

Box 3 Quantifying the South African Reserve Bank's seigniorage income

Seigniorage is the profit earned by money issuers. It arises because cash costs less to produce than its face value and pays no interest, enabling the issuer – typically a central bank – to finance itself at low cost.¹

This box estimates the seigniorage income of the South African Reserve Bank (SARB) over the past six years, using two basic approaches: one from the asset side of the balance sheet and one from the liability side.

In a floor system, the central bank transmits monetary policy through the interest on reserves. This removes the dependence on reserve scarcity and allows the central bank to change the size of its balance sheet without affecting the policy rate, thereby enabling monetary policy and balance sheet policy to operate independently.

The preferred method (the liability side) indicates that seigniorage income has averaged about R11 billion annually in recent years. This income helped the SARB to offset the costs of carry associated with holding foreign exchange (FX) reserves, which typically pay returns below domestic market rates.

Generally, however, the asset-side approach is better known and has a simpler intuition.² With this measure, a central bank faces public demand for banknotes and coin, which are its liabilities, and uses that demand to acquire income-generating assets. For many central banks, these assets take the form of government bonds.³ Seigniorage income is then calculated as the return earned on these assets /less the costs of producing and issuing banknotes and coin.⁴

This approach is captured in the agreement underpinning the Common Monetary Area (CMA), which provides for compensation to Eswatini, Lesotho and Namibia for the South African rands circulating in their economies, on which they forgo seigniorage income. This compensation is based on a formula using the returns on longer-term South African government bonds.⁵

A limitation of the asset-side approach, however, is that it can generate misleading results in the South African case, with negative estimates of seigniorage income in some years.

One reason for this is that the SARB holds assets, like gold, which do not generate interest income and are only subject to valuation changes. The South African Reserve Bank Act 90 of 1989 (as amended) classifies these valuation changes as a liability of the SARB – to be recorded in the Gold and Foreign Exchange Contingency Reserve Account (GFECRA), not booked as income.⁶ Nonetheless, the SARB must still finance the gold holdings on its balance sheet.⁷

Another reason why the asset-side approach can generate misleading results for South Africa is that the SARB holds large quantities of FX reserves which often generate modest returns.⁸ For instance, in March 2021, FX reserves comprised 73% of the SARB's total assets, with an average return of just 0.25% during that year.⁹

The SARB's earnings on assets can therefore be lower than the cost of producing and issuing banknotes and coin. Conversely, estimated seigniorage returns can be unusually high in years when the SARB receives excess GFECRA balances in terms of the new GFECRA agreement.

1 Not all seigniorage accrues to central banks. In some jurisdictions, coin minting is not a central bank function, and the associated seigniorage accrues to treasuries instead. Stablecoin issuers also earn seigniorage profits, because they hold interest-bearing assets but do not pay interest to stablecoin holders. See Digital Currencies: The Rise of Stablecoins.

2 See Seigniorage transfer payments in the context of the Common Monetary Area (CMA)

3 Assets can also be loans to banks, which was the SARB's approach in the late 1990s before the growth of FX reserves created a structural surplus of liquidity.

4 These costs can be established accurately as the SARB orders banknotes and coin for circulation from the South African Bank Note Company (RF) Proprietary Limited and the South African Mint Company (RF) Proprietary Limited respectively, and accounts for them in its financial statements. This measure excludes the costs associated with producing other products such as commemorative coins.

5 The formula pays two-thirds of the rate on South African government bonds with a maturity of 10–15 years (*Quarterly Bulletin* series KBP2003M) for the final quarter of the relevant year, for the estimated rands circulating in the three countries.

6 The GFECRA captures the unrealised profits or losses incurred by the SARB on South Africa's holdings of gold and FX reserves that arise from exchange rate and price movements.

7 In July 2026, gold represented 21.3% of the SARB's total assets.

8 For instance: for much of the period between the global financial crisis and COVID-19, advanced economies faced deflation risk and their interest rates were frequently close to, or even below, zero.

9 This calculation excludes gold and special drawing rights (SDRs). For comparison, recent returns have been slightly below 4%.

	A. Cost of currency (R billion, fiscal year)	B. Currency in circulation (R billion, period average)	C. Percentage cost (A/B)	D. Return on assets, percentage*	E. Gap (D-C)	F. Seigniorage income (B multiplied by E divided by 100) (R billion)
2021	2.81	170.06	1.66	1.43	-0.23	-0.39
2022	2.74	167.45	1.64	0.74	-0.90	-1.51
2023	2.94	170.97	1.72	1.84	0.12	0.20
2024	1.95	169.01	1.16	2.68	1.52	2.57
2025	2.67	169.69	1.57	12.17	10.59	17.97
2025 ex-GFECRA transfer	2.67	169.69	1.57	3.98	2.40	4.08
2026	3.20	173.00	3.20	2.76	0.91	1.57

* Returns are calculated from the annual income statements using interest income and fair value gains. Dividends and operating income are excluded as these are very small and their inclusion would not alter the results. GFECRA gains are not included, although the 'other income' payment from GFECRA is noted in the 2025 row of the table.

The asset-side method may be more appropriate for central banks with demand-driven balance sheets, where the size of the balance sheet is determined by demand for central bank liabilities and assets are held to satisfy that demand.

However, central banks can also operate with supply-driven balance sheets, meaning they can choose to hold a certain volume of assets and then select tools to finance them. This has been a common situation, over many decades, for emerging market economies which hold large stocks of FX reserves.¹⁰

In such cases, seigniorage can be interpreted not as the average return on assets, but rather as the saving associated with financing those assets through banknotes and coin instead of another liability. In the South African case, the marginal liability, which would be used if notes and coin were not available, pays the policy rate.¹¹ Seigniorage is therefore equivalent to the cost of producing notes and coin *less* the policy rate.

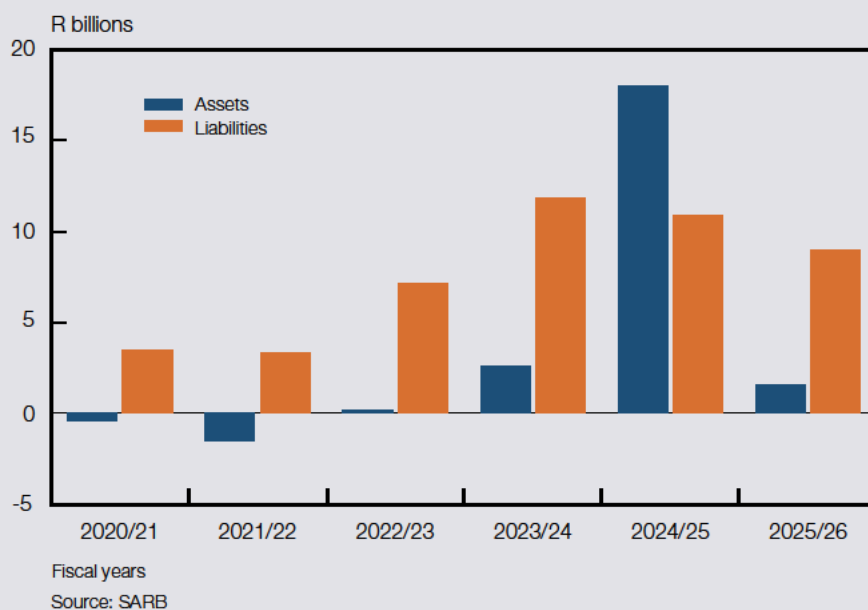
	A. Cost of currency (R billion, fiscal year)	B. Currency in circulation (R billion, period average)	C. Percentage cost (A/B)	D. Policy rate (period average)	E. Gap (D-C)	F. Seigniorage income (B multiplied by E divided by 100) (R billion)
2021	2.81	170.06	1.66	3.68	2.03	3.45
2022	2.74	167.45	1.64	3.64	2.00	3.35
2023	2.94	170.97	1.72	5.90	4.18	7.14
2024	1.95	169.01	1.16	8.17	7.02	11.86
2025	2.67	169.69	1.57	7.99	6.41	10.88
2026	3.20	173.00	1.85	7.04	5.18	8.97

¹⁰ Supply-driven balance sheets have also been observed in advanced economies, more recently in the context of quantitative easing. See Back to normal? Balance sheet size and interest rate control - SUERF

¹¹ Under the reformed monetary policy implementation framework (MPIF), this liability is generally excess reserves. It can also be other deposit balances, such as Corporation for Public Deposits funds, but these also pay the policy rate. Before the MPIF reform, in 2022, the available draining tools generally paid more than the policy rate.



South African Reserve Bank seigniorage income measured from assets and liabilities



Seigniorage provides an independent source of income that supports policy operations, mainly through the accumulation of FX reserves and gold. The calculations presented in this box demonstrate how seigniorage income increases and decreases with fluctuations in interest rates. This is because the costs of producing banknotes and coin are relatively stable while the returns on assets, or alternatively the costs of interest-bearing liabilities, are more variable. For this reason, seigniorage returns have increased in recent years, even though growth of notes and coin in circulation has stalled.

The liability-side method gives a more realistic measure of seigniorage income in the South African context, with estimates ranging between R9.2 billion and R12.0 billion lately.¹² Notably, about 10% of these returns are paid out to the CMA partner countries, even though these economies are collectively just over 5% the size of South Africa's economy.

¹² This calculation refers solely to currency in circulation, not required reserves or other such deposits. The rationale for this is that the public freely chooses to hold zero-interest cash, whereas banks are legally compelled to hold zero-interest reserves. The same method could nonetheless be employed to quantify the SARB's income from these reserves (implying about R12.6 billion lately).