills, SARB debentures, Land Bank bills and rand-denominated Separate Trading of Registered Interest and Principal of Securities (STRIPS).

Commercial banks sell these securities to the Bank for a period of one week in return for cash, while paying a specified rate (the repo rate) on the cash they receive. During the week of the MPC meeting, 2- and 5-day main repo transactions are conducted to accommodate the possible rate changes by the MPC.

The transaction is reversed at maturity when the commercial banks return the cash to the Bank in exchange for the securities. No actual flows of cash and securities take place; the commercial banks’ settlement accounts at the Bank are merely credited and debited, and the ownership of securities is transferred electronically in the Central Depository at Strate and in the Bank’s Central Bank Collateral Management System.

Main repurchase (repo) auctions

At 10:00 on Wednesdays the Bank publishes the projected average daily liquidity requirement for the week and at the same time invites tenders on its wire services pages for its refinancing auction, which starts at 12:00 and closes at 12:15. These invitations are published electronically on Reuters (page SARB01), I-Net Bridge, Bloomberg and the Bank’s Internet web page. Individual commercial banks tender only for the amounts of refinancing that they need as the main repurchase rate is fixed. Because each bank only knows its own liquidity position, it almost invariably happens that the total amount of tenders received deviates from the average requirement estimated by the Bank. The Bank allocates the weekly main repo auctions on a pro rata basis, up to the announced average daily liquidity requirement for the week, in instances when the auction is over-subscribed. If the daily liquidity requirement is different from the amount allotted at the main repo auction, commercial banks can utilise the facilities described on the next page for end-of-day to square-off their positions.
Supplementary auctions and standing facilities

Although the main repo auctions provide the market’s estimated liquidity needs for a week, deviations may occur on a daily basis, leaving the market in either a long or a short liquidity position. These fluctuations can result from factors such as changes in the amount of notes and coin in circulation, movements in the accounts of the Corporation for Public Deposits, government spending and foreign-exchange transactions. In the case of a daily shortage, further refinancing would be provided either through a supplementary repo auction or a standing facility repo. In contrast to the seven-day main repos, these square-off facilities mature on the next working day. Surplus liquidity, in turn, is absorbed by means of a supplementary reverse repo auction or a standing facility reverse repo, in which case the Bank would pay interest on the cash it absorbs on an overnight basis. The standing facility is conducted on an automated basis during the square-off window period, whereas the supplementary facility is conducted at the discretion of the Bank.

The difference between supplementary tenders and standing facilities is that the former are conducted at the prevailing repo rate, while the latter are conducted at penalty rates, either 100 points above (standing facility repo) or below (standing facility reverse repo) the prevailing repo rate. The Bank may change the standing facility rate at its discretion.

Access to statutory cash reserves

In addition to the supplementary auctions and standing facilities mentioned above, commercial banks have access to their cash-reserve balances at the Bank for liquidity management purposes, provided that they adhere to the requirement on an average basis over the full maintenance period. This implies that if a bank uses some of its cash reserves for a day or two (thus falling below the required amount) it has to hold additional reserves for the rest of the maintenance period in order to comply, on average, with the statutory reserve requirement.

Access to cash reserves has been introduced as an additional mechanism for commercial banks to manage their short-term liquidity needs. However, the averaging requirement prevents commercial banks from using this facility for an extended period. If a bank continues to have a liquidity shortage for some time, it has to obtain liquidity either in the interbank market or through the Bank’s refinancing facilities.

Special assistance

As the lender of last resort, the Bank may also provide special assistance to commercial banks in distress, in which case it can provide liquidity against a broader range of collateralised assets. The type and conditions of this assistance vary on a case-by-case basis. This facility is not regarded as part of the Bank’s monetary policy implementation framework, but is more closely related to the Bank’s responsibility of promoting financial stability.

Conclusion

The Bank’s refinancing system is continuously reviewed and assessed for appropriateness and changes are made when deemed necessary. Changes were effected in 2001, 2005, 2007, 2010, 2012 and again in August 2013. The changes made were intended to streamline operations in line with practices pursued by other central banks. Furthermore, the recent refinements implemented were also meant to enhance the effectiveness of the repo-based refinancing system, which was introduced in March 1998.