

An Assessment of the Term Funding Facility

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Abstract

The Term Funding Facility (TFF) was announced by the Reserve Bank Board in March 2020 as part of a comprehensive policy package to support the Australian economy in response to the COVID-19 pandemic. The facility has provided low cost three-year funding to banks operating in Australia against high quality collateral. The TFF closed to new drawdowns at the end of June 2021, so the last of this funding will not mature until mid 2024. This article provides an overview of TFF usage by banks, considers the future refinancing task for the banking sector, and provides an assessment of the TFF with respect to its primary policy goals.

In March 2020, the Reserve Bank Board announced the Term Funding Facility (TFF) as part of a comprehensive policy package to support the Australian economy in response to the COVID-19 pandemic. The facility has provided low cost three-year funding to banks operating in Australia. As for all central bank funding, funds are lent against high-quality collateral. The TFF had three overall aims:

- Support the banking sector to continue to extend credit to households and businesses at a time when wholesale funding markets had been significantly disrupted

- Lower funding costs for banks and, in turn, lower borrowing rates for their business and household customers
- Encourage banks to increase their lending to businesses, particularly small and medium-sized enterprises (SMEs).

The TFF initially gave banks access to three-year funding at a cost of 0.25 per cent, with:^[1]

- an 'initial allowance' equivalent to 3 per cent of each bank's total credit outstanding; banks could access their initial allowance until 30 September 2020

- an ‘additional allowance’, which was available until 31 March 2021 to any bank that managed to expand its business credit, particularly to SMEs – for every extra dollar lent (relative to a pre-pandemic baseline) to large businesses, a bank could access one additional dollar of funding from the Reserve Bank; for every extra dollar lent to SMEs, it had access to an additional five dollars of funding.

The Reserve Bank Board made a number of adjustments to the TFF in response to changes in economic and financial conditions:

- In September 2020, the TFF was expanded with a new supplementary allowance for each bank equivalent to 2 per cent of its credit outstanding, available to be drawn between 1 October 2020 and 30 June 2021. Also, the period for drawdowns for the additional allowance was extended by three months to 30 June 2021.
- In November 2020, the cost of new funding under the TFF was lowered to 0.1 per cent in line with reductions in the target cash rate and the three-year government bond yield target.

While the facility has now closed to new drawdowns, banks retain access to the funding they have drawn for up to three years when the final TFF borrowings mature in mid 2024.

This article provides an overview of TFF usage by banks, considers the future refinancing task for the banking sector, and provides an evaluation of the TFF with respect to its primary policy goals.

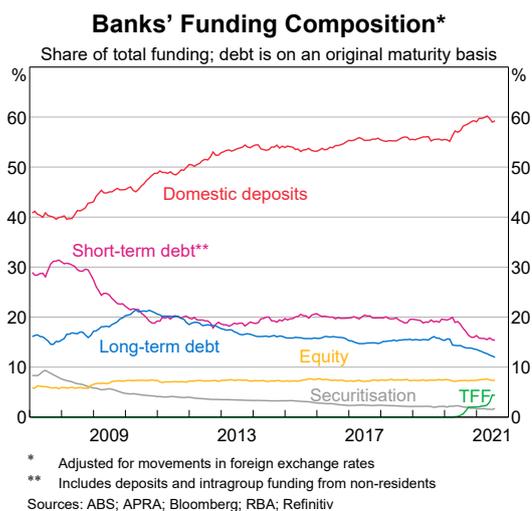
Banks accessed \$188 billion of funding from the TFF

The TFF has provided \$188 billion in funding to banks since its inception. This funding is equivalent to 4 per cent of banks’ non-equity funding (Graph 1), or 6 per cent of credit. The facility was announced on 19 March 2020, a time of significant uncertainty for financial markets in Australia and globally. The announcement of the Bank’s initial policy package, which included the TFF, contributed to an immediate reduction in volatility in markets and an improvement in sentiment, and the Bank’s expanded open market operations during that

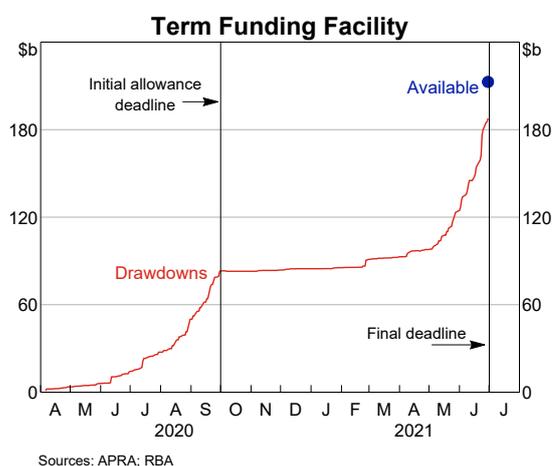
period supported banking sector liquidity. As a result, by the time the first TFF drawdowns became available in early April, funding conditions for banks had already improved.^[2] This allowed the banking sector to defer the bulk of drawdowns until closer to allowance deadlines, thereby locking in low-cost funding for as long as possible. Consistent with this, drawdowns were concentrated over two periods of heightened activity in the lead up to expiry dates for allowances (Graph 2).^[3]

Total funding available over the life of the TFF was \$213 billion. As a share of GDP, this was a similar amount to term lending facilities created by a number of other central banks, albeit smaller than the European Central Bank’s targeted long-term refinancing operations and larger than the US Federal Reserve’s Paycheck Protection Program

Graph 1



Graph 2



Liquidity Facility (Graph 3). Use of the TFF has been somewhat higher than comparable schemes to date. However, all but the US facility remain open to new drawdowns, and these facilities vary in purpose and design across the different central banks.

Most banks took up most of their TFF allowances

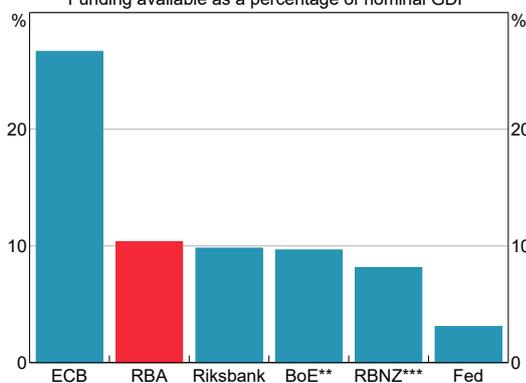
In aggregate, banks drew down 88 per cent of the total funding available from the facility. The major banks and mid-sized Australian banks took up all of their allowances, while small banks and foreign banks took up a little over half of their total allowances (Graph 4). Data on the drawdown amounts and allowances of the top 10 users of the facility were published with the August 2021 *Statement of Monetary Policy* and are listed in the Appendix; these accounted for almost 90 per cent of drawdowns from the facility. These banks include the four major banks as well as some smaller Australian banks. Differences in the amount drawn from the TFF within this group largely reflect differences in banks' total credit outstanding; this is consistent with each bank's initial and supplementary allowances having been based on its credit outstanding when the allowances were set in March 2020 and September 2020. For some of the smaller banks, the additional allowances they accumulated were significant, reflecting strong growth in their loans to businesses (particularly SMEs) since early 2020.

By number, 92 banks (around two-thirds of the 133 eligible banks) accessed the TFF.^[4] The 41 banks that did not access the facility represented a very small share of allowances by value (Graph 5). In large part these banks were small Australian banks and foreign banks, many with very small allowances, and some with larger allowances but with less ready access to eligible collateral at a low cost.

Self-securitisation notes (backed by pools of loans) were eligible to be used as collateral for TFF funding, in contrast to repo funding available through the Bank in open market operations.^[5] This ensured the banking system would have sufficient collateral to access the TFF at scale without having to draw upon large amounts of other securities to

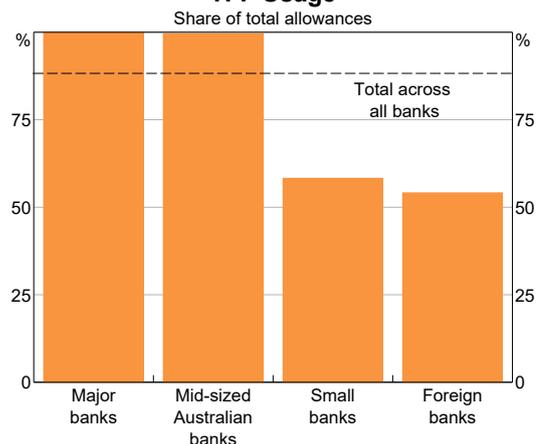
Graph 3

Size of Selected Term Funding Schemes*
Funding available as a percentage of nominal GDP



* Schemes created in response to COVID-19 pandemic
 ** Initial allowance only
 *** Funding for Lending program only
 Sources: Central Banks; RBA; UBS

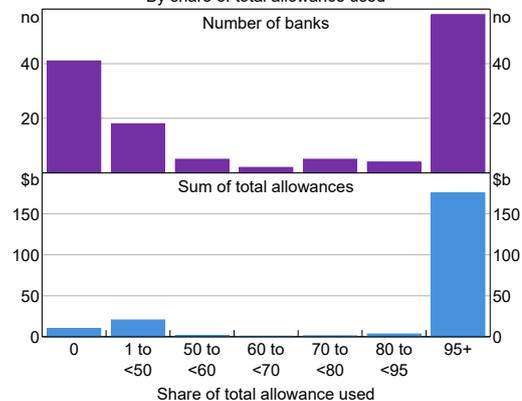
Graph 4
TFF Usage



Sources: APRA; RBA

Graph 5

Distribution of TFF Allowance Usage*
By share of total allowance used



* Includes 133 eligible banks as at the end of the drawdown period
 Sources: APRA; RBA

provide to the RBA, which might have otherwise disrupted these markets in the process.^[6]

Self-securitisations were generally the most cost-effective collateral eligible for banks to use for the TFF, as this type of collateral involves banks pledging AAA-rated notes backed by loans that are already on their balance sheets, rather than other, lower-yielding securities. As a result, those banks with self-securitisations available used them as much as possible (and some banks even created new self-securitisations to access the facility). Indeed, over 90 per cent of collateral pledged for the TFF by value was of this type (Graph 6). Conversely, those banks without self-securitisations generally accessed less TFF funding, pledging collateral such as Australian Government securities, semi-government bonds, bank bonds issued by other banks, or marketed residential mortgage-backed securities (RMBS).

A small number of banks terminated previously drawn TFF funding, although terminations during the drawdown window amounted to less than \$1 billion.^[7] The majority of terminations occurred following the November 2020 reduction in the interest rate on new TFF drawdowns. Banks that terminated at this time generally had limited low-cost collateral to access their full allowance and so it made sense for them to refinance part or all of their existing drawdowns with a new TFF drawdown at the lower rate of 0.10 per cent. Also, a number of small Australian banks terminated TFF funding

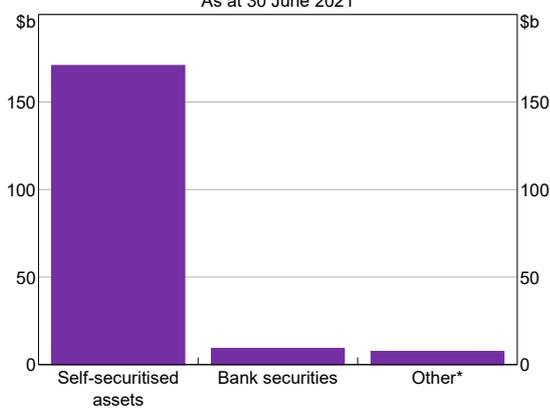
citing excess liquidity, particularly the availability of plentiful low-cost deposits.

TFF allowances grew towards the end of the drawdown window, driven by SME lending by some banks

Total funding of \$213 billion available over the life of the facility comprised: initial allowances of \$84 billion (which closed in September 2020, and of which \$80 billion was drawn down); \$57 billion of supplementary allowances; and \$72 billion of additional allowances. The availability of the supplementary allowance until 30 June 2021 ensured that banks that did not have any additional allowance kept access to the facility after the initial allowance closed.

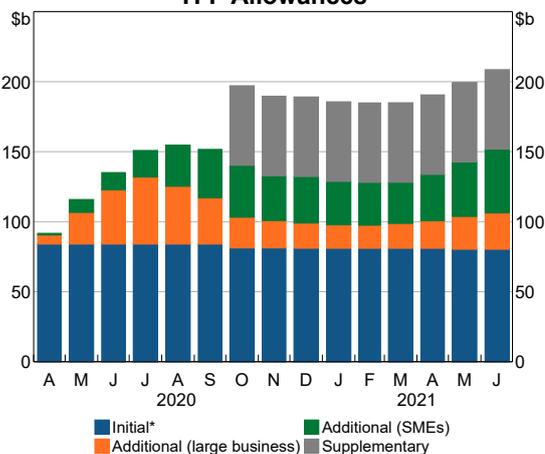
In contrast to the initial and supplementary allowances, the additional allowance varied over the life of the TFF, depending on each bank’s increase in lending to businesses relative to early 2020. Additional allowances rose strongly in the first few months following the commencement of the TFF (Graph 7). This reflected a sharp pick-up in large business lending, as businesses drew on revolving credit facilities for precautionary reasons in response to the COVID-19 shock. As businesses repaid the buffers they had drawn down and business credit declined, additional allowances declined through to early 2021 (Graph 8).

Graph 6
TFF Collateral
As at 30 June 2021



* Includes marketed RMBS/ABS, corporate bonds, AGS and semis
Source: RBA

Graph 7
TFF Allowances



* Represents final usage from October 2020 onwards, as the drawdown period for the initial allowance closed on 30 September 2020
Sources: APRA; RBA

Since then, and prior to the TFF allowances being finalised, aggregate lending to businesses by banks had been little changed. Nevertheless, additional allowances increased over the last few months of the TFF, driven by a number of banks that increased their business lending, particularly to SMEs. Consistent with this, the bulk of additional allowances available in June 2021 was due to increases in SME lending by some banks.

Overall commitments for new business loans increased over the three months to June 2021, as well as growth in business credit outstanding. Liaison with banks suggests that businesses had shown a bit more appetite to borrow, consistent with both improved economic conditions and the cessation of a number of measures that had supported cashflows – most notably the JobKeeper program, which concluded at the end of March 2021. However, this period largely predates the lockdowns across the eastern states in response to COVID-19 outbreaks.

The TFF has contributed to lower funding costs for banks and non-banks ...

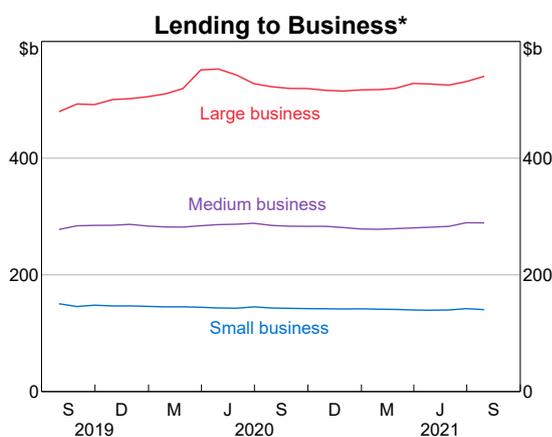
The TFF provided a degree of funding certainty for banks and has lowered bank funding costs by providing a low-cost source of funds. In particular, the TFF provided access to funds for three years at a cost that has been well below that of wholesale debt for the same term. The estimated cost of sourcing three-year unsecured funding in domestic wholesale debt markets for the major banks was

around 0.6 per cent at the end of June 2021, compared with 0.1 per cent for TFF funding (Graph 9). Taking into account the lower cost of funds and the share of bank funding provided, our estimates suggest that the direct effect of the TFF has been to lower major bank funding costs by around 5 basis points.^[8] Smaller banks pay higher rates to borrow in wholesale markets, so the difference between their wholesale funding costs and 0.1 per cent is larger. Since the last of this low-cost funding is not due to mature until mid 2024, the TFF will keep bank funding costs lower than otherwise for a number of years.

The TFF has also had an indirect effect on banks' funding costs. As banks have drawn on the TFF, they have largely refrained from issuing new senior unsecured debt in wholesale funding markets, so the total stock of bank bonds has declined as existing bonds have matured (Graph 10). The lower supply of bank bonds has led to a decline in spreads on these bonds in the secondary market.

Moreover, the TFF has also contributed to reduced spreads on securities issued by non-banks, which are close substitutes for bank bonds. Hence, the cost of issuing new bonds has declined for both banks and non-banks. In particular, spreads on newly issued non-bank RMBS to the bank bill swap rate (BBSW) have declined to their lowest level in over a decade (Graph 11). Non-bank lenders have responded by issuing large volumes of RMBS, and their market share in housing lending has

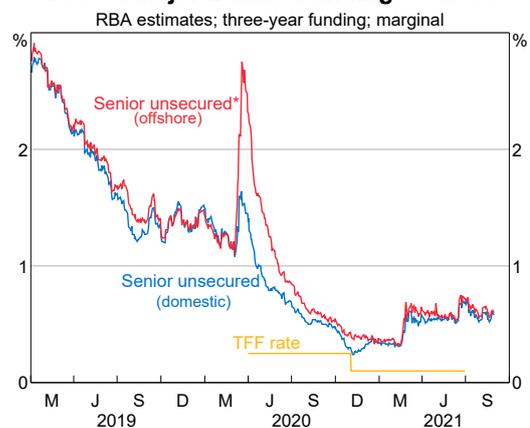
Graph 8



* Data cover financial institutions with \$2 billion or more in business credit
Sources: APRA; RBA

Graph 9

Cost of Major Banks' Funding Sources

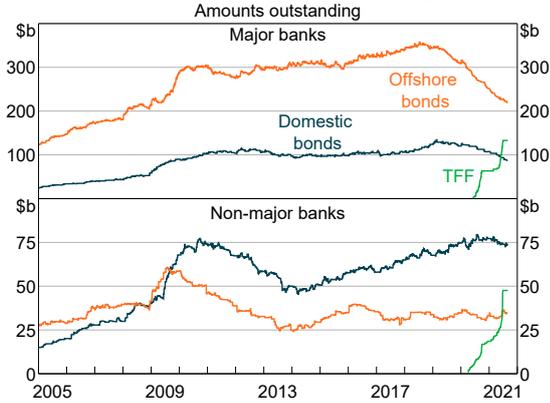


* Adjusted for cross-currency hedging
Sources: Bloomberg; RBA

rebounded from the modest decline around the middle of last year (Graph 12).

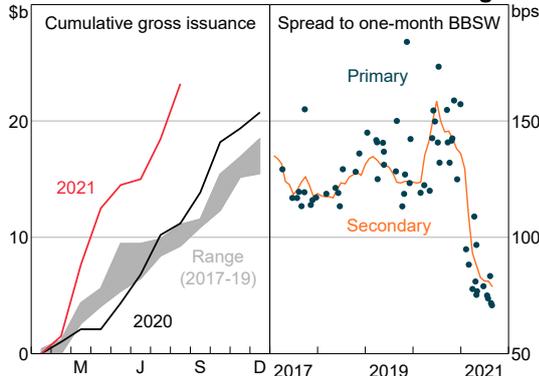
It is difficult to estimate the size of this indirect effect of the TFF on wholesale funding markets

Graph 10
Banks' Wholesale Funding
Amounts outstanding



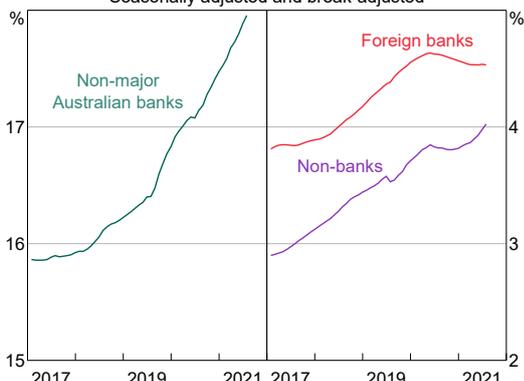
Sources: Bloomberg; RBA

Graph 11
Non-bank RMBS Issuance and Pricing



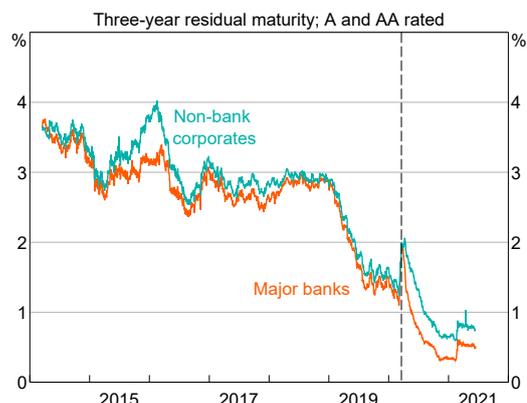
Sources: Bloomberg; ICE; KangaNews; RBA

Graph 12
Market Share of Housing Credit*
Seasonally adjusted and break-adjusted



* Major banks make up the remainder of market share
Sources: APRA; RBA

Graph 13
Bond Yields*
Three-year residual maturity; A and AA rated



* Dotted line indicates announcement date of TFF
Sources: Bloomberg; RBA

because the TFF was announced as part of a broader policy package in a period of significant market dysfunction. However, following the announcement of the TFF, along with other policy measures at the time, bank bond spreads fell by around 50 basis points more than the spreads of similarly rated non-bank and non-financial corporate bonds (Graph 13). This is broadly consistent with research that shows the Bank of England's Funding for Lending Scheme contributed to a narrowing in bank bond spreads compared with bonds issued by non-banks.

Another indirect effect of the TFF on bank funding costs is that it has contributed to the growth in deposits. With bank bonds maturing in sizeable volumes, banks repaid bondholders, who then returned these funds to the banking sector in the form of low-cost deposits.

... and, in turn, lower lending rates

As a result of the Reserve Bank's package of policy measures, including the TFF, bank funding costs have declined to historically low levels. This decline has, in turn, been passed through to lending rates, which are also historically low. On average, lending rates have declined in line with banks' overall funding costs, although the extent of reductions in interest rates has varied across different types of housing and business loans (Graph 14).

Since the end of February 2020, interest rates on variable-rate loans to SMEs and large businesses have declined by around 95 basis points. Interest

rates on fixed-rate loans to SMEs and large businesses have declined by around 80 and 60 basis points, respectively.

Rates on outstanding variable-rate housing loans have declined by around 55 basis points since February 2020, while interest rates on outstanding fixed-rate housing loans have declined by around 140 basis points.

The effectiveness of the additional allowance in encouraging business lending is difficult to assess

The TFF’s additional allowance was designed to encourage banks to lend to businesses, particularly SMEs. As outlined above, a bank was provided with \$1 of additional funding for every extra dollar it lent to large businesses, and \$5 for every extra dollar it lent to SMEs. Overall, the banks that had access to additional allowances generated \$26 billion of additional new lending to large businesses and \$9 billion to SMEs.

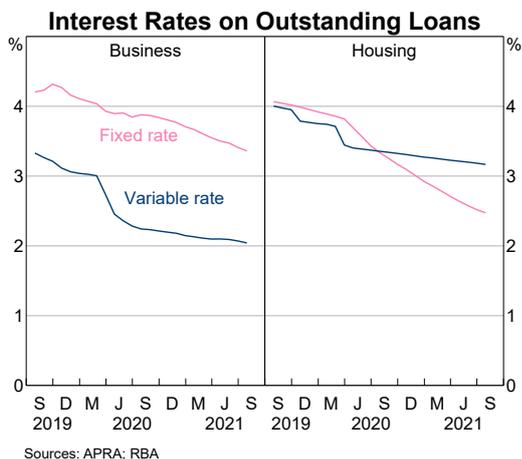
The effectiveness of the additional allowance in supporting aggregate growth of business credit growth is difficult to assess. Nevertheless, a number of banks that significantly increased their lending to SMEs reported in liaison that this was influenced by the incentive of the additional allowance. Overall business lending was little changed, with lending by a number of banks declining. Econometric estimates by Bank staff suggest there was little observable effect from the larger incentive for lending to SMEs compared with lending to large

business.^[9] However, it is difficult to control for other important factors that influenced the demand for business credit, such as the fact that SMEs were disproportionately in industries that were more severely affected by the pandemic, adversely affecting both the supply of and demand for credit. Also, SMEs received sizeable government support, via initiatives such as JobKeeper, which reduced the need for credit. It is worth noting that business credit has held up better during the sharp downturn in economic activity in 2020 than during the global financial crisis and earlier recessions (Graph 15). At least part of this difference may be attributable to the incentives to lend to businesses under the TFF.

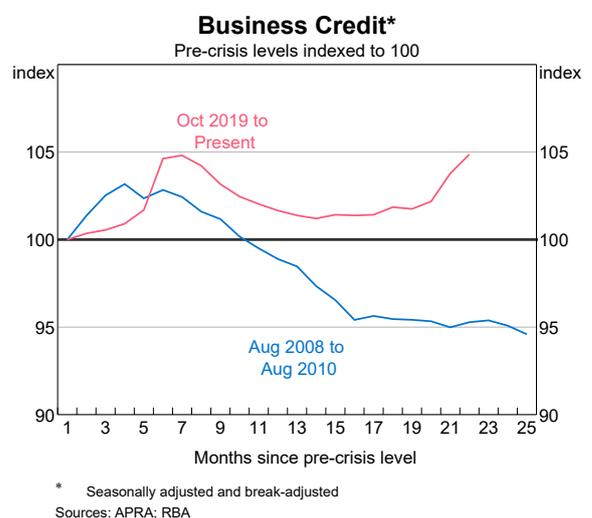
The TFF refinancing task that banks will face in two to three years is sizeable but manageable

Over the next two to three years, banks will need to repay the funding they have accessed from the TFF. Bank decisions about how to repay the funding will depend on a number of factors, including their asset growth and the price and availability of the full range of funding sources, including deposits. According to liaison, banks’ current plans are to raise a sizeable amount of funds to repay TFF funding (on or before maturity) from wholesale debt markets, thereby at least partly reversing the process whereby debt issuance declined as TFF drawdowns increased. The bulk of scheduled TFF maturities occur in the September 2023 and June

Graph 14



Graph 15



2024 quarters (Graph 16). If banks issue new debt to replace TFF drawdowns in the quarter of maturity, this would require quarterly issuance as a share of assets at levels not seen in over a decade (Graph 17; top panel).

However, banks are unlikely to refinance their TFF drawdowns right at the time they are scheduled to mature. In liaison, banks have flagged plans to issue bonds earlier than scheduled TFF maturities ('pre-funding').^[10] Banks can also terminate TFF repos early without any additional cost. Indeed, some banks have indicated willingness to terminate early and issue bonds at around the same time. These strategies would allow banks to spread the

refinancing task over a period of time, as illustrated by way of a hypothetical example in the bottom panel of Graph 17. This would serve to reduce the effect of refinancing on market conditions as well as offset the effect of approaching TFF maturities on their regulatory liquidity ratios.

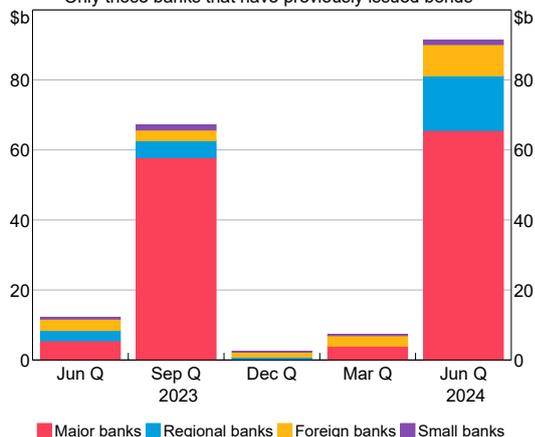
From the outset of the TFF, the RBA has been in regular contact with the Australian Prudential Regulation Authority (APRA) about this refinancing issue. APRA has been and will continue to engage closely with banks on their liquidity management. Based on aggregate flows, we do not anticipate that this refinancing task poses a significant challenge for the banking sector overall, provided there is no episode of broader market disruption at the time. Australian banks have issued similarly large volumes of bonds as a share of assets in the past without a large effect on the cost. They are highly rated by global standards and remain highly profitable. Liaison indicates that banks are planning carefully for this period, particularly in considering early repayments and ensuring that investors remain engaged.

Nonetheless, the aggregate nominal funding task is sizeable, and there is always uncertainty around the outlook three years ahead. The Bank and APRA will continue to monitor this issue closely.

Graph 16

Scheduled TFF Maturities

Only those banks that have previously issued bonds*



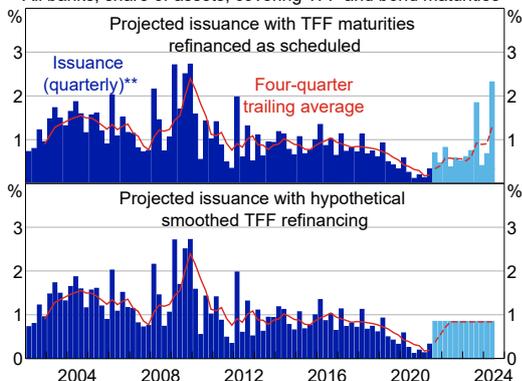
* These banks account for 96% of TFF drawdowns; maturities on 1 July 2024 included in June 2024 quarter value

Source: RBA

Graph 17

Bank Bond Issuance Scenarios

All banks, share of assets, covering TFF and bond maturities*



* Assumes 4 per cent annual asset growth

** During the period late 2008 to early 2010 considerable issuance was guaranteed under the Australian Government Guarantee Scheme

Sources: APRA; Bloomberg; RBA

The evidence suggests the TFF has met its goals and helped to support the Australian economy in the wake of the pandemic

With financial markets in Australia operating well, the TFF closed to new drawdowns on 30 June 2021 as scheduled. Banks drew \$188 billion from the facility. With the TFF providing funding for three years, it will continue to support low funding costs for the banking sector until mid 2024.

Along with the other monetary policy measures announced in March 2020, the TFF helped to stabilise funding markets and provide banks with a degree of funding certainty that supported the provision of credit to households and businesses. It has directly reduced funding costs for banks, and indirectly for other institutions issuing debt in wholesale funding markets. In turn, the facility – along with the Bank’s other policy measures – has

contributed to lower lending rates for households and businesses. The incentive for banks to lend to businesses, particularly SMEs, supported business credit. Some banks increased their lending to SMEs, and received additional funding in line with this incentive. However, business lending overall was

little changed over the TFF drawdown window in an environment of soft demand for business finance and government policy providing significant support to businesses' cash flows. ✎

Appendix

A.1: Top Ten Largest Drawdowns of the Term Funding Facility

Table A.1: Top Ten Largest Drawdowns of the Term Funding Facility by Bank

Bank name	Total Allowance		of which			
	Drawn-down (\$ billion)	Share of allowance (Per cent)	Initial ^(a) Drawn-down (\$ billion)	Share of allowance (Per cent)	Supplementary and Additional ^(b) Drawn-down (\$ billion)	Share of allowance (Per cent)
CBA	51.14	100.0	19.15	100.0	31.99	100.0
NAB	31.87	100.0	14.27	100.0	17.60	100.0
Westpac	29.78	100.0	17.90	100.0	11.89	100.0
ANZ	20.09	100.0	12.00	99.8	8.09	99.9
Macquarie	11.26	99.1	1.72	100.0	9.53	98.9
ING Bank (Aust.)	5.42	100.0	1.87	100.0	3.55	99.9
Bendigo Bank	4.72	100.0	1.83	100.0	2.89	100.0
Suncorp	4.13	100.0	1.74	100.0	2.39	100.0
Judo Bank	2.86	33.1	0.03	99.8	2.83	32.9
BoQ	2.15	100.0	1.24	100.0	0.92	100.0

(a) Closed on 30 September 2020.

(b) Closed on 30 June 2021. For more information on these allowances, see RBA, 'TFF Operational Notes.' Available at <<https://www.rba.gov.au/mkt-operations/term-funding-facility/operational-notes.html>>

Source: RBA

Footnotes

[*] The authors are from Domestic Markets department.

[1] For more detail on this initial phase of the TFF, see Lowe (2020), RBA (2020a), RBA (2020b) and Alston *et al* (2020).

[2] Banks could also count undrawn TFF allowances during the window they were available to be drawn as liquid assets to meet their regulatory liquidity requirements, to the extent they had eligible collateral that would not otherwise be counted (such as the debt of other banks). As a result, the TFF also immediately eased liquidity needs for some banks.

[3] For more information on why banks might delay TFF drawdowns until close to the deadline, see Kent (2020).

[4] While there are around 145 banks registered with APRA, only 133 are currently members of the Reserve Bank

Information and Transfer System (RITS) for settlement of high-value payments and thus eligible counterparties for RBA financial market operations.

[5] Self-securitisations are structured pools of assets, such as residential mortgages, created by banks specifically to use as collateral to access liquidity from the Reserve Bank (Cole and de Roure 2020).

[6] Self-securitisations are eligible for the Bank's Committed Liquidity Facility (CLF) under the same rationale.

[7] Banks can terminate TFF funding at any time with no additional cost.

[8] Hedging the TFF from fixed to variable was also very cheap through late 2020 and most of 2021; the elevated swap rate meant the initial cost of drawing down the TFF

was negative. This benefit will become a cost should interest rates rise, but interest from banks' variable rate assets would also rise.

[9] These estimates are broadly consistent with the OECD's assessment of a similar incentive in the Bank of England's Funding for Lending scheme (Havrylchyk 2016).

[10] Banks can also 'post-fund' if they accumulate excess liquid assets prior to maturity (and then, following TFF repayment, accumulate liquid assets back to the desired level).

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