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INSIGHT

The end of unconventional monetary policy in Australia

The unwinding of the Reserve Bank of Australia's Term Funding Facility and Bond Purchase Program is likely to have a significant effect on interest rate and bank funding markets.

by Kashi Trathen

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DEBT INVESTMENTS

Key takeaways – possible near-term effects of the unwinding of the TFF and bond purchase program

- Increased demand for government and semi-government bonds due to large shortfall in high-quality liquid assets
- Scarcity of 1-3 month bank bills due to bank liquidity coverage ratio pressure to likely result in tighter bills/overnight index swap spreads
- Re-emergence of net stable funding ratio and liquidity coverage ratio-friendly deposit products and long dated term deposits
- Steeper 6s3s basis as banks prefer to issue long dated bills
- Persistently wide spreads on bank senior debt as bank issuance remains elevated.
- Pressure on non-bank corporates as banks readjust their asset books
- Net interest margin pressure may eventually result in out-of-cycle rate hikes

In early 2020, the COVID-19 pandemic severely impacted economic activity and bond market liquidity. In response, the Reserve Bank of Australia (RBA), in addition to cutting interest rates to near zero, introduced several unconventional policy measures. Among the most significant were the Term Funding Facility (TFF), Bond Purchase Program (BPP) and Yield Curve Control (YCC) program.

As the economy rebounded, rising inflation – initially thought to be transitory – triggered a rapid tightening of monetary policy. In addition to the fastest interest rate increases in a generation, the RBA also began to unwind its unconventional policy measures. The impact of this will likely become significant in the coming months. This paper explores the mechanics of the unwind of the TFF and the maturity of bonds purchased by the RBA and explains the possible effects on funding markets in Australia.

Timeline of RBA unconventional policy

MARCH 2020

- 03 The RBA reduced the cash rate by 25 basis points to 0.50 per cent.
- 19 The RBA further reduced the cash rate by 25 basis points to 0.25 per cent.
- 19 TFF announced.
- 19 3-year yield target of 0.25 per cent announced.
- Announced regular one, three and six-month maturity repurchase operations for "as long as market conditions warranted".

MAY 2020

- Eligible collateral for domestic market operations extended to include investment grade credit.

APRIL 2020

- RBA announced daily open market operations were likely to be smaller given substantial system liquidity and TFF.

SEPTEMBER 2020

- 01 TFF extension announced.

NOVEMBER 2020

- 03 The RBA reduced the cash rate to 0.1 per cent.
- 03 RBA announced $100 billion BPP.
- 03 TFF interest rate reduced to 0.1 per cent.
- 03 3-year yield target lowered to 0.10 per cent.

FEBRUARY 2021

- 02 RBA announced additional $100 billion extension to BPP.

JUNE 2021

- 30 TFF closed to new drawdowns as scheduled.

JULY 2021

- 06 RBA announced that it would continue to purchase government bonds at a rate. of A$4 b per week until at least mid-November.
- 05 RBA announced that yield target would continue to apply to April 2024 bond, but not roll to a later-maturity bond.

SEPTEMBER 2021

- 07 BPP further extended until mid-February 2022.

NOVEMBER 2021

- 02 RBA announced discontinuation of April 2024 bond yield target.

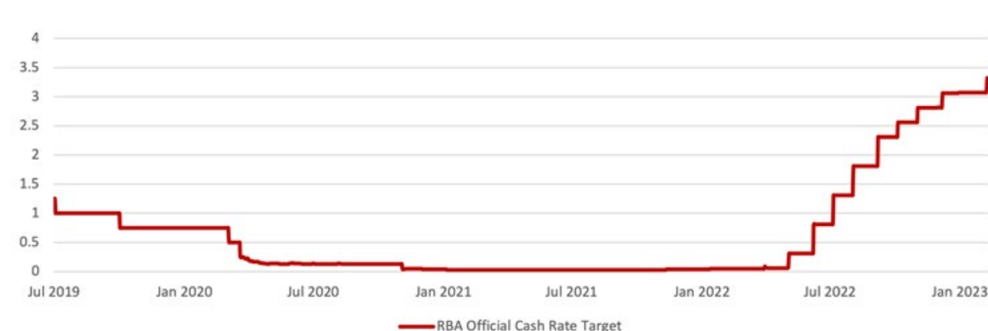
FEBRUARY 2022

- 01 RBA announced BPP would cease on 10 February 2022.

MAY 2022

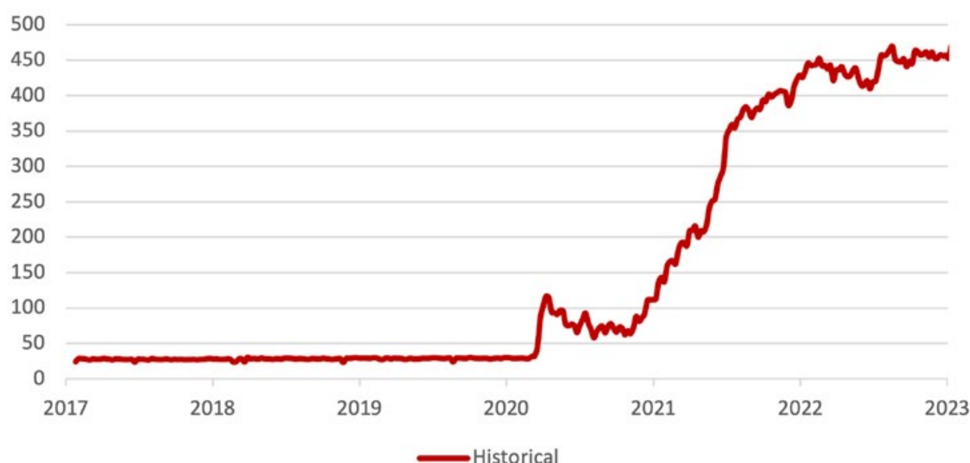
- RBA increased the cash rate.

CHART 01 THE RESERVE BANK OF AUSTRALIA'S OFFICIAL CASH RATE FROM JULY 2019 TO PRESENT.



Source: Reserve Bank of Australia

CHART 02 ES BALANCES OVER TIME (A$B)



Source: Reserve Bank of Australia

The effect of unconventional policies on Exchange Settlement account balances

Exchange Settlement (ES) Accounts are accounts held by authorised deposit-taking institutions (ADIs) with the RBA that are used to settle payment obligations with other banks. Prior to the pandemic, the RBA used open market operations to manage the supply of ES balances to keep the cash rate as close as possible to the official cash rate target. This was primarily achieved using repurchase agreements (repos).[1]

Both the TFF and the RBA's bond purchases had the effect of increasing ES account balances, which is clearly visible in chart 2.

The Term Funding Facility: A Recap

The TFF is a monetary policy tool that was introduced by the RBA in 2020 in response to the economic impacts of the COVID-19 pandemic. It provided very low rate (0.10%) three-year funding to authorised deposit-taking institutions in order to encourage lending to businesses and households. A total of A$187.6b was borrowed through the scheme between April 2020 and June 2021, after which point drawdowns ceased.

The Effects of the TFF on bank balance sheets

Upon initial drawdown, the bank's balance sheet increases in size. A liability is created in the form of the TFF loan from the RBA, and an asset is created in the form of ES balances. The combination of a 3-year loan and a liquid overnight deposit (ES balance) improves the bank's liquidity coverage ratio (LCR). The very cheap source of term funding (0.10% on the TFF loan compared to the Bank Bill Swap rate (BBSW) + 60 on a typical 3-year floating-rate note at the time) improves the bank's average cost of funds. Additionally, because banks no longer needed to issue term debt while the TFF is being drawn down, the scarcity of paper leads to narrowing credit spreads. The overall effect is to improve bank net interest margins (NIMs).

By at least partially displacing short-dated bank bills as a funding source, it improves the bank's net stable funding ratio (NSFR). As money is leant to businesses and households (which is the premise of being able to borrow under the TFF), cash moves around the banking system (E.g. from the mortgagee's bank account to the vendor's bank account). At the end of each day, it must still reside in another deposit account, since the banking system is a closed loop. Thus, system ES balances have increased by the total amount of TFF drawdown.

Since bank ES balances qualify as high-quality liquid assets (HQLA) under Australian Prudential Regulation Authority (APRA) regulation, bank balance sheets do not need to hold as much government and semi-government bonds. This frees up their balance sheet to hold higher yielding assets.

The Yield Curve Control Program

Announced by the RBA in March 2020, YCC was a form of monetary support in which the central bank set a target of 0.25% for 3-year government bond yields and intervened as necessary to maintain yields close to this target. The objective was to

[1] Details of the arrangement can be found on the RBA's website under 'How the Reserve Bank Implements Monetary Policy'.

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support businesses and households by lowering longer-term yields and to improve the liquidity and functioning of the market during dislocations. In November 2020, the yield target was lowered to 0.10%. As part of this program, the RBA bought primarily Australian government bonds with maturities close to three years. In November 2021, the yield target was discontinued after bond yields rose through the target after stronger-than-expected CPI, and speculation that the target was unsustainable.

The Bond Purchase Program

In November 2020, in addition to the 3-year yield target, the RBA announced a bond purchase programme of A$100b at a pace of A$5b per week, a form of quantitative easing (QE). This occurred alongside forward guidance from RBA governor Philip Lowe that *"given the outlook, the Board is not expecting to increase the cash rate for at least three years"*[2]. The bond purchase program was extended by an additional A$100b in early 2021, with the pace of A$5b per week maintained. This was later extended further. A combination of government and semi-government bonds were purchased under this program, with maturities up to and including 2033. The bond purchase program ceased in February 2022.

The RBA are now allowing bonds purchased under both programs to mature, and not rolling their holdings into new securities. This is effectively a form of quantitative tightening (to be discussed later in this paper). Table 1 shows the face value of bonds purchased under both programs, as well as to support overall market function. The Bond Purchase Program (BPP) was the most significant of these interventions, accounting for almost 80% of the total volume.

Initial Effects of RBA bond purchases

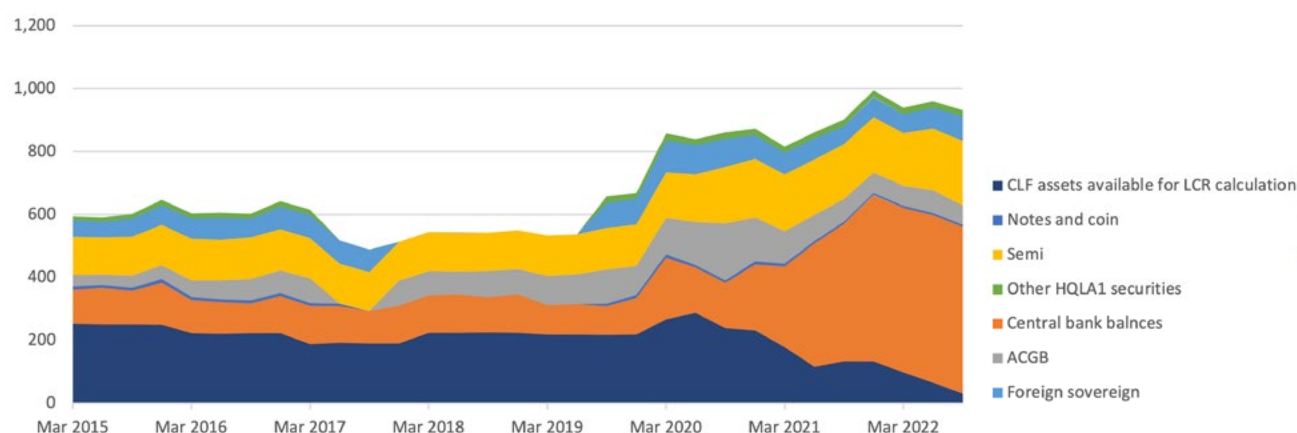
When conducting bond purchases in the secondary market, the RBA injected cash into the system, which found its way into bank dealer ES accounts. In total, RBA bond purchases increased system ES balances even more so than the TFF (although its effects roll off more gradually). Unlike the TFF, the bond purchases also removed eligible HQLA (government and semi-government bonds) from the system. Given HQLA and NSFR/LCR regulations, it therefore had no direct effect on lending, other than helping to keep underlying long-end interest rates low.

TABLE 01 SUMMARY OF BONDS PURCHASED BY THE RBA

	Amount (A$b)	Share (%)
Yield target (YCC)	36	10
Market function	44	12
Bond purchase program (BPP)	281	78
Total	**361**	**100**

Source: RBA Review of the Yield Target: https://www.rba.gov.au/monetary-policy/reviews/yield-target/index.html

CHART 03 BANK HQLA COMPOSITION OVER TIME (A$B)



Source: APRA quarterly authorised deposit taking institution statistics: https://www.apra.gov.au/quarterly-authorised-deposit-taking-institution-statistics

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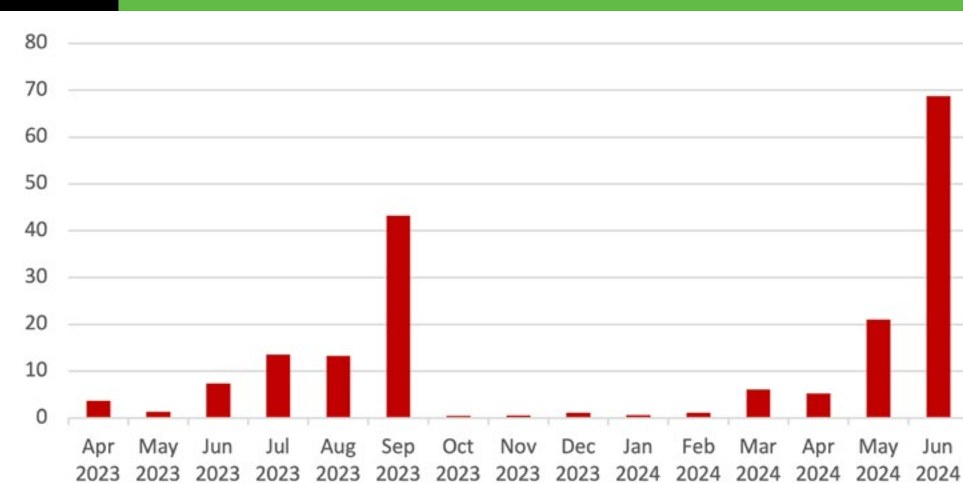
[2] Statement by Philip Lowe, Governor: Monetary Policy Decision, 3 November 2020, accessed 14/02/23 https://www.rba.gov.au/media-releases/2020/mr-20-28.html

CHART 04 TFF MATURITIES BY MONTH (A$B)



Source: Reserve Bank of Australia

Initial effect of unconventional monetary policies on HQLA composition over time

As the TFF, BPP and other policies came into effect, and as the committed liquidity facility (CLF) rolled off (a topic not explored in this paper), central bank balances became the most significant contributor to HQLA1, as shown in Chart 3.

As the three-year loans resulting from TFF drawdowns in 2020 and 2021 are repaid, most of the initial effects that occurred because of the policy will be reversed. The timing of total TFF loan maturities is shown in Chart 4.

TFF Maturities	
2023	84.67
2024	103.06

The effects of the TFF maturity on bank balance sheets

When a TFF loan is repaid to the RBA, the bank's balance sheet decreases in size. The liability (TFF loan) and corresponding asset (increased ES balance) are both eliminated. From a funding perspective, there is no direct shortfall. Without any regulatory capital requirements, and without the need to maintain LCR, further impacts would be limited. All else being equal, the bank's LCR deteriorates as a highly liquid asset disappears along with a term loan.

To maintain the bank's LCR, banks are likely to buy more liquid assets. This is funded by either issuing more term debt, or selling (lending via repurchase agreement) securities such as credit and securitisations that would have previously been CLF eligible. Both these options are more costly than the TFF arrangement. Retail deposits are also likely to be a sought-after as an NSFR-friendly funding source.

The average cost of funds for the bank increases since the overall funding mix is no longer diluted by the ultra-low rate TFF. This, combined with a retail deposit war, risks narrowing NIMs further.

The increased quantity of bank debt on issue will likely cause widening of credit spreads (indeed we have already witnessed this). The composition of HQLA will change as the reduction of ES balances creates a need to buy government and semi-government bonds. In this sense, the bank treasury must buy liquid assets for two reasons (to maintain LCR and to boost HQLA). The pressure on NIMs to narrow in late 2023 to 2024 increase the probability that banks will opt for out-of-cycle mortgage rate increases (or smaller mortgage rate decreases in the quite likely event that we have entered an easing cycle by then).

While these effects are significant, the timing of these maturities is predictable. This gives the banks time to adjust their funding profile and tweak HQLA in advance. Therefore, the unwind impact is likely to be more gradual than the effect of the initial drawdown after the policy was introduced. Since late 2022, bank senior issuance has been elevated, as banks have expanded their balance sheets in preparation for the TFF maturities. It is unclear precisely how much of the impact has been prefunded.

Maturity of bonds held by RBA

The maturity of bonds held by the RBA will be a theme that lasts well into the 2030s, with the largest impact being two to five years from now. The timing of bond maturities is shown in Table 2 and Chart 5 below.

RBA Held Bond Maturities	
2023	14.487
2024	37.641
2025	47.381
2026	39.607

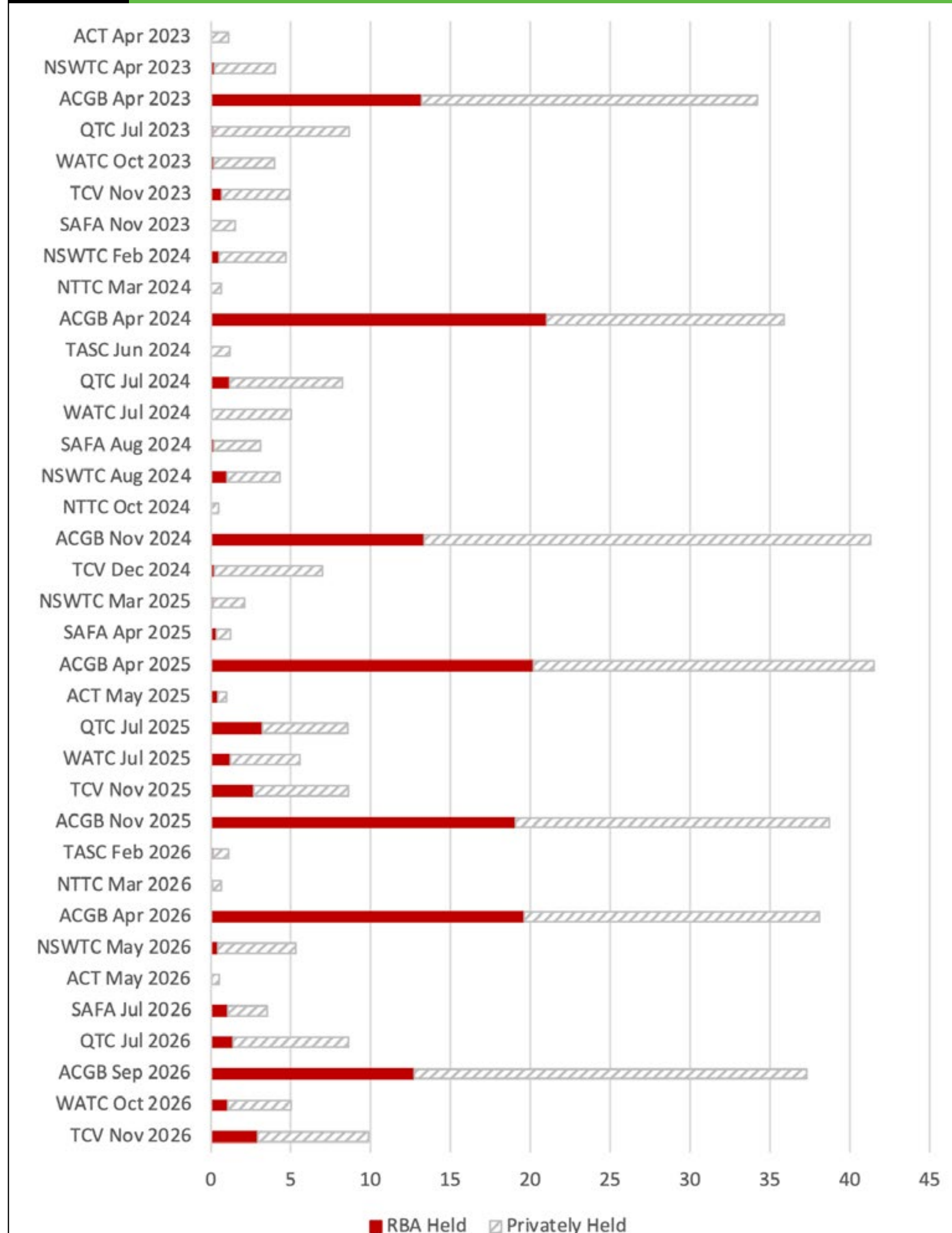
Effect of bond maturities

Much like the TFF repayments, RBA held bond maturities drain system ES balances (see Chart 6).

Taking the example of a government bond; when the maturity occurs, the RBA receives cash from the Australian Office of Financial Management (AOFM), which is subsequently removed from the financial system, hence quantitative tightening (QT) occurs.

At some point the AOFM must issue new debt. This is likely already happening and will continue to do so. To the extent that

CHART 05 UPCOMING GOVERNMENT/SEMI GOVERNMENT BOND MATURITIES (A$B)



Source: Reserve Bank of Australia

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this new issuance is purchased by banks, ES balances are reduced. This is because the banks hold less of the maturing paper than the new paper (because the RBA holds some of it). This explains why ES balances have already been gradually reducing even without any bond or TFF maturities.

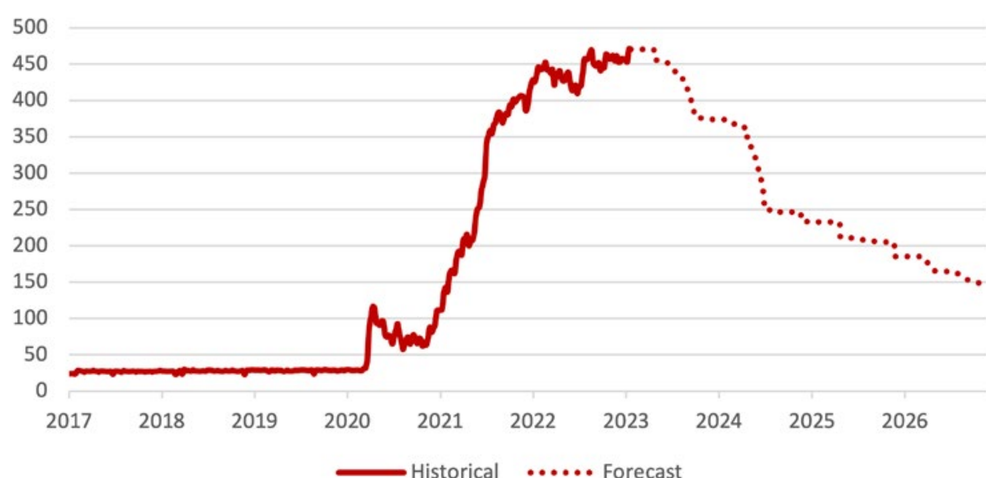
Forecast ES balances over time

As the TFF is repaid and RBA bond holdings mature, system ES balances will decline back towards pre-pandemic levels. The following chart models these two effects only, and ignores other effects (such as RBA open market operations), which are generally smaller in magnitude. The two large drops visible in 2023 and 2024 are due to the TFF repayments, whereas the gradual declines thereafter are as a result of bond maturities.

Key implications for money markets and fixed income in Australia

- **Increased demand for government and semi-government bonds:** The large shortfall in HQLA due to the maturity of bonds held by the RBA and the TFF are likely to create structurally higher demand for government and semi-government bonds for years to come. This reduces the risk of semi-government bond spreads widening versus bond, despite weak state government fundamentals.
- **Scarcity of 1-3 month bank bills:** Banks will remain averse to issuing very short term deposits in 2023, as their LCRs come under pressure. This effect will be most noticeable immediately prior to September 2023 and June 2024, the two largest months for TFF roll-off. This is likely to push bills/ overnight index swap (OIS) basis negative in the very short end.
- **Re-emergence of NSFR and LCR-friendly deposit products:** Longer-dated term deposits and notice-deposit accounts are likely to re-emerge as a solution for banks to improve their key liquidity and funding ratios.
- **Steeper 6s3s basis:** Short dated (1-3 month) bills/OIS spreads will likely face narrowing pressure throughout 2023, resulting in a steeper bills/OIS curve, and hence wider 6s3s floating-floating basis.
- **Persistently wide spreads on bank senior debt:** Bank issuance is likely to remain elevated. With no scarcity of paper, spreads can remain at levels wider than the post-Global Financial Crisis average.
- **Pressure on non-bank corporate borrowers:** Non-bank corporate borrowers and securitisations may find it more difficult to borrow money from banks, since banks may prefer to reduce holdings of these assets as an alternative to issuing more long term debt.
- **NIM pressure may do some of the RBA's job for it:** If banks need to increase mortgage rates (or pass on fewer cuts in the next easing cycle), this has the potential to reduce the need for further RBA hikes, or incentivise further cuts down the track.

CHART 06 ES BALANCES OVER TIME (A$B)



Source: Reserve Bank of Australia, Internal IFM Investors' Modelling

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Conclusion

The effects of the unwinding of pandemic-era unconventional monetary policy, especially when viewed alongside the rapid pace of increase in official interest rates, is likely to have a significant effect on bank funding and interest rate markets. Most of the effect of the TFF repayments will be felt in 2023 and 2024, when the bond maturities will have a more gradual impact. System ES balances will remain above pre-pandemic levels for up to 10 years.

For fixed income investors, semi-government bonds are to remain well supported, while spreads on bank senior debt will likely continue to trade at levels above the long run average. Money market investors will be rewarded for being able to purchase term deposits longer than six months and invest in regulatory friendly notice deposit accounts. As with any structural shift in system funding arrangements, there is potential for further volatility, and investors ought to consider their interest rate, credit and liquidity risks with this in mind.

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