



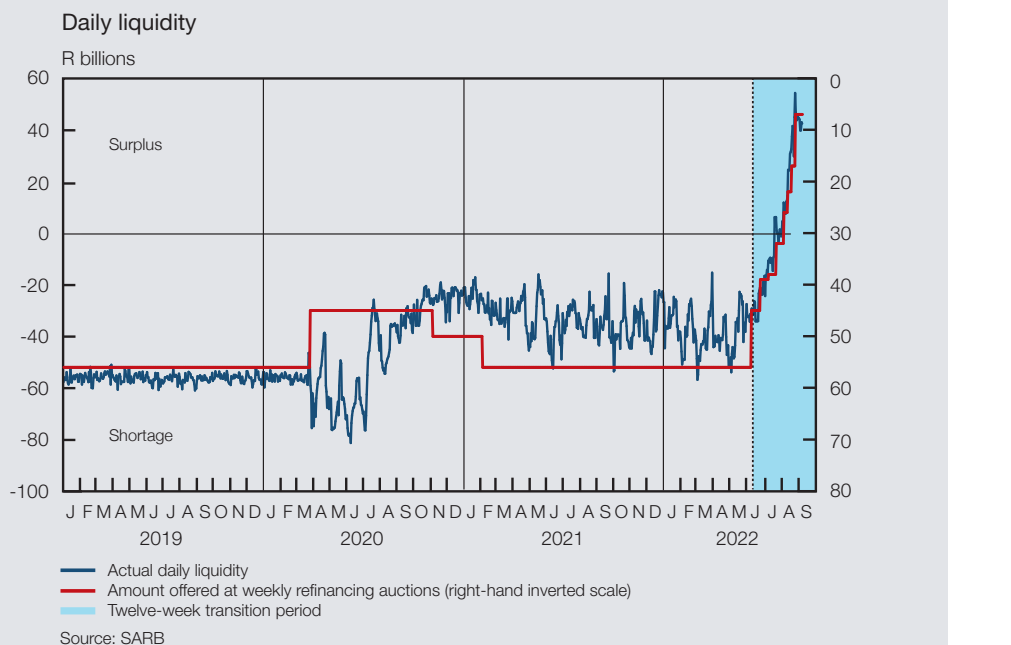
Box 3 The impact of the new monetary policy implementation framework on money and banking statistics¹

This box discusses the impact of the South African Reserve Bank's (SARB) new monetary policy implementation framework (MPIF)² on money and banking statistics. As from 8 June 2022, the transition from a shortage- to a surplus-based framework for the transmission of monetary policy affected a range of statistics and analysis published in the *Quarterly Bulletin*.

The shortage, or classical cash reserve, system³ required of banks to borrow funds from the SARB to fund the money market liquidity shortage against eligible collateral.⁴ In the classical system, the statistics reflected money market liquidity management practices, both draining operations by the SARB to create a shortage and providing liquidity to fund that shortage.⁵

- 1 This box elucidates the impact of the MPIF on money and banking statistics disseminated in the *Quarterly Bulletin*. This is reflected in the changes to the 'Selected money market and related indicators' table on page S-28 and the 'Liquidity management operations' table on page S-29, with spillover to the content and interpretation of the related time series in the balance sheets of the SARB on pages S-2 and S-3.
- 2 The SARB reviewed the MPIF from April to October 2021 and, after consultation, replaced the classical cash reserve system, or money market shortage-based framework, with a tiered floor surplus-based liquidity framework. For the consultation paper on the new MPIF, see <https://www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/2021/Monetary-Policy-Implementation-Framework-Consultation-Paper>. Detail on the implemented new MPIF is available at <https://www.resbank.co.za/content/dam/sarb/publications/media-releases/2022/mpif-may-2022/A%20new%20framework%20for%20implementing%20Monetary%20Policy%20in%20South%20Africa.pdf>
- 3 In the classical cash reserve system, the SARB created a money market liquidity shortage on a weekly basis, which banks could refinance at the repurchase (repo) rate while also lending and borrowing against each other in the interbank market. In addition, banks utilised standing facilities, borrowing from and depositing with the SARB, at punitive rates.
- 4 In the classical cash reserve system, banks obtained liquidity from the SARB against eligible collateral for seven days at the weekly main refinancing auctions, at the repo rate. The collateral that qualified to be pledged by participating banks is stipulated in a money market operational notice, available at <https://www.resbank.co.za/content/dam/sarb/publications/financial-markets/notices/operational-notices/2022/Operational-notice-Money-Market-Operations-July-2022.pdf>.
- 5 The liquidity management operations to create a liquidity requirement are recorded in the *Quarterly Bulletin*'s statistical tables. The 'Liquidity management operations' table on page S-29 reflects the main refinancing auctions, standing facility reverse repo and repo transactions as well as supplementary facilities, whereas the 'Selected money market and related indicators' table on page S-28 reflects liquidity provided and the SARB's liquidity draining operations through foreign currency swaps, reverse repo transactions, SARB debentures and deposits by the Corporation for Public Deposits (CPD) with the SARB. The format of these statistical tables changed as from the September 2022 edition of the *Quarterly Bulletin* to provide for the changes brought about by the new MPIF.

The shortage-based framework was in place since 1998. With the onset of the coronavirus disease 2019 (COVID-19) pandemic, the SARB amended some aspects of the money market liquidity management strategy to ease the strain in various funding markets.^{6,7} Post COVID-19, the demand for SARB debentures was weak and there was a lack of interest in long-term reverse repurchase (repo) transactions.⁸ The movement of funds to the Corporation for Public Deposits' (CPD) call account at the SARB from commercial banks was the primary tool used to drain liquidity.⁹ Until early 2020, the daily liquidity requirement of banks of R56 billion fluctuated in line with the amount on offer at the weekly repo auctions, and therefore the South African Multiple Option Settlement (SAMOS)¹⁰ system's end-of-day standing facility fluctuated close to zero.



Subsequently, the daily liquidity requirement of banks declined to around R37 billion along with a reduced demand for funding – which included a low of R15.2 billion on 30 March 2022. In the event where a bank might have ended up with surplus liquidity on any given day, it could have been deposited in the SAMOS standing facilities at the SARB, at a punitive rate.^{11, 12}

6 For the SARB press releases, see <https://www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/2020/9791> and <https://www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/2020/9805>

7 For a discussion of these changes, see 'Box 3: Unpacking special liquidity measures in response to the COVID-19 pandemic' on page 75 in the March 2022 edition of the *Quarterly Bulletin*, available at <https://www.resbank.co.za/content/dam/sarb/publications/quarterly-bulletins/boxes/2022/march/Box%203%20Unpacking%20special%20liquidity%20measures%20in%20response%20to%20the%20COVID-19%20pandemic.pdf>

8 Reverse repo transactions constitute the selling of securities under repo contracts by the SARB to drain surplus liquidity from the market. The SARB's reverse repo auctions have maturities of 7, 14, 28 and 56 days.

9 National Treasury can at any time draw down deposit balances in the Inter-Governmental Cash Coordination (IGCC) accounts at the CPD.

10 The SAMOS system is a real-time gross settlement system (RTGS) owned and operated by the SARB. The SAMOS system facilitates the settlement of domestic high-value payments, retail batches as well as bond and equity market settlements. The automated system settles obligations in real time or via delayed settlement arrangements. Each settlement participant has a settlement account with the SARB and has to provide sufficient funds to ensure the smooth functioning of the settlement system. In the event of insufficient funds, the SAMOS system automatically grants a loan against acceptable collateral.

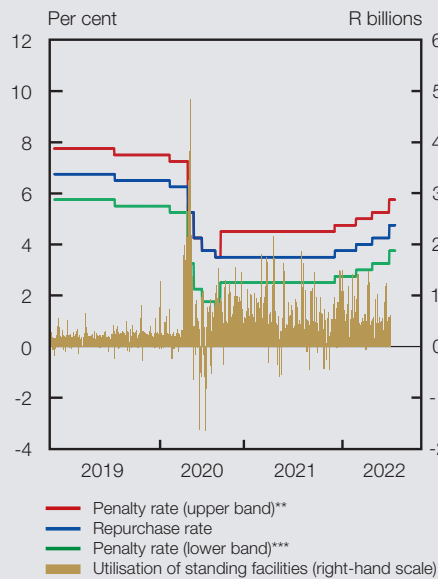
11 The SARB provided overnight liquidity to banks at the repo rate plus 100 basis points and banks deposited surplus funds at the SARB at 100 basis points below the repo rate. During the height of the COVID-19 lockdown in 2020, the lending rate at which the SARB provided overnight liquidity to banks was lowered to the repo rate as part of the measures to assist banks with liquidity.

12 See 'other balances' as part of bank deposits in table KB101 on page S–2 and SAMOS account standing facilities in table KB131 on page S–29 in this edition of the *Quarterly Bulletin*.





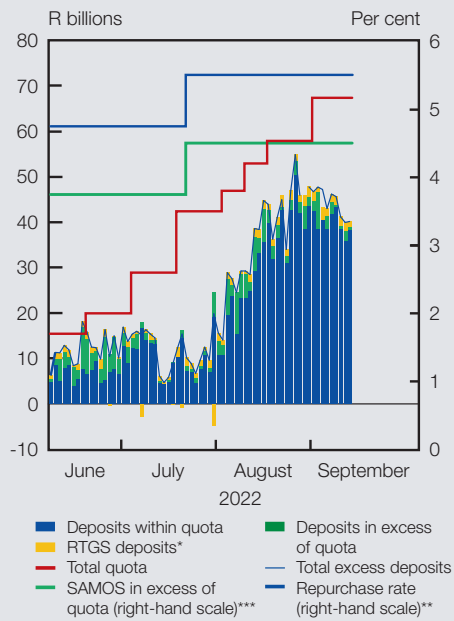
Previous dispensation: SAMOS standing facilities*



— Penalty rate (upper band)**
 — Repurchase rate
 — Penalty rate (lower band)***
 ■ Utilisation of standing facilities (right-hand scale)
 * Daily
 ** Upper band: from 1 January 2019 to 19 March 2020, repo rate plus 100 basis points; from 20 March to 19 August 2020, equal to repo rate; and from 20 August to February 2022, repo rate plus 100 basis points
 *** Lower band: from 1 January 2019 to 19 March 2020, repo rate less 100 basis points; from 20 March 2020 to 17 August 2020, repo rate less 200 basis points; and from 18 August 2020 to February 2022, repo rate less 100 basis points

Source: SARB

Current dispensation: SAMOS quota deposits



■ Deposits within quota
 ■ RTGS deposits*
 ■ Deposits in excess of quota
 — Total quota
 — SAMOS in excess of quota (right-hand scale)***
 — Total excess deposits
 — Repurchase rate (right-hand scale)**
 * Deposits of central banks in the regional cross-border real-time gross settlement system (RTGS) of the Southern African Development Community (SADC) do not attract interest.
 ** Deposits within quota earn the repo rate.
 *** Deposits in excess of quota earn the repo rate less 100 basis points.

The new MPFI¹³ was phased in over a 12-week period, starting on 8 June 2022. In the new framework, the SARB supplies ample liquidity, while banks earn the repo rate on qualifying excess reserves deposited overnight at the SARB as reflected in the SAMOS¹⁴ system, subject to quotas.¹⁵ The cash reserve requirement of 2.5% of banks' total liabilities remains applicable and is reflected in their cash reserve¹⁶ accounts at the SARB. Banks do not receive any interest on these required reserves.

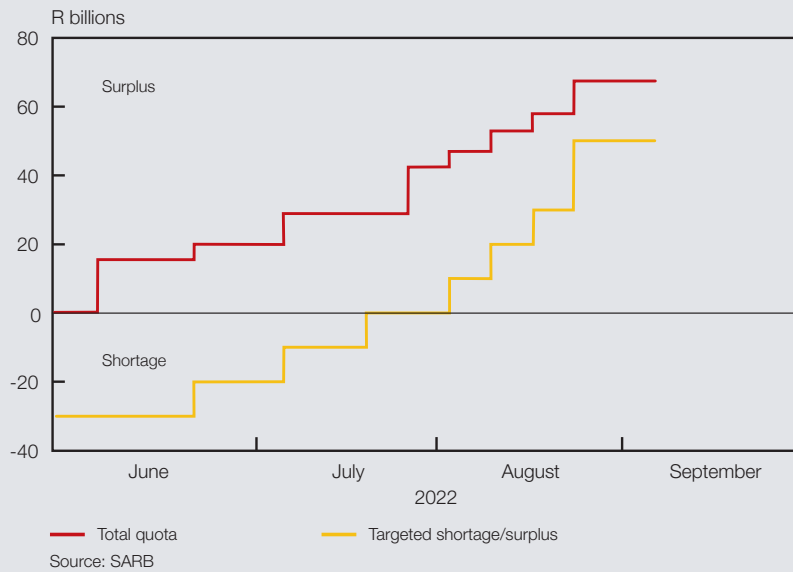
13 In the surplus-based framework, the SARB provides daily liquidity while banks lend and borrow in the interbank market with no obligation to participate in the SARB's weekly auctions.

14 See table KB131 on page S-29 for the SAMOS account standing facilities regarding 'within quota' and 'in excess of quota' amounts as well as total liquidity, which changed from a shortage (-) to a surplus (+).

15 The SARB sets quotas at its desired level of surplus liquidity, with the size of each bank's quota based on the relative size of its balance sheet. Amounts within quota represent surplus liquidity deposited by banks at the SARB at the end-of-day square-off and these funds earn interest at the repo rate. Amounts deposited at the SARB 'in excess of quota' at the end-of-day square-off earn interest at 100 basis points below the repo rate. For more detail, refer to: <https://www.resbank.co.za/en/home/what-we-do/financial-markets/monetary-policy-implementation-framework#accordion-b837cc8dc8-item-e00bb21ada>

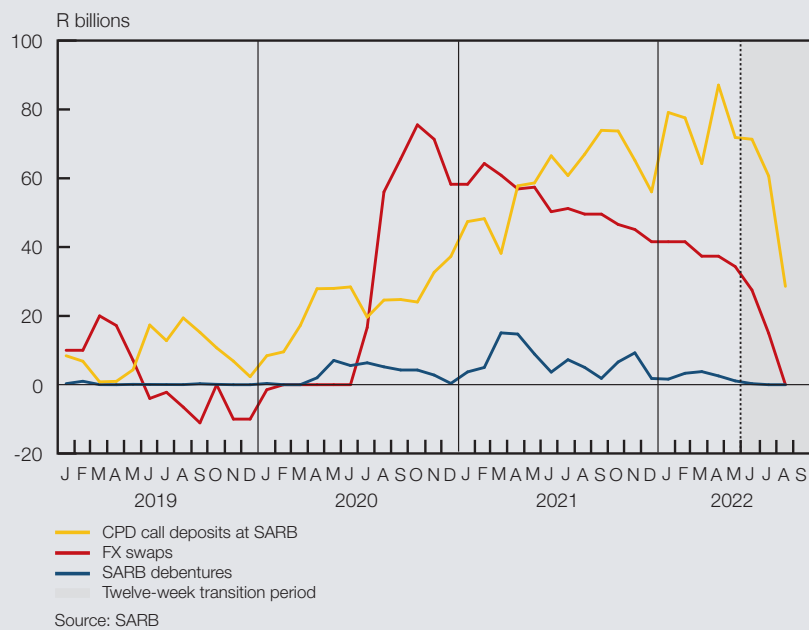
16 Banks could use cash reserve accounts to clear daily positions within the SAMOS system, subject to maintaining an average balance that complies with prudential guidelines.

Changes during transition



During the transition period, the SARB gradually reduced the weekly main refinancing auction from a starting amount of R56.0 billion on 1 June 2022 to R7.0 billion from 24 August 2022. Banks' total quotas increased from R15.4 billion on 8 June to R67.4 billion from 24 August. The shortage was eliminated on 20 July 2022, with the SARB targeting a surplus of R50 billion since the week of 24 August.¹⁷

Unwinding of SARB liquidity draining operations

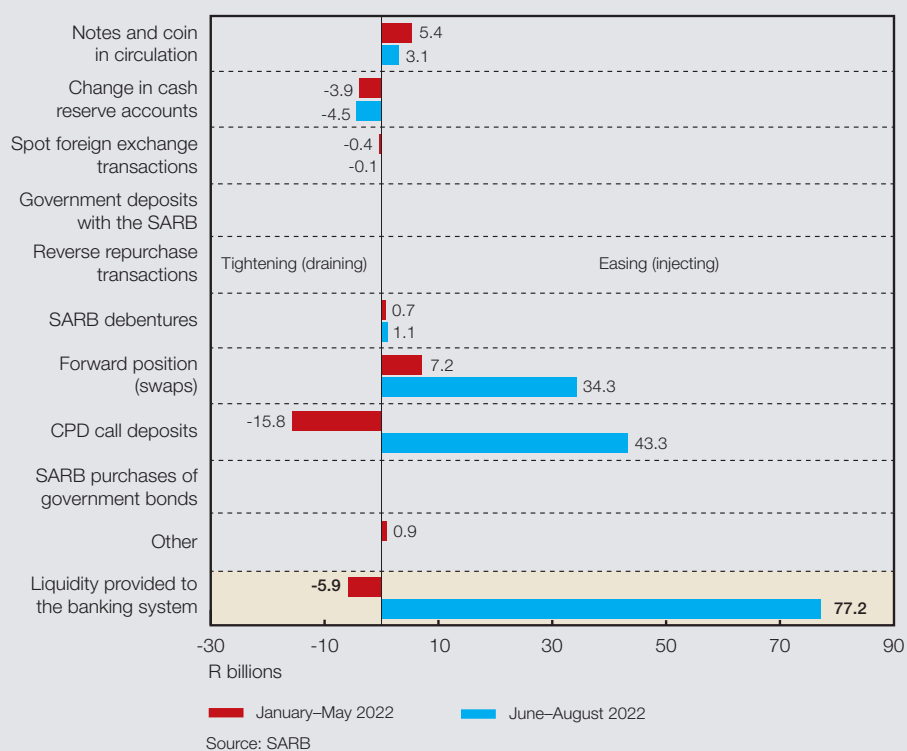


The switch to a surplus liquidity-based framework required the unwinding of liquidity-draining operations through maturing SARB debentures and foreign exchange (FX) swaps as well as the injection of liquidity through switching CPD call deposits from the SARB to banks.

¹⁷ The total daily liquidity of banks is determined through their end-of-day square-off transactions within the SAMOS system, movements in banks' cash reserve accounts and any other funding provided to banks through supplementary auctions conducted by the SARB. See table KB131 on page S-29 in this edition of the *Quarterly Bulletin*.

Reverse repo transactions and SARB debenture auctions have now been discontinued but could be reintroduced when required, while FX swaps would be used less frequently. These changes show up in the factors influencing money market liquidity flows.

Factors influencing money market liquidity flows



Banks' surplus funds deposited at the SARB, which show up in the end-of-day settlement balances in the SAMOS system, are part of the monetary base.¹⁸

Composition of South Africa's monetary base

R millions

	Dec 2019	Dec 2020	Dec 2021	Aug 2022
Banknotes and coin in circulation outside the SARB	165 574	177 573	177 098	168 579
Private bank deposits at the SARB.....	126 306	124 891	141 498	181 087
Required reserve balances	114 320	118 832	126 345	133 860
Excess cash reserves and other deposits ¹	11 986	6 059	15 153	47 227
Of which:				
SAMOS deposits (previous dispensation) ²	12 722	5 684	10 850	
SAMOS deposits within quota ³				38 531
SAMOS deposits exceeding quota ⁴				8 142
Monetary base	291 880	302 464	318 596	349 666

¹ Excluding deposits denominated in foreign currency

² Received interest at a penalty rate of the repo rate less 100 basis points

³ Received interest at the repo rate

⁴ Received interest at a punitive rate of the repo rate less 100 basis points

The new MPIF necessitated changes to the statistical tables on pages S–28 and S–29 as from this edition of the *Quarterly Bulletin*. The 'Selected money market and related indicators' table now reflects the change from 'draining liquidity operations' to 'liquidity operations', and the 'Liquidity management operations' table now provides for SAMOS deposit quotas, with total liquidity now in a surplus position.

¹⁸ For more detail on the monetary base, see 'Note on recent developments in money creation in South Africa' on page 101 in the September 2020 edition of the *Quarterly Bulletin*, available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/quarterly-bulletins-articles-and-notes/2020/10269>