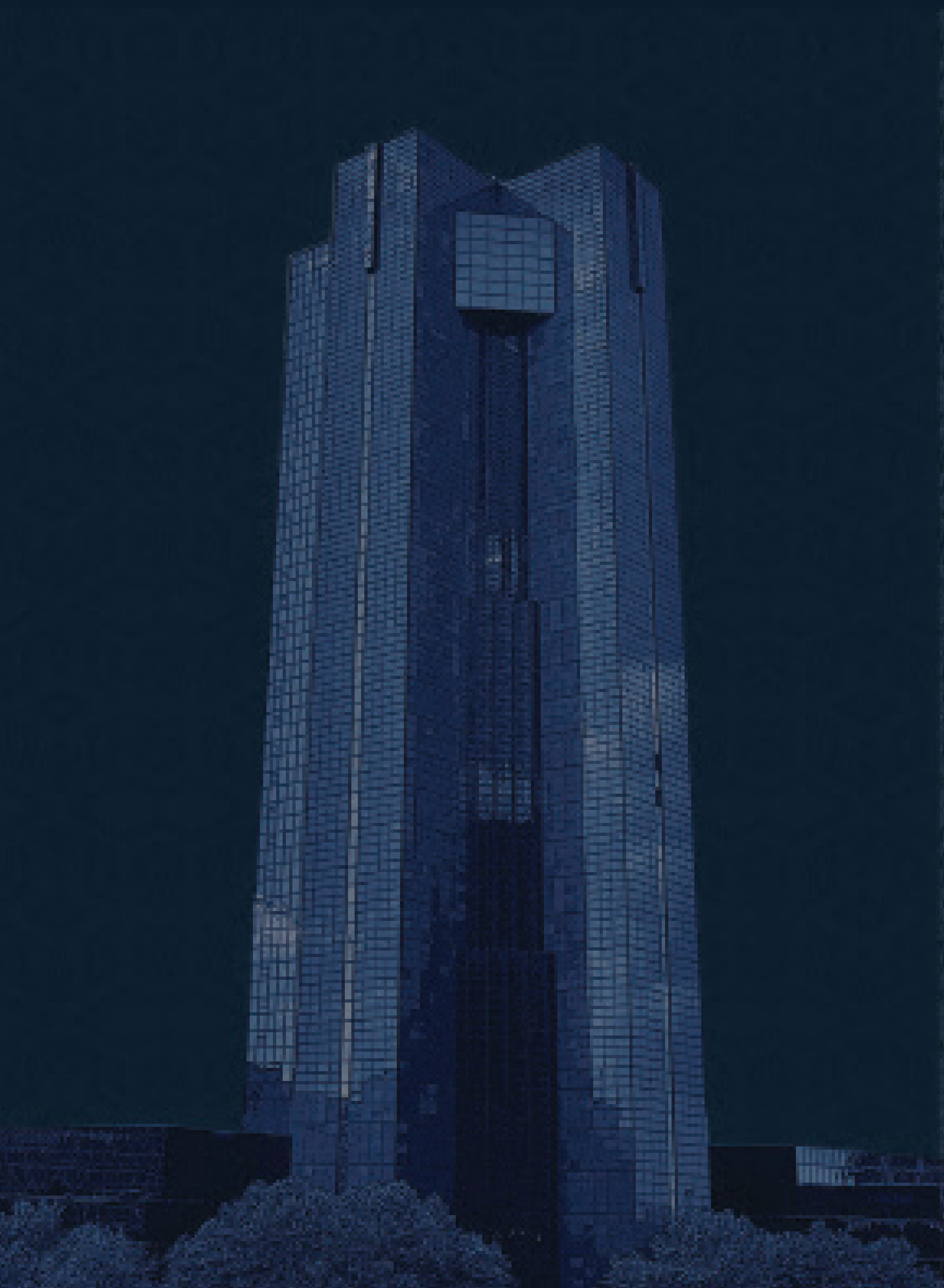
South African Reserve Bank

The South African Reserve Bank's system of accommodation



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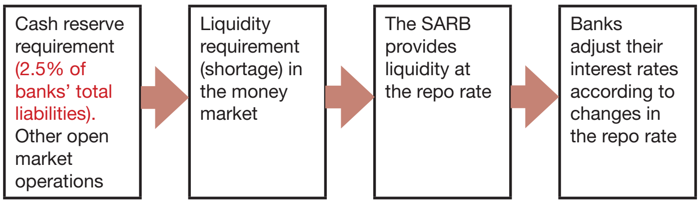
Introduction

The main purpose of the money market operations conducted by the South African Reserve Bank (SARB) is to implement the interest rate policy as determined by the Monetary Policy Committee (MPC), with the aim of achieving the SARB's inflation-targeting mandate. In its monetary operations, the SARB 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 (FMD) uses various instruments to conduct the SARB's monetary operations.

The monetary policy implementation framework

The SARB's refinancing system is the main mechanism that the SARB uses to implement its monetary policy. In terms of this system, the SARB creates a liquidity requirement (or shortage) in the money market, which banks refinance at the repurchase (repo) rate – a fixed policy interest rate determined by the MPC. Through the refinancing system, the SARB provides liquidity to commercial banks, which 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.

The SARB'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 SARB can be simplified as follows:



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 SARB's market operations on commercial banks' ability to grow their balance sheets, that is, to manage credit extension. This impact is exerted in two ways. First, 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. Second, banks have to hold approved securities as collateral in the SARB's refinancing operations. Furthermore, funding that is locked into acquiring these assets also restricts the ability of banks to extend credit.

Money market interest rates are determined by a combination of both market forces and the repo rate. Fluctuations in the demand for, and supply of, liquidity in the markets can influence market rates. For example, some interest rates tend to increase over month-end and decrease again when liquidity pressures subside. Furthermore, market interest rates may not always change by exactly the same margin as the 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 into the market.

The SARB evaluates its monetary policy implementation framework on a regular basis for effectiveness and effects refinements when necessary. Changes were effected in 2001, 2005, 2007, 2010, 2012 and 2013. The most recent adjustment made in August 2013 was to allow the money market shortage to increase gradually to reflect the growth trend in the autonomous factors impacting on money market liquidity. These autonomous factors include notes and coin in circulation outside of the SARB, and the required cash reserve balances of the commercial banks with the central bank at the start of the maintenance period. Since September 2016, the SARB has, for operational reasons, adjusted its liquidity management strategy and managed the money market shortage at around the R56 billion level.

Creating a liquidity shortage

To ensure that the repo rate remains effective, commercial banks are compelled to borrow a substantial amount (i.e. the liquidity requirement) from the SARB. The SARB 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. To create and maintain the shortage, in addition to levying a cash reserve requirement on commercial banks, the SARB 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 markets and the SARB.

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 SARB. This requirement is currently 2.5%. However, the effective percentage held is somewhat lower because commercial banks are allowed to exclude certain liabilities from the base amount.

The amount of cash reserves held at the SARB 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 SARB conducts open market operations to drain excess liquidity from the market 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 SARB.

One of the instruments that the SARB 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 SARB pays each participant the nominal amount plus interest.

Another instrument that the SARB uses for draining liquidity from the market is reverse repos. The SARB sells bonds from its monetary policy portfolio (MPP) in terms of repo agreements, and pays the interest rates tendered by the counterparties (mostly commercial banks) on the cash that they withdraw 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 SARB can conduct is limited to the size of the bond holding in its MPP.

The SARB also uses foreign exchange swap transactions (i.e. swapping US dollars for South African rands (ZAR)) 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 SARB which, in turn, delivers ZAR to the counterparties. The SARB 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 SARB delivers the US dollars and, in return, the counterparty delivers ZAR to the SARB.

In August 2020, a number of refinements were made to the open market operations toolkit. The SARB previously capped the debentures and reverse repos at the repo rate. However, the SARB now has greater flexibility and can allot these at below and above the repo rate. The allocation decision to issue above the repo rate is at the discretion of the SARB, taking into consideration the prevailing money market liquidity conditions as well as other tools at its disposal.

Since August 2020, the SARB has also been able to conduct short-term buy/sell-back transactions, of up to one month, with commercial banks on a bilateral basis for the purposes of managing money market liquidity. The buy/sell-back transactions are conducted as and when required. Finally, the SARB's MPP increased in size following the introduction of the bond purchasing programme at the end of March 2020, making the MPP an effective tool for draining and injecting liquidity on a permanent basis. The MPP is used actively to manage money market liquidity through outright purchases and sales of government bonds in the secondary market.

Estimating the daily liquidity requirement

The SARB estimates the markets' overall liquidity requirement on a daily, weekly and monthly basis. In the main weekly refinancing operation, the SARB calculates the average daily liquidity requirement of the markets and this amount is then offered to the banks. To this end, it takes into consideration all transactions that either expand or contract the commercial banks' balances at the SARB. It is important to realise that only transactions between a domestically registered commercial bank and the SARB 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 SARB will increase the liquidity requirement and the need for refinancing. Such factors are also reflected on the balance sheet of the SARB. A general rule is that a rise in a liability item on the SARB'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 SARB'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 SARB is in the best position to estimate the daily liquidity requirement, first, because it is the sole creator and destroyer of liquidity and, second, because it has the best overall market information about the factors influencing liquidity.

Refinancing the liquidity requirement

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

Commercial banks sell these securities to the SARB 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, the SARB will conduct two main repo transactions. These transactions will be for two and five days to accommodate the possible rate changes by the MPC. The first transaction will be conducted on the Wednesday and mature on the Friday, and the second one will be mechanically conducted on the Friday and mature on the following Wednesday. The banks that were successful at the Wednesday auction will roll the amounts as allocated on Wednesday at the prevailing/new repo rate.

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

Main repurchase (repo) auctions

At 10:00 on Wednesdays the SARB 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 SARB's Internet web page. Individual commercial banks tender only for the amounts of refinancing that they need, as the main repo 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 SARB. The SARB 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 transactions to square off their positions.

Supplementary auctions and standing facilities

Although the main repo auctions provide the markets' estimated liquidity needs for a week, deviations may occur on a daily basis, leaving the markets in either a long or a short liquidity position. These fluctuations can occur due to changes in the amount of notes and coin in circulation, movements in the accounts of the Corporation for Public Deposits, government spending as well as foreign exchange transactions. In the case of daily fluctuations, 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 SARB 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 SARB. 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 SARB reserves the right to 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 SARB 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 was 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 SARB's refinancing facilities.

Special assistance

As the lender of last resort, the SARB 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 SARB's monetary policy implementation framework, but is more closely related to the SARB's responsibility of promoting financial stability.

Conclusion

The SARB's refinancing system is continually reviewed and assessed for appropriateness and effectiveness, and changes are made when deemed necessary and/or to streamline operations in line with practices pursued by other central banks.

This is the ninth in a series of fact sheets on the South African Reserve Bank, compiled by the Financial Markets Department and distributed by the Communications Division, Executive Management Department.

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