Reforming SA's monetary policy implementation framework

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SARB Financial Markets Department

South African Reserve Bank

SARB 100 YEARS 1921–2021

A purposeful journey

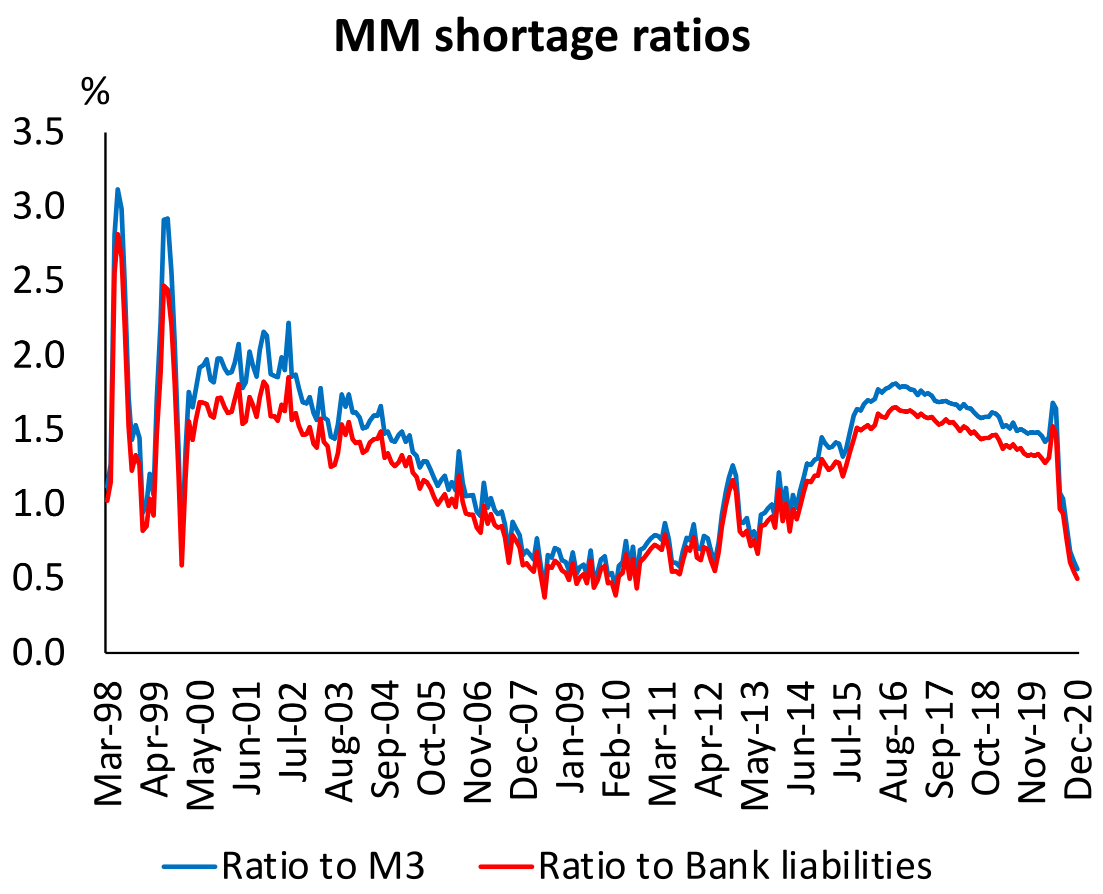
Punchlines

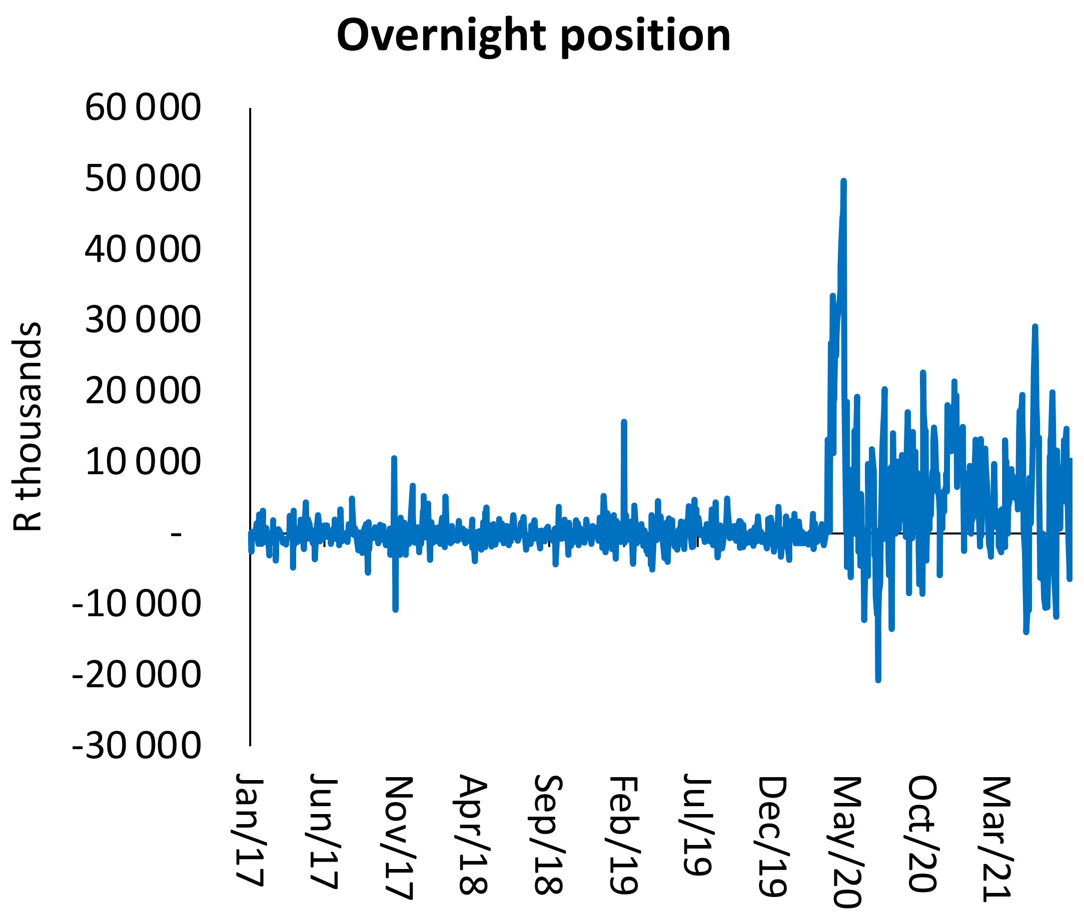
- The shortage system is showing limits and should be replaced
- SA’s structural liquidity surplus points us to a floor-style alternative…
- Specifically, a tiered floor, given that we don’t want a huge balance sheet
- How would this work practically? Some detail on quotas, repo auctions
- Theory and verification of transmission

Since ’98 the SARB has implemented MP using a shortage system

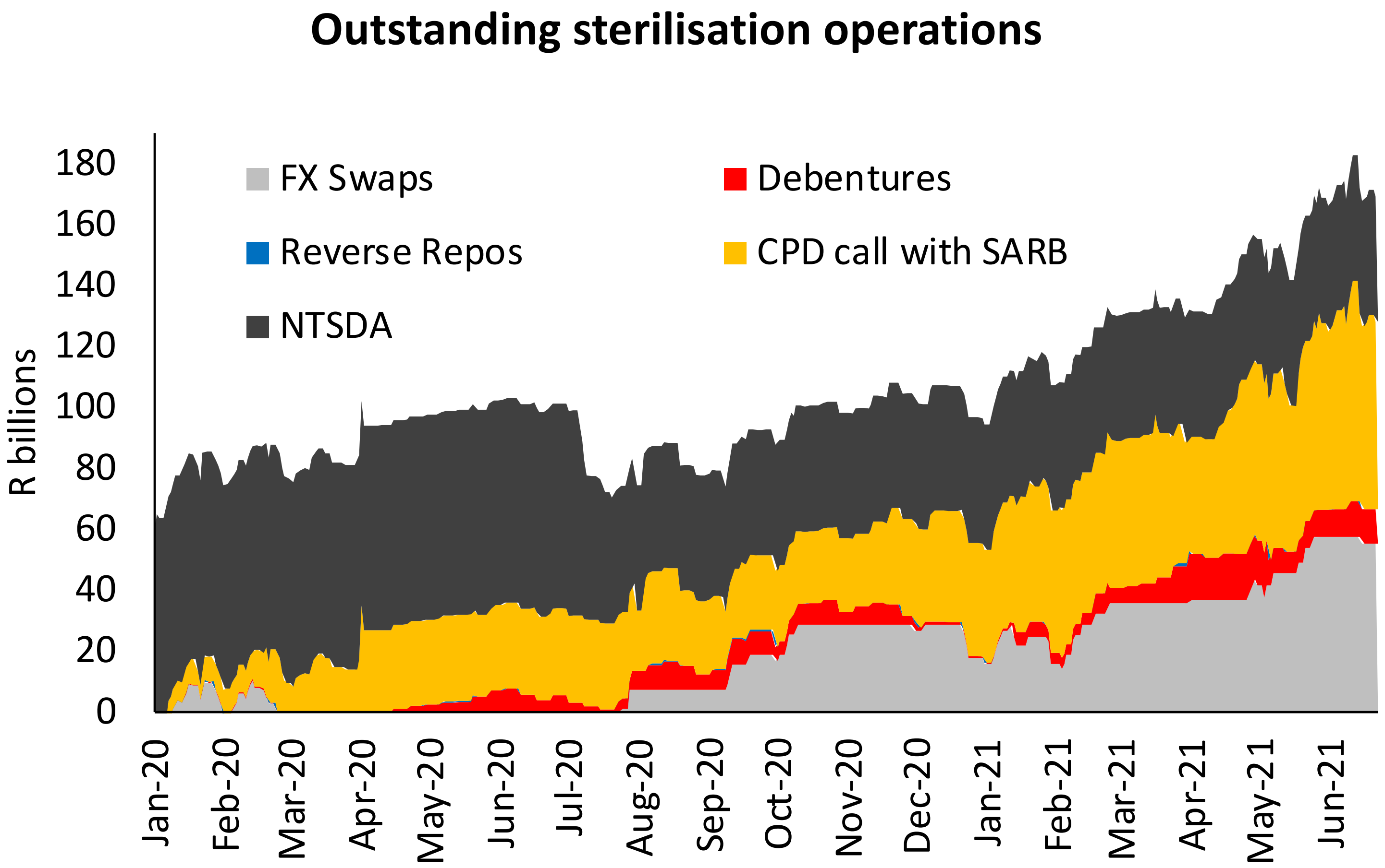
- Banks need bank reserves to meet reserve obligations & make interbank payments
- SARB provides funds to make up a shortage of these bank reserves, charging the policy rate
- If there isn’t a structural shortage, the SARB creates one by draining liquidity
- In theory, market squares off overnight
- This system has worked less well with time – problems are weaker MP transmission, distortions, expense

The shortage is unusually small and the market is not squaring

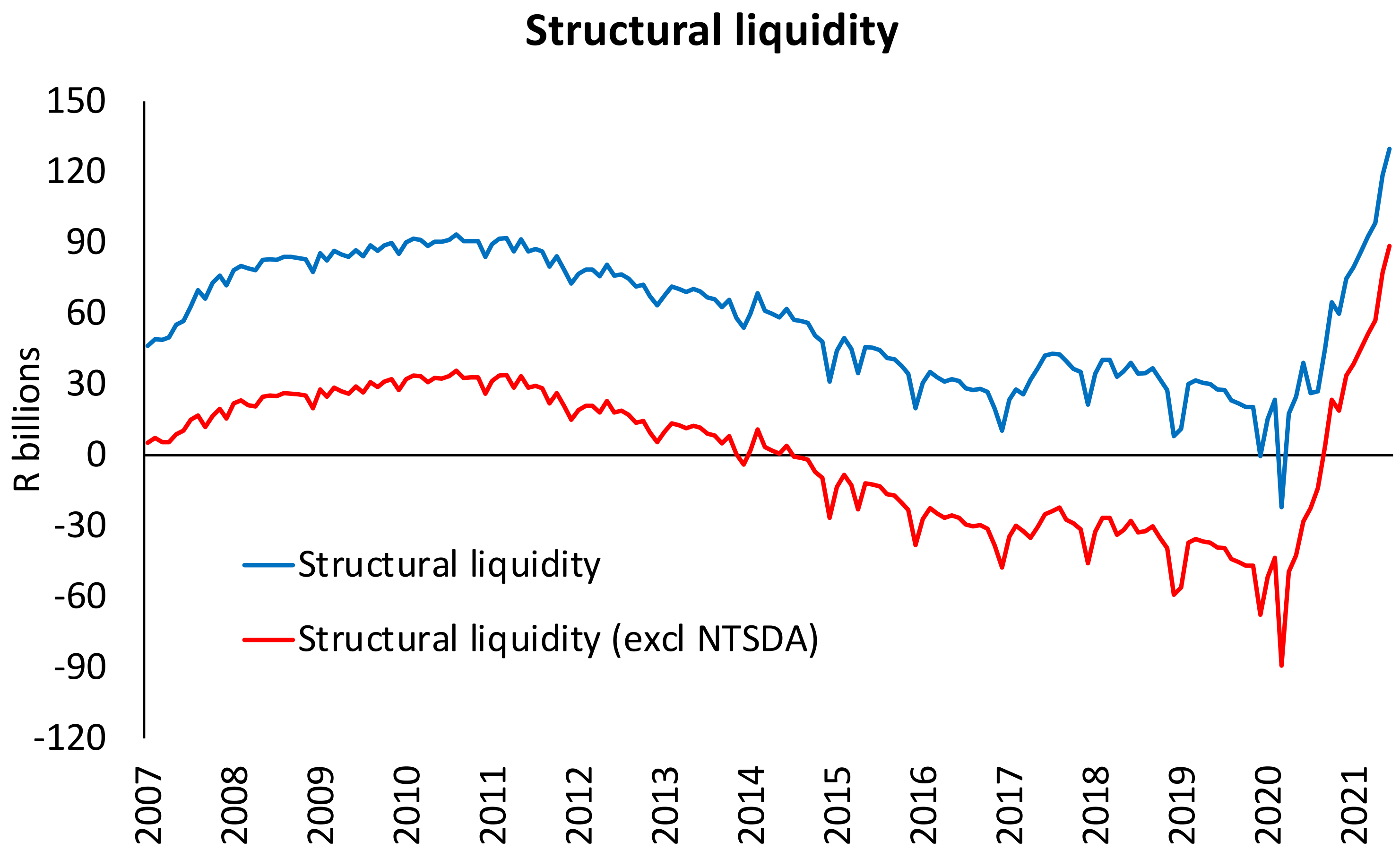




The SARB has drained large amounts of liquidity



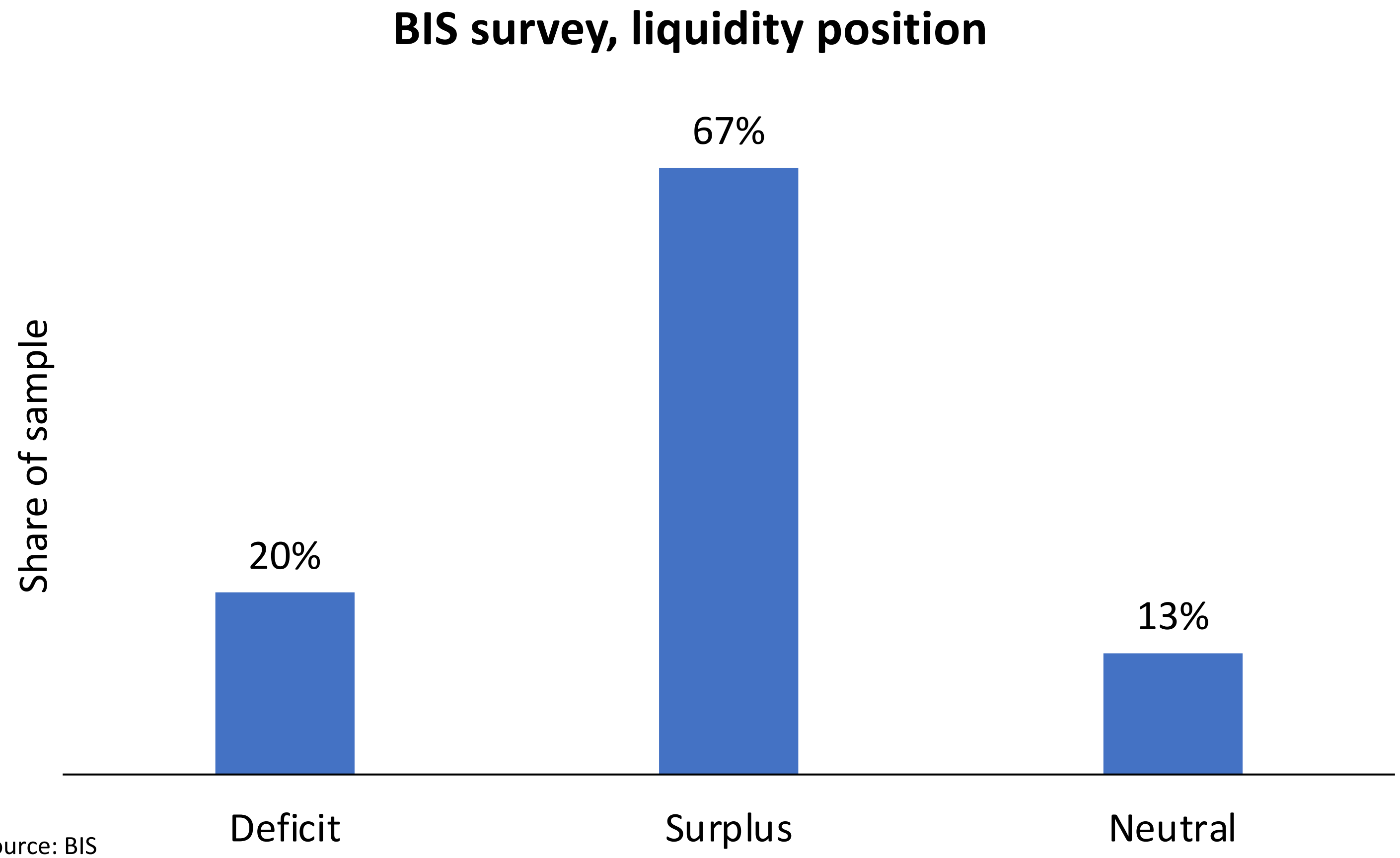
Underlying problem is a structural liquidity surplus



Note: structural liquidity is liquidity position of system less all SARB liquidity management operations

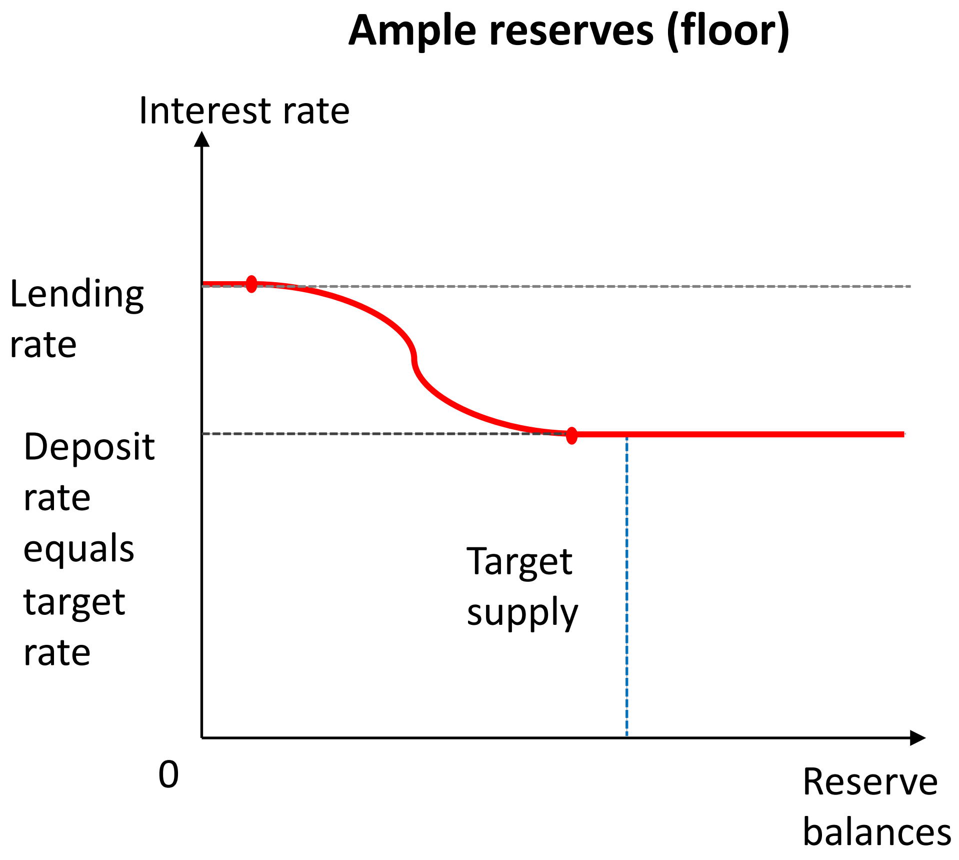
SA is not the only country with a surplus liquidity position

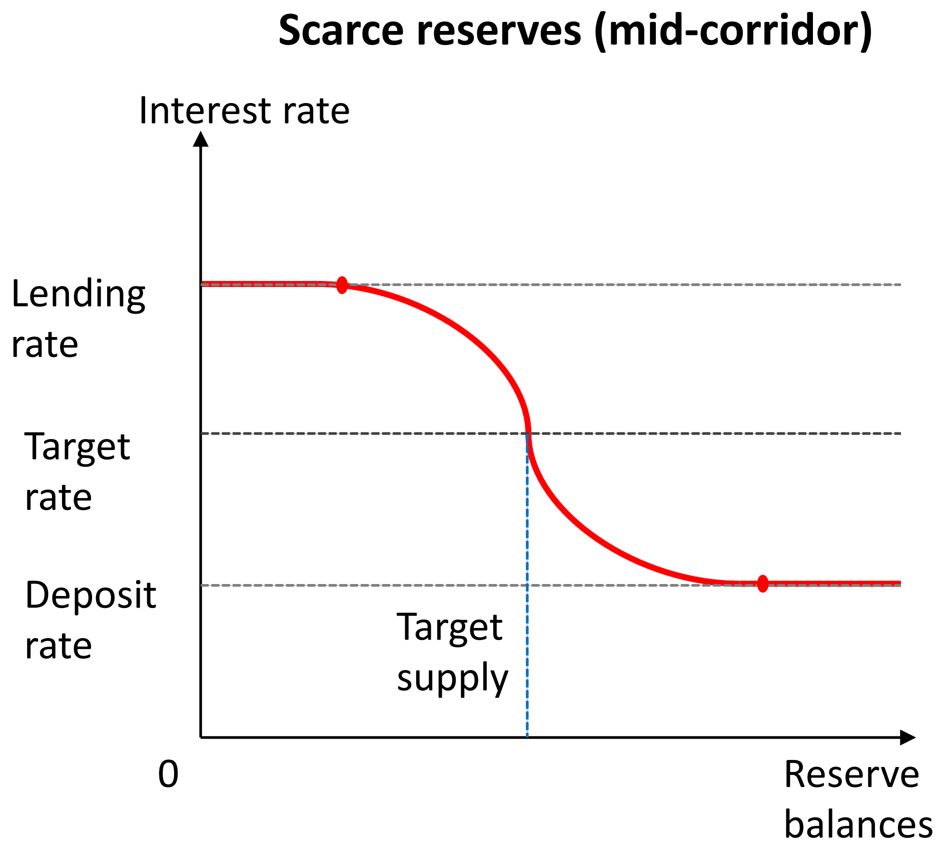
Our proposal is a big change, but not a leap in the dark



Source: BIS

The textbook answer to excess liquidity is a floor system





Floor systems also confer other advantages

- **Regulation** – central bank exposures are favoured; interbank exposures less so
- **Financial stability & balance sheet policies** – no trade-off with MP implementation, larger supply of maximally liquid, safe assets
- **Simplicity & resilience** – floor systems perhaps the least complex MP implementation frameworks

Given local conditions, we favour a tiered-floor system

This is type 4 of the IMF (2018) typology

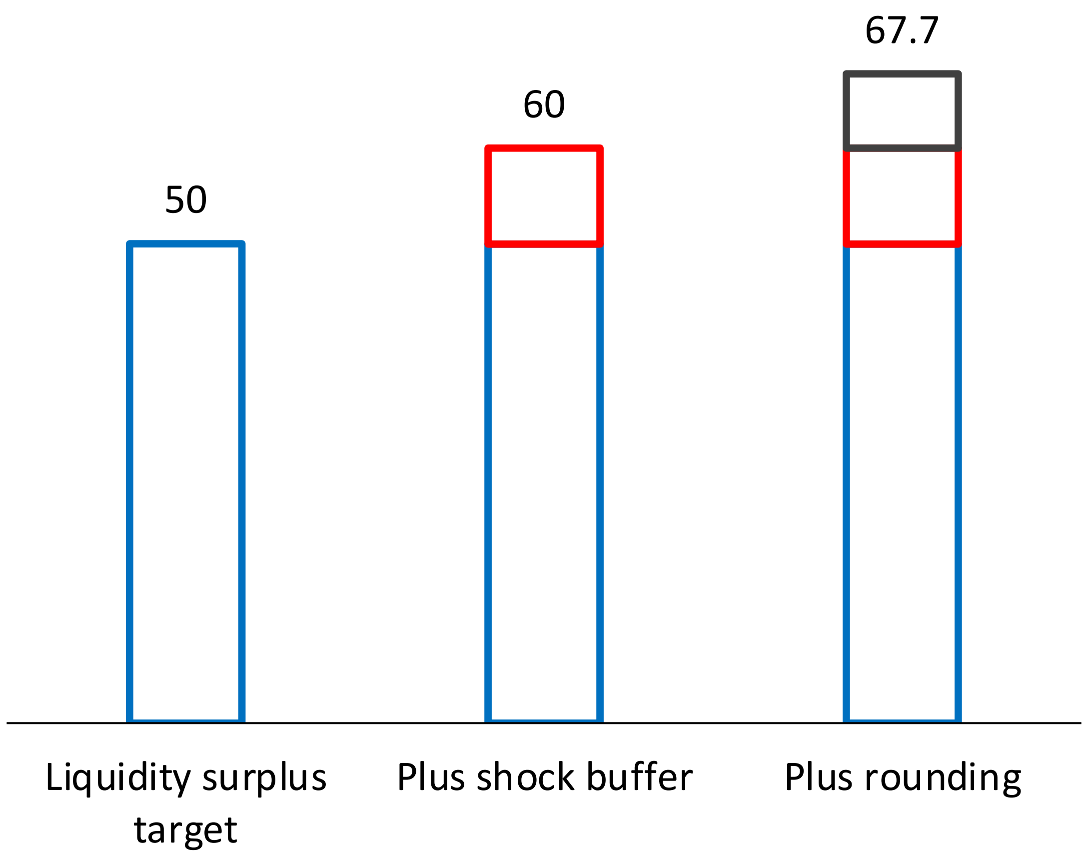
Four Basic Designs

Interest-rate-based operational frameworks can be designed in four general ways: (1) a mid-corridor system targeting a market rate, (2) a mid-corridor system with the policy rate attached to a central bank instrument, (3) a floor system with bank reserves remunerated at the policy rate, and (4) a tiered-floor system with bank reserves remunerated at the policy rate up to a set limit, with the balance remunerated at a lower rate. There are, however, many variations and individual frameworks do not always fit neatly into any one of these categories.

Tiers/quotas make sense for surplus liquidity systems with ample but not massive cash balances (e.g. from QE)

- Banks will have deposit accounts that earn the policy rate, but these will have deposit limits
- Excess deposits will automatically revert to the standing deposit facility at a punitive rate (repo less 100bps)
- This will deter liquidity hoarding, promoting some interbank activity
- And prevent upward pressure on market rates, which would otherwise prompt the SARB to expand its balance sheet
- Quota deposits are separate to required reserves

Quota design thinking – an illustrative example:



- Rounding example: R1bn for big banks, R500m for medium banks & R200m for small banks
- Aggregate quota comfortably larger than actual liquidity surplus
- Liquidity target misses would justify special supp. ops.

How would auctions work in a floor system?

- Auction uptake will probably be low
- But useful for ensuring all banks have access to liquidity…
- And helpful to have an established, non-punitive, non-stigmatized lending facility during crises
- We propose fixed-price, full-allotment auctions (close to status quo, simple)
- Could be problematic if banks overfund relative to aggregate quotas – response would likely be a switch to fixed-quantity, flexible price format

Theory of MP transmission

- Shortage system affects banks' marginal cost of lending, and forces banks to hold qualifying assets for repos
- New theory is just about setting the price for the shortest end of the yield curve
- Markets price risk & term premia, plus expected short-term rates
- Repo setting feeds into asset pricing throughout the financial system
- Incentives to arbitrage away discrepancies (e.g. sell reserves to buy mis-priced asset)

Following reference rate reform, ZARIBOR is likely to be the main benchmark rate – but we would consider multiple rates

ZASFR	ZARIBOR	ZARONIA	JIBAR
Secured	Unsecured - interbank	Unsecured - deposits at banks from both banks and non-banks	Unsecured - interbank
Secured like repo transactions, but limited transactions to date, so weak connection to larger market	Primary benchmark	Widest coverage, but mismatch between this market and actual SARB lending – more scope for divergence	Low coverage; inferior to ZARIBOR

Conclusions

- Current system not broken but vulnerable
- A tiered floor system would address pressing challenges, and give the SARB a resilient, flexible framework for the longer term
- Paper now available for public comment, until end-Feb. 2022
- We hope to reform the framework during 2022, but this is not a *fait accompli*

Misconceptions?

- New framework does not require a simultaneous balance sheet expansion
- SARB does not need to raise spending to pay interest on reserves
- Banks not forced to borrow from SARB – liquidity injected through open market operations
- Not QE or a prelude to QE
- New reserve money can't exit SA; SARB would also only pay interest on bank reserves, not any deposits e.g. household savings

Thank you