

9 November 2022

SENATE ESTIMATES

Opening Statement to the Economics Committee

The last time the AOFM appeared before this committee was in October 2020. It has been an eventful two years since then. This statement focusses on the AOFM's borrowing activities, including some context; a description of the recent operating environment and bond issuance during the last two years; and some observations about the near-term future.

Some context

The AOFM regularly issues into Treasury Bond lines across the yield curve. Issuing into bond lines with a wide range of maturities assists market liquidity by supporting diversity in the investor base, stimulating active trading in bond lines, and ensuring that the 'free float' of all bond lines is of sufficient size. Bond market functionality and liquidity are important for investors and ultimately reduce the AOFM's borrowing costs. Spreading the volume of bonds that needs to be refinanced across many years also keeps future borrowing programs relatively steady, which reduces risk by avoiding large refinancing peaks.

The AOFM began extending the length of the yield curve around a decade ago. Over that time, the tenor of the longest Treasury Bond has increased from around 12 years to 30 years, and the weighted average maturity (WAM) of bond issuance has risen from around 6 years to around 10 years.

There are several benefits to the lengthening of the AOFM's debt issuance.

- Annual gross issuance requirements are lower, because less debt needs to be issued to replace maturing debt.
- The impact of interest rate volatility on budget outcomes is reduced.
- The investor base for Australian Government Securities is broader, encompassing investors with diverse preferences and needs, reducing the risk that all investors will seek to exit at once.
- A longer yield curve also offers more issuance options, which enhances the AOFM's operational flexibility.
- Lengthening the risk-free yield curve has also facilitated long-dated bond issuance by other entities, particularly state and territory borrowing authorities.

The yield curve was extended gradually in a 5-year process. First, 15-year benchmark bonds were established, then 20-year bonds, then 30-year bonds. The gradual approach enabled the market to become familiar with how long-dated Australian government bonds would trade over time.

Issuance of large volumes of ultra-long bonds is constrained by what the market can bear – only a subset of the investor base will buy bonds longer than 12 years. Although demand for ultra-long Australian dollar bonds has grown as the AOFM has developed the market, issuance primarily relies on demand from offshore private sector investors, since domestic investors and offshore central banks tend to heavily weight their portfolios towards 0-12 year bonds. There is insufficient demand for Australian dollar denominated bonds longer than 30 years to support further extension of the yield curve. Almost every other sovereign debt issuer faces similar constraints to those faced by the AOFM.

The AOFM has no control over the levels of bond yields and is in no better position to predict changes in yields than other market participants. Rather than attempting to concentrate borrowing at times when yields are perceived to be 'low', the AOFM aims to be transparent, regular and predictable. This approach will reduce borrowing costs over time and ensure consistent access to funding markets.

However, in order to meet its objective of facilitating an orderly bond market, the AOFM needs to be mindful of underlying demand dynamics. As I will shortly explain in greater detail, while the AOFM had a bias towards issuing long bonds when the cost of doing so was at historic lows, it needed to ensure that it did not issue them in volumes that exceeded the market's capacity to absorb them, lest it cause a dislocation.

The operating environment and bond issuance in the last two years

Amidst a backdrop of extremely accommodative monetary policy settings in Australia and elsewhere, bond yields remained low in 2020-21. The RBA's yield target regime was in place for the entire year; the bond purchase program began in November 2020.

The AOFM issued a large volume of long-dated bonds at historically low yields in 2020-21. The financing task for the year was met primarily via \$207 billion of Treasury Bond issuance, with an extremely low average issuance yield of 0.99 per cent. The WAM of bond issuance in 2020-21 exceeded 10 years. \$15 billion of a new 30-year benchmark bond was issued at a yield below 2 per cent.

2021-22 was a year of two halves for bond yields. The dominant market view until late-2021 was that emerging inflationary pressures would be transitory. This view, coupled with ongoing quantitative easing from the RBA and other central banks, ensured bond yields remained at relatively low levels. Yields rose significantly from the beginning of calendar 2022 as central banks began to react to a more sustained rise in inflation, which was driven by a combination of strong consumer demand, continuing supply shortages and rising energy prices. Economists and market participants, including the AOFM, did not anticipate the speed or magnitude of the increase in bond yields. 10 year bond yields increased by around 2 per cent over the year amongst bouts of extreme volatility.

Treasury Bond issuance in 2021-22 totalled \$96 billion, significantly less than in the previous year. The average issuance yield was 1.9 per cent and the WAM of issuance was 8.6 years. Factors contributing to the lower WAM included some shorter-dated issuance to support market functioning for bond lines that had been the subject of heavy RBA purchases, which served to reduce the 'free float' of these lines. Moreover, there was limited investor demand for long-dated bonds at times because of significant market volatility.

2022-23 has thus far seen continued volatility and higher bond yields domestically and abroad, with markets reacting to more entrenched inflation and weighing the risks that central bank policy actions may tip some major developed economies into recession. Despite, or perhaps because of this, investor demand for our Treasury Bonds has remained relatively robust, albeit still limited for ultra-long tenors. \$25.2 billion of Treasury Bonds have been issued at an average yield of 3.5 per cent and WAM of 8.8 years so far in 2022-23.

Looking forward

The market was updated on the expected size of the 2022-23 Treasury Bond program following the release of the Budget last month. Around \$95 billion of bond issuance is planned.

Bond yields are higher than they have been for some years and are not expected to return to the extremely low levels that prevailed between 2019 and 2021. The yield curve is relatively flat beyond 2023 – the difference between short-dated bond yields and long-date bond yields has fallen significantly courtesy of the gradual unwinding of unconventional monetary policy settings, and several cash rate increases.

Large-scale RBA bond purchases, as part of extraordinary pandemic monetary policy settings, significantly reduced the ‘free float’ of some bond lines available for market trading. In the absence of sales from the RBA, which we understand to not be in prospect, AOFM issuance to assist liquidity in these bond lines can be expected to continue over the coming years.

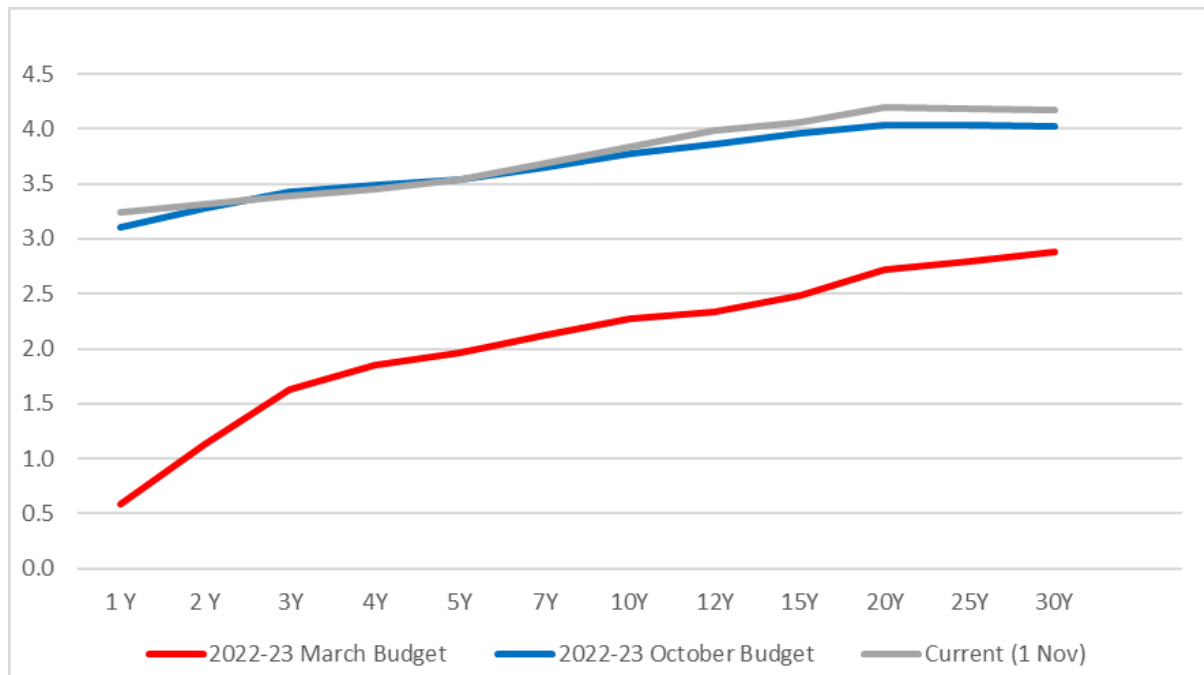
The lengthening of the tenor of AOFM’s debt portfolio undertaken over an extended period, means that it will take some years for higher bond yields to be fully reflected in the government’s interest costs. Only a quarter of the current Treasury Bond portfolio will mature in the next three years, so the interest costs relating to the other three-quarters of the portfolio are ‘locked-in’ for the next 3-30 years. Only new issuance, to replace the maturing bonds and to meet additional government funding requirements, is subject to prevailing market interest rates.

Budget - Key Debt Aggregates

Table 6: Comparison of budget aggregates to PEFO

	Forecasts							
	2022-23		2023-24		2024-25		2025-26	
	\$b	% GDP	\$b	% GDP	\$b	% GDP	\$b	% GDP
Underlying cash balance	-36.9	-1.5	-44.0	-1.8	-51.3	-2.0	-49.6	-1.8
PEFO	-77.9	-3.4	-56.5	-2.4	-47.1	-1.9	-42.9	-1.6
Gross debt	927.0	37.3	1004.0	40.8	1091.0	42.5	1159.0	43.1
PEFO	977.0	42.5	1056.0	44.6	1117.0	44.9	1169.0	44.7
Net debt	572.2	23.0	634.1	25.8	702.8	27.4	766.8	28.5
PEFO	714.9	31.1	772.1	32.6	823.2	33.1	864.5	33.1
Receipts	607.2	24.5	621.4	25.3	642.8	25.1	679.0	25.2
PEFO	548.5	23.8	585.2	24.7	615.2	24.7	643.9	24.6
Payments	644.1	25.9	665.5	27.0	694.2	27.1	728.6	27.1
PEFO	626.5	27.2	641.7	27.1	662.3	26.6	686.8	26.3
Total interest payments	18.9	0.8	22.4	0.9	25.4	1.0	32.6	1.2
PEFO	17.9	0.8	20.3	0.9	21.6	0.9	26.3	1.0

Yield Curves



Note: For Budget purposes, it is assumed yield curves are constant from 2022-23 to 2025-26.

Syndicated Issuance

Face value of issuance (\$ billion)

	2019 - 20	2020 - 21	2021 - 22	2022 - 23 (YTD)
Treasury Bonds	128.2	207.3	96.0	25.2
tender	94.2	109.3	81.0	25.2
syndication	34.0	98.0	15.0	0.0
% share by syndication	26.5%	47.3%	15.6%	0.0%
TIBS	1.65	2.50	5.25	0.55
tender	1.65	2.50	2.00	0.55
syndication	0.00	0.00	3.25	0.00

- Syndication played a key role when funding needed to be ramped up across Q4 2019-20 and fiscal 2020-21.
- Usage has fallen subsequently as the financing task has eased.

Syndication fees paid (TBs only)

	2019 - 20	2020 - 21	2021 - 22	2022 - 23 (YTD)
Number of transactions	3	6	1	0
fees paid (\$million)	32.9	86.9	13.2	0
fees paid (bp equivalent)	1.4	1.0	0.9	

- Across full period:
 - \$147 billion face value of syndicated Treasury Bond issuance.
 - \$132.99 million paid in fees (inc GST)
 - : Equivalent to around 1.1 basis points or 1.1 hundredths of a percent.
- The AOFM has reduced fees paid from 15 cents (pre covid) to 8 cents per \$100 of face value issued (excl. GST)
- Syndicate fees offered by the AOFM are generally lower (on a proportionate basis) than other issuers.
- Note there was a single TIB syndication in 21-22 – \$3.25 billion face value issued, \$2.9 million in fees paid, 0.7 basis point equivalent.

Fee offset from tender (TBs only)

	2019 - 20	2020 - 21	2021 - 22	2022 - 23 (YTD)
Tender gain (\$million)	22.7	51.5	35.4	18.0

- Fees are in part offset by the aggressive competition between bank intermediaries in tenders that sees them purchase bonds from the AOFM at yields below the prevailing secondary market yield.

- They do this to improve their ranking for JLM selection in syndicate deals - effectively they 'loss-lead' on tenders with a view to earning it back later through syndicate fees.
- AOFM estimates that this is worth around \$127.5 million over the period from 2019-20 until today (i.e. suggesting 96% of fees have been recovered over this period).

Benefits of Syndication

- places bonds directly into the hands of end investors - bypassing bank balance sheets which can be a "bottle neck" when the required funding rate is high.
- enables bond lines to be built to liquid size immediately which is beneficial for market efficiency/liquidity, follow-on trading and subsequent tenders.
- provides the AOFM with a direct line of sight to end investors enabling subsequent investor relation/marketing activity to be better targeted.
- provides surety around funding position when fiscal uncertainty is elevated. Allows for much higher volume transactions.
- encourages more aggressive bidding in tenders by intermediaries.
- reduces AOFM execution risk in meeting Government financing needs.
- many end investors value the opportunity to access large volumes of TBs at a point in time with confidence about the price (i.e. bypassing the secondary market facilitates this). Syndication supports more diverse participation in the AGS market.

Services Rendered

- JLMs selected in syndicated transactions execute the issuance and placement of Bonds, involving:
 - the bookbuild process. This includes providing the technical infrastructure to record, amend and finalise bids/allocations in a system that is compatible with downstream settlement/distribution systems + client relationships + staff with expertise to manage client relationships.
 - risk management, hedging and switching process.
 - ticketing, settlement and selling restriction compliance.

Could AOFM fund solely through tenders?

- Technically yes but no guarantee that AOFM funding would be as orderly (as it has been) or that participation in the AGS market from intermediaries and investors would be as broadly based.
- A mix of funding channels allows the AOFM to better calibrate its activities to the funding task and market conditions. This better supports a healthy well-functioning and liquid market in AGS which is the key to cost effective and reliable government financing.

Reconcile Net HCB and Financing Task and change in FV of Gross Debt

	2022-23	2023-24	2024-25	2025-26	TOTAL	Comment
UCB	- 36.9	- 44.0	- 51.3	- 49.6	- 81.8	
Investments for policy purposes	- 12.7	- 6.7	- 13.7	- 14.0	- 47.1	
Student loans	- 3.8	- 4.6	- 5.0	- 5.2	- 18.6	
NBN loan	0.9	5.5	0.0	0.0	6.4	
NBN investment	- 0.3	- 0.7	- 1.0	- 0.3	- 2.4	
Trade support loans	- 0.2	- 0.2	- 0.2	- 0.1	- 0.7	
CEFC loans and investments	- 0.7	- 0.6	- 1.5	- 2.9	- 5.8	
Northern Australia Infrastructure Facility	- 0.7	- 1.0	- 1.1	- 1.0	- 3.8	
Australian Business Securitisation Fund	- 0.4	- 0.3	- 0.3	- 0.3	- 1.1	
Structured Finance Support Fund	0.3	0.3	0.1	0.1	0.7	
Drought and rural assistance loans	- 0.3	- 0.2	- 0.2	- 0.1	- 0.9	
Official Development Assistance Multilateral Replenishment	- 0.1	- 0.1	- 0.1	- 0.2	- 0.6	
National Housing Finance and Investment Corporation	0.0	- 0.2	- 0.5	0.3	- 0.4	
COVID-19 Support for Indonesia loan	0.1	0.1	0.1	0.1	0.4	
Financial Assistance to Papua New Guinea Loan	0.1	0.1	0.1	0.1	0.3	
Net other	- 7.4	- 4.7	- 4.1	- 4.5	- 20.8	
(1) HCB	- 49.6	- 50.7	- 65.0	- 63.6	- 229.0	
NOT PUBLIC						
Difference between financing task and HCB						
(2) Items in HCB which are not financed by AOFM						
Fund reinvestments	- 8.0	- 8.5	- 8.9	- 9.3	- 34.6	Interest/dividend receipts are included in UCB - but are not in the financing task because they are directly reinvested into the fund
Fund payments	7.6	6.8	5.7	5.7	25.7	Fees and fund disbursements are included in UCB but are not in the financing task because they are funded from the fund
(3) Items which are financed by AOFM but not in HCB						
Investments for liquidity purposes						
(4) Unreconciled	2	0	2	4	7.8	
Cash position to be financed by AOFM (from BPO) (1 2 3 4)	-72.1	-59.9	-78.7	-65.2	-275.9	
Other financing - AOFM	- 8.8	- 6.4	- 7.3	- 7.3	- 29.7	
- Non cash impacts in GFS interest paid	- 4.5	- 2.1	- 2.3	- 2.3	- 11.2	
- Borrowing premiums/discounts and infl accretion	- 4.2	- 4.3	- 5.0	- 4.9	- 18.5	This is \$30.8 billion higher than the 2022-23 Budget (March) projections - this number is referenced in B57
- Discount to FV on Treasury Notes	- 0.1	- 0.0	-	- 0.0	- 0.1	
Total cash deficit to be financed by AOFM	-80.9	-66.3	-86.0	-72.4	-305.6	

s 47D

CHANGES IN BUDGET 2022-23 (October) FROM BUDGET 22-23 (March)

		2021-22	2022-23	2023-24	2024-25	2025-26	2021-22	2022-23	2023-24	2024-25	2025-26	Explanation
FISCAL AGGREGATES												
		\$ Billion					Per cent of nominal GDP					
Underlying Cash Balance	BUDGET 2022-23 (October)	-32.0	-36.9	-44.0	-51.3	-49.6	-1.4	-1.5	-1.8	-2.0	-1.8	<i>HCB incorporates government investment for policy purposes as well as the net operating position. It's the starting point for the AOFM's financing task.</i>
	BUDGET 2022-23 (March)	-79.8	-78.0	-56.5	-47.1	-43.1	-3.5	-3.4	-2.4	-1.9	-1.6	
		47.8	41.1	12.5	-4.2	-6.5	2.1	1.9	0.6	-0.1	-0.2	UCB improved compared to March Budget leading to a lower financing requirement overall.
			90.7									
Headline Cash Balance	BUDGET 2022-23 (October)	-33.3	-49.6	-50.7	-65.0	-63.6	-1.5	-2.0	-2.1	-2.5	-2.4	<i>HCB also improved overall from March Budget.</i>
	BUDGET 2022-23 (March)	-85.8	-90.8	-60.4	-57.2	-49.9	-3.7	-3.9	-2.6	-2.3	-1.9	
		52.5	41.2	9.7	-7.8	-13.7	2.2	1.9	0.5	-0.2	-0.5	
			81.8									
FINAL PDI RUN CALCULATIONS												
		\$ Billion										
NOT PUBLIC												
Headline Cash Balance (at final PDI run)	BUDGET 2022-23 (October)	-40.4	-66.4	-52.7	-75.5	-61.6						<i>Note this is the derived HCB behind the AOFM financing task provided at the last BUDGET PDI run on 18 Oct 2022.</i>
	BUDGET 2022-23 (March)	-73.4	-90.5	-66.5	-55.8	-52.6						
		33.0	24.1	13.8	-19.7	-9.0						HCB improved overall compared to March Budget.
			42.1									
NOT PUBLIC												
Funds operating flows (at final PDI run)	BUDGET 2022-23 (October)	-2.0	-5.7	-7.2	-3.2	-3.6						Aggregate fund transfer activity (outflows) increased compared to March Budget.
	BUDGET 2022-23 (March)	-5.3	-5.0	-6.0	-2.0	-2.3						
		3.3	-0.7	-1.2	-1.2	-1.3						Cash financing requirement decreased significantly compared to March Budget.
			-1.2									
NOT PUBLIC												
Cash financing for AOFM (at final PDI run)	BUDGET 2022-23 (October)	-42.4	-72.1	-59.9	-78.7	-65.2						Some of the improvements in UCB were offset by other financing. Specifically, an increase in yields has increased the amount of issuance the AOFM is required to meet the financing task.
	BUDGET 2022-23 (March)	-78.7	-95.5	-72.4	-57.8	-54.9						
		36.3	23.4	12.5	-21.0	-10.3						*As the derived HCB is significantly different from the published HCB - a reconciliation has been provided separately.
			40.9									
NOT PUBLIC												
Other financing (at final PDI run)	BUDGET 2022-23 (October)	-3.9	-8.8	-6.5	-7.4	-7.3						
	BUDGET 2022-23 (March)	-1.6	-1.6	-0.4	-0.6	-0.1						
		-2.2	-7.2	-6.1	-6.8	-7.2						
			-29.5									
NOT PUBLIC												
New Financing Task (at final PDI run)	BUDGET 2022-23 (October)	-46.2	-80.9	-66.4	-86.1	-72.5						<i>The amount of debt (in FV terms) that the AOFM needs to raise starts with the HCB but is adjusted for financing effects (such as premiums/discounts), other financing flows and funds transfers (where cash flows have been hypothecated in some manner). This net new financing task will be closely related to the net change in AGS. Taking account of scheduled debt maturities and early debt repurchases will determine the gross financing task. This will largely determine the gross term issuance program with any residual financing met through net movements in liquidity assets and short term debt (leading to funding ratios other than 100%).</i>
	BUDGET 2022-23 (March)	-80.3	-97.1	-72.8	-58.3	-55.0						
		34.1	16.2	6.4	-27.8	-17.6						Overall, the AOFM's issuance program has decreased slightly compared to March Budget, a result of the improved budget cash position.
			11.4									This can be reconciled as follows
NOT PUBLIC												
Refinancing Task (at final PDI run)	BUDGET 2022-23 (October)	-23.2	-85.5	-35.9	-82.2	-88.0						Over the FE (2021-22 to 2025-26), cash financing improved by 40.9.
	BUDGET 2022-23 (March)	-23.2	-85.5	-34.4	-79.7	-91.9						
		0.0	0.0	-1.5	-2.5	3.8						Other financing increased by 29.5 (decrease in premiums/proceeds on issuance).
			-0.1									Leaving 11.4 decrease in new financing required.
NOT PUBLIC												
Total Financing Task (at final PDI run)	BUDGET 2022-23 (October)	-69.5	-166.4	-102.3	-168.3	-160.6						Refinancing increased by 0.1 as more issuance was done in shorter lines when compared to March Budget.
	BUDGET 2022-23 (March)	-103.6	-182.6	-107.2	-138.0	-146.9						
		34.1	16.2	4.9	-30.3	-13.7						Leaving 11.3 decrease in total financing requirement.
			11.3									To meet the change, long term issuance was decreased by 2.2 and a net change in liquid assets decreased by 9.1 (or, 9.1 extra cash was retained for cash management purposes over the FE).
NOT PUBLIC												
Issuance Program	BUDGET 2022-23 (October)	101.3	97.5	112.5	171.5	157.5						
	BUDGET 2022-23 (March)	110.4	137.5	109.5	142.5	142.5						
		-9.2	-40.0	3.0	29.0	15.0						
			-2.2									
NOT PUBLIC												
Net Change Liquid Assets	BUDGET 2022-23 (October)	-31.8	68.9	-10.2	-3.2	3.1						
	BUDGET 2022-23 (March)	-6.8	45.1	-2.3	-4.5	4.4						
		-24.9	23.8	-7.9	1.3	-1.3						
			-9.1									
		30-Jun-22	30-Jun-23	30-Jun-24	30-Jun-25	30-Jun-26	30-Jun-22	30-Jun-23	30-Jun-24	30-Jun-25	30-Jun-26	

CHANGES IN BUDGET 2022-23 (October) FROM BUDGET 22-23 (March)

STOCK OF DEBT

		\$ Billion					Per cent of nominal GDP				
Face Value of AGS (EOY)	BUDGET 2022-23 (October)	895	927	1,004	1,091	1,159	39.0	37.3	40.8	42.5	43.1
	BUDGET 2022-23 (March)	906	977	1,056	1,117	1,169	34.5	44.8	50.5	51.6	51.6
		-11	-50	-52	-26	-10	4.5	-7.5	-9.7	-9.1	-8.5
Change in FV of AGS	BUDGET 2022-23 (October)	78	32	77	87	68					
New Financing Task	BUDGET 2022-23 (October)	-46	-81	-66	-86	-73					
Change Liquid Assets	BUDGET 2022-23 (October)	-32	69	-10	-3	3					
		-78	-12	-77	-89	-69					
Face Value of AGS (Within year PEAK)	BUDGET 2022-23 (October)	896	947	1,024	1,114	1,186	39.0	38.1	41.6	43.4	44.1
	BUDGET 2022-23 (March)	906	982	1,071	1,131	1,193	39.5	42.7	45.2	45.4	45.6
Market Value of AGS (EOY)	BUDGET 2022-23 (October)	848	878	963	1,056	1,127					
	BUDGET 2022-23 (March)	929	1,004	1,088	1,153	1,207					
		-81	-126	-125	-96	-79					
Net Debt Market Value (EOY)	BUDGET 2022-23 (October)	516	572	634	703	767	22.5	23.0	25.8	27.4	28.5
	BUDGET 2022-23 (March)	631	715	772	823	865	27.6	31.1	32.6	33.1	33.1
		-116	-143	-138	-120	-98	-5.1	-8.1	-6.8	-5.7	-4.6
Cash Balance with RBA Face Value (EOY)	BUDGET 2022-23 (October)	86	39	50	51	47					
	BUDGET 2022-23 (March)	65	39	45	48	45					
		21	0	5	3	1					

A decrease in the financing requirement means that the Face Value of AGS is growing by less over the FE compared to March Budget.

Change in MV of AGS is mainly driven by the increase in yields. Some smaller proportion of the decrease is the result of a lower financing requirement.

2021-22 2022-23 2023-24 2024-25 2025-26 2021-22 2022-23 2023-24 2024-25 2025-26

INTEREST COST

		\$ Billion					Per cent of nominal GDP				
Interest Payments on AGS	BUDGET 2022-23 (October)	-15.7	-18.1	-21.5	-24.5	-31.7	-0.7	-0.7	-0.9	-1.0	-1.2
	BUDGET 2022-23 (March)	-17.0	-17.4	-19.7	-21.0	-25.7	-0.7	-0.8	-0.8	-0.8	-1.0
		1.3	-0.7	-1.8	-3.4	-6.0	0.0	0.1	-0.1	-0.2	-0.2
				-10.7							
Net Interest Payments	BUDGET 2022-23 (October)	-15.0	-13.6	-16.6	-19.4	-26.5	-0.7	-0.5	-0.7	-0.8	-1.0
	BUDGET 2022-23 (March)	-14.9	-15.1	-16.9	-18.0	-22.4	-0.7	-0.7	-0.7	-0.7	-0.9
		-0.1	1.4	0.3	-1.4	-4.1	0.0	0.2	0.0	-0.1	-0.1
				-3.9							
Interest Expense on AGS	BUDGET 2022-23 (October)	-18.5	-22.4	-24.2	-27.7	-32.0	-0.8	-0.9	-1.0	-1.1	-1.2
	BUDGET 2022-23 (March)	-18.4	-19.8	-21.2	-23.1	-24.6	-0.8	-0.9	-0.9	-0.9	-0.9
		-0.1	-2.6	-2.9	-4.6	-7.4	0.0	0.0	-0.1	-0.2	-0.3
				-17.6							
Net Interest Expense	BUDGET 2022-23 (October)	-15.5	-18.0	-19.7	-27.7	-28.1	-0.7	-0.7	-0.8	-1.1	-1.0
	BUDGET 2022-23 (March)	-16.7	-17.7	-18.3	-20.1	-21.3	-0.7	-0.8	-0.8	-0.8	-0.8
		1.2	-0.3	-1.4	-7.6	-6.9	0.0	0.1	0.0	-0.3	-0.2
				-14.9							
Weighted Average New Issuance Yield	BUDGET 2022-23 (October)			3.8							
	BUDGET 2022-23 (March)			2.3							
				1.6							
BUDGET 2022-23 (October) Interest Payments on AGS @ BUDGET 2022-23 (October) and BUDGET 2022-23 (March) Yield Curves	BUDGET 2022-23 (October)	-15.7	-18.1	-21.5	-24.5	-31.7					
	BUDGET 2022-23 (March)	-17.0	-17.2	-18.7	-20.1	-25.3					
		1.3	-0.9	-2.8	-4.3	-6.4					
					-13.2						

As the face value of debt increases, interest costs increase with a lag until the full year effects are felt. The effect of changing interest rates flows through faster because it is dependent not only on the increase in the stock but also on the amount of debt rolling over each year.

Despite the overall decrease in financing requirement and AGS portfolio levels, interest payments on AGS have increased over the FE because of the increase in yields (circa 150bp since March Budget).

Also, we are relieving less proceeds on our issuance. Premiums have diminished compared to March budget and in many cases we are projecting to issuing at a discount on newer lines with very low coupon rates. We now require a higher Face Value amount of issuance to meet the same new financing requirement.

Over the FE (to 2025-26), interest payments on AGS have increased by around \$10.7 billion compared to March Budget.

The weighted average new issuance yield increased by around 150 basis points compared to March Budget.

Applying the March Budget yield curve to the October Budget issuance program results in an reduction of interest payment on AGS of around \$13.2 billion over the FE (2021-22 to 2025-26).

Baseline, High and Low are the absolute* numbers used for MT analysis in the Budget Docc.
 *not the % of GDP as presented in the docc.

		30/06/2023	30/06/2024	30/06/2025	30/06/2026	30/06/2027	30/06/2028	30/06/2029	30/06/2030	30/06/2031	30/06/2032	30/06/2033
Gross AGS	Baseline	926,769	1,003,940	1,090,665	1,158,920	1,243,617	1,334,707	1,430,846	1,527,598	1,629,967	1,715,134	1,804,329
	High	926,769	1,005,902	1,100,011	1,180,018	1,277,340	1,380,626	1,487,462	1,596,086	1,715,880	1,817,699	1,923,408
	Low	926,769	1,001,476	1,079,824	1,134,840	1,206,885	1,285,471	1,370,089	1,455,504	1,542,226	1,612,746	1,688,118
	MYEFO	920,807	989,114	1,064,994	1,119,489	1,191,115	1,267,628	1,350,268	1,433,947	1,522,673	1,592,775	1,666,413
PDI	Baseline	- 18,057 -	21,491 -	24,456 -	31,700 -	31,984 -	38,950 -	40,792 -	45,291 -	57,065 -	62,848 -	69,217 -
	High	- 18,057 -	21,623 -	25,140 -	33,405 -	35,127 -	44,025 -	48,301 -	55,338 -	69,594 -	78,140 -	86,717 -
	Low	- 18,057 -	21,336 -	23,657 -	29,518 -	27,848 -	32,587 -	32,291 -	34,236 -	43,229 -	46,145 -	50,782 -
	MYEFO	- 17,173 -	18,685 -	20,073 -	25,177 -	23,310 -	27,892 -	27,850 -	29,726 -	38,114 -	40,891 -	44,617 -
Issuance Yield on all stock in the portfolio as at	Baseline	2.19%	2.40%	2.76%	3.00%	3.22%	3.35%	3.47%	3.61%	3.78%	3.92%	3.99%
	High	2.19%	2.44%	2.93%	3.39%	3.82%	4.11%	4.34%	4.55%	4.76%	4.92%	5.00%
	Low	2.19%	2.37%	2.59%	2.64%	2.64%	2.62%	2.63%	2.69%	2.81%	2.93%	2.99%
	MYEFO	2.06%	2.04%	2.12%	2.15%	2.19%	2.23%	2.31%	2.43%	2.59%	2.74%	2.86%
Issuance Yield on New Stock during that year	Baseline	3.45%	3.76%	3.80%	3.75%	3.80%	3.88%	3.95%	4.02%	4.10%	4.16%	4.24%
	High	3.45%	4.00%	4.54%	5.00%	5.25%	5.23%	5.21%	5.17%	5.15%	5.11%	5.09%
	Low	3.45%	3.51%	3.05%	2.50%	2.35%	2.53%	2.70%	2.87%	3.05%	3.21%	3.39%
	MYEFO	2.37%	2.21%	2.30%	2.20%	2.33%	2.53%	2.74%	2.92%	3.12%	3.30%	3.50%

Budget Yield Curve Assumptions

	MYEFO 2021-22 3-Dec-21	MARCH BUDGET 2022-23 17-Mar-22	OCTOBER BUDGET 2022-23 6-Oct-22
Generic Bond Curve			
1D	0.04	0.05	2.32
1M	0.04	0.06	2.57
3M	0.04	0.09	2.90
6M	0.07	0.23	3.18
9M	0.14	0.45	3.43
1Y	0.21	0.59	3.10
2Y	0.55	1.13	3.28
3Y	0.95	1.63	3.43
4Y	1.24	1.85	3.49
5Y	1.38	1.96	3.54
7Y	1.57	2.13	3.65
10Y	1.77	2.27	3.77
12Y	1.86	2.34	3.86
15Y	2.08	2.49	3.96
20Y	2.36	2.72	4.04
25Y	2.43	2.80	4.03
30Y	2.51	2.88	4.02
32Y	2.54	2.92	4.02

~~OFFICIAL~~

Australian Office of Financial Management

Entity resources and planned performance

Australian Office of Financial Management

Section 1: Entity overview and resources	115
1.1 Strategic direction statement.....	115
1.2 Entity resource statement.....	117
1.3 Budget measures.....	122
Section 2: Outcomes and planned performance	123
2.1 Budgeted expenses and performance for Outcome 1.....	124
Section 3: Budgeted financial statements	130
3.1 Budgeted financial statements	130
3.2 Budgeted financial statements tables.....	131

Australian Office of Financial Management

Section 1: Entity overview and resources

1.1 Strategic direction statement

The Australian Office of Financial Management (AOFM) is responsible for managing Australian Government debt and certain financial assets. It issues Treasury Bonds, Treasury Indexed Bonds and Treasury Notes (collectively called Australian Government Securities or AGS), manages the government's cash balances and invests in financial assets as directed by government policy.

The government requires that AOFM finance Budget deficits and maturing debt in a cost-effective manner subject to acceptable risk; ensure government cash outlay requirements are always met; and conduct its financing operations in a way that supports a well-functioning AGS market. The AOFM's main financing instrument is Treasury Bonds but Treasury Indexed Bonds and Treasury Notes also play a role.

The AOFM influences the cost structure of the debt portfolio chiefly through the maturity profile of Treasury Bonds that are issued. Issuance is undertaken according to an annual debt management strategy that aims to balance portfolio risks (such as future interest rate volatility and funding risks) and borrowing costs. Through its issuance and associated activities, the AOFM also aims to support domestic financial market integrity, stability and liquidity. The AOFM has lengthened the duration of its Treasury Bond portfolio over the last decade through longer term issuance and by extending the yield curve. Most issuance is achieved using competitive tenders. Where appropriate, the AOFM also undertakes issuance through syndications (large volume point-in-time transactions using a 'book building' process conducted by a panel of banks appointed by the AOFM).

Between mid-2016 and early 2020 the AOFM conducted regular buy-backs of short-dated Treasury Bonds. This program aimed to reduce the size of bond lines ahead of their maturity dates; it was suspended in March 2020 when the RBA commenced its own large bond buying operations. The AOFM will review relevant market and financial system considerations each year to determine the appropriateness of restarting this program.

Issuing Treasury Indexed Bonds facilitates diversification of the investor base. It has a heavy domestic (Australian based) investor focus. The AOFM aims to issue sufficient volumes to meet demand, and to support the liquidity and functioning of the market.

~~OFFICIAL~~

The AOFM manages the government's cash balances to ensure it can meet all financial obligations when they fall due. Treasury Bonds and Treasury Indexed Bonds issuance tends to be at a relatively steady rate throughout the year. Therefore, fluctuations in the cash balances through the year are managed using deposits with the RBA and the issuance of Treasury Notes. Cash balance fluctuations arise from the difference in timing of revenue collections and outlays. The AOFM also maintains a 'cash buffer' to cover unforeseen circumstances, such as a large unanticipated change to forecasts or a temporary deterioration in financial market conditions that could impact the ability to issue AGS at any time.

In April 2019 the then Government established the Australian Business Securitisation Fund (ABSF). The Structured Finance Support Fund (SFSF) was established as part of the *Structured Finance Support (Coronavirus Economic Response Package) Bill 2020*, in response to the COVID-19 pandemic. The AOFM is responsible for the administration of both funds.

Australian Business Securitisation Fund

The Australian Business Securitisation Fund (ABSF) is a \$2 billion investment fund established by the *Australian Business Securitisation Fund Act 2019*. The policy aim is to enhance access to finance for small and medium-sized enterprises (SMEs) through targeted securitisation market investments. This will promote more competition between smaller lenders and the major banks and other lenders; and fill niche gaps in the lending market that are otherwise underserved in Australia.

While the securitisation market for residential mortgages in Australia is well developed, the Australian SME securitisation market is constrained by a lack of scale. Low volumes of capital raisings tend to deter potential investors from committing to the task of due diligence needed to enter the market. The ABSF is used to invest in SME loan securitisations and over time this will help to establish a track record in lending against the type of collateral new to the securitisation market. It will also help SME lenders to obtain credit ratings and in turn promote broader investor interest.

OFFICIAL**Structured Finance Support Fund**

This Fund provides for up to \$15 billion to facilitate continued access to funding markets by SME lenders impacted by the economic effects of the COVID-19 pandemic. In particular, smaller lenders were assessed as vulnerable to loss of access to funding from markets during the period of pandemic disruption. These smaller lenders did not have access to the RBA's term funding facility. The policy aim of the Structured Finance Support Fund (SFSF) has been achieved through targeted government investments in structured finance markets.

There are three key elements to the SFSF implementation strategy:

- support new issuance of public securitisations sponsored by smaller lenders. This has included the AOFM purchasing existing securities through the secondary market, with the proceeds used by investors to facilitate participation in new primary transactions
- invest in revolving warehouse facilities of small lenders (primarily to fill the gaps in existing facilities arising from investors exiting these arrangements; and/or being unable to meet additional funding calls; and/or being required to elevate the level of credit enhancement within the facilities they finance ostensibly to meet prudential regulation requirements)
- establish a 'forbearance trust' to enable the SFSF to invest in trust-issued securities, the proceeds of which are advanced to existing warehouses and public securitisation vehicles of eligible small lenders against capitalised interest on loans that were in COVID-19 related hardship from April 2020 and March 2021, to provide liquidity support during the pandemic.

1.2 Entity resource statement

Table 1.1 shows total funding from all sources available to the entity for its operations and for delivery of programs and services on behalf of the government.

The table summarises how resources will be applied by outcome (government strategic policy objectives), and by administered (on behalf of the government or the public) and departmental (for the entity's operations) classification.

For more detailed information on special accounts and special appropriations, please refer to *Budget Paper No. 4 – Agency Resourcing*.

Information is presented on a resourcing basis (that is, appropriations/cash available) basis, whilst the 'Budgeted expenses by Outcome 1' tables in Section 2 and the financial statements in Section 3 are presented on an accrual basis.

OFFICIAL

Table 1.1: Australian Office of Financial Management resource statement – Budget estimates for 2022–23 as at October Budget 2022

	2021-22 Estimated actual \$'000	2022-23 Estimate \$'000	NOTE
Departmental			
Annual appropriations - ordinary annual services (a)			
Prior year appropriations available	28,672	32,646	1
Departmental appropriation (b)	16,513	16,379	2
s74 External Revenue (c)	181	25	3
Departmental capital budget (d)	368	377	4
Total departmental annual appropriations	45,734	49,427	
Total departmental resourcing	45,734	49,427	
Administered			
Total administered special appropriations (e)	143,967,515	420,337,532	5
Special accounts (f)			
Opening balance	13,703,985	15,289,647	6
Appropriation receipts (g)	500,000	500,000	7
Non-appropriation receipts	1,449,385	444,374	8
Total special account receipts	15,653,370	16,234,021	
Total administered resourcing	159,620,885	436,571,553	
Total resourcing for AOFM	159,666,619	436,620,980	
	2021-22	2022-23	
Average staffing level (number)	44	50	

All figures shown above are GST exclusive – these may not match figures in the cash flow statement. Prepared on a resourcing (that is, appropriations available) basis.

- a) Appropriation Bill (No. 1) 2022–23, Supply Bill (No. 3) 2022-23 and *Supply Act (No. 1) 2022–23*.
- b) Excludes departmental capital budget (DCB).
- c) Estimated External Revenue receipts under section 74 of the PGPA Act.
- d) Departmental capital budgets are not separately identified in Appropriation Bill (No. 1) and form part of ordinary annual services items. Refer to Table 3.5 for details. For accounting purposes, this amount has been designated as a 'contribution by owner'.
- e) Special Appropriations comprise funding to meet estimated operating expenditures such as interest on Australian Government Securities (AGS), investing expenditures such as acquisition of financial assets, and financing expenditures such as maturity of AGS.
- f) The AOFM administers three special accounts – the Debt Retirement Reserve Trust Account (DRRTA), the ABSF Special Account and the SFSF Special Account. Figures include the ABSF and SFSF special accounts only. For further information on special accounts refer to *Budget Paper No. 4 – Agency Resourcing*. Table 2.1 has further information on outcome and program expenses broken down by various funding sources, that is, annual appropriations, special appropriations and special accounts.
- g) Comprises amounts credited to the ABSF Special Account under section 14 of the *Australian Business Securitisation Fund Act 2019*.

~~OFFICIAL~~**NOTES for Table 1.1**

1 – Prior year Departmental appropriations are unspent operating and capital appropriations which the AOFM can retain and spend in the *current* period. The AOFM can access prior year appropriations for the two previous years but after this time, appropriations sunset and are no longer available to spend.

	2021-22 Actual \$'000	2022-23 Estimate \$'000
Appropriation Act:		
Supply Act (No.1) 2019-20	6,002	-
Appropriation Act (No.1) 2019-20	5,671	-
Supply Act (No.1) 2020-21	8,403	8,403
Appropriation Act (No.1) 2020-21	8,596	7,181
Appropriation Act (No.1) 2021-22	-	17,062
Prior year appropriation available	28,672	32,646

2 – Departmental annual operating appropriation. This excludes Departmental capital appropriation.

	2021-22 Actual \$'000	2022-23 Estimate \$'000
Appropriation Act:		
Appropriation Act (No.1) 2021-22	16,513	-
Supply Bill (No.1) 2022-23	-	6,974
Supply Bill (No.3) 2022-23	-	9,763
Appropriation Act (No.1) 2022-23	-	(358)
Departmental appropriation	16,513	16,379

3 – s74 External Revenue represents money collected and retained. Such receipts are used to increase the balance of existing AOFM Departmental operating appropriations (in the current period).

4 – Departmental Capital Budget represents money which the AOFM can spend on capital items (non-financial Departmental assets). Unspent money can be retained as prior year appropriation (as per note 1). Tables 3.5 and 3.6 provide more information on how the Departmental Capital Budget will be spent in the Budget and forward estimate years.

~~OFFICIAL~~

5 – Total Administered Special Appropriation is comprised of the following:

	2021-22 Actual \$'000	2022-23 Estimate \$'000
Appropriation Act:		
Commonwealth Inscribed Stock Act 1911	143,966,814	420,337,526
Financial Agreement Act 1994	7	6
Public Governance, Performance and Accountability Act 2013	692	-
Total Administered special appropriations	143,967,513	420,337,532

The CIS Act 1911 comprises three appropriations:

	2021-22 Estimated actual \$'000	2022-23 Estimate \$'000
Commonwealth Inscribed Stock Act 1911		
CIS Act 1911 - s13AA (maturities and coupons)	141,880,324	420,312,419
CIS Act 1911 - s13A (expenses for issuing and managing debt)	16,739	25,000
CIS Act 1911 - s13B (repurchases)	2,069,751	107
Total CIS Act 1911	143,966,814	420,337,526

The increase in the CIS Act 1911 s13AA appropriation in 2022-23 can be largely attributed to an increase in Treasury Bond and Treasury Note maturities compared to 2021-22:

	2021-22 Actual \$'000	2022-23 Estimate \$'000	Change
Maturities under s13AA:			
Treasury Bonds	16,398,000	85,462,381	(69,064,381)
Treasury Indexed Bonds	5,511,731	-	5,511,731
Treasury Notes	98,240,636	311,381,718	(213,141,082)
CDIs and Other	45,349	69,184	(23,835)
Total CIS Act maturities	120,195,716	396,913,283	(276,717,567)

There is a less significant increase in coupon interest under the CIS Act s13AA as follows:

	2021-22 Actual \$'000	2022-23 Estimate \$'000	Change
Coupon interest under s13AA:			
Treasury Bonds	20,220,912	21,713,134	(1,492,222)
Treasury Indexed Bonds - coupon	820,408	842,445	(22,037)
Treasury Indexed Bonds - capital accretion	625,099	-	625,099
Treasury Notes	9,364	843,557	(834,193)
CDIs and Other	8,825	-	8,825
Total CIS Act maturities	21,684,608	23,399,136	(1,714,528)

~~OFFICIAL~~

6 – Special account opening balance is comprised of the following:

	<i>2021-22 Actual \$'000</i>	<i>2022-23 Estimate</i>
Special account opening balances:		\$'000
SFSF	13,305,485	14,397,201
ABSF	398,500	892,446
Special account opening balance	13,703,985	15,289,647

Note that the Department of Finance requested the DRRTA special account be excluded from this note. The Department of Finance no longer considers the DRRTA to be a special account given the money is held in trust on behalf of the States.

7 – Appropriation receipts relate to the credits of the ABSF. This is the credit to the ABSF in accordance with Section 14 of the ABSF Act.

8 – Non-appropriations receipts relate to coupon and principal repayments returned to the respective ABSF and SFSF special accounts.

	<i>2021-22 Actual \$'000</i>	<i>2022-23 Estimate</i>
Non appropriation receipts:		\$'000
SFSF	88,413	57,718
ABSF	1,360,972	386,656
Total non-appropriation receipts	1,449,385	444,374

~~OFFICIAL~~

1.3 Budget measures

Budget measures in Part 1 relating to the AOFM are detailed in the October Budget Paper No. 2 and are summarised below.

Table 1.2: AOFM October 2022–23 Budget measures
Part 1: Measures announced since the 2022–23 March Budget

	Program	2022-23 \$'000	2023-24 \$'000	2024-25 \$'000	2025-26 \$'000	NOTE
Payment measures						
An Ambitious and Enduring APS Reform Plan (a)	1.2					
Departmental payments		(6)	(17)	(17)	-	1
Savings from External Labour and Savings from Advertising, Travel and Legal Expenses (b)	1.2					
Departmental payments		(352)	-	-	-	2
Total		(358)	(17)	(17)	-	
Total payment measures						
Departmental		(358)	(17)	(17)	-	
Total		(358)	(17)	(17)	-	

Prepared on a Government Finance Statistics (Underlying Cash) basis. Figures displayed as a negative (-) represent a decrease in funds and a positive (+) represent an increase in funds.

- The lead entity for measure An Ambitious and Enduring APS Reform Plan is the Department of Prime Minister and Cabinet. The full measure description and package details appear in Budget Paper No. 2, *Budget Measures 2022–23*, under the Prime Minister and Cabinet portfolio.
- The measure Savings from External Labour, and Savings from Advertising, Travel and Legal Expenses is a cross-portfolio measure. The full measure description and package details appear in Budget Paper No. 2, *Budget Measures 2022–23*, under Cross Portfolio measures.

NOTES for Table 1.2

1 – An Ambitious and Enduring APS Reform Plan represents a 3-year commitment to strengthen the capability of the APS with the cost of this measure being offset by savings from agencies. More details are on page 169 of Budget Paper 2.

2 – Savings from External Labour and Savings from Advertising, Travel and Legal Expenses represents a 4-year election commitment to achieve savings by reducing spending on the aforementioned items. Savings have only been allocated for the 2022-23 Budget year and savings for 2023-24 to 2025-26 will be allocated in the 2023-24 Budget. More details are on page 83 of Budget Paper 2.

~~OFFICIAL~~

Section 2: Outcomes and planned performance

Government outcomes are the intended results, impacts or consequences of actions by the government on the Australian community. Commonwealth programs are the primary vehicle by which government entities achieve the intended results of their outcome statements. Entities are required to identify the programs which contribute to government outcomes over the Budget and forward years.

Each AOFM outcome is described below, together with related programs. The following provides detailed information on expenses for each outcome and program, further broken down by funding source.

Note:

Performance reporting requirements in the Portfolio Budget Statements are part of the Commonwealth performance framework established by the *Public Governance, Performance and Accountability Act 2013*. It is anticipated that the performance measure described in Portfolio Budget Statements will be read with broader information provided in an entity's corporate plans and annual performance statements – included in Annual Reports – to provide a complete picture of an entity's planned and actual performance.

The most recent corporate plan for AOFM can be found at:
(<https://www.aofm.gov.au/publications/corporate-plan>).

The most recent annual performance statement can be found at:
(<https://www.aofm.gov.au/publications/annual-reports>).

2.1 Budgeted expenses and performance for Outcome 1

Outcome 1: The advancement of macroeconomic growth and stability, and the effective operation of financial markets, through issuing debt, and investing in financial assets and managing debt, investments and cash for the Australian Government.

Budgeted expenses for Outcome 1

This table shows how much the entity intends to spend (on an accrual basis) on achieving the outcome, broken down by program, as well as by Administered and Departmental funding sources.

Table 2.1.1: Budgeted expenses for Outcome 1

	2021-22 Estimated actual \$'000	2022-23 Budget \$'000	2023-24 Forward estimate \$'000	2024-25 Forward estimate \$'000	2025-26 Forward estimate \$'000	NOTE
Program 1.1: Commonwealth Debt Management						
Administered expenses						
Special appropriations						
<i>Commonwealth Inscribed Stock Act 1911</i>	18,516,788	22,420,864	24,164,854	27,700,984	31,993,112	1
<i>Financial Agreement Act 1994</i>	7	6	6	6	6	2
<i>Public Governance, Performance and Accountability Act 2013</i>	692	-	-	-	-	3
Expenses not requiring appropriation in the Budget year (b)	30,339	2,378	2,090	2,544	2,914	4
Administered total	18,547,826	22,423,248	24,166,950	27,703,534	31,996,032	5
Total expenses for program 1.1	18,547,826	22,423,248	24,166,950	27,703,534	31,996,032	

NOTES for Table 2.1.1 – Administered

1 – Commonwealth Inscribed Stock Act 1911 represents accrual interest expense associated with AGS.

~~OFFICIAL~~

2 – Financial Agreement Act 1994 represents accrual interest expenses associated with tax free stock issued by States & Territories and governed by the Financial Agreement Act.

3 – Public Governance, Performance and Accountability Act 2013 represents money returned under s77 of the Act. This is money received in error and no other appropriation exists for its return. The AOFM does not budget for this item and as such, nil is allocated to the Budget and forward estimate years.

4 – Expenses not requiring appropriation in the Budget year represents accrual gains or losses which are broken down as follows:

	2021-22 Actual \$'000	2022-23 Estimate \$'000	2023-24 Estimate \$'000	2024-25 Estimate \$'000	2025-26 Estimate \$'000
Expenses not requiring appropriation in the Budget year:					
Accrual loss on repurchase of debt – buyback \$1.7b Feb 22 TIB	34,160	-	-	-	-
Write down and impairment of assets	(3,821)	2,378	2,090	2,544	2,914
Total expenses not requiring appropriation	30,339	2,378	2,090	2,544	2,914

The buyback was done in conjunction with syndicated issuance of \$3.25b of a 2032 TIB series.

5 – Administered Total = 'Total expenses administered on behalf of Government before remeasurements' as per Table 3.7 - 'Schedule of Budgeted Income and expenses administered on behalf of the Government'.

Table 2.1.1: Budgeted expenses for Outcome 1 (continued)

	2021-22 Estimated actual \$'000	2022-23 Budget \$'000	2023-24 Forward estimate \$'000	2024-25 Forward estimate \$'000	2025-26 Forward estimate \$'000	NOTE
Program 1.2: AOFM - Departmental - Outcome 1						
Departmental expenses						
Ordinary annual services (Appropriation Bill No. 1)	12,583	15,238	15,415	14,584	14,757	1
s74 External Revenue (a)	51	25	25	25	25	2
Expenses not requiring appropriation in the Budget year (b)	834	813	813	813	813	3
Departmental total	13,468	16,076	16,253	15,422	15,595	
Total expenses for program 1.2	13,468	16,076	16,253	15,422	15,595	4
Total expenses for Outcome 1	18,561,294	22,439,324	24,183,203	27,718,956	32,011,627	
	2021-22	2022-23				
Average staffing level (number)	44	50				

a) Estimated expenses incurred in relation to receipts retained under section 74 of the PGPA Act.

b) Administered expenses not requiring appropriation comprises provision for bad and doubtful debts and accrual losses on repurchase of debt. Departmental expenses not requiring appropriation are made up of depreciation expenses, amortisation expenses, make good expenses and ANAO audit fees.

Note: Departmental appropriation splits and totals are indicative estimates and may change in the course of the budget year as government priorities change.

NOTES for Table 2.1.1 – Departmental

1 – Appropriation Bill No 1 represents accrual Departmental operating expenses.

2 – s74 External Revenue represents money collected and retained. The amount in each year represents s74 receipts from the AOFM’s secondment arrangements. This ties back to ‘Sale of goods and rendering of services’ in Table 3.1 – ‘Comprehensive income statement (showing net cost of services) for the period ended 30 June’

3 – Expenses not requiring appropriation in the Budget year represents depreciation/amortisation costs plus resources received free of charge (ANAO external audit fees) and is broken down as follows:

	2021-22 <i>Actual</i> \$'000	2022-23 <i>Estimate</i> \$'000	2023-24 <i>Estimate</i> \$'000	2024-25 <i>Estimate</i> \$'000	2025-26 <i>Estimate</i> \$'000
Expenses not requiring appropriation in the Budget year:					
Depreciation and amortisation	574	553	553	553	553
Resources received free of charge (ANAO audit)	260	260	260	260	260
Total expenses not requiring appropriation	834	813	813	813	813

4 - Departmental Total = 'Total expenses' as per Table 3.1 - 'Comprehensive income statement (showing net cost of services) for the period ended 30 June '

OFFICIAL**Table 2.1.2: Performance measure for Outcome 1**

Table 2.1.2 provides performance measures for each program associated with Outcome 1. It also provides the related key activities as expressed in the current Corporate Plan where further detail is provided about the delivery of the activities related to the program, the context in which these activities are delivered and how the performance of these activities will be measured. Where relevant, details of the October 2022–23 Budget measures that have created new programs or materially changed existing programs are provided.

Outcome 1 – The advancement of macroeconomic growth and stability, and the effective operation of financial markets, through issuing debt, investing in financial assets and managing debt, investments and cash for the Australian Government.		
Program 1.1 – Australian Office of Financial Management The AOFM issues AGS debt, makes investments and manages debt and investments in accordance with policy objectives.		
Purpose 1.1.1: Meet the government’s annual financing task while managing the trade-offs between costs and risks.		
Key Activities	Establish a debt management strategy; execute the debt issuance program; settle transactions and coupon and redemption payments; monitor the costs and risks of the portfolio of assets and liabilities.	
Year	Performance measures	Expected performance results
Current year, Budget year and forward years	Annual debt management strategy: formulate an annual debt management strategy and advise the Secretary to the Treasury with supporting analysis.	Prior to start of fiscal year
	Term issuance: the shortfall in volume in dollar terms for the fiscal year between actual Treasury Bond issuance and planned issuance announced at the most recent official Budget related update.	Zero
	New issuance yields: the weighted average issue yield at Treasury Bond and Treasury Indexed Bond tenders compared to prevailing mid-market secondary yields.	At or below mid-market yields
	Tender coverage ratio: the average tender coverage ratio across all tenders for the fiscal year.	Greater than 2.5 times
	Settlement of AGS transactions: number of times AGS transactions fail to settle in a complete, timely and accurate manner where the AOFM is responsible for the failure.	Zero
	Settlement of AGS coupons and redemptions: number of times AGS coupon and redemption payments fail to occur in a complete, timely and accurate manner where the AOFM is responsible for the failure.	Zero
	Financing costs – issuance: the cost of Treasury Bond issuance in percentage terms over the past 12 months compared to the average 10-year bond rate over the same period.	Lower

OFFICIAL**Table 2.1.2: Performance measure for Outcome 1 (continued)**

Purpose 1.1.2: Ensure the government can always meet its cash outlay requirements.		
Key Activities	Establish a liquidity management strategy; conduct the cash management task.	
Year	Performance measures	Expected performance results
Current year, Budget year and forward years	Annual liquidity management strategy: formulate an annual liquidity management strategy and advise the Secretary to the Treasury with supporting analysis.	Prior to start of fiscal year
	Use of overdraft facility: the number of instances the RBA overdraft facility was utilised.	Zero
Purpose 1.1.3: Conducting market facing activities in a manner that supports a well-functioning AGS market.		
Key Activities	Communicate AOFM operations clearly and consistently to the market; conduct a market engagement program; support financial market liquidity.	
Year	Performance measures	Expected performance results
Current year, Budget year and forward years	Market commitments: the number of times the AOFM failed to conduct issuance operations consistent with prior market announcements.	Zero
	Investor publications: number of times investor targeted information publications are updated and made available on the AOFM website.	At least twice per year
	Secondary market turnover: the annual turnover in dollar value terms in the secondary market for Treasury Bonds and Treasury Indexed Bonds in a fiscal year.	Greater than previous fiscal year
Purpose 1.1.4: Meet the priorities of the Australian Business Securitisation Fund (ABSF) and the Structured Finance Support Fund (SFSF).		
Key Activities	Manage the ABSF program; manage the SFSF program.	
Year	Performance measures	Expected performance results
Current year, Budget year and forward years	ABSF rate of return: the accrual earnings (net of losses) for a fiscal year divided by the average drawn (invested) amount in percentage point terms.	Greater than Bloomberg AusBond Treasury 0-1 year index
	SFSF losses: gross credit losses for a fiscal year divided by the average drawn amount in percentage point terms.	Zero

OFFICIAL

Section 3: Budgeted financial statements

Section 3 presents budgeted financial statements which provide a comprehensive snapshot of entity finances for the 2022–23 budget year, including the impact of budget measures and resourcing on financial statements.

3.1 Budgeted financial statements

3.1.1 Differences between entity resourcing and financial statements

Departmental

The comprehensive income statement (Table 3.1) includes resources received free of charge from the Australian National Audit Office for audit services. Departmental entity receipts as recorded in the entity resource statement (Table 1.1) exclude the estimated value of these services received free of charge.

The AOFM's estimated departmental expenses as shown in Table 2.1 are itemised in the departmental comprehensive income statement (Table 3.1).

Administered

The AOFM receives administered appropriations to meet operating expenditures and for capital expenditure purposes arising from managing the debt and asset portfolios. These are reflected in the entity resource statement (Table 1.1). The schedule of budgeted administered cash flows (Table 3.9) itemises these expenditures and classifies them into operating, investing, and financing activities.

The AOFM's estimated administered expenses as shown in Table 2.1 are itemised in the schedule of budgeted administered income and expenses (Table 3.7).

3.1.2 Explanatory notes and analysis of budgeted financial statements

Administered

The AOFM produces budget estimates of Australian Government Securities (AGS) liabilities (debt) and certain financial assets. The projections of AGS debt are a consequence of forecasts arising from the expenditure, investment and revenue decisions incorporated in the Budget. Annual debt servicing costs on AGS debt are largely determined after considering changes in the volume of AGS debt over the projection period, yields on existing debt and technical assumptions about yields on new debt to be issued over the projection period.

Estimated budgeting impacts of the ABSF and the SFSF are incorporated in the administered budgeted financial statements.

~~OFFICIAL~~

3.2 Budgeted financial statements tables

Table 3.1: Comprehensive income statement (showing net cost of services) for the period ended 30 June

	2021-22 Estimated actual \$'000	2022-23 Budget \$'000	2023-24 Forward estimate \$'000	2024-25 Forward estimate \$'000	2025-26 Forward estimate \$'000	NOTE
EXPENSES						
Employee benefits	7,618	9,614	9,812	9,358	9,673	
Suppliers	5,215	5,852	5,834	5,461	5,323	
Depreciation and amortisation (a)	574	553	553	553	553	
Finance costs	61	57	54	50	46	
Total expenses	13,468	16,076	16,253	15,422	15,595	1
LESS:						
OWN-SOURCE INCOME						
Own-source revenue						
Sale of goods and rendering of services	51	25	25	25	25	
Other	260	260	260	260	260	
Total own-source revenue	311	285	285	285	285	2
Gains						
Other	-	-	-	-	-	
Total gains	-	-	-	-	-	
Total own-source income	311	285	285	285	285	
Net (cost of)/contribution by services	(13,157)	(15,791)	(15,968)	(15,137)	(15,310)	
Revenue from Government	16,513	16,379	17,468	14,845	15,022	3
Surplus/(deficit) attributable to the Australian Government	3,356	588	1,500	(292)	(288)	
OTHER COMPREHENSIVE INCOME						
Changes in asset revaluation surplus	(23)	-	-	-	-	4
Total other comprehensive income	(23)	-	-	-	-	
Total comprehensive income/(loss)	3,333	588	1,500	(292)	(288)	
Total comprehensive income/(loss) attributable to the Australian Government	3,333	588	1,500	(292)	(288)	5

NOTES for Table 3.1

1 – Total Expenses comprises Departmental employee, supplier, depreciation/amortisation and finance/interest costs on the AOFM's leasehold agreement (recognised as per AASB 16).

2 – Total own source revenue/income comprises Departmental revenue from the AOFM's secondment arrangements (in 'Sale of goods and rendering of services' or otherwise known as s74 revenue) plus ANAO external audit resources received free of charge (in 'Other').

~~OFFICIAL~~

3 – Revenue from Government comprises Departmental annual operating appropriation as outlined in Note 2 of Table 1.1.

4 – Change in asset revaluation for 2021-22 comprises a decrement to the AOFM's asset revaluation reserve recognising an increase to the provision to make-good or restore the AOFM's premises after expiration of its leasehold agreement (Canberra office only). No budget is provided for this item in the Budget and forward estimate years due to the infrequent nature of make-good revaluation.

5 – Total comprehensive income/loss attributable to the Australian Government represents the surplus *including* depreciation. Note that financial sustainability is assessed against the surplus *excluding* depreciation. This aggregate is shown in the continuation of table 3.1 (next page).

OFFICIAL**Table 3.1: Comprehensive income statement (showing net cost of services) for the period ended 30 June (continued)****Note: Impact of net cash appropriation arrangements**

	2021-22 Estimated actual \$'000	2022-23 Budget \$'000	2023-24 Forward estimate \$'000	2024-25 Forward estimate \$'000	2025-26 Forward estimate \$'000	NOTE
Total comprehensive income/(loss) – as per statement of Comprehensive Income	3,333	588	1,500	(292)	(288)	
plus: depreciation/amortisation of assets funded through appropriations (departmental capital budget funding)	282	261	261	261	261	
plus: depreciation/amortisation expenses for ROU assets (b)	292	292	292	292	292	
less: lease principal repayments (b)	233	241	253	261	265	
Net Cash Operating Surplus/ (Deficit)	3,674	900	1,800	-	-	1

Prepared on Australian Accounting Standards basis.

- a) In 2010-11, the Government introduced net cash appropriation arrangements. This means Bill 1 revenue appropriations for the depreciation/amortisation expenses of non-corporate Commonwealth entities (and select corporate Commonwealth entities) are replaced with a separate capital budget (the Departmental Capital Budget, or DCB) provided through Bill 1 equity appropriations. For information regarding DCBs, refer to Table 3.5 Departmental Capital Budget Statement.
- b) Applies leases under AASB 16 Leases.

NOTES for Table 3.1 - Continued

1 – Net Cash Operating Surplus/(Deficit) represents the measure by which the financial sustainability of an entity is assessed. This is calculated by adding back depreciation and taking away lease principal repayments (cash). The AOFM is budgeting for a surplus in the Budget and first forward estimate year, with a breakeven result forecast in the remaining forward estimate years.

~~OFFICIAL~~**Table 3.2: Budgeted departmental balance sheet (as at 30 June)**

	2021-22 Estimated actual \$'000	2022-23 Budget \$'000	2023-24 Forward estimate \$'000	2024-25 Forward estimate \$'000	2025-26 Forward estimate \$'000	NOTE
ASSETS						
Financial assets						
Cash and cash equivalents	100	100	100	100	100	
Trade and other receivables	32,560	33,511	35,311	35,312	35,313	
Total financial assets	32,660	33,611	35,411	35,412	35,413	
Non-financial assets						
Property, plant and equipment	5,730	5,526	5,157	5,165	5,178	
Intangibles	433	461	671	509	347	
Other non-financial assets	280	280	280	280	280	
Total non-financial assets	6,443	6,267	6,108	5,954	5,805	
Total assets	39,103	39,878	41,519	41,366	41,218	1
LIABILITIES						
Payables						
Suppliers	906	906	906	906	906	
Personal benefits	540	545	545	545	545	
Total payables	1,446	1,451	1,451	1,451	1,451	
Interest bearing liabilities						
Leases	4,142	3,901	3,648	3,387	3,122	
Total interest bearing liabilities	4,142	3,901	3,648	3,387	3,122	
Provisions						
Employee provisions	2,311	2,357	2,357	2,357	2,357	
Other provisions	483	483	483	483	483	
Total provisions	2,794	2,840	2,840	2,840	2,840	
Total liabilities	8,382	8,192	7,939	7,678	7,413	2
Net assets	30,721	31,686	33,580	33,688	33,805	
EQUITY*						
Parent entity interest						
Contributed equity	(8,664)	(8,287)	(7,893)	(7,494)	(7,090)	
Reserves	315	315	315	315	315	
Retained surplus (accumulated deficit)	39,070	39,658	41,158	40,867	40,580	
Total parent entity interest	30,721	31,686	33,580	33,688	33,805	
Total equity	30,721	31,686	33,580	33,688	33,805	3

Prepared on Australian Accounting Standards basis.

*Equity' is the residual interest in assets after deduction of liabilities.

NOTES for Table 3.2

1 – Total assets comprise cash at bank, appropriations receivable plus goods and service receivables (in 'Trade and other receivables'), property, plant and equipment assets, Quantum licences (in 'Intangibles') and prepaid supplier costs (in 'Other non-financial assets'). Property, plant and equipment and Intangible asset movements are reconciled for the Budget year in Table 3.6.

~~OFFICIAL~~

2 – Total liabilities comprise supplier accrued expenses (in ‘Suppliers’), employee wages and salaries payable (in ‘Personal benefits’), lease repayments, annual and long service leave provisions (in ‘Employee provisions’) and the make-good/restoration provision (in ‘Other provisions’).

3 – Total Equity is comprised of contributed equity, reserves and retained surpluses. Contributed equity is increased each period by the annual Departmental Capital Budget appropriation however, this figure has a negative carry due to the accumulation of repealed capital and operating appropriations in prior periods. Reserves comprise the asset revaluation reserve which can be applied to the revaluation of property, plant and equipment and its associated make-good/restoration provision. The retained surplus is the opening retained amount plus the operating result during the period. A breakdown of equity movement for the Budget year is provided at Table 3.3 (next page).

OFFICIAL**Table 3.3: Departmental statement of changes in equity summary of movement (Budget year 2022–23)**

	Retained earnings \$'000	Asset revaluation reserve \$'000	Other reserves \$'000	Contributed equity/capital \$'000	Total equity \$'000	NOTE
Opening balance as at 1 July 2022						
Balance carried forward from previous period	39,070	315	-	(8,664)	30,721	
Adjusted opening balance	39,070	315	-	(8,664)	30,721	
Comprehensive income						
Surplus/(deficit) for the period	588				588	
Total comprehensive income	588	-	-	-	588	1
of which:						
Attributable to the Australian Government	588	-	-	-	588	
Transactions with owners						
Contributions by owners						
Departmental Capital Budget (DCB)	-	-	-	377	377	2
Sub-total transactions with owners	-	-	-	377	377	
Estimated closing balance as at 30 June 2023	39,658	315	-	(8,287)	31,686	
Closing balance attributable to the Australian Government	39,658	315	-	(8,287)	31,686	3

Prepared on Australian Accounting Standards basis.

NOTES for Table 3.3

1 - Total comprehensive income – the 2022-23 surplus *after* depreciation as per Table 3.1.

2 – Departmental Capital Budget – as per 2022-23 in note 4 of Table 1.1. The allocation of the Capital Budget is shown in Tables 3.5 and 3.6.

3 – Closing balance attributable to the Australian Government – as per 'Total equity' for 2022-23 in Table 3.2.

OFFICIAL**Table 3.4: Budgeted departmental statement of cash flows (for the period ended 30 June)**

	2021-22 Estimated actual \$'000	2022-23 Budget \$'000	2023-24 Forward estimate \$'000	2024-25 Forward estimate \$'000	2025-26 Forward estimate \$'000	NOTE
OPERATING ACTIVITIES						
Cash received						
Appropriations	12,905	15,453	15,693	14,869	15,046	
Sale of goods and rendering of services	181	25	25	25	25	
Total cash received	13,086	15,478	15,718	14,894	15,071	
Cash used						
Employees	7,757	9,563	9,812	9,357	9,672	
Suppliers	4,854	5,592	5,574	5,201	5,063	
Interest payments on lease liability	61	57	54	50	46	
s74 External Revenue transferred to the OPA	181	25	25	25	25	
Total cash used	12,853	15,237	15,465	14,633	14,806	
Net cash from/(used by) operating activities	233	241	253	261	265	1
INVESTING ACTIVITIES						
Cash used						
Purchase of property, plant and equipment and intangibles	6	377	394	399	404	
Total cash used	6	377	394	399	404	
Net cash from/(used by) investing activities	(6)	(377)	(394)	(399)	(404)	2
FINANCING ACTIVITIES						
Cash received						
Contributed equity	6	377	394	399	404	
Total cash received	6	377	394	399	404	
Cash used						
Principal payments on lease liability	233	241	253	261	265	
Total cash used	233	241	253	261	265	
Net cash from/(used by) financing activities	(227)	136	141	138	139	3
Cash and cash equivalents at the beginning of the reporting period	100	100	100	100	100	
Cash and cash equivalents at the end of the reporting period	100	100	100	100	100	4

Prepared on Australian Accounting Standards basis.

NOTES for Table 3.4

1 – Net cash from (used by) Operating Activities is comprised of expected cash drawdowns from annual operating appropriations as well as cash receipts from ‘Sale of goods and rendering of services’ (or s74 receipts), cash used on salaries and wages, supplier payments, interest payments on the lease agreement and s74 receipts

~~OFFICIAL~~

returned to the OPA (which mirrors the aforementioned ‘Sale of goods and rendering of services’).

2 – Net cash from (used by) Investing Activities is comprised of cash used for the purchase of non-financial assets. For the Budget and forward estimate years, purchase of non-financial assets is assumed to be equal to the annual Departmental Capital Budget. This ties back to non-financial asset cash purchases in Table 3.5 with a breakdown for 2022-23 provided in Table 3.6.

3 – Net cash from (used by) Financing Activities is comprised of Departmental Capital Budget receipts (in ‘Contributed equity’) and payments on the lease liability. This ties back to new capital appropriations in Table 3.5.

4 – Cash and cash equivalents at the end of the reporting period for actual and in estimates is \$100k for each period. This ties back to the ‘Cash and cash equivalents’ in Table 3.2.

~~OFFICIAL~~**Table 3.5: Departmental capital budget statement (for the period ended 30 June)**

	2021-22 Estimated actual \$'000	2022-23 Budget \$'000	2023-24 Forward estimate \$'000	2024-25 Forward estimate \$'000	2025-26 Forward estimate \$'000	NOTE
NEW CAPITAL APPROPRIATIONS						
Capital budget - Bill 1 (DCB)	368	377	394	399	404	
Total new capital appropriations	368	377	394	399	404	1
<i>Provided for:</i>						
<i>Purchase of non-financial assets</i>	6	377	394	399	404	
Total items	6	377	394	399	404	2
PURCHASE OF NON-FINANCIAL ASSETS						
Funded by capital appropriations (a)	6	377	394	399	404	
TOTAL	6	377	394	399	404	2
RECONCILIATION OF CASH USED TO ACQUIRE ASSETS TO ASSET MOVEMENT TABLE						
Total purchases	6	377	394	399	404	
Total cash used to acquire assets	6	377	394	399	404	2

Prepared on Australian Accounting Standards basis.

a) Does not include annual finance lease costs. Includes purchases from current and previous years' Departmental Capital Budgets (DCBs).

NOTES for Table 3.5

1 – Total new capital appropriations is the AOFM's allocated Departmental annual Capital Budget appropriations. Refer to Note 4 of Table 1.1.

2 – Purchase of non-financial assets represents the cash amount to be spent on non-financial assets which is funded by Departmental Capital Appropriation. For the Budget years, it is assumed that all of the Departmental Capital Budget will be spent.

OFFICIAL

Table 3.6: Statement of departmental asset movements (Budget year 2022–23)

	Other property, plant and equipment \$'000	Computer software and intangibles \$'000	Total \$'000	NOTE
As at 1 July 2022				
Gross book value	2,314	1,696	4,010	
Gross book value - ROU assets	4,820	-	4,820	
Accumulated depreciation/ amortisation and impairment	(527)	(1,263)	(1,790)	
Accumulated depreciation/amortisation and impairment - ROU assets	(877)	-	(877)	
Opening net book balance	5,730	433	6,163	
Capital asset additions				
Estimated expenditure on new or replacement assets				
By purchase - appropriation ordinary annual services (a)	187	190	377	
Total additions	187	190	377	1
Other movements				
Depreciation/amortisation expense	(99)	(162)	(261)	
Depreciation/amortisation on ROU assets	(292)	-	(292)	
Total other movements	(391)	(162)	(553)	2
As at 30 June 2023				
Gross book value	2,501	1,886	4,387	
Gross book value - ROU assets	4,820	-	4,820	
Accumulated depreciation/ amortisation and impairment	(626)	(1,425)	(2,051)	
Accumulated depreciation/amortisation and impairment - ROU assets	(1,169)	-	(1,169)	
Closing net book balance	5,526	461	5,987	3

Prepared on Australian Accounting Standards basis.

- a) 'Appropriation ordinary annual services' refers to funding provided through Appropriation Bill (No.1) 2022-23 for depreciation/amortisation expenses, Departmental Capital Budget or other operational expenses..

NOTES for Table 3.6

1 – Total additions comprises non-financial asset additions by asset class. This ties back to Tables 3.5 and 3.4.

2 – Total other movements comprises the depreciation charge by asset class. This ties back to 'Depreciation and amortisation' in Table 3.1.

3 – Closing net book balance comprises the closing net book balance as per the balance sheet and ties back to 'Property Plant and Equipment' plus 'Intangibles' in Table 3.2.

**Table 3.7: Schedule of budgeted income and expenses administered on behalf of Government
(for the period ended 30 June)**

	2021-22 Estimated actual \$'000	2022-23 Budget \$'000	2023-24 Forward estimate \$'000	2024-25 Forward estimate \$'000	2025-26 Forward estimate \$'000	NOTE
EXPENSES						
Grants	1	1	1	1	1	1
Finance costs (a)	18,536,344	22,395,869	24,154,859	27,690,989	31,983,117	2
Write-down and impairment of assets	(3,821)	2,378	2,090	2,544	2,914	3
Other expenses	15,302	25,000	10,000	10,000	10,000	4
Total expenses administered on behalf of Government before re-measurement	18,547,826	22,423,248	24,166,950	27,703,534	31,996,032	
LESS:						
OWN-SOURCE INCOME						
Non-taxation revenue						
Interest	228,321	1,143,153	1,202,558	1,212,930	1,103,285	5
Total non-taxation revenue	228,321	1,143,153	1,202,558	1,212,930	1,103,285	
Total own-source revenue administered on behalf of Government before re-measurement	228,321	1,143,153	1,202,558	1,212,930	1,103,285	
Total own-sourced income administered on behalf of Government	228,321	1,143,153	1,202,558	1,212,930	1,103,285	
Net (cost of)/contribution by services	(18,319,505)	(21,280,095)	(22,964,392)	(26,490,604)	(30,892,747)	
Surplus/(deficit) before income tax	(18,319,505)	(21,280,095)	(22,964,392)	(26,490,604)	(30,892,747)	
OTHER COMPREHENSIVE INCOME						
Re-measurements						
Net market revaluation gains/(losses)	115,931,023	(2,433,721)	(11,642,880)	(10,716,190)	(9,797,423)	6
Total other comprehensive income	115,931,023	(2,433,721)	(11,642,880)	(10,716,190)	(9,797,423)	
Total comprehensive income/(loss)	97,611,518	(23,713,816)	(34,607,272)	(37,206,794)	(40,690,170)	

Prepared on Australian Accounting Standards basis.

a) Includes \$34.2 million of accrual losses on repurchase of debt in 2021-22.

NOTES for Table 3.7

1 – Grants comprise DRRTA Commonwealth Contributions and interest paid on behalf of the States.

2 – Finance costs comprise interest on AGS and Tax-free stock as well as repurchase costs (accrual losses). Finance costs are broken down as follows:

	2021-22 <i>Actual</i> \$'000	2022-23 <i>Estimate</i> \$'000	2023-24 <i>Estimate</i> \$'000	2024-25 <i>Estimate</i> \$'000	2025-26 <i>Estimate</i> \$'000
Finance costs:					
Treasury Bonds - interest expense	16,313,959	17,510,222	20,153,197	24,134,991	28,703,427
Treasury Indexed Bonds - interest expense	2,165,785	3,977,357	2,656,339	2,241,366	2,014,125
Treasury Notes - interest expense	22,434	908,277	1,345,318	1,314,627	1,265,560
TFS - interest expense	6	5	5	5	5
Repurchase costs (accrual losses)	34,160	8	-	-	-
Total finance costs	18,536,344	22,395,869	24,154,859	27,690,989	31,983,117

Repurchase costs in 2021-22 primary relate to accrual losses upon repurchase of the February 2022 TIB. Small repurchase losses were also recognised on retail bond repurchases (TBs and TIBs) in 2021-22 and for 2022-23 YTD. No further budget has been provided for repurchases over the forward estimates period due to the continued suspension of the wholesale buyback program.

3 – Write down and impairment of assets is comprised of the expected credit loss expense for ABSF and SFSF investments. Note that in 2021-22, a gain was recognised due to unwinding of the expected credit loss provision as a result of significantly lower investments balances for the SFSF. Losses are forecast over the Budget and forward estimate periods as a result of increasing investment balances for the ABSF.

4 – Other expenses are comprised of syndication, registry, depository and auction system costs (also known as CIS s13A expenses). Two syndications have been provided for in the Budget year. \$10m in the forward years is a placeholder only at this

~~OFFICIAL~~

stage. Two syndications were done in 2021-22; one Treasury Bond (\$15b of the Nov 2033) and one Treasury Indexed Bond (\$3.25b of the Nov 2032).

5 – Interest revenue is broken down as follows:

	2021-22 <i>Actual</i> \$'000	2022-23 <i>Estimate</i> \$'000	2023-24 <i>Estimate</i> \$'000	2024-25 <i>Estimate</i> \$'000	2025-26 <i>Estimate</i> \$'000
Interest revenue:					
Housing agreements - interest	69,759	65,527	61,226	56,974	52,891
Housing agreements - unwind discount	13,094	10,919	13,636	12,902	11,283
ABSF/SFSF - interest	34,153	47,260	49,141	53,282	61,830
CMA - interest	110,373	1,019,447	1,078,555	1,089,772	977,281
Other - interest	942	-	-	-	-
Total interest revenue	228,321	1,143,153	1,202,558	1,212,930	1,103,285

The increase in CMA interest revenue for the Budget and forward estimates period is due to increasing interest rates. Rates are held constant from the time of budget production over the forward estimates period. The increase in interest revenue for structured finance securities is associated with the increased investment holdings estimated for the ABSF. Note that items in 'Other' for 2021-22 are comprised of interest on State and Territory Debt, interest from stock lending and other miscellaneous receipts for which no budget is provided.

6 – Net market valuation gains/(losses) are broken down as follows:

	2021-22 <i>Actual</i> \$'000	2022-23 <i>Estimate</i> \$'000	2023-24 <i>Estimate</i> \$'000	2024-25 <i>Estimate</i> \$'000	2025-26 <i>Estimate</i> \$'000
Net market revaluation gains/(losses):					
Treasury Bonds	107,982,100	(3,616,661)	(11,468,514)	(10,629,350)	(9,483,806)
Treasury Indexed Bonds	7,936,737	1,200,790	(173,619)	(87,205)	(313,762)
Treasury Notes	12,186	(17,850)	(747)	365	145
Total net market revaluation gains/(losses)	115,931,023	(2,433,721)	(11,642,880)	(10,716,190)	(9,797,423)

Net market revaluation gains made in 2021-22 (from rising market yields) are forecast to unwind into losses over the estimates period. This is attributable to the impact of time decay and rates being held constant from the time of budget production over the budget and forward estimates period. As at 30 June 2022, the unrealised gain on Treasury Bonds alone was \$70b.

OFFICIAL

Table 3.8: Schedule of budgeted assets and liabilities administered on behalf of Government (as at 30 June)

	2021-22 Estimated actual \$'000	2022-23 Budget \$'000	2023-24 Forward estimate \$'000	2024-25 Forward estimate \$'000	2025-26 Forward estimate \$'000	NOTE
ASSETS						
Financial assets						
Cash and cash equivalents (includes special accounts)	101,375,450	54,946,205	66,233,213	66,792,346	62,606,887	1
Loans to state and territory governments	1,333,393	1,251,623	1,169,842	1,089,300	1,004,018	2
Structured finance securities	803,174	925,648	896,075	1,060,816	1,244,714	3
Securities issued but not settled	2,490,549	-	-	-	-	4
Accrued interest on cash management account	53,308	57,645	70,000	70,940	65,264	5
Total financial assets	106,055,874	57,181,121	68,369,130	69,013,402	64,920,883	
Total assets administered on behalf of Government	106,055,874	57,181,121	68,369,130	69,013,402	64,920,883	
LIABILITIES						
Payables						
Suppliers	50	50	50	50	50	6
Total payables	50	50	50	50	50	
Interest bearing liabilities						
Australian Government securities (at fair value)						
Treasury Bonds	775,775,427	780,934,861	858,646,402	950,197,984	1,030,075,410	
Treasury Indexed Bonds	45,223,825	50,030,026	56,745,878	61,036,778	53,400,586	
Treasury Notes	27,450,825	46,976,788	47,473,511	44,974,905	43,975,464	
Other government securities	5,392	5,358	5,358	5,358	5,358	
Total interest bearing liabilities	848,455,469	877,947,033	962,871,149	1,056,215,025	1,127,456,818	7
Provisions						
Other provisions	628	628	628	628	628	8
Total provisions	628	628	628	628	628	
Total liabilities administered on behalf of Government	848,456,147	877,947,711	962,871,827	1,056,215,703	1,127,457,496	
Net assets/(liabilities)	(742,400,273)	(820,766,590)	(894,502,697)	(987,202,301)	(1,062,536,613)	

Prepared on Australian Accounting Standards basis.

NOTES for Table 3.8

1 – Cash and cash equivalents (includes special accounts) is broken down as follows:

	2021-22 <i>Actual</i> \$'000	2022-23 <i>Estimate</i> \$'000	2023-24 <i>Estimate</i> \$'000	2024-25 <i>Estimate</i> \$'000	2025-26 <i>Estimate</i> \$'000
Cash and cash equivalents:					
Cash at bank	621	621	621	621	621
Cash management account	86,084,992	39,235,434	49,944,685	50,616,859	46,556,382
Cash held in SFSF special account	14,397,201	14,691,340	14,985,114	15,075,222	15,140,517
Cash held in ABSF special account	892,446	1,018,810	1,302,794	1,099,645	909,368
Cash held in DRRTA	190	-	-	-	-
Total cash and cash equivalents	101,375,450	54,946,205	66,233,213	66,792,346	62,606,887

2 – Loans to state and territory governments comprise the balance of housing loans agreements with the states.

3 – Structured finance securities comprise the investments of the SFSF and the ABSF and is broken down as follows:

	2021-22 <i>Actual</i> \$'000	2022-23 <i>Estimate</i> \$'000	2023-24 <i>Estimate</i> \$'000	2024-25 <i>Estimate</i> \$'000	2025-26 <i>Estimate</i> \$'000
Structured finance securities:					
ABSF	111,368	498,432	747,150	995,881	1,244,714
SFSF	691,806	427,216	148,925	64,935	-
Total structured finance securities	803,174	925,648	896,075	1,060,816	1,244,714

4 – Securities issued but not settled comprise Treasury Notes issued over the end of 2021-22 (in escrow at 30 June). No budget is provided for this item in the Budget and over the forward estimate period.

5 – Accrued interest on cash management account is recognised separately to balance of the cash management account in item 1.

~~OFFICIAL~~

6 – Supplier payable comprises an accrual for unpaid registry, depository and auction system costs at the end of the period (excludes an accrual for unpaid syndication fees which are generally settled within the period).

7 – Interest bearing liabilities are carried at market or fair value. ‘Other government securities’ are Overdues. Note that the market or fair value of AGS is below its face and book value due to the significant MTM gains made during 2021-22.

	2021-22 <i>Actual</i> \$'000	2022-23 <i>Estimate</i> \$'000	2023-24 <i>Estimate</i> \$'000	2024-25 <i>Estimate</i> \$'000	2025-26 <i>Estimate</i> \$'000
Interest bearing liabilities:					
Face Value					
Treasury Bonds	830,511,750	840,049,369	912,149,369	998,949,369	1,074,049,369
Treasury Indexed Bonds	37,235,372	39,735,297	44,235,297	46,735,297	41,092,713
Treasury Notes	27,500,000	47,000,000	47,500,000	45,000,000	44,000,000
Other government securities	5,392	5,358	5,358	5,358	5,358
Total Face Value	895,252,514	926,790,024	1,003,890,024	1,090,690,024	1,159,147,440
Book Value					
Treasury Bonds	845,947,056	847,489,826	913,732,857	994,655,088	1,065,048,706
Treasury Indexed Bonds	46,151,537	52,158,528	58,700,762	62,904,456	54,954,502
Treasury Notes	27,462,495	46,970,610	47,466,581	44,968,340	43,969,044
Other government securities	5,392	5,358	5,358	5,358	5,358
Total Book Value	919,566,480	946,624,322	1,019,905,558	1,102,533,243	1,163,977,609
Market Value					
Treasury Bonds	775,775,427	780,934,861	858,646,405	950,197,984	1,030,075,410
Treasury Indexed Bonds	45,223,825	50,030,026	56,745,879	61,036,778	53,400,586
Treasury Notes	27,450,825	46,976,788	47,473,507	44,974,905	43,975,464
Other government securities	5,392	5,358	5,358	5,358	5,358
Total Market Value	848,455,469	877,947,033	962,871,149	1,056,215,025	1,127,456,818

8 - Other provisions comprises the expected credit loss provision on ABSF and SFSF structured finance securities.

~~OFFICIAL~~

Table 3.9: Schedule of budgeted administered cash flows (for the period ended 30 June)

	2021-22 Estimated actual \$'000	2022-23 Budget \$'000	2023-24 Forward estimate \$'000	2024-25 Forward estimate \$'000	2025-26 Forward estimate \$'000	NOTE
OPERATING ACTIVITIES						
Cash received						
Interest	174,138	1,124,368	1,176,118	1,198,782	1,097,299	1
Net GST received	1,134	-	-	-	-	2
Other	1,570	-	-	-	-	2
Total cash received	176,842	1,124,368	1,176,118	1,198,782	1,097,299	
Cash used						
Grant	-	1	1	1	1	3
Suppliers	17,435	25,000	10,000	10,000	10,000	4
Borrowing costs	21,431,860	22,568,959	23,607,102	26,742,775	33,983,338	5
Total cash used	21,449,295	22,593,960	23,617,103	26,752,776	33,993,339	
Net cash from/(used by) operating activities	(21,272,453)	(21,469,592)	(22,440,985)	(25,553,994)	(32,896,040)	
INVESTING ACTIVITIES						
Cash received						
Repayments of advances and loans	93,672	94,784	94,284	92,482	96,565	6
Structured finance securities	1,416,857	400,886	389,460	272,651	327,695	7
Total cash received	1,510,529	495,670	483,744	365,133	424,260	
Cash used						
Structured finance securities	363,723	524,304	360,395	438,668	514,128	8
Total cash used	363,723	524,304	360,395	438,668	514,128	
Net cash from/(used by) investing activities	1,146,806	(28,634)	123,349	(73,535)	(89,868)	

Table 3.9: Schedule of budgeted administered cash flows (for the period ended 30 June) (continued)

	2021-22 Estimated actual \$'000	2022-23 Budget \$'000	2023-24 Forward estimate \$'000	2024-25 Forward estimate \$'000	2025-26 Forward estimate \$'000	NOTE
FINANCING ACTIVITIES						
Cash received						
Proceeds from borrowing	198,264,155	426,496,542	674,028,196	718,708,907	685,309,162	9
Other	45,634	69,152	16,676	43,625	13,534	10
Contributed equity	500,000	500,000	500,000	-	-	11
Total cash received	198,809,789	427,065,694	674,544,872	718,752,532	685,322,696	
Cash used						
Net repayments of borrowing	121,901,423	396,775,060	601,294,716	637,029,435	621,864,572	12
Other	45,349	69,152	16,676	43,625	13,534	10
Total cash used	121,946,772	396,844,212	601,311,392	637,073,060	621,878,106	
Net cash from/(used by) financing activities	76,863,017	30,221,482	73,233,480	81,679,472	63,444,590	
Net increase/(decrease) in cash held	56,737,370	8,723,256	50,915,844	56,051,943	30,458,682	
Cash at beginning of reporting period	70,256,058	101,375,450	54,946,205	66,233,213	66,792,346	
Cash from Official Public Account for:						
- Appropriations	143,967,515	420,337,532	625,844,677	665,366,218	657,219,893	
- CMA transfers	29,533,564	-	10,709,252	672,174	-	
Total cash from Official Public Account	173,501,079	420,337,532	636,553,929	666,038,392	657,219,893	13
Cash to Official Public Account for:						
- Appropriations	(199,119,057)	(428,640,474)	(676,182,765)	(721,531,202)	(687,803,554)	
- CMA transfers	-	(46,849,559)	-	-	(4,060,480)	
Total cash to Official Public Account	(199,119,057)	(475,490,033)	(676,182,765)	(721,531,202)	(691,864,034)	13
Cash at end of reporting period (a)	101,375,450	54,946,205	66,233,213	66,792,346	62,606,887	14

Prepared on Australian Accounting Standards basis.

- a) Includes balances of special accounts and the cash management account (CMA) held with the RBA. In recent years, liquidity investments have been restricted to term deposits with the RBA. In November 2020 the AOFM established a new investment facility to replace term deposits – a cash management account – to more flexibly and more efficiently manage cash liquidity. The balance of the CMA is reported as 'cash' and not as 'investment'.

~~OFFICIAL~~

NOTES for Table 3.9

1 – Interest comprises interest receipts on the CMA, Housing Loans and the ABSF/SFSF. Interest receipts increase significantly in the Budget and forward estimate periods due to the increase in interest rates on the CMA.

2 – Net GST received and Other comprises GST receipts (claimed on supplier payments) and other miscellaneous receipts for which no budget is provided for.

3 – Grants comprises cash payments made into the DRRTA on behalf of the States for Commonwealth contributions and interest.

4 – Suppliers comprises the GST inclusive amount paid to suppliers for syndication, registry, depository and auction system costs.

5 – Borrowing costs comprise cash interest/coupon payments on AGS offset by any accrued interest on issuance. Accretion upon issuance for TIB repurchases and maturities is also included. Borrowing costs are broken down as follows:

	2021-22 Actual \$'000	2022-23 Estimate \$'000	2023-24 Estimate \$'000	2024-25 Estimate \$'000	2025-26 Estimate \$'000
Borrowing costs:					
Treasury Bonds	19,651,957	20,886,591	21,316,648	24,392,966	28,403,348
Treasury Indexed Bonds	1,760,380	838,806	942,278	1,031,083	4,312,787
Treasury Notes	9,364	843,557	1,348,171	1,318,721	1,267,198
Other and other government securities	10,159	5	5	5	5
Total borrowing costs	21,431,860	22,568,959	23,607,102	26,742,775	33,983,338

Note that the Indexed Bond maturity in 2025-26 is driving up estimated borrowing costs in this year due to the inclusion of capital accretion since issuance of \$3.5b (September 2025 TIB maturity). Also, TIB costs for 2021-22 include capital accretion costs of \$943m due to the buyback and maturity of the February 2022 TIB.

~~OFFICIAL~~

6 – Repayments of advances and loans comprises principle received on housing loans.

7 – Cash received - Structured finance securities comprises principle repayments received on ABSF and SFSF investments.

8 – Cash used - Structured finance securities comprises purchase of ABSF and SFSF securities.

9 – Proceeds from borrowing comprises proceeds from AGS issuance and is broken down as follows:

	2021-22 Actual \$'000	2022-23 Estimate \$'000	2023-24 Estimate \$'000	2024-25 Estimate \$'000	2025-26 Estimate \$'000
Proceeds from borrowing:					
Treasury Bonds	96,139,736	90,312,370	103,289,803	163,336,582	149,980,007
Treasury Indexed Bonds	6,174,463	2,868,513	4,828,172	2,993,412	3,117,299
Treasury Notes	95,949,956	333,315,659	565,910,221	552,378,913	532,211,856
Total proceeds from borrowing	198,264,155	426,496,542	674,028,196	718,708,907	685,309,162

These figures are excluding CDIs which are shown in 'Other'. The churn (issuance and maturities) on Treasury Notes increases significantly in the Budget and forward estimate years increasing proceeds from borrowing and repayments from borrowings respectively.

Face value issuance is as follows:

	2021-22 Actual \$'000	2022-23 Estimate \$'000	2023-24 Estimate \$'000	2024-25 Estimate \$'000	2025-26 Estimate \$'000
Face value issuance:					
Treasury Bonds	96,000,000	95,000,000	108,000,000	169,000,000	155,000,000
Treasury Indexed Bonds	5,250,000	2,500,000	4,500,000	2,500,000	2,500,000
Treasury Notes	98,500,000	334,225,274	567,259,563	553,691,781	533,476,712
Total face value issuance:	199,750,000	431,725,274	679,759,563	725,191,781	690,976,712

~~OFFICIAL~~

10 – Other comprises cash used and received to fund the maturity of Chess Depository Interests (CDIs). CDI maturities are budgeted for on a back-to-back basis, as such the net impact is nil for the Budget and forward estimate periods.

11 – Contributed equity comprises appropriation receipts for the ABSF. The last receipt is due 1 July 2023 and then nil thereafter.

12 – Net repayments of borrowing comprise repayment of AGS at maturity, repurchases and redemption of overdues. Repayment of borrowings is broken down as follows:

	2021-22 <i>Actual</i> \$'000	2022-23 <i>Estimate</i> \$'000	2023-24 <i>Estimate</i> \$'000	2024-25 <i>Estimate</i> \$'000	2025-26 <i>Estimate</i> \$'000
Repayments of borrowings:					
Treasury Bonds	16,398,026	85,393,229	35,883,324	82,156,375	79,886,466
Treasury Indexed Bonds	7,262,657	81	-	-	8,768,591
Treasury Notes	98,240,636	311,381,718	565,411,392	554,873,060	533,209,515
Other government securities	104	32	-	-	-
Total repayments of borrowings	121,901,423	396,775,060	601,294,716	637,029,435	621,864,572

These figures are excluding CDIs which are shown in 'Other'. The churn (issuance and maturities) on Treasury Notes increases significantly in the Budget and forward estimate years increasing proceeds from borrowing and repayments from borrowings respectively.

13 – Cash to/from OPA includes cash drawn down from special appropriations, CMA net receipts or returns for the period and cash returned to the OPA. Excludes cash drawn and returned to the ABSF and SFSF special accounts.

14 – Cash at end of reporting period includes special accounts and ties back to 'Cash and cash equivalents' in Table 3.8.

**SENATE ESTIMATES HEARINGS
OCTOBER 2023 BUDGET (NOVEMBER 2022 HEARING DATE)**

STATE & TERRITORY HOUSING ADVANCES ADMINISTERED BY THE AOFM

Loan balances as at 30 June 2022

State or Territory	Principal Value Outstanding (\$'m)
NSW	\$658.5
VIC	\$0.0
QLD	\$216.1
SA	\$163.5
WA	\$289.0
NT	\$133.3
TAS	\$0.0
TOTAL	\$1,460.4

Loan waivers and early repayments of CSHA loans

- The AOFM administers those CSHA loans made by the Australian Government from 1945 to 1989.
- Each loan was made on concessional basis for 53 years and credit foncier in nature.
- A single principal and interest payment is due annually on 30 June.
- Since the mid-1980s a number of Commonwealth advances to the States and Territories have been waived or repaid early. Waivers or early repayment requires agreement of the terms.
- The usual principal applied to their early repayment during these episodes was for the economic value to be determined by using the Commonwealth's bond rates (as opposed to the relevant State or Territory's bond rates).
 - From records we identified:
 - in 1994 Tasmania repaid \$80.6 million of CSHA loans at an agreed economic value using Commonwealth bond rates.
 - In 1999 Victoria repaid all of their CSHA loans at an agreed economic value using Commonwealth bond rates.
- The exception to this practice has been the provision of specific financial assistance to a State or Territory.
 - From our records we identified that the Commonwealth and SA Government's agreed an early repayment of \$358 million in 1991. The economic value of the loans was determined using SA bond rates. This approach resulted in SA obtaining around \$50 million in financial assistance.
- In 2013 the Commonwealth and SA Government's agreed to the waiver of \$320 million (in face value terms) of CSHA loans. The AOFM does not have any information on the nature of the agreement reached and the amount of financial assistance provided.
- In 2019 the Commonwealth and Tasmanian Government's agreed to the waiver of all CSHA loans (being \$157.6 million in face value terms). The AOFM does not have any information on the nature of the agreement reached and the amount of financial assistance provided.

Please note: In AOFM's 2021-22 Annual Report, Page 35 we set out Syndications for 2021-22 and show Treasury bond raisings over the last 10 years by Tender and by Syndication.

Treasury Bond Syndicated Issues				
Bond Line	Financial Year	Managers	Allocated Volume (\$b)	Fees Paid (incl GST) \$'m
Apr-27	2011-12	JLMs: Citi/DB/UBS Co's: ANZ/CBA/WBC	3.25	5.363
Apr-29	2012-13	JLMs: Citi/RBC/UBS Co's :Bar/DB/WBC	3.25	5.363
Apr-25	2012-13	JLMs: Citi/DB/UBS/WBC	4.00	6.600
Apr-33	2013-14	JLMs: ANZ/Citi/UBS Co's: DB/JPM/WBC	5.90	9.735
Apr-26	2013-14	JLMs: Citi/DB/UBS/WBC	7.00	11.550
Apr-37	2014-15	JLMs: ANZ/Citi/UBS/WBC	7.00	11.550
Jun-35	2014-15	JLMs: ANZ/CBA/DB/UBS	4.25	7.013
Jun-39	2015-16	JLMs: CBA/DB/UBS/WBC	4.00	6.600
Nov-27	2015-16	JLMs: ANZ/Citi/UBS/WBC	4.60	7.590
May-28	2015-16	JLMs: Citi/CBA/DB/UBS	7.00	11.550
Mar-47	2016-17	JLMs: ANZ/CBA/Citi/DB/UBS/WBC	7.60	15.048
Dec-21	2016-17	JLMs: ANZ/Citi/UBS/WBC	9.30	15.345
Nov-28	2016-17	JLMs: ANZ/CBA/DB/WBC	11.00	18.150
Jun-39 (tap)	2017-18	JLMs: BAML/UBS/WBC	2.30	3.795
Mar-47 (tap)	2018-19	JLMs: Citi/DB/TD	2.10	3.465
Nov-29	2017-18	JLMs: CBA/Citi/DB/UBS	9.60	15.840
Jun-39 (tap)	2017-18	JLMs: ANZ/CBA/NAB	1.70	2.805
May-41	2018-19	JLMs: CBA/TD/UBS/Westpac	3.60	5.940
May-41	2019-20	JLMs: CBA/UBS/JP Morgan	2.00	3.300
Nov-24	2019-20	JLMs: ANZ/UBS/DB/Westpac	13.00	12.870
Dec-30	2019-20	JLMs: Citi/UBS/ANZ/CBA	19.00	16.720
Nov-25	2020-21	JLMs: BofA/JP Morgan/UBS/Westpac	17.00	14.960
Jun-51	2020-21	JLMs: ANZ/CBA/DB/JP Morgan/UBS	15.00	18.150
Nov-31	2020-21	JLMs: CBA/Citi/UBS/Westpac	21.00	18.480
Sep-26	2020-21	JLMs: BofA/ANZ/DB/JP Morgan	25.00	19.250
May-41	2020-21	JLMs: NAB/TDA/Westpac/UBS	6.00	5.280
Nov-32	2020-21	JLMs: CBA/DB/Westpac/UBS	14.00	10.780
Nov-33	2021-22	JLMs: CBA/DB/NAB/UBS	15.00	13.200

Treasury Bonds	244.450	296.291	
By financial Year			Average cents/hundred\$
2009-10	-	-	
2010-11	-	-	
2011-12	3.250	5.363	16.5
2012-13	7.250	11.963	16.5
2013-14	12.900	21.285	16.5
2014-15	11.250	18.563	16.5
2015-16	15.600	25.740	16.5
2016-17	27.900	48.543	17.4
2017-18	13.600	22.440	16.5
2018-19	5.700	9.405	16.5
2019-20	34.000	32.890	9.7
2020-21	98.000	86.900	8.9
2021-22	15.000	13.200	8.8

Indexed Bond Syndicated Issues				
Bond Line	Financial Year	Managers	Allocated Volume (\$b)	Fees Paid (incl GST) \$'m

20 September 2025	2009-10	JLMs: DB/RBS/UBS Co's: Citi/JPM/WBC	4.00	6.600
20 September 2030	2010-11	JLMs: JPM/RBS/UBS Co's: BAML/Citi/CBA/DB	1.30	2.145
21 February 2022	2011-12	JLMs: BAML/DB/RBS/UBS	0.90	1.485
21 August 2035	2013-14	JLMs: BAML/DB/WBC	2.10	3.465
21 August 2040	2015-16	JLMs: DB/UBS/WBC	1.25	2.063
21 August 2040	2016-17	JLMs: DB/UBS/WBC	0.70	1.155
21 November 2027	2017-18	JLMs: Citi/DB/UBS/WBC	3.00	4.950
21 February 2050	2018-19	JLMs: Citi/DB/BAML/UBS/WBC	3.75	6.188
21 November 2032	2021-22	JLMs: NAB/Westpac/UBS	3.25	2.860

	Indexed Bonds	20.250	30.911	
	By financial Year			Average cents/hundred\$
	2009-10	4.000	6.600	16.5
	2010-11	1.300	2.145	16.5
	2011-12	0.900	1.485	16.5
	2012-13	-	-	
	2013-14	2.100	3.465	16.5
	2014-15	-	-	
	2015-16	1.250	2.063	16.5
	2016-17	0.700	1.155	16.5
	2017-18	3.000	4.950	16.5
	2018-19	3.750	6.188	16.5
	2019-20	-	-	
	2020-21	-	-	
	2021-22	3.250	2.860	8.8

	TOTAL	264.700	327.201	Average cents/hundred\$
	2009-10	4.000	6.600	16.5
	2010-11	1.300	2.145	16.5
	2011-12	4.150	6.848	16.5
	2012-13	7.250	11.963	16.5
	2013-14	15.000	24.750	16.5
	2014-15	11.250	18.563	16.5
	2015-16	16.850	27.803	16.5
	2016-17	28.600	49.698	17.4
	2017-18	16.600	27.390	16.5
	2018-19	9.450	15.593	16.5
	2019-20	34.000	32.890	9.7
	2020-21	98.000	86.900	8.9
	2021-22	18.250	16.060	8.8

Legal Authority for Syndication Fees

Section 13A of the *Commonwealth Inscribed Stock Act 1911* provides a standing appropriation to meet syndication and other specific costs arising from issuing and selling debt, and managing the debt portfolio. Section 13A reads:

The Consolidated Revenue Fund is appropriated to the extent necessary for the payment of:

- (a) the costs and expenses incurred by the Commonwealth in relation to the issue or sale of stock, including but not limited to syndication fees; and**
- (b) the costs and expenses incurred by the Commonwealth in relation to managing stock that has been issued or sold, including but not limited to: (i) registry fees; and (ii) clearing and settlement facility fees.**

Background

In the past borrowing costs, such as syndication fees were met from standing appropriations contained in annual Loan Acts.

- An annual Loan Act provided the authority to borrow, under the *Commonwealth Inscribed Stock Act 1911* or the *Loans Securities Act 1919*, to meet expected fiscal deficits in the current financial year.
- These Acts also provided an authority to use borrowed money 'for the expenses of borrowing'.
- The last annual Loan Act was assented in June 1996 for the 1996-97 financial year.

During the period from 1997-98 to 2007-08 the authority to borrow, under the *Commonwealth Inscribed Stock Act 1911*, was provided by the *Loans Redemption and Conversion Act 1921*, but limited borrowing to the amount necessary for the purpose of paying off, repurchasing or redeeming any loan.

- This Act remains in force and provides an authority to use money borrowed under the authority of the Act to meet 'the expenses of borrowing'.
- This Act does not provide authority to increase the volume of debt on issue. In 2008-09 with the onset of the GFC this Act did not provide the authority to raise new borrowings to undertake deficit financing.

In July 2008, the *Commonwealth Inscribed Stock Act 1911* was amended to provide an ongoing borrowing authority (which initially established a statutory debt cap, and which has since been removed), but no provision was made for borrowing costs in the Act. When this omission was identified in 2009 the then (Labor) Government committed to considering the need to amend the *Commonwealth Inscribed Stock Act 1911* to provide a standing appropriation for meeting borrowing costs as part of the review of the Commonwealth's borrowing legislation.

In June 2011, *Appropriation Bill (No.2) 2011-12* established a special appropriation in the *Commonwealth Inscribed Stock Act 1911* for the costs and expenses incurred in relation to the issue or sale of stock and to manage stock that has been issued.

- Section 13A was inserted into the *Commonwealth Inscribed Stock Act 1911*.
- The explanatory memorandum stated (at paragraph 85) – "In undertaking these activities [the sale or issue of stock and the management of the debt portfolio] the Government from time to time incurs specific costs and expenses in relation to borrowing and debt management activities. These can include items such as syndication fees". Paragraph 89 also states "The costs and expenses in relation to the issue or sale of stock is to provide for those costs directly associated with the issuance of stock, such as syndication fees".

**SENATE ESTIMATES HEARINGS
OCTOBER 2023 BUDGET (NOVEMBER 2022 HEARING DATE)**

RECEIPT OF GIFTS AND BENEFITS

AOFM Employment Policy and Procedures (last updated 21 June 2017) on the receipt of hospitality

- Hospitality that is considered 'excessive' should be declined.
- Common sense needs to be applied in making a judgement as to 'excessive' offerings of hospitality.
 - The likely cost (the higher the cost the more likely it is to be assessed excessive).
 - The nature of the hospitality – travel or accommodation should not be accepted unless approved by the CEO, whereas offers of lunch or dinner are viewed as acceptable.
 - The frequency or regularity of offers by an organisation.
- Consideration also needs to be given to:
 - the relationship between the person or organisation and the AOFM; and
 - the timing of the hospitality relative to current or prospective dealings, particularly if these events are known in advance.
- Hospitality should not be accepted where it would influence the professional judgement or independence of the employee or is likely to result in a perception of AOFM favouring a particular party.
- Prior approval (if practical) for accepting hospitality should always be sought from a superior. If uncertain, the superior should consult their own supervisor or the CEO.
- EG members can determine the appropriateness of offers themselves.
- Any hospitality with an estimated value in excess of \$350 should involve consultation with the CEO.
- Excessive, inappropriate or persistent offers of hospitality should be discussed with the CEO for guidance on how to deal with such circumstances.
- Hospitality should never be accepted from bidders during a procurement or tender process.
- All offers of hospitality should be recorded on the spreadsheet for this purpose.

AOFM Chief Executive Instructions (also known as Accountable Authority Instructions):

Section 6.6 Receiving gifts and benefits

- Officials must not:
 - ask for or encourage the giving of gifts; and
 - accept a gift over \$350 except in exceptional circumstances **and** must be referred to the CEO as soon as practicable.
- Officials must not accept a gift or benefit which influences or could be perceived to influence that official's decision or action on a particular matter.
- Approval must be sought by Business Unit Heads before accepting a gift or benefit up to \$350.
- Gifts or benefits above \$350 will require CEO approval prior to acceptance.
- Regard should be given to APS Values and Code of Conduct in deciding whether to accept a gift.

APSC Agency Head Gifts and Benefits Register

- All agency heads are to publicly disclose all gifts and benefits accepted and valued over \$100 (excluding GST) where received in the performance of official duties.
- This is to be done by publishing a register on the agency website on a quarterly basis.
- A link to the register must be provided to the APSC for publication on their website.
 - s 22 provided the APSC a link to our website on Tuesday 1 November 2022.
- Gifts and benefits must be recorded on the (internal) agency register within 31 days of receiving the gift or benefit.
 - A number of entries on the AOFM register fall outside this time limit and are visible on the public register.
- Although not a requirement, there is a 'strong expectation' that gifts and benefits received by staff over \$100 (excluding GST) will also be published.
 - AOFM publishes staff gifts and benefits received, but does not disclose their names.
- AOFM records the total value of hospitality received by event – seen as a more appropriate way of reporting this type of benefit.

AOFM Opening Statement – Senate Estimates, 28 October 2020

The unfolding impact of the pandemic was extraordinary for a number of reasons, not the least from the AOFM's perspective because it brought with it extreme stress and volatility in global funding markets.

The funding market dislocation in March this year materially constrained AOFM's issuance capability for several weeks. High-quality government bond markets globally were the last to close in the disruption and while investors had other assets to liquidate, for most of these assets there were no willing buyers, or market values didn't effectively exist at the time. They therefore sold large volumes of government bonds. The domestic and investment bank trading arms, which sit between us and global funding markets, absorbed a lot of this selling. Very quickly the banks reached their volume and risk limits, in turn meaning they would be unable to bid for meaningful volumes at AOFM bond tenders – for us this was like a river into the sea meeting a storm surge.

The AOFM has long had in place a plan for a crisis in which funding market access is lost temporarily. This plan had two elements – one was to ensure always holding sufficient liquidity in the cash portfolio to cover around four weeks of forecast Government outlays – the other was to maintain the Treasury Notes market. Treasury Notes are short-term cash instruments that are expected to be in demand during periods of extreme market stress when investors will be avoiding interest rate and liquidity risk. Both of these mechanisms allowed continued access to cash flow during the market dislocation.

AOFM borrowing operations are referred to as primary market activity. Secondary market activity is where banks acting as intermediaries buy from and sell to investors. The AOFM uses two approaches to access primary markets; both are common to sovereign issuer operations. The bulk of AOFM issuance is typically achieved through competitive tenders where issuance volume is set in advance and banks bid competitively for bonds. The volume on offer is progressively allocated to the lowest yield bids until the announced maximum is reached. Banks bid with varying motivations but in essence take bonds on the risk they will find buyers, and market valuations for that stock won't move against them in the interim.

Syndication is a method whereby the issuer can place bonds directly with investors and for this reason it allows for much higher volume transactions than do tenders. This method has most often been used for establishing new bond lines. In a syndication the AOFM does not set a fixed issuance volume and it has a degree of control over price. Syndications are attractive to investors who are able to access large volumes at a point in time and with confidence regarding price. The process is technically complex and the AOFM appoints banks to run it under instruction. The risks associated with tenders and syndications are readily identifiable by AOFM but the relative costs of the two approaches are more difficult to determine – syndications involve direct costs whereas establishing new bond lines over multiple tenders involves indirect costs.

The AOFM has established an unusually high number of new bond lines by syndication for such a short period since April. This has been driven by risk considerations and the need for these new bond lines to accommodate the scale of the Budget financing tasks. Furthermore, the rate at which financing has been required, and the uncertainty both in terms of the potential for further fiscal change and the ongoing possibility for further turmoil in funding markets has been unprecedented.

The largest previous issuance program was \$106B in 2016-17 and compared with the \$90B required in the last quarter of 2019-20 alone, this highlights how little experience there has been on which to base expectations at each point in time since March for the near-term outlook. Even during WWII, when the overall scale of debt accumulation by Australia was larger than what is currently forecast (as a percentage of GDP), the rate at which the fiscal response was required did not match the recent pandemic experience.

From late March until recently, managing the cash portfolio has required: trying to understand the profile of outlays as the new fiscal programs were implemented; the extent to which the underlying Budget position was deteriorating due to economic contraction generally; and how funding markets would absorb the high rates of issuance required. The underlying objective was to rebuild a strong cash position in order to be well placed to deal with an uncertain outlook. As of last Friday 53 per cent of the \$240B Treasury Bond issuance task for this year has been completed. Market conditions have been consistently favourable over the last six months and interest from offshore investors has been supported by slightly higher yields in the Australian Government Securities market relative to overseas competing markets. Moreover, high quality sovereign bonds in general have benefited from a 'flight to quality' as the global risk outlook continues to encourage conservative investment decisions across many institutions.

Turning to the AOFM's establishment of the Structured Finance Support Fund, the aim is to keep public securitisation markets open so that revolving warehouse financiers (for example banks who provide so-called 'senior' funding to smaller lenders) can be confident of continued market access. Detail describing the three approaches adopted by the AOFM to achieve this aim are available in the recently published AOFM Annual Report. However, by way of summary the Committee can note the following. One approach has involved public securitisation market support using the SFSF to invest directly in new primary issuance. The SFSF has also been used to invest in some secondary market securities, whereby the proceeds of those transactions are used by investors in support of new primary market issuance.

Securitisation market conditions have steadily improved in recent months to the point where the need for AOFM support has diminished noticeably. To illustrate this point, all \$1.4B of SFSF investments in public markets occurred between late March and the beginning of July. Of the 26 primary market transactions totaling \$16.5B that AOFM has agreed to support since the last week of March, the last 15 transactions have been executed without calling on the AOFM commitment to invest.

In a second approach to using the SFSF the AOFM has so far agreed to make revolving warehouse investments of over \$2.2B, which has helped to maintain around \$15B of private sector funding to more than 30 smaller lenders. This market also appears to be improving over recent months, with a number of investors indicating a renewed willingness to invest in these facilities.

Under the third approach, the AOFM has worked with industry through the Australian Securitisation Forum to establish a special purpose vehicle to provide lending, via SFSF investment, to Non-ADIs against capitalised interest on loans in Covid-19 related hardship. As well as providing secured funding to eligible lenders its availability alone has underpinned confidence in the broader non-ADI securitisation market. It is our understanding that this approach is without any comparative examples and is attracting interest from overseas markets.

ENDS



INCOMING CEO BRIEF

Commonwealth green bond issuance

Green bonds

- Green bonds are issued to finance assets or projects with environmental benefits.
- Investors may be prepared to accept a lower yield for a green bond than they would accept for a standard bond. The difference between the yield of a green bond and the yield of a standard bond with otherwise identical characteristics is called a 'greenium'.
- Issuers of green bonds include sovereigns, semi-government borrowing authorities, supranational authorities, corporates and financial institutions.
- The regulatory landscape for sustainable finance is not settled – for example, there is no universally accepted taxonomy of which assets qualify as 'green'.

Investor considerations

- Environmental considerations do not currently factor heavily into sovereign bond investment decisions. However, these considerations are beginning to gain momentum.
 - The bulk of the AOFM's investors are motivated by returns, credit quality and liquidity.
- Investors are, however, increasingly engaging the AOFM on the Government's climate policies.
 - There are no substantial concerns about the impact of climate change on the price of Australian Government Securities (AGS) or the Commonwealth's creditworthiness.
 - The AOFM now provides details of the Government's climate policies and commitments in investor information releases.
- Some investors have recommended Australian Government green bond issuance.

Work required to issue a green bond

- There are significant financial and resourcing costs to establish and maintain a green bond program.
 - Resourcing would be primarily spread between Treasury and the AOFM.
 - New Zealand Treasury's green bond implementation team advise that the project demands 8-10 people for a year before the first issue and the subsequent 1-2 years.
 - Ongoing reporting would require resourcing and coordination from across government.

- Based on the experience of sovereign peers, we estimate that a green bond could be issued around 12 months after a decision to implement a program.

AOFM stance

- We do not see a clear debt management rationale for green bond issuance.
 - A green bond would probably attract some new investors who would not buy standard AGS, but the volume of this demand is not expected to be material.
 - Investors advise us that they would not accept significantly lower yields for a green bond.
s 47D, s 47J
- There does not seem to be a strong 'market development' rationale for the Commonwealth to issue green bonds.
 - The Australian green bond market is developing steadily already; it is not clear that sovereign issuance would accelerate or otherwise benefit this development.
- The strongest case for green bond issuance is to promote the Government's environmental credentials. This has been a primary motivation for many green bond issuers.
- We will not issue a green bond before being directed to by the Treasurer.

State of play

- We have a process plan for establishing a green bond program and issuing a green bond.
- We are monitoring market developments.
 - We have met many sovereign green bond issuers and banks that have worked with them. Treasury (Budget Policy Division) has been involved in some of these meetings.
- Treasury has advised the Treasurer to 'explore the possible benefits from issuing sustainable Australian Government bonds (once policies and frameworks to address climate change and track progress are in place).'

s 22



2 November 2022

LITIGATION

Kathleen O'Donnell v Commonwealth of Australia and others

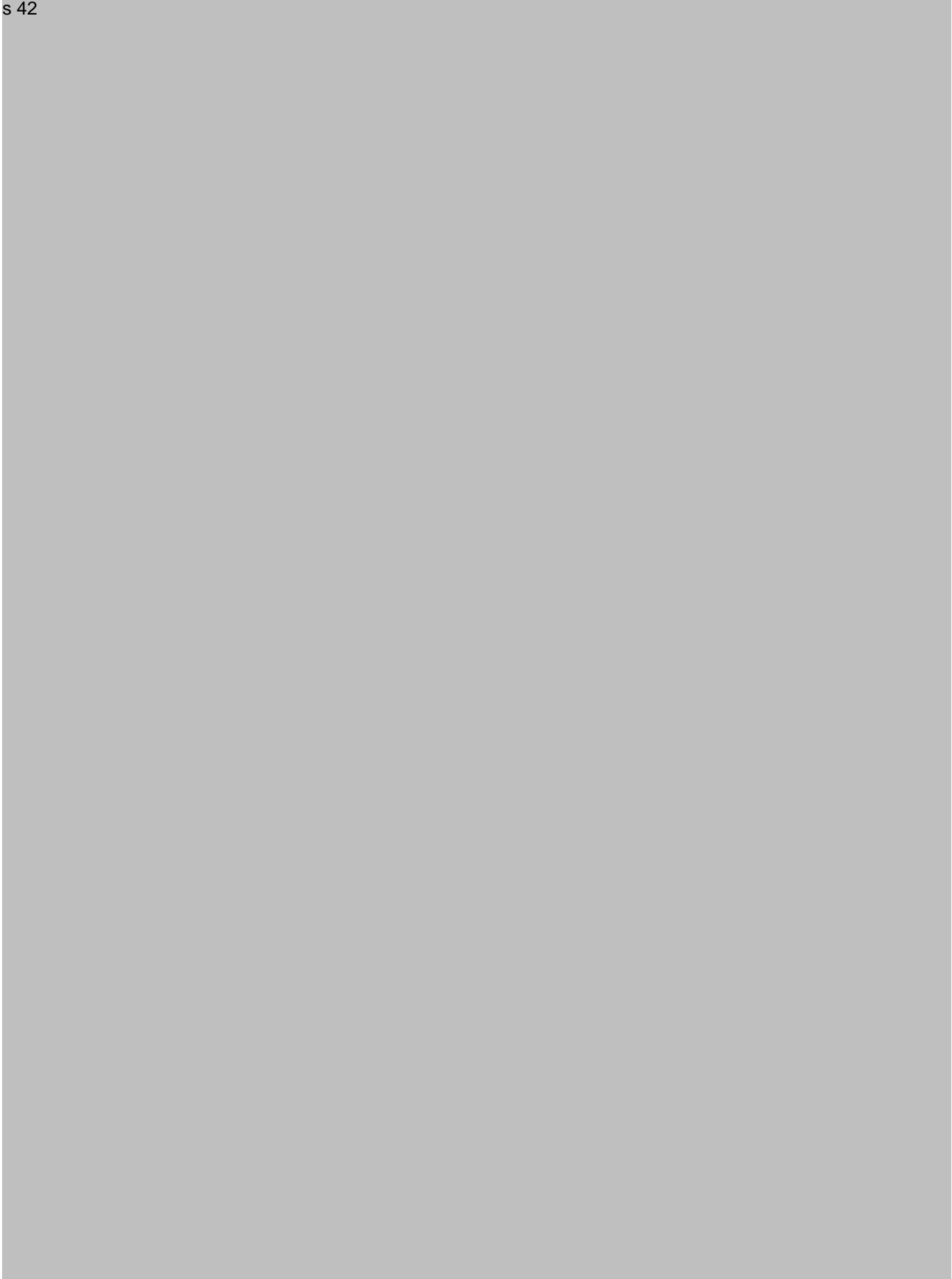
Background

On 22 July 2020 the Applicant lodged in the Federal Court of Australia (FCA) proceedings against the Commonwealth, the Secretary to the Treasury and the Chief Executive of the AOFM for failure of fiduciary duties, failure of duties of care, and breaches of the *Australian Securities and Commission Act 2001* (ASIC Act) for not disclosing climate change risks in retail investor product disclosure documents for exchange-traded Australian Government Bonds. The Applicant lodged the pleadings as a class action. The Applicant is seeking declarations and an injunction to restrain the Commonwealth from selling exchange-traded Australian Government Bonds unless the Information Statements include additional disclosures of climate change risks.

In June 2021 the Commonwealth lodged an application to strike-out the Applicant's pleadings. On 8 October 2021 the FCA handed down its decision on the strike-out application. The Applicant's pleadings for breach of fiduciary duty and breach of duty of care were struck-out. As a result of the strike out application, the Secretary to the Treasury and the Chief Executive of the AOFM are no longer respondents in the case. The FCA has allowed the pleading as to misleading and deceptive conduct in financial product disclosure documents (under subsection 12DA of the ASIC Act) to proceed to trial, and for the proceedings to continue as a class action.

The Applicant's claim is focused on the allegation that the Commonwealth has failed to disclose material climate change price risk Information to those who have acquired certain exchange-traded Australian Government Bonds. The Applicant claims that by failing to include information about climate change risks in Information Statements (prepared by the Commonwealth), the Commonwealth has engaged in conduct, and continues to engage in conduct, in relation to financial services that is misleading or deceptive, or is likely to mislead or deceive under the ASIC Act. It is asserted that this is because climate change risks could affect the future price at which the exchange-traded Australian Government Bonds in question are traded.

On 16 December 2021 the Commonwealth filed its defence with the FCA. The parties shared with each other their proposed categories of documents to be produced by the by the Commonwealth and the Applicant by way of discovery. Agreement was reached on the majority of the discovery categories and the Court delivered its judgement on the disputed categories in June 2022. Discovery processes formally concluded in early September 2022 (although, discovery obligations remain ongoing).



s 42



On 25 October 2022 a case management hearing was held. The FCA issued its Orders:

- the Applicant has until 9 December 2022 to provide a 4th further amended statement of claim.
- By 19 December 2022 the Commonwealth is to advise whether it opposes leave to file the claim.
- A further case management hearing is set for 23 March 2023.

The case is being managed by the Treasury and the Australian Government Solicitor and assisted by external legal counsel (Michael Hodge KC). Various agencies have also been assisting: including the AOFM; PM&C; Attorney General's; the Department of Industry, Science and Resources; the Department of Agriculture, Fisheries and Forestry; and the Department of Climate Change, Energy, the Environment and Water.

s 22





21 September 2022

SANCTIONS AGAINST THE RUSSIAN CENTRAL BANK

On the 24 February 2022 Russia invaded Ukraine. In response many in the international community introduced sanctions against Russia. Sanctions are punitive measures not involving the use of armed force that target certain persons, entities or governments, and include an interruption to economic relations.

Australia imposed significant sanctions against certain Russian entities and individuals. The initial response was rapid and was expanded a number of times thereafter.

- Australian has two separate sanctions regimes – legislation that implements sanctions giving effect to decisions of the UN Security Council (the *Charter of the United Nations Act 1945*) and sanctions imposed as a matter of Australia's foreign policy (the *Autonomous Sanctions Act 2011*). Sanctions against Russia were made via the latter regime.

On 2 March 2022, the Foreign Minister designated an additional number of Russian entities and individuals under Australia's sanctions laws. This included the Russian Central Bank for the first time. It was believed at that time that the Russian Central Bank held \$8 billion of Australian Government Securities (AGS) through Euroclear (an international central securities depository regulated by EU law).

- This was reported in the press (<https://www.canberratimes.com.au/story/7641654/treasurer-concedes-australia-will-pay-interest-on-bonds-held-by-russia/>).

The AOFM attempted to confirm the existence of AGS holdings by the Russian Central Bank directly with Euroclear and Clearstream (also an international central securities depository regulated by EU law), and through their sub-custodian agents in Australia. However, we were unsuccessful in our attempts.

s 42

s 42

A large rectangular area of the page is redacted with a solid grey fill, covering the majority of the upper half of the document.

s 47D

A very large rectangular area of the page is redacted with a solid grey fill, covering almost the entire middle section of the document.

s 22

A small rectangular area of the page is redacted with a solid grey fill, located in the lower-left portion of the page.



21 September 2022

AOFM'S ROLE IN THE SECURITISATION MARKET

Three interventions (so far)

This briefing provides a summary of the AOFM's interventions in the Australian securitisation (structured finance) market.

- The AOFM has been directed by Government to intervene in the Australian securitisation market three times. Two of these were in response to liquidity crises, namely the Global Financial Crisis (GFC) and the early stages of the Covid-19 pandemic, and one was to assist the development of the securitisation market's capacity to finance loans to small and medium enterprises (SMEs).
 - In the 14 years since the collapse of Lehman Brothers, the AOFM has either held investments in securitised products, or has been planning to do so, for all but 7 months.
- The GFC intervention was announced in September 2008 and utilised the Treasurer's investment powers provided by the Financial Management and Accountability (FMA) Act and subsequently the Public Governance, Performance and Accountability (PGPA) Act.
 - In all, \$20 billion was made available for investment under a series of Directions issued by the Treasurer and around \$15.5 billion was invested in AAA rated residential mortgage backed securities (RMBS) between late 2008 and mid-2012. In 2013, the Treasurer announced the suspension of the program.
 - Twenty lenders benefited from the program, 16 authorised deposit-taking institutions (ADIs) and four non-bank lenders.
 - The AOFM sold the last of its RMBS holdings in February 2018.
- In November 2018 the Government announced its intention to establish the Australian Business Securitisation Fund (ABSF), a \$2 billion fund with the objective of improving access to and lowering the cost of finance to SMEs by making targeted interventions in the SME securitisation market. The AOFM was directed to implement the ABSF and its CEO is the Treasurer's Delegate.
 - Following its announcement, the AOFM and Treasury engaged with market participants in order to ascertain how the ABSF could be utilised to achieve the Government's objectives. It soon became clear that the ABSF needed to be deployed in a way that addressed market frictions and gaps, but picking winners and/or injecting subsidy haphazardly could impede rather than support the market's development. A subsequent report on SME finance undertaken by the PC has confirmed the appropriateness of the AOFM's approach.

- Legislation to establish the ABSF was passed on the last sitting day of the 45th Parliament in April 2019. Activity ramped up significantly to implement the ABSF, including procuring the services of an investment manager to advise the AOFM, from June 2019.
- Speeches given by AOFM officials at market forums can be found on the AOFM website and these trace out the evolution of the ABSF's establishment. Also, recent briefing provided to the Treasurer on the ABSF provides detail on current investments and is available on request.
- The pipeline of activity is starting to pick up again after a hiatus.
- In March 2020, the Government announced a series of measures in response to the onset of the Covid-19 pandemic. One of the measures was the establishment of the Structured Finance Support Fund (SFSF), a \$15 billion fund designed to maintain access to finance for consumers and businesses who borrow from lenders unable to access the Reserve Bank's Term Funding Facility (TFF). The AOFM was directed to implement the SFSF and the CEO is the Treasurer's Delegate.
 - The implementation of the SFSF required the AOFM to pivot quickly from its implementation of the ABSF (which was announcing its first investment at the time).
 - The mandate of the SFSF was much broader than that of the previous interventions. In all \$3.8 billion was approved for investment by the delegate. One ADI (Judo Bank) and 40 non-bank lenders were approved for one or more types of support from the SFSF.
 - There were some interesting interactions between the AOFM's implementation of the SFSF and the RBA's implementation of the TFF and the Treasury's implementation of the various SME loan guarantee schemes. The AOFM's experience with the SFSF also provides some useful lessons for interventions in times of crisis.
 - Recent briefing provided to the Treasurer on the SFSF provides detail on current investments held by the SFSF and is available on request.
 - The SFSF is unique among Covid-19 pandemic interventions in that the legislation has no sunset clause, however would-be proponents are required to demonstrate a loss of access to reasonably priced finance resulting from the pandemic. The last new investment was approved in December 2020 and the last limit increase was approved in February 2021.
- Credit markets have been stressed since April 2022, causing some parties (including the Australian Securitisation Forum) to engage (unsuccessfully) with Treasury and the AOFM on the possibility of further assistance. The AOFM considers the Australian securitisation market to be functioning, albeit under some pressure.
 - Transactions are currently able to be completed, at high margins. This is likely to have implications for non-bank lenders operating in low yielding parts of the market, such as prime mortgage lending, where they compete with ADIs who typically raise around 60 per cent of their funding via deposits.
 - Note that the AOFM has no mandate to intervene in securitisation markets at will, either to support competition or to prop up non-bank lenders with unsustainable business models.



21 October 2022

THE AOFM'S PLACE IN STRUCTURED FINANCE (SECURITISATION)

Separate to the AOFM's role in the market for Australian Government Securities (AGS), the AOFM has been called upon to make three interventions in the structured finance (securitisation) market over the last 14 years (See Incoming CEO Brief: "AOFM Interventions in the Securitisation Market").

The AOFM network

The AOFM's work in securitisation markets is concentrated in the Global Markets and Business Strategy (GMBS) team, supported by the Settlements and Finance team and the Business and Data Systems team. The GMBS team is split between Canberra and Sydney offices (where the AOFM sub-lets four desks from Treasury).

GMBS maintains an informal network across the securitisation market, namely originators (issuers), bank intermediaries (structurers) and investors, but also with members of the Council of Financial Regulators (Financial System Division in Treasury, APRA, the RBA and ASIC), service providers (trustees, legal firms, ratings agencies and professional services firms) and industry bodies (The Australian Securitisation Forum and the Australian Finance Industry Association).

Key participants and the AOFM's intersection with their operations and interests are described below.

Originators

Strictly speaking, the 'issuers' of securitised products are trusts or special purpose vehicles. However, the market typically refers to the originator of the loans whose beneficial ownership is typically assigned to these trusts as the 'issuer'. We try to use the more correct language of 'originator' to describe these parties, who are the key beneficiaries of AOFM investment, in that they use the finance provided by the ABSF/SFSF to make loans.

Originators can be both authorised deposit-taking institutions (ADIs) and Non-ADIs (non-bank lenders). In the intervention undertaken during the Global Financial Crisis (GFC), 16 out of 20 were smaller ADIs (regional banks, building societies and credit unions) while four were Non-ADIs. In the intervention undertaken during the Covid-19 pandemic, 40 out of 41 originators

were Non-ADIs, and this skew towards Non-ADIs arose because the Structured Finance Support Fund (SFSF) was designed to assist small lenders who could not access the RBA's Term Funding Facility (TFF) which was restricted to ADIs who could originate AAA rated securitised products.

Some Non-ADI originators are focused solely on residential mortgage lending (be it prime or 'non-conforming'), or other forms of consumer credit (credit cards and 'buy now pay later' products), while some specialise in business lending, such as equipment finance, invoice/inventory finance and/or unsecured lending. Some straddle both markets, for example providing finance to small businesses secured by the residential property of the business owners. In essence, the Non-ADI originators tend to be less constrained than the banks, although they are reliant on them to a degree as the banks are a key source of their senior finance.

Bank intermediaries

The ADIs use securitisation as a funding source, however securitisation's share of the composition of bank funding has fallen from around ten per cent pre-GFC to around two or three per cent today, (excluding self-securitisation and the TFF, which use securitisation technology to produce collateral acceptable to the RBA under repurchase agreements). The more relevant roles that banks have in the industry are as senior financiers in (private) revolving warehouse facilities and as structurers of securitisation vehicles (both public and private transactions). Each of the big four has a presence in the market, but NAB is the largest player, while CBA and WBC compete for second place. Foreign banks (BoA, JP Morgan, Citi, RBC, SG, DB, CS) also have a presence in the market, but their interest in Australia tends to ebb and flow over time.

Institutional investors

There are two broad categories of institutional investors who invest in securitised products: (i) those who invest solely in public securitisation transactions (RMBS, CMBS, ABS), at varying parts of the capital structure (ranging from AAA rated securities to sub-investment grade securities) and (ii) specialist credit investors who may invest in public securities but specialise in investing in mezzanine tranches of private warehouse facilities. The latter role has emerged in recent years as APRA regulation has tightened with respect to the level of risk that the banks can take as senior financiers. In essence, the banks have reduced their risk in these facilities by advancing a smaller proportion of the value of loans made (or put differently, they now require a larger buffer beneath them in the capital structure to absorb losses). As a gap has emerged between the level of subordination the banks have required and the amount of 'skin in the game' (equity) the originators are willing or able to provide, this has been filled by the specialist mezzanine investors.

In order to assist in the credit analysis and due diligence of private warehouse facilities entered into by the ABSF, the AOFM has hired a specialist investment manager, namely Challenger Investment Partners (CIPAM). As well as undertaking the tasks set out in our investment management agreement, CIPAM provides useful perspectives on market conditions and helps us ensure we are not operating in a manner that might be considered at risk of crowding-out private sector investment. We also maintain an open dialogue with other investors to ensure we receive a broad range of views.

Council of Financial Regulators

Treasury

While the bulk of AOFM engagement with Treasury is with Budget Policy Division on matters related to its core business of sovereign debt management, almost all interaction with Treasury on securitisation matters is with Financial System Division (FSD). *Inter alia*, FSD advises the Treasurer on policy matters regarding access to finance for ADIs and Non-ADIs. Typically, any AOFM engagement with the Treasurer's Office on securitisation policy matters is via FSD, at least in the first instance.

APRA

For ADIs, APRA sets the prudential regulations as they relate to securitisation. However, more recently APRA has been given a role in the regulation of Non-ADIs with respect to securitisation. APRA's main interest with regards to securitisation is in ensuring that loans that have been securitised are genuinely 'off balance sheet' from the perspective of the ADI originator and thus are no longer an ongoing source of risk. APRA is watched closely by the industry as its regulations regarding 'capital relief' associated with securitised loans can drive the economics of securitisation products.

RBA

The RBA accepts a wide range of repurchase agreement ('repo') collateral from ADIs as part of its liquidity management functions. While AAA rated public securitisation products are one form, by far the more important form in recent years has been in so called 'self-securitisations' of loans. Under self-securitisation, a bank essentially assigns the cashflows of loans (typically residential mortgages) already on its balance sheet to a special purpose vehicle which issues securities back to the bank. The more senior of these can be rated AAA and held in reserve as repo collateral when required. At one point, around two thirds of the RBA's Committed Liquidity Facility (CLF) was collateralised by self-securitised mortgages. Note that, as a result of an increase in the amount of AGS and other kinds of highly liquid assets in recent years, APRA and the RBA are in the process of winding down the CLF. However, securitisation is likely to provide an ongoing, albeit less important source of collateral for ADIs seeking to access RBA liquidity on a secured basis, and so the RBA has an interest in securitisation technology being maintained. Indeed in 2020, the RBA's TFF was essentially a modified version of the CLF, where funding was available for up to three years on a secured basis. It is not known what proportion of TFF collateral was in the form of self-securitised assets, but it is likely to be close to 100 per cent.

ASIC

ASIC is interested in both market conduct and the regulation of investment products. Historically, as a member of the International Organisation of Securities Commissions (IOSCO), ASIC has had a key role in codifying the rules around risk retention or 'skin in the game' for originators of securitised products.

Service Providers

Trustees (and trust managers)

There is a lot of administration involved in ensuring that the many, many moving parts in a securitisation transaction come together in accordance with how the trust documents say they will. The trust manager and trustee of each trust have a slightly different role but often they are undertaken by the same entity. Trust managers make all the payments according to the rules set

out in the trust documents. Trustees have a fiduciary duty to the investor and sign off that everything is operating in accordance with the documents. In Australia, one company has a very large market share in both endeavours, but there are new entrants. As a value-added service, the trust managers typically offer data analytics and reporting services.

Other service providers

The documentation of trusts is complex, so it stands to reason that the big law firms dominate this market. Each party to a private warehouse transaction will typically require legal representation. While investors typically recoup legal fees from the originator, the AOFM has no legal capacity to do so and is unique among investors in paying its own way. We are giving thought to whether 'modularisation' of key securitisation document clauses supporting warehouses could be a useful endeavour under the aegis of the ABSF's market development objectives to support small business lending.

There is also no shortage of accounting and auditing needing to be done on securitisation transactions to provide assurance to all parties. The large professional services firms thus all have thriving securitisation practices.

All public deals in Australia are rated by one or more of the three major ratings agencies. Typically, private warehouse facilities are unrated but this is not always the case.

Industry Bodies

Australian Securitisation Forum (ASF)

The ASF has representation spanning originators, investors, intermediaries and service providers, however it is seen to be mainly the representative body of the originators. The ASF runs an annual conference in November each year that is useful for the AOFM to deliver messages to the industry on its activities in the securitisation market. The ASF has also convened industry roundtables for both Treasury and the AOFM and has formed a working group to establish and promote the adoption of a performance reporting template for SME lending. The AOFM sees the establishment of this template as a key enabler for the development of the securitisation market to support new kinds of SME lending, as it will help to produce the track record that investors and ratings agencies need.

s 47E(d)

Australian Finance Industry Association (AFIA)

AFIA's constituency is dominated by the emerging, Non-ADI lenders who are specialising in new kinds of finance. In particular AFIA has found itself to be the industry body of choice for the 'buy now, pay later' segment. AFIA has put one or two round tables on for the AOFM that have been useful for delivering messages to targeted segments of the market, such as unsecured SME lending, which is a focus of the ABSF's activities.

s 47E(d)

s 22



26 September 2022

THE AOFM NETWORK AND PLACE IN MARKETS

The AOFM operations have a broad reach and can impact other sectors of financial markets either by its actions as an issuer or via its role as an investor on behalf of government. They can also intersect directly or indirectly with the interests/activities of many other financial market participants.

Australian Government Securities (AGS) are a cornerstone of the Australian financial market. They provide a benchmark pricing reference for other issuers, underpin ASX Treasury Bond Futures contracts, are a key investor asset class and store of value for investors, while providing the basis for AOFM funding and cash management operations.

The AOFM approach to funding

The AOFM's objective is to provide the government with reliable, stable, low-cost access to funding for the long term. This long-term horizon means the AOFM is as concerned about the ability to efficiently fund in future years as it is today. It also recognises that opportunism or an absence of integrity in decision making today will have longer term costs even if it yields short term benefits.

At the core of the AOFM operational approach to financing is the principle that a liquid and efficient market, supported by a diversified investor base is fundamental to cost-effectiveness and efficient long-term access. This informs how the AOFM engages with markets and approaches its funding operations.

- The AOFM places a premium on maintaining the trust and confidence of market participants. Its reputation as a reliable and responsible participant in the Australian market is the key to broad investor participation, strong liquidity and lower funding costs. The AOFM accordingly seeks to conduct its operations in an open, transparent and predictable manner while avoiding choices or actions that could be interpreted as opportunistic or with the capacity to surprise the market.
- Flexibility in issuance (what lines are issued and funding run-rate) allows the AOFM to calibrate its operations to prevailing conditions. If stresses or dislocations are present (due to severe volatility in markets for example), the AOFM can respond by migrating issuance to less

effected sectors of the curve, reducing or suspending issuance or increasing usage of Treasury Notes¹.

- Flexibility to vary the funding rate is supported by the maintenance of a substantial liquidity buffer (the liquidity buffer also provides insurance against cash forecasting errors and unbudgeted spending ‘surprises’).
- The practice of weekly issuance announcements also supports flexibility enabling the AOFM to pivot quickly as conditions and investor preferences change (many sovereign issuers announce auction dates, lines and issue volumes months in advance).
- The issuance program recognises the importance of the ASX Treasury Bond futures contracts for the pricing and management of interest rate risk in the Australian financial system. Depth and liquidity in the futures contracts are complimentary to the AOFM’s funding objectives (by supporting AGS intermediation and broad investor participation). The most liquid points on the curve are in 3- and 10-year baskets stocks which is where the bulk of issuance occurs. The AOFM supports the futures contracts by providing basket stocks and through regular issuance.
- Through behaviours, operational practice and market engagement, the AOFM endeavours to be a model issuer in the Australian market. Widespread adoption of best practice approaches to primary issuance supports broad investor participation in AGS and the wider Australian market.

The AOFM network

The AOFM maintains and leverages extensive networks across markets, government, and the international community to fulfil its core function as the Government’s financier and manager of policy driven investment funds. Key participants and the AOFM’s intersection with their operations and interests are described below.

AGS Investors

As the end holders of AGS the AOFM values the level of engagement and relationships we have with this important stakeholder group. Given the very large and often changing number of this group, the ability by the AOFM to engage with all investors at any real depth of relationship is limited. Maintaining a level of ongoing contact with certain key investors and often certain personnel within those institutions is a core part of Investor Relations (IR) activity. Understanding investor strategies, drivers and themes and providing this as feedback to the CEO, front office and the AOFM in general, is also a major objective of the IR function.

Who are the Investors:

Australia has a large and diverse range of global institutional investors who invest in Australian Government Securities (AGS)

Most of these investors are invested in Treasury Bonds (TBs). Many hold TBs for medium to longer term, strategic positions in TBs but a large group are also shorter, term holders. Investors are also the main holders of Treasury Indexed Bonds (TIBs) and Treasury Notes (TNs)

¹ To support broad investor participation in the Treasury Note market, the AOFM maintains a floor of \$25 billion outstanding at all times. Treasury Note financing is considered highly scalable (given broad investor support) with AOFM access less susceptible to broader market stresses/disruptions.

All AGS investors are institutions and can be divided between Resident (Domestic) and Non-Resident (Offshore). Including the Reserve Bank of Australia (RBA), domestic investors hold approximately xx % of total TBs outstanding. However removing the RBA see the domestic proportion falls to XX%. By total number of investors there are considerably more non resident institutions owning AGS.

How do we assess Investors?

- The AOFM groups, assesses and engages with the investors, based on the following:
 - ❖ their importance of and receptiveness to the AGS market
 - ❖ What type they are (official, fund manager, bank treasury)
 - ❖ Where they're from (geographical location or region)
 - ❖ How they invest (type of investment strategy and activity in AGS, although investor type also provides some guidance here)
- General groups of AGS investors
 - ❖ Fund or asset Managers: including specialised fund managers, pension or super funds, insurers (e.g. life, general, re-insurers)
 - ❖ Bank treasuries or balance sheets: The big four domestic banks plus second and third tier domestic and foreign banks
 - ❖ Official money: central bank reserve managers, sovereign wealth funds
 - ❖ Other public sector: national or public sector pension funds, supra- nationals, state owned financial institutions
 - ❖ Hedge funds
 - ❖ The Reserve Bank of Australia

Given the large number of investors very widely distributed globally, it is difficult to maintain regular engagement with all. IR narrows the focus down to a group who have a higher level of importance to the AOFM, the financial intermediaries and the market in general.

This is based on criteria such as size of holding of AGS, country or sector significance of the investor (central bank, national pension fund) and volume turnover of AGS (investors may hold smaller volumes but be active traders). The relevance of the to our intermediaries is also important although this relationship is based more on turnover and dollar value.

Who participates in IR activities?

- ❖ CEO
- ❖ Head Investor Relations
- ❖ Investor Relations Team
- ❖ Heads of Funding and Liquidity & Portfolio Strategy and Research
- ❖ Occasionally other members of AOFM

How do we engage with Investors?

- Directly
 - ❖ Face to face meetings (conducted in a targeted roadshow or ad hoc)

- ❖ Speeches, presentations, roundtable discussions (such as the CEOs speech at the Australian Business Economists (annual), annual bank fixed income conferences, financial media companies hosting roundtable discussions)
- ❖ AOFM Fixed Income Forum in Tokyo every 18-24 months (organised /hosted by the AOFM)
- ❖ Fortnightly calls with a small group of domestic investors for TIBs feedback
- ❖ General enquires vis website, email and phone

➤ Indirect:

Usually written documents or slide packs provided as handouts or via website.

- ❖ Investor Insights publication
- ❖ Targeted investor handouts provided at all meeting
- ❖ Investor chart pack update
- ❖ Australia Government Climate Change Commitments & Policies slides
- ❖ AOFM Website and LinkedIn page

AGS Intermediaries

To the AOFM intermediaries represent primary access to market (because the AOFM does not have direct trading relationships with end-investors). Intermediaries are essential to the smooth functioning of the market.

The AOFM issues AGS to financial intermediaries in the primary market via competitive tenders who then act as market makers by buying and selling AGS to investors and to other market makers in the secondary market. The AOFM will also from time-to-time issue AGS by syndication where a panel of banks (who are also intermediaries) are selected (and paid) to act as joint lead managers to directly source investor demand and intermediate transactions between the AOFM and end investors.

<https://www.aofm.gov.au/investors/wholesale-investors/investor-insights/bond-issuance-methods-tenders-versus-syndications>

There are 19 banks who claim to make markets in Treasury Bonds (see <https://www.aofm.gov.au/securities/treasury-bonds>). There are fewer in Treasury Indexed Bonds and Treasury Notes.

- s 47J, s 47D
 [REDACTED] See [file:///escudo.aofm.treasury.gov/data/DM_BR/Project%20Buy-Side%20\(Distribution\)/Bidder%20Reports/Tender%20Bidder%20Reports/Treasury%20Bonds%20-%20bidder%20report.htm](file:///escudo.aofm.treasury.gov/data/DM_BR/Project%20Buy-Side%20(Distribution)/Bidder%20Reports/Tender%20Bidder%20Reports/Treasury%20Bonds%20-%20bidder%20report.htm)
- Secondary turnover is distributed over a wider group although a few banks make outsized contributions. See [file:///escudo.aofm.treasury.gov/data/DM_BR/Project%20Buy-Side%20\(Distribution\)/AOFM%20AGS%20Turnover/Turnover%20survey%20report.html](file:///escudo.aofm.treasury.gov/data/DM_BR/Project%20Buy-Side%20(Distribution)/AOFM%20AGS%20Turnover/Turnover%20survey%20report.html)

s 47J, s 47D

[REDACTED]
 [REDACTED]
 [REDACTED] Contact with intermediaries is very frequent and occurs at three main levels:

- **Trading: Funding and Liquidity** use the bank trading network to understand flows (buying and selling of AGS) and drivers of investor activity as well as to gather views on liquidity and functionality of the AGS market and macro factors influencing prices. This is an input to weekly decision making on AGS issuance (preferred lines, volumes and timing for example).
- **DCM and Syndicate:** Bank DCM and syndicate teams routinely provide advice' and suggestions with respect to debt strategy and primary issuance (i.e. maturity selections, issuance windows and observations on investor activity). *Portfolio Strategy and Research* manage feedback on longer term debt strategy. *Funding and Liquidity* manage JLM appointments (also requiring CEO approval).
- **Sales:** *Investor Relations* leverage bank sales networks in planning and undertaking investor relation activities.

Banks compete aggressively in the primary market, usually pushing tenders through the mid-market secondary price to win stock. The carrot of fee earning roles as a JLM in AOFM syndications is an important factor here. JLM roles are awarded on merit based on (1) primary rankings, (2) an AOFM assessment of bank distribution capacity and (3) the quality and impact of contributions made to AOFM strategic thinking.

Unlike many other sovereign issuers, the AOFM does not pay intermediaries to make markets. The AGS market is well 'brokered' which contributes to good liquidity and depth with tight bid/offer margins available to clients (most of the time).

Market making capacity for any individual intermediary is a commercial decision and related to its limits on: (1) the volume of stock it can hold; and (2) the risk it can tolerate. In recent years the size of bond markets has increased substantially, but it is not clear that the collective market making capacity of intermediaries has matched that growth. Regulatory change since the GFC has also contributed to an erosion of market making capacity (by making it more expensive). Intermediaries are generally more vulnerable now to events that trigger AGS accumulation on trading balance sheets.

- In March 2020, the volume of bond selling (triggered by covid fear) overwhelmed sources of demand, which led to intermediaries quickly reaching balance sheet volume and risk limits (despite some banks quickly getting internal approvals to increase both risk and volume limits); at this point markets effectively stopped trading. For a short period, this prevented AOFM bond issuance via tender as intermediaries were incapable of absorbing the extra volume.

The AOFM's approach to funding and liquidity management makes some allowance for the risk of intermediaries experiencing AGS 'digestion' problems stemming from either the volume of AOFM supply (i.e. the rate of funding) or from temporary dislocations/volatility in markets leading to investor selling. While inevitably circumstance specific, the AOFM's standard response will be to reduce the rate of issuance or to temporarily suspend issuance to give the market space to 'clear'. A substantial liquidity buffer (held in deposits at the RBA) affords this flexibility. Treasury Notes add further flexibility given their scalability and much lower probability of being constrained by intermediary volume and risk limits.

- The events of March 2020 did see the AOFM suspend issuance, however, the severity of dysfunction in financial markets at the time ultimately saw the RBA step into the market. The RBA purchased 40 billion in Treasury Bonds over the next seven weeks to address dysfunction and achieve its three-year yield target. By early April intermediaries were functional again and

the AOFM had resumed issuance (at a much-accelerated tempo to fund the pandemic response).

- Prior to the RBA's intervention, consideration was given to deploying AOFM reserves (using the liquidity buffer) to repurchase Treasury Bonds from intermediaries. This option was not pursued given the scale of the problem and urgency of the government's fiscal response.

RBA

The RBA are a major stakeholder in the AOFM's activities. They act as the governments banker, are part of the AOFM's BCP arrangements while the AGS market is important to them in judging and implementing monetary policy.

- Business continuity
 - The AOFM have an agreement with the RBA to act as the primary backup in case of AOFM failure for running tenders and making settlements in Austraclear on behalf of the AOFM.
- AOFM departmental banking
 - The RBA are responsible for the provision of the AOFM's departmental and administered bank accounts.
- Cash Management
 - The RBA as the Government's banker provide the AOFM with investment options - primarily the Cash Management Account (CMA) and Term Deposits. Agreements exist between the AOFM and the RBA for the provision of both these investment options.
- Securities Lending Facility
 - The AOFM have an agreement with the RBA to operate a securities lending facility on behalf of the AOFM (as the AOFM does not have the staffing or systems to operate such a facility). This is a facility of last resort which is designed to increase liquidity and avoid settlement failures in AGS. This facility is available to participants in the secondary market. <https://www.aofm.gov.au/intermediaries/securities-lending-facility>
- System liquidity management
 - The RBA are responsible for the management of system liquidity via the amount of Exchange Settlement balances available. This requires forecasts of government expenditure and receipts as these will directly increase and decrease ES balances available. The RBA and the AOFM (*Funding and Liquidity*) compare forecasts on a daily basis. The AOFM also provides forecasts (for at least the next year) to the RBA of planned AGS issuance and redemptions. A letter between the AOFM and the RBA details the information sharing and responsibilities. Currently the management of system liquidity is a lower priority for the RBA as they have injected large volumes into ES accounts through the Term Funding Facility and bond purchases.
- AGS market functionality

- The RBA are concerned with the functionality of the AGS market as it is important to the transmission of monetary policy. In March 2020 the RBA stepped into the AGS market by purchasing securities to reduce dysfunction (as proxied by bid/ask spreads). The AOFM and the RBA maintain communications on AGS market functionality and endeavour to coordinate actions where possible (noting that fiscal and monetary policy remain independent). The RBA maintain their own Treasury Bond securities lending facility (and semis) which helps market functionality.
- Reporting
 - : The RBA provide a variety of reports to the AOFM including: banking statements for AOFM accounts; SLF transaction reports; whole of government account balances and expenditure and receipts actuals; and the CMA rate amongst other things.

Treasury

The AOFM is a portfolio agency of Treasury and as such they are an important stakeholder. Treasury have ownership of government debt policy and manage the relationship with the ratings agencies.

- Portfolio strategy
 - The Treasury Secretary has historically been responsible for approving the AOFM's issuance strategy this takes the form of signing a remit which approves a Debt Management strategy and a Liquidity Management strategy.
- Debt policy
 - Treasury are responsible for debt policy, this includes briefing the minister on any changes required to the Debt limit.
- Budget
 - Treasury provide AOFM data required for the Public Debt Interest process which informs the AOFM's issuance task and underpins parts of the Budget Debt Statement. Budget Policy division work with AOFM's Business and Data Systems on this process.
- Cash forecasting
 - Treasury often have insight into major spending proposals which will impact the AOFM's cash management task. Budget Policy division will generally inform AOFM of any relevant proposals and provide contacts at the spending agency.
- IT and HR systems
 - Treasury are the providers of the AOFM's IT and HR systems. A Memorandum of Understanding between the AOFM and Treasury outlines the various responsibilities.
- Other interactions
 - Treasury regularly seek advice from AOFM on conditions in financial markets and broader balance sheet/financial management issues/proposals.

Finance

The Department of Finance are responsible for government's banking policy and agency expenditure and some associated Budget processes.

- Banking Deed
 - The RBA and Finance are parties to the Central banking deed which has clauses relevant to the operation of the CMA. Finance have ownership of the Official Public Account but AOFM are responsible for the management of the total balance.
- Cash forecasting module
 - Finance maintains the Central Budget Management System (CBMS) this includes a cash forecasting module where agencies are required by EM 2022/37 to enter monthly forecasts of spending which can be incorporated in the AOFM's cash forecasts.
- Agency cash management
 - Finance have control of changes to agency cash management and will generally consult with the AOFM and the RBA before implementation. Recent changes have included moving to real time drawdowns and 24/7 ability to spend.
- Reporting
 - Finance provide various reporting to the AOFM including daily drawdown amounts. The AOFM is also responsible for providing reporting to Finance in line with requirements.

ASIC

ASIC are the conduct regulator of the AGS market (and fixed income markets more broadly). Over the last few years ASIC have been conducting a review of fixed income, commodity and currency (FICC) markets including increased monitoring. As a part of their monitoring, they can and have requested documentation from the AOFM (generally surrounding syndicated issues). ASIC have released a report (REP668) relevant to how the AOFM conduct syndications with further reports and findings expected over the next few years. The AOFM maintain regular communications with ASIC on AGS market conditions and behaviour (monthly meetings with *Funding and Liquidity*).

ASX

The ASX operate much of the infrastructure which is important for the AGS market. The Finance and Settlements unit are responsible for the AOFM's relationship with the ASX.

- Austraclear
 - The ASX operate the system in which the AOFM settle all AGS transactions. Austraclear is one of the AOFM's critical software services.
- Exchange traded bonds

- The AOFM have an agreement with the ASX to provide a retail Treasury Bond and Treasury Indexed Bond product on our behalf. These take the form of CHESS depository interests (CDIs), they are ASX products but with the full support and endorsement of the AOFM. The AOFM maintains the Australian government Bonds website for these products.
- There are currently two market makers for the exchange traded TBs an TIBs (eTBs and eTIBs). The market makers are CBA and JPM. They are not provided compensation for making markets in these products. The AOFM and the ASX jointly maintain the relationship with the market makers, there is generally an annual meeting.
- Treasury Bond futures
 - The ASX operate the Treasury Bond futures (3yr, 5yr, 10yr and 20yr) which are an important hedging and speculating tool in Australian fixed income markets. The existence of these contracts increase the liquidity available in AGS. AGS form the underlying securities for these contracts.
- Listing and other fees
 - The AOFM have negotiated with the ASX to waive most fees which would otherwise be charged for issuing securities and utilising Austraclear.

AFMA

The Australian Financial Markets association provide guidelines and conventions to be used in Australian financial markets including AGS markets. AFMA host committees of market participants from the buy-side, sell-side and others who meet quarterly to discuss relevant matters. The AOFM have a presence on several committees relevant to the AGS market.

OECD

The OECD WPDM serves as a policy forum for sovereign debt managers from OECD Member countries to exchange views, experiences and policies in the field of government debt management and government securities markets. The AOFM CEO will typically attend the annual WPDM forum in Paris each year while also serving regularly on the WPDM coordinating committee (that determines the agenda).

Kanga-News

KangaNews is a news outlet dedicated to Australian fixed income markets. They regularly report on AOFM operations. The CEO and senior officers of the AOFM regularly participate in KangaNews roundtables, interviews, and conference panels.

ABE

The AOFM CEO makes an annual presentation through the ABE forum each year discussing the context and direction of AGS funding. This annual event has become the major forum for communicating the AOFM's views and strategic intentions. Timing is usually shortly after the government delivers the Budget

YieldBroker

Yieldbroker are a major electronic platform used for trading in Australian and New Zealand fixed income markets. Yieldbroker built and maintains an auction platform for use by issuers. The AOFM along with most state borrowing authorities and the New Zealand Debt Management Office utilise Yieldbroker for issuing and repurchasing securities.

- Yieldbroker DEBTS
 - Yieldbroker DEBTS is the software the AOFM uses for weekly tenders. It is one of AOFM's critical software applications. AOFM signed a deed with Yieldbroker where we agree to abide by the Operating Rules and Terms and Conditions of the Yieldbroker platform.
 - A contract management plan exists for the Yieldbroker relationship. The relationship is maintained by Funding and Liquidity.
- Reporting
 - The AOFM access various reports from Yieldbroker including: ticketing of trades: user access reporting and end of day rate sheets (which is used to value the AOFM's portfolio).

26 September 2022

LEGAL FRAMEWORK IN WHICH THE AOFM OPERATES

AOFM is an administrative entity within Commonwealth

On 1 July 1999 the AOFM was established as an administrative entity within the Commonwealth in the Treasury Portfolio. It is a listed non-corporate Commonwealth entity under the *Public Governance, Performance and Accountability Act 2013* (PGPA Act), and is legally part of the Commonwealth of Australia.

The AOFM CEO is the Accountable Authority of the AOFM under the PGPA Act. As well as having general duties and obligations applicable to all AOFM officers, the CEO is responsible for: leading and governing the entity, ensuring the proper use and management of public resources, achieving the AOFM's purposes, ensuring the financial sustainability of the AOFM, and assisting the Treasurer (including through Treasury) to discharge their responsibilities.

- The AOFM was not established by its own legislation and has no separate legal existence from the Commonwealth.
- When the AOFM enters into legal relationships, such as contracts, it does so as the Commonwealth, and in turn the Commonwealth is bound by any obligations entered into by the AOFM.
- The nature and extent of the authority that AOFM officers (including the CEO) may have to enter into a contract or to conduct a specific activity on behalf of the Commonwealth is to be determined in accordance with constitutional rules.

The AOFM is not a department of state

Through the *Administrative Arrangement Orders* the Governor General appoints ministers and establishes departments of state and allocates responsibilities to them. The Treasury is a department of state and is responsible for administering borrowing legislation and for 'borrowing money on the public credit of the Commonwealth' (as per subsection 51(iv) of the Constitution).

The CEO is accountable to the Treasurer and the Secretary to the Treasury in relation to debt management and other responsibilities assigned to the AOFM.

- The AOFM is not a department of state, and forms part of the Treasury.

- Accordingly, the AOFM is not a separate APS agency under the *Public Service Act 1999* (the PS Act). The AOFM is a part of Treasury under the Act, and the Secretary to the Treasury is the employer of AOFM staff on behalf of the Commonwealth.

The authority to exercise power

Generally, ordinary and well recognised functions of government do not require legislative authority (i.e. exercising executive powers). However, matters within the legislative powers of the Constitution (under section 51) must be supported by statutory authority in legislation passed by Parliament (i.e. exercising legislative powers). Borrowing money is a legislative power, and accordingly must be authorised by borrowing legislation. The primary legislative regime for the Commonwealth's borrowing activities is the *Commonwealth Inscribed Stock Act 1911* (the CIS Act).

When Parliament establishes a statutory power in legislation it vests that power in an individual or body who is then able to exercise it. The exercise of the power must be made by the person who has that power. There are a few exceptions to this rule.

- Firstly, where the legislation provides an express power to delegate or authorise the power to another person or persons. In this instance, the delegate or authorised person can exercise the power in their own right.
- Secondly (unless expressing prohibited or as a matter of interpretation it is evident that the power was intended to be exercised personally) an official can use an implied (common law) power to authorise an official to exercise a power. In this instance the power is exercised *for and on behalf* of the authoriser. Routine administrative powers are most amenable to common law (non-statutory) authorisations. Authorisations can be express or implied. However, a written authorisation provides greater certainty.
- The choice of delegate or authorised officer, especially where specialist skills are required, needs to be reasonable.
- A power that is delegated or authorised can still be exercised by the delegator or authoriser respectively.
- Delegations and authorisations can be made in favour of nominated individuals or to persons holding a specific position.
- Statutory delegations and authorisations do not automatically cease because there is a change in the identity of the person who is the delegator. However, common law authorisations do cease in such instances.

Instruments of delegation and authorisation

There are several instruments of delegation and authorisation in place to provide the AOFM CEO and certain AOFM officials with the ability to exercise various powers, including in relation to financial management, debt management and the management of the ABSF and the SFSF. A few examples are as follows.

- Under the PGPA Act: the Finance Minister has delegated certain statutory powers to the accountable authorities of non-corporate Commonwealth entities.

- Under the CIS Act: the Governor General has delegated certain statutory powers to the Treasurer. The Treasurer has delegated and authorised certain statutory powers to officials holding nominated positions in the AOFM and the RBA.
- Under the PS Act: the Secretary to the Treasury has delegated certain statutory powers to the AOFM CEO in relation to matters arising from terms and conditions of employment for AOFM staff.

In addition, the AOFM CEO has issued the 'delegations and authorisations relating to resource management' to delegate or authorise various powers to officials holding nominated positions in the AOFM.

Spending of public money

The authority (either through the exercise of executive power or legislative power) to conduct certain activities or to enter into certain arrangements, is a separate issue as to whether authority exists to make payments of public money. An appropriation must be available to make payments. Also, except in limited circumstances, an appropriation is not a source of spending power.

s 22



Additional Budget Estimates 2022-23

TOPIC: 2022-23 OCTOBER BUDGET – BALANCE SHEET COMMITMENTS

CONTACT OFFICER: Leigh Cunnington

Key messages

- Since PEFO, the headline cash balance (HCB) has improved by \$29.4b over the forward estimates, less than the \$42.7b improvement in the UCB. The difference is driven by the change since PEFO of net cash flow from **investments in financial assets for policy purposes**, including:
 - Net decrease in student loan cash flows: (-\$4.7b), reflecting a reduction in projected repayment rates following an Australian Government Actuary review
 - Net decrease in cash flows from NBN compared with March Budget estimates (-\$3.4b), reflecting additional equity investment in NBN (\$2.4b) and a \$1b reduction in expected loan repayments over the forward estimates (this payment was made in 2021-22)
 - Net decrease in cash flows due to CEFC loans and investments (-\$4.1b). This includes additional loans and investments CEFC will provide in relation to Rewiring the Nation.
- **Investments in financial assets for liquidity purposes** do not directly impact the UCB or HCB, but still need to be financed through debt issuance. Net cashflows from these investments decreased by \$19.1b over the forward estimates since PEFO. Main drivers of this deterioration include:
 - Allowance for the Housing Australia Future Fund (HAFF), around \$10b.
 - Budget updates relating to the Future Fund Management Agency. Further questions relating to this update should be directed to the Department of Finance.

Background

- The HCB adjusts the UCB to include net cash flows from investments in financial assets for policy purposes.
- Acquisition of financial assets for policy purposes, such as loans and equity investments – the type that will eventually be made in the Rewiring the Nation measure – increases the headline cash deficit and requires additional debt issuance, increasing gross debt and interest payments.
- The acquisition of financial assets for liquidity purposes – assets acquired for the purpose of earning a return which may subsequently finance a particular program – such as the Future Fund and the new Housing Australia Future Fund, do not directly impact HCB. These investments still require additional debt issuance.

- Returns on both types of investments, as well as the interest costs associated with financing them, are included in the UCB and, therefore, the HCB.

Major balance sheet commitments	Are capital investments reflected in this Budget?
<p>\$20b to establish Rewiring the Nation (RTN), to be managed by a new Rewiring the Nation Office (RTNO) within the Department of Climate Change, Energy, the Environment and Water (DCCEW).</p>	<p>Yes, RTN is reflected in the following ways:</p> <ul style="list-style-type: none"> In the balance sheet as an increase in liabilities (government securities) and an offsetting increase in assets – cash and deposits to begin with and then loans and equity investments by CEFC in relation to RTN In the cash flow statement as an increase in net cash flows from financing activities, this does not impact the HCB Once the loans and equity investments begin these are treated as an ‘investment in financial assets for policy purposes’ in the cash flow statement and included in the headline cash balance The public debt interest associated with the increased borrowing and the returns on investment are included in the underlying and headline cash balances <p>For example, Table 3.5, p95, reports CEFC loans having increased by \$4.1b over the forward estimates since the March Budget. This includes additional loans and other equity investments CEFC will provide in relation to the RTN.</p> <p>The Powering Australia – Rewiring the Nation measure description in BP2 (p72) states that the Government will provide \$20 billion in funding to establish Rewiring the Nation. s 47D</p> <p>The impacts of Rewiring the Nation in the forwards and medium term have been modelled by Finance. Further queries should be directed to the Department of Finance, DCCEW, or the CEFC.</p>
<p>\$10b to invest in the newly created Housing Australia Future Fund (HAFF), to be managed by the Future Fund Management Authority.</p>	<p>Yes, the HAFF is reflected in the following ways:</p> <ul style="list-style-type: none"> In the balance sheet as an increase in liabilities (government securities) and an offsetting increase in assets – investments, loans and placements. It is also reflected in the general government sector cash flow statement, specifically, investments in financial assets for liquidity purposes. Investments in financial assets for liquidity purposes do not impact HCB. In the Contingency Reserve described in BP1 (p204). <p>BP1 Statement 6 (p204) states that the Contingency Reserve also includes the estimates for a number of measures that require legislation to be implemented, including the HAFF. BP1 Statement 10 (p363) states that legislation to establish the Fund is expected to be introduced to Parliament in 2022-23. s 47D</p> <p>The Safe and Affordable Housing measure description in BP2 (p191) states that of the investment returns, \$330 million will be allocated for accurate housing needs.</p> <p>The impacts of the HAFF in the forwards and medium term have been modelled by Finance. Its investment mandate is assumed to be like other similar investment funds. Further queries should be directed to the Department of Finance.</p>
<p>\$15b investment over 7 years from 2023-24 to establish the National Reconstruction Fund (NRF).</p>	<p>Yes, the NRF is reflected in the following ways:</p> <ul style="list-style-type: none"> In the balance sheet through an increase in liability (government securities) and an offsetting increase in assets – cash and deposits

	<ul style="list-style-type: none"> In the cash flow statement as an increase in net cash flows from financing activities. <p>The NRF is expected to generate revenue from investments, which will be quantified as part of the policy and legislation design of the NRF, following public consultation.</p> <p>The National Reconstruction Fund – establishment measure in BP2 (p153) states the Government will create a \$15b fund. s 47D</p> <p>See <i>Issues Brief – Establishing A National Reconstruction Fund</i> for more information.</p> <p>The NRF is modelled in the MT broadly based on PBO modelling. Further queries should be directed to the Department of Industry, Science and Resources, or the Department of Finance.</p>
<p>This Budget provisions a \$324.6m UCB impact over 4 years from 2022-23 to establish the Help to Buy scheme to assist people on low to moderate incomes to purchase a new or existing home with an equity contribution from the Government.</p>	<p>s 47D</p> <p>The Safe and Affordable Housing measure description in BP2 (p191) states the Government will provide \$324.6 million to establish the Help to Buy scheme.</p> <p>s 47D</p> <ul style="list-style-type: none"> <p>See <i>Issues Brief – Election Commitments</i> for more information.</p> <p>Help to Buy is modelled in the MT based on Treasury modelling.</p>

*Balance sheet commitments are reflected in the general government sector balance sheet and cash flow statements found in Budget Paper 1, *Statement 10: Australian Government Budget Financial Statements*, Tables 10.2 and 10.3.

Questions and Answers

If asked: Where in the Budget papers can I find a debt profile of borrowing for the Government’s very significant balance sheet commitments?

The Government’s borrowings are reflected, in aggregate, as a liability on the balance sheet (BP1 p323), specifically *Government securities*. This includes borrowing to finance balance sheet commitments. Borrowings for the balance sheet commitments are also reflected in gross and net debt estimates (BP1 p218;223). Specific debt profiles for each balance sheet item are not available, either because the commitments have not yet been finalised (eg. NRF), or because the committed funding profiles are subject to negotiations (eg Help to Buy scheme). Further detail on each of the commitments can be found in BP2 – page references provided in the table above.

If asked: Why hasn’t the borrowing requirement across the forward estimates decreased by as much as the UCB since PEFO?

This primarily reflects financing for the Government’s balance sheet commitments – see **key messages** for more information.

If asked: Why is the financing for many of these commitments being held as cash and deposits? Particularly given interest on deposits is lower than the governments cost of borrowing.

Many of the commitments are yet to be finalised due to implementation of legislation or policy design, it is likely than a small portion of the financing will sit in cash and deposits (at least for very long), rather, many will flow through to equity or loan investments once finalised. They have been incorporated into the Government’s financing requirements though given the Government needs to raise debt to finance these commitments. Further questions on the accounting treatment of the financial statements should be directed to the Department of Finance.

	Name and Role	Group/Branch/Org	Phone ext	Phone (m)
Cleared By	Neena Pai, Assistant Secretary	FG / BPD / Treasury	X2774	s 22
Contact Officer	s 22	FG / BPD / Treasury	s 22	s 22



(plus 14b for May-34, 150m ix32)

Treasury Bonds

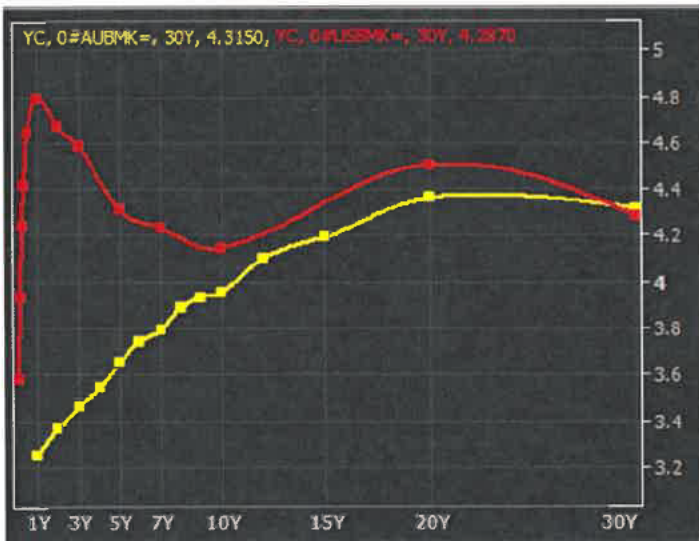
	Last	Net Chg	Imp Yld	B Sz	Bid	Ask	A Sz	High	Low	Close	Vol
3YR TB-DAY DEC2	96.46	0.02	3.54	8	96.46	96.47	898	96.51	96.42	96.43	50,041
5YR TB-DAY DEC2	96.31	0.05		13	96.3	96.305	3	96.355	96.305	96.27	79
10YR TB-DAY DEC2	96.03	0.07	3.97	347	96.025	96.03	759	96.06	95.935	95.955	68,103
20YR TB-DAY DEC2	95.6		4.4	30	95.625	95.64	50			95.6	0
BANK BILL DEC2	96.73	0.00	3.27	2,354	96.72	96.73	405	96.74	96.72	96.72	6,111

Ten year bonds	Spread			3s10s	43.75
AU	3.96			Close	47.5
US	4.15	-19	0.6496		3.75 flatter
JP	0.25	371	94.69	10s20s	39.5
GB	3.55	41	0.56	Close	35.5
CA	3.48	48	0.87		4.00 steeper
DE	2.28	168	0.65		

	Last	Trd Vol	Net Ch	Imp Yld	B Sz	Bid	Ask	A Sz	High	Low	Cls	Vol	Op Int	Curve	Curve cls
3YR TB-DAY DEC2	96.47	2	0.030	3.53	555	96.46	96.47	576	96.51	96.42	96.43	50,110	800,538		
5YR TB-DAY DEC2	96.31	1	0.045		13	96.305	96.315	59	96.355	96.305	96.27	79	24,465		
10YR TB-DAY DEC2	96.035	2	0.080	3.965	349	96.030	96.035	541	96.060	95.935	95.955	68,396	1,026,662	43.25	47.5
20YR TB-DAY DEC2		0		4.4	30	95.630	95.645	50			95.600	0	16,550	39.5	35.5

	Coupon	Mid	Close	Yld Chg	Mid EFP	Cls EFP	EFP Ch	Fut	PPH	ModDu	o/s	BPV	Swp Spd	AS 3m	First Issued
21 NOV 2022 TB153	2.25	2,9150	2.89	4.55	-62.00	-67.05	5.86	TYB D	101.04	0.03	26,500	0.0	89.4	1.7	13 OCT 2017
21 APR 2023 TB133	5.50	3,1831	3.20	-1.59	-35.19	-36.10	8.89	TYB D	101.31	0.43	34,199	0.4	59.4	14.7	23 MAY 2011
21 APR 2024 TB137	2.75	3,2620	3.28	-2.05	-27.30	-27.75	8.85	TYB D	99.40	1.40	35,900	1.4	58.8	10.8	25 JUN 2012
21 NOV 2024 TB159	0.25	3,3838	3.40	-1.87	-15.12	-15.75	8.88	TYB D	93.98	1.99	41,300	1.9	43.2	8.7	21 APR 2020
21 APR 2025 TB139	3.25	3,4205	3.44	-2.18	-11.45	-11.77	8.37	TYB D	99.73	2.32	40,800	2.3	58.7	44.1	29 MAY 2013
21 NOV 2025 TB161	0.25	3,4800	3.51	-2.62	-5.50	-5.38	-0.12	TYB D	90.83	2.96	38,000	2.7	58.4	58.4	24 JUL 2020
21 APR 2026 TB142	4.25	3,5187	3.54	-2.39	-1.63	-1.74	8.17	TYB D	102.51	3.18	38,100	3.3	66.4	54.7	19 MAR 2014
21 SEP 2026 TB164	0.50	3,5742	3.59	-1.57	3.92	2.99	8.83	TYB D	89.02	3.76	36,700	3.3	67.3	33.8	29 SEP 2020
21 APR 2027 TB136	4.75	3,5987	3.63	-2.70	6.37	6.57	-0.20	TYB D	104.84	3.98	36,699	4.2	68.9	54.4	27 OCT 2011
21 NOV 2027 TB148	2.75	3,6644	3.70	-3.43	12.94	13.87	-0.93	TYB D	96.97	4.58	31,400	4.4	63.8	53.5	28 JAN 2016
21 MAY 2028 TB149	2.25	3,6911	3.73	-4.29	-27.64	-31.10	3.86	XYB D	93.70	5.06	29,700	4.8	63.8	53.1	19 MAY 2016
21 NOV 2028 TB152	2.75	3,7377	3.79	-4.83	-22.98	-25.90	3.30	XYB D	95.75	5.40	34,100	5.2	64.4	53.3	02 MAR 2017
21 APR 2029 TB138	3.25	3,7574	3.82	-5.88	-21.01	-22.88	3.85	XYB D	96.97	5.73	34,499	5.6	65.1	53.7	17 OCT 2012
21 NOV 2029 TB154	2.75	3,8039	3.87	-6.48	-16.36	-17.63	3.27	XYB D	94.46	6.21	33,400	5.9	65.8	53.7	25 JAN 2018
21 MAY 2030 TB155	2.50	3,8409	3.91	-6.96	-12.66	-13.45	3.75	XYB D	92.05	6.65	37,100	6.2	66.4	53.5	13 JUN 2018
21 DEC 2030 TB160	1.00	3,8950	3.96	-6.69	-7.25	-8.31	1.98	XYB D	80.01	7.58	38,700	6.1	66.1	54.1	21 MAY 2020
21 JUN 2031 TB157	1.50	3,9129	3.99	-7.34	-5.46	-5.87	8.41	XYB D	82.61	7.83	38,100	6.5	66.8	53.1	31 MAY 2019
21 NOV 2031 TB163	1.00	3,9342	4.00	-7.08	-3.33	-4.00	8.40	XYB D	77.89	8.37	41,800	6.6	66.3	54.8	02 SEP 2020
21 MAY 2032 TB146	1.25	3,9406	4.02	-7.52	-2.69	-2.92	8.33	XYB D	78.86	8.69	38,400	6.9	67.3	54.8	24 JAN 2020
21 NOV 2032 TB165	1.75	3,9568	4.03	-7.75	-1.07	-1.07	8.38	XYB D	82.13	8.87	27,800	7.3	67.8	53.3	20 APR 2021
21 APR 2033 TB140	4.50	3,9560	4.03	-7.78	-1.15	-1.12	-0.03	XYB D	104.19	8.31	22,200	8.7	69.3	60.1	22 NOV 2013
21 NOV 2033 TB166	3.00	3,9995	4.08	-7.77	3.20	3.22	-0.02	XYB D	91.92	9.05	17,600	8.4	65.3	53.1	20 APR 2022
21 JUN 2035 TB145	2.75	4,1117	4.17	-6.30	14.42	12.97	3.44	XYB D	87.20	10.23	9,550	9.0	33.4	44.4	31 MAR 2015
21 APR 2037 TB144	3.75	4,2037	4.26	-6.09	23.62	21.96	3.48	XYB D	94.70	10.93	12,300	10.4	46.7	43.8	21 OCT 2014
21 JUN 2039 TB147	3.25	4,3170	4.35	-2.90	34.95	30.10	4.85	XYB D	88.39	12.22	10,300	10.8	34.8	38.3	21 OCT 2015
21 MAY 2041 TB156	2.75	4,3665	4.40	-3.22	39.90	35.37	4.53	XYB D	80.55	13.54	13,500	11.0	34.8	44.4	27 JUL 2018
21 MAR 2047 TB150	3.00	4,3647	4.40	-3.89	39.72	35.86	3.86	XYB D	79.57	16.05	13,600	12.8	46.6	4.2	19 OCT 2016
21 JUN 2051 TB162	1.75	4,3130	4.36	-4.38	34.55	31.38	4.11	XYB D	58.26	19.63	18,700	11.5	4.7	15.9	05 AUG 2020

AU vs US

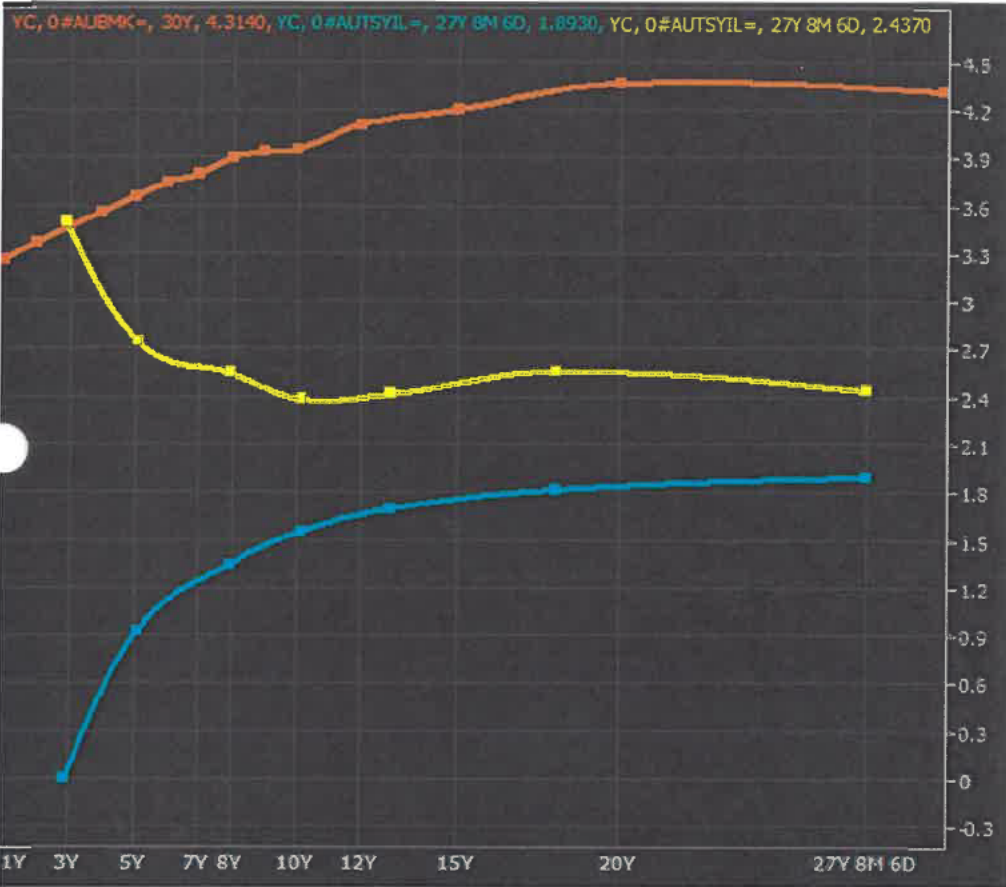


Historical 3 (blue), 10 (orange), 30-year (yellow) yields



Linkers

	Coupon	Mid	Cls	Yld Chg	md EFP	ClsEFP	Ch. EFP		MidPrc	ModDur	Nom Yld	Nom Cls	BEI	BEI CIs	BEI Chg	First Issue	Last tender	
20 SEP 2025	3.00	8.08	0.0261	0.0675	-0.04	-350.89	-349.25	-1.64	TYB	146.18	2.744	3.46	3.48	3.42	3.41	1.7	08 OCT 2009	28-Jun-22
21 NOV 2027	0.75	6.58	0.944	0.995	-0.05	-259.1	-256.5	-2.6	TYB	112.33	4.918	3.66	3.70	2.70	2.69	1.7	31 AUG 2017	9-Nov-21
20 SEP 2030	2.50	6.58	1.3752	1.4405	-0.07	-259.23	-260.45	1.22	XYB	142.33	7.145	3.87	3.94	2.48	2.48	0.2	21 SEP 2010	14-Jun-22
21 NOV 2032	0.25	4.08	1.5501	1.6143	-0.06	-241.74	-243.07	1.33	XYB	93.419	9.851	3.96	4.03	2.39	2.40	1.3	31 AUG 2021	8-Nov-22
21 AUG 2035	2.00	4.38	1.6949	1.7548	-0.06	-227.26	-229.02	1.76	XYB	126.93	11.241	4.12	4.18	2.40	2.41	0.3	03 OCT 2013	9-Feb-21
21 AUG 2040	1.25	4.38	1.8428	1.8895	-0.05	-212.47	-215.55	3.08	XYB	106.99	15.735	4.35	4.38	2.46	2.46	1.6	20 AUG 2015	11-Oct-22
21 FEB 2050	1.00	4.28	1.9133	1.9468	-0.03	-205.42	-209.82	4.4	XYB	89.793	23.238	4.33	4.37	2.39	2.40	1.0	25 SEP 2018	10-Jul-18





Published Dec 20 20

FOI 3206
Document 18

Should We Worry about Government Debt? Thoughts on Australia's COVID-19 Response

Chris Edmond, Richard Holden and Bruce Preston*

Would benefit from
research on our
insurance in 2020,
including \$15bn of 50yr!

Abstract

No. While the COVID-19 crisis has required a dramatic increase in debt-financed government spending, in the current conditions the benefits from this debt are unusually high and the costs unusually low. While conditions can change, the Australian Government can right now hedge against these risks by lengthening the maturity structure of government debt, even at the cost of a modest increase in its current servicing costs.

1. Introduction

The COVID-19 crisis has led to an extraordinary turnaround in Australian fiscal policy. Only a year ago, the federal government was forecasting a return from persistent deficits to modest surpluses, around 1 per cent of national income. But in response to the crisis the federal government has sharply increased government spending, in particular spending on the JobKeeper wage replacement program and the JobSeeker unemployment benefits program. Together with a modest decline in tax revenues, this has led to a budget deficit on the order of 10 per cent of national income, an 11 per cent (or approximately \$600 billion) turnaround. This deficit is projected to fall to around 6 per cent of national income as JobKeeper and other pandemic support measures are wound back but is still expected to be sizeable for the rest of the decade.

While this debt-financed government spending has been necessary to address the unprecedented public health crisis, and resulting economic crisis, it still raises several fundamental questions. How are we going to service this debt? Should we return to surplus quickly? Do we have the capacity to spend more should circumstances warrant it? Do high levels of debt limit our ability to pursue other government programs? What are the implications of governments all around the world all issuing large amount of new debt at the same time?

In this article we briefly address these issues, with a focus on the *sustainability* of large levels of government debt both under

* Edmond and Preston: University of Melbourne, Australia; Holden: UNSW Business School, Australia. Corresponding author: Preston, email: <bruce.preston@unimelb.edu.au>.

current economic conditions, which tend to make debt relatively easy to sustain, and under a possible worsening of global economic conditions. We argue that if current debt servicing conditions were to continue then current levels of government debt, indeed even substantially larger levels of government debt, would be sustainable in perpetuity. That said, there are no guarantees in either life or public finance, and it is easy to envisage scenarios that make debt servicing considerably more expensive. In particular, a rise in global interest rates (driven, for example, by increased political tensions in the United States, or by the sheer amount of new government debt issued around the world), would likely lead to rising interest rates in Australia too, increasing debt servicing costs.

Such scenarios do not mean that current levels of debt are unsustainable. But they do imply that prudent fiscal policy should hedge against such risk by lengthening the maturity structure of government debt. We should issue more long-term government debt, accepting slightly higher debt servicing costs today in order to lock in low interest rates for years to come. We should not assume we will always be able to roll over short-term debt at current interest rates.

In Section 2 we argue that the increase in government debt should be sustainable. In Section 3 we identify two key risks to Australian fiscal policy going forward: the risk of premature austerity, and the risk of worsening global economic conditions. Section 4 discusses some broader lessons from the COVID-19 crisis for fiscal policy and monetary policy, stressing that Australian public policy discussion of fiscal policy needs to move beyond its traditional narrow obsession with the headline budget position. Rather, we emphasise that while it is natural that fiscal policy takes the lead in responding to the current crisis, monetary policy still has an important role to play. Section 5 concludes.

2. Fiscal Sustainability

In this section we review the benefits and costs of running large deficits in response to

the COVID-19 crisis. In short, current conditions suggest the benefits of additional government spending are unusually high and the costs unusually low. While conditions can change, the Australian Government should take out insurance against a worsening of conditions by lengthening the maturity structure of government debt.

2.1 Benefits of Spending

To begin with, consider the benefits of additional government spending right now. Two broad kinds of spending are of particular significance: (1) additional transfers, as part of the new JobKeeper program and the expanded JobSeeker program (which replaces the old Newstart), that act as *wage insurance*, mitigating much of the decline in worker incomes that would otherwise occur as businesses substantially reduce activity, either in badly affected sectors of the economy like tourism and hospitality or in other sectors affected more indirectly; and (2) more traditional forms of government stimulus intended to buttress private sector demand.

The short-run impact of this government spending is likely to be high. At times of full employment, additional government spending tends to crowd out private-sector spending, driving up interest rates, which in turn undermines the effectiveness of the stimulus. But in current conditions with the economy far from full employment and interest rates low, crowding-out effects are likely to be small.¹ In other words, the fiscal policy multiplier, the dollar increase in national income from each dollar of government spending, will be larger than in normal times.

This is not just conjecture on our part. A substantial literature spells out the economic conditions required for large fiscal multipliers. To take a couple of key examples, using state-of-the-art econometric techniques, Auerbach and Gorodnichenko (2012) and Caggiano et al. (2015) show that fiscal policy is far more effective in deep recessions than in normal times.

So long as the pandemic rages, public investment in public health, especially testing,

tracking and isolating, will have extremely high net social returns. But there are good reasons to expect high net social returns to other public investments too, especially under our current low interest rate conditions. Securing a strong, sustained recovery from the COVID-19 recession will require ongoing investments to limit scarring ‘hysteresis effects’ for workers who experience prolonged detachment from the labour force and/or who need to retrain for new jobs with new skill requirements. The Australian economy is going to experience an extended period of adjustment, and there are likely to be strong social benefits to making the necessary adjustments as painless as possible.

2.2. Are Debts Sustainable?

While there are good short-run and longer-run reasons for this large increase in government spending, such spending comes at a cost.

What is the right way to think about these fiscal costs? From a public finance point of view, we should think about the deadweight losses of distortionary taxes used to finance government spending. Such distortions are certainly important and there are good reasons to think Australia could meaningfully reduce such deadweight losses by shifting to a less distortionary system.

But at the macroeconomic level, the more important consideration is whether the fiscal costs are sufficiently large so as to make the overall amount of government debt *unsustainable*. A useful way to think about debt sustainability is the difference $r - g$ between the interest cost of servicing the stock of debt outstanding, r , and the growth rate of national income, g . This difference measures the cost of maintaining a constant government debt to income ratio in perpetuity. A higher r increases the cost of servicing existing debt. A higher g decreases the cost of servicing existing debt. This is because as the economy grows outstanding debt becomes a smaller fraction of the overall size of the economy. In effect, productivity growth and population growth expand the tax base.

If $r > g$, then holding the debt to income ratio constant requires higher taxes either now or in the future (but structured so that the present values add up). In this sense, $r > g$ means the implicit cost of servicing the stock of outstanding debt is relatively high. If $r = g$, no changes in taxes are required in order to hold the debt to income ratio constant. But if $r < g$, then even holding the level of taxes fixed, the debt to income ratio will decline over time. In this sense, $r < g$ means the implicit cost of servicing the stock of outstanding debt is relatively low. Put differently, $r < g$ means the government could cut taxes or increase spending and still keep the debt to income ratio constant.

In short $r < g$ means government debt pays for itself. As an example, at the end of World War II, Australia's gross government debt was around 120 per cent of national income, compared to about 30 per cent of national income before the COVID-19 crisis.² Over subsequent decades, gross debt declined to a low of around 8 per cent of national income (just before the 2008 financial crisis) despite the Federal government running headline deficits in almost every year. This explains why it is generally unhelpful to discuss a given deficit in terms of ‘when it will be paid off’ or the need to ‘run future surpluses to balance the budget over time’. A debt to income ratio can be stabilised without significant surpluses so long as g is high relative to r .

So which situation best describes Australia? To take one recent estimate, Barro (2020) finds that Australia's long-run r for government bonds is around 3.3 per cent per year while long-run growth g in real GDP is around 3.4 per cent per year, suggesting $r - g$ is around -0.1 per cent per year. More generally Mehrotra (2018) shows $r < g$ holds for many countries over long periods of time. Using data over the period 1870–2013 he shows that while the $r - g$ differential displays some variability, on average real interest rates are below average growth rates. This evidence is also supported by various studies that estimate long-run real rates for different economies. Del Negro et al. (2019) provide

evidence that long-run real rates in the United States have fallen from about 2.5 per cent per year in the early 1980s to around 0.5 per cent in recent years. Because of the United States's role in the global financial system, this decline in real rate is also observed for many advanced economies. For Australia, McCririck and Rees (2017) estimate that the long-run real rate has declined from 2.5 per cent per year to 0.8 per cent in 2017. Taking these numbers together with even the most pessimistic assessment of future growth rate makes $r < g$ for the foreseeable future, suggesting that current debt to income ratios are indeed sustainable.

For this reason, Blanchard (2019), and others, have argued forcefully for a significant expansion in government spending, funded by debt—even in countries with substantially higher levels of indebtedness than Australia. Of course, historical interest rates may not be good predictors of future interest rates. The conditions that have given rise to low interest rates need not persist. But right now investors appear to place low probability on a substantial increase in rates. The Australian Government can currently borrow at 1 per cent at 10 years and at 1.75 per cent over 30 years.

None of this says that government debt is without costs. But current economic conditions make those costs relatively small given the insurance we need to provide to the citizens of Australia in the face of an unprecedented economic and public health crisis.

3. Risks for Fiscal Policy Going Forward

We now briefly discuss two significant risks for fiscal policy going forward: (1) the risk of *premature austerity*, specifically the risk of trying to reduce the budget deficit too quickly relative to the state of the economy; and (2) the risk of *worsening global economic conditions*. The former is under the control of Australian policymakers. The latter is beyond the control of Australian policymakers, but we can still choose fiscal policy settings to give

ourselves as much insurance as possible against worsening global conditions.

3.1 Premature Austerity

The first and most direct concern is that Australian fiscal policy might tighten too quickly. The government's response to the COVID-19 crisis has led to a sudden large increase in the government deficit. Even though Australia's baseline fiscal position coming into the crisis was relatively sound, with modest levels of gross debt relative to national income and low levels of net debt relative to national income, the political narrative around 'debt and deficits' has, unfortunately, been a feature of Australian public debate for decades. In this climate, it doesn't seem far-fetched to imagine the government will come under considerable pressure to return the government deficit to surplus relatively quickly.

A premature return to austerity, with cuts in government spending and/or increases in taxes would in turn hold back consumer and business spending, discouraging job creation, leaving employment and hours-worked low and unemployment high with wages growing slowly if at all. By holding back the overall economy, such policies can, in fact, be counterproductive from a debt sustainability point of view. After all, the quicker the economy recovers, the less we will end up having to spend on programs like JobKeeper and JobSeeker. Rather than worrying about the headline deficit, we should take advantage of low interest rates and use expansionary fiscal policy to drive the economy back to full employment. We should start to think about bringing the deficit down when unemployment is low and wages are growing briskly. Not before.

Given the current state of the pandemic in Australia—broadly under control—going forward we should be fairly optimistic about the prospects of economic recovery, absent some unforced domestic policy error. But in a small open economy like Australia we cannot ignore events abroad.

3.2 Worsening Global Conditions

There are two broad ways in which events in the global economy might worsen and thereby make the conduct of fiscal policy in Australia more difficult. First, the economic downturn in the rest of the world could become deeper and/or more protracted, reducing the demand for Australian exports, especially commodities, thereby slowing the rate of recovery in Australia. Second, while global interest rates (and inflation) are currently low, it is not difficult to think of scenarios where global interest rates rise substantially over the next few years.

Most economies are still struggling with the direct effects of the pandemic on economic activity and the indirect economic effects of temporary measures to suppress the virus. While many economies are beginning to show signs of economic recovery relative to the heady days of March–April–May 2020, this recovery is far from assured. At the time of writing, across Europe and the United States we are seeing a dramatic increase in COVID-19 cases, in positive test results, and hospitalisations. Once again both the direct effects of the pandemic and the indirect effects of public health measures are likely to reduce economic activity, preventing the recovery from being as robust as it otherwise could be. This reinforces a key lesson: one of the most important aspects of economic policy in the COVID-19 crisis has been bringing the pandemic under control. Absent such control, economic activity is on a very unstable footing.

But while the pandemic naturally looms large in any such discussion, it isn't the only concern. Just as a domestic turn to austerity could undermine Australian economic recovery, so too could a global turn to austerity. Suppose for example that European economies turn to austerity as they did following the 2012 European sovereign debt crisis. A widespread adoption of tight fiscal policy in Europe or in other major economies could easily slow down their recovery thereby slowing down the Australian recovery. And of course the effects of such a global turn to

austerity would be all the larger if our major trading partners are still struggling to bring the pandemic under control.

Why might we see this kind of global turn to austerity?

This brings us to the second main way that global economic conditions could make the conduct of fiscal policy in Australia more difficult: a global rise in interest rates. It is not so difficult to imagine interest rates on government debt rising around the world in ways that discourage expansionary fiscal policy both in Australia and around the world.

Just because interest rates on both short-term and long-term government debt are low right now, there is no guarantee that they will stay low. The current low level of interest rates is driven by a confluence of factors. First, the 'global savings glut'—unusually high levels of private sector savings around the world—that increases the supply of savings and puts downward pressure on interest rates. Second, the 'productivity slowdown'—the unusually slow rate of productivity growth in major economies—that in turn leads to low investment demand, that is, low demand for savings, which puts further downward pressure on interest rates. Third, a crisis-driven 'flight to quality'—temporarily elevated demand for assets like government debt that offer a safe return, at least in nominal terms, that look especially attractive to risk-averse investors in times of heightened uncertainty.

The 'savings glut' and the 'productivity slowdown' are usually thought to be slow-moving, long-run features of the global economy and new developments on that front, for example, a gradual reduction in private sector savings over the course of the recession, are unlikely to lead to sudden changes in interest rates. But there are other determinants of interest rates that can change relatively quickly.

Just as a 'flight to quality' reflects a sudden increase in demand for government debt, pushing down interest rates relatively quickly, the sudden unwinding of such positions can lead to the reverse, pushing up interest rates just as quickly. More generally, to the extent

that government debt comes to be seen as less safe as an investment vehicle, interest rates around the world will tend to rise. To be clear, while major governments that are able to issue debt denominated in their own currency can never default in nominal terms, in *real terms*, which is presumably what ultimately matters to investors, inflation risk acts in an analogous manner. Thus for major economies the underlying risk that might lead to higher interest rates is in effect the risk that inflation might rise appreciably (for governments that cannot borrow in their own currency, there are of course additional sovereign default considerations).

Notice that it need not be inflation in Australia that is of concern here. An increase in inflation risk for the United States (relative to Australia) that leads to reduced demand for US government debt could depress demand for government debt as an asset class more broadly, leading perceptions of inflation risk elsewhere to effectively spill-over to Australia, driving up interest rates here also. In principle our floating exchange rate should act as a cushion against this, in this scenario leading the Australian dollar to appreciate relative to the US dollar, but (1) that appreciation would create its own adjustment issues for the Australian economy, and (2) in practice such exchange rate adjustments are rarely so clean as to cushion the domestic economy entirely.

This in turn raises the question of why inflation might increase substantially in major economies like the United States. At the time of writing this seems faintly absurd, given just how low inflation is around the world. But these things can change quickly.

One way we could see a significant rise in US inflation and interest rates is if the United States experiences a period of substantial political tension, for example, a congressional deadlock, that prevents fiscal policy from operating in conventional ways. Such political tensions matter not just in their own right but also because they undermine the long-run 'fiscal backing' of the economy—for example, the capacity to raise government revenue via taxation—that ultimately

determines how much inflation results when the government issues more debt. A protracted congressional deadlock or other political dysfunction that undermines the long-run fiscal capacity of the United States could lead to higher US inflation and higher interest rates both in the United States and around the world, thereby constraining fiscal policy in Australia too.

3.3 Managing Interest Rate Risk

It is precisely because of this global 'tail risk' that Australian policymakers should be acting prudently right now, lengthening the maturity structure of Australian government debt (even at the expense of slightly elevated interest expense in the short run) so as to help Australia lock in relatively debt servicing costs now and giving us more flexibility to respond to future shocks.

Most existing government debt is of short maturity (the thickness of markets for short-term government debt means longer-term debt tends to face something of an illiquidity premium), a sudden rise in global interest rates would mean a sudden rise in the cost of servicing the stock of debt outstanding as the government rolls over its short-term positions.

The government can lengthen the maturity structure of government debt, issuing more 10- and 20-year debt, trading off the certainty of slightly higher interest servicing costs in order to lock in insurance against the possibility of having to roll over short-term debt at substantially higher rates in the future. Indeed even this may be too short sighted. It seems worthwhile exploring whether there is market appetite for even longer-term 30-year government debt. Long-term debt issues have been subscribed to by central banks and pension funds from Japan and the Euro area. Australia's low debt, considerable fiscal space, and its relative success in containing the public health crisis will surely make it an attractive place to invest, especially relative to other countries that entered the crisis with worse fiscal conditions and are so far experiencing deeper

So what's \$15bn of 2051s @ 5% 2% pa??
A hen sand with??
FFS.

recessions and more protracted difficulties managing the COVID-19 pandemic.

We now turn to some broader lessons for macroeconomic policy in Australia.

4. Broader Lessons for Macro Policy in Australia

The COVID-19 pandemic and the need for dramatic fiscal interventions has drawn attention to the fact that public policy discussion of fiscal policy in Australia has been impoverished for years. While the academic literature on fiscal policy has become ever more sophisticated, precious little of that thinking has trickled down to the opinion pages.

4.1 *We Need a New Approach to Fiscal Policy*

It is well past time that analysis of fiscal policy is put on a more serious footing. For too long, discussion of fiscal policy has been obsessed with the headline budget deficit. We should move on from the view that a deficit (or surplus) is any guide to good economic management let alone any kind of end unto itself. We should judge macroeconomic policy by its ability to deliver good outcomes for the Australian people, not interim financial statements.

In our view, there are four key elements of a new approach. First, a broad-based acknowledgment that fiscal policy is a tool that can achieve desirable ends and that fiscal policy plays a necessary role in stabilising the economy. In the short run we need aggressive fiscal stimulus to get us out of recession. In the medium run, fiscal policy should be deployed (with monetary policy, more on this below) to achieve price stability and full employment. Second, a separation of the budget into 'ordinary' and 'emergency' expenditures that formally recognise the special role of the new discretionary spending programs. The government should continue to use the emergency budget as needed to ensure a recovery is achieved. Any need to demonstrate fiscal prudence should be confined to the province of the ordinary budget.

Third, a recognition that even within the ordinary budget there is an important distinction between the 'cyclical' component, which is necessarily affected by automatic stabilisers and ordinary amounts of discretionary spending, and the underlying 'structural' budget balance that reflects the long-term fiscal position. Fourth, a commitment not to raise taxes against debt issued for emergency expenditures for 30 years if financed by 30-year debt. Taxes should only be raised to cover interest payments.

A discussion of fiscal policy in these terms provides several benefits. It clarifies the purpose of these expenditures, tying them to desired outcomes. And if the recovery from the coming downturn takes longer than anticipated, it will help frame and build a case for further action.

In the longer term it will clarify what part of ongoing government debt is attributable to the economic policy response of a once-in-a-century event and what part is attributable to other government decisions. It will clearly identify the spending that was required to ensure the economic livelihood of current and future generations, an obligation we must all bear together. And it will avoid future political point scoring over the state of the budget, permitting sensible policy action to bring down debt, should that be required.

4.2 *Monetary Policy Must Do Its Bit Too*

In this article we have focused on the role of fiscal policy in stabilising the economy. In more ordinary times, we would expect monetary policy to play that role. We have focused on fiscal policy because in general fiscal policy is more powerful (albeit more clumsy) than monetary policy. That makes fiscal policy the go-to tool in a deep, protracted crisis such as we are facing right now. It makes monetary policy (which is more nimble but less powerful) the go-to tool for managing more routine economic fluctuations.

But the primacy of fiscal policy in the current crisis should not absolve the Reserve Bank of Australia (RBA) from doing its part. Monetary policy needs to be set both now, and

in the future, to properly support fiscal policy. Inflation plays a vital role in the state of government finances, through its influence on nominal income growth. For example, higher nominal income growth lowers outstanding nominal government debt as a fraction of nominal income.

To give a sense of the numbers, if average inflation runs at 1.5 per cent per year rather than the 2.5 per cent per year, the overall price level in the economy would be roughly 10 per cent lower. The cost of under-shooting the target is that the real value of public debt, as a fraction of national income, is then 10 per cent higher. And that is before taking into account revenue implications from lower nominal growth (bracket creep, etc).

Of course, the RBA's options are limited right now. Short-term interest rates are effectively zero and can go no lower. Long-term rates are also at historic lows. And while the RBA has resisted calls for negative interest rates, it is hard to believe further reductions in the cash rate will prove more effective than fiscal policy.

But even so *there is* more the RBA can do. For one, it can be much more transparent about its plans for future policy. At some future time, whether it be 12 or 24 months, the RBA will have greater traction on economic activity and inflation. It will face the choice of whether to raise rates to more normal levels, or to continue its low interest rate policy.

The RBA should do the latter and promise inflation, more than it is probably comfortable with. Promising to over-shoot the target band will raise inflation expectations and lower real interest rates. Doing so will buttress the recovery from this recession, supporting economic growth. It will also greatly improve the state of government finances.

How much inflation should it generate? The RBA should generate average inflation of 2 to 3 per cent over a long window, say ten years. This will place a clear boundary on how much inflation is appropriate. Given the sustained period of undershooting the inflation band, this would require a sustained period of overshooting the band in the future.

Such a policy might sound unusual. But after an extensive review of policy strategy and process, the Federal Reserve in the United States recently adopted average inflation targeting as its formal policy objective. There is no reason the RBA could not do the same. This approach will both make monetary policy more effective and will also help deliver fiscal goals.

5. Conclusion

The COVID-19 crisis has required a dramatic increase in Australian government debt. In the current conditions, the benefits of issuing more government debt are unusually high and the costs unusually low. While conditions can change, the government can right now hedge against these risks by lengthening the maturity structure of Australian government debt, even at the cost of a modest increase in its current servicing costs.

The COVID-19 crisis draws attention to the fact that Australian public policy discussion of fiscal policy has been too focused on interim *instruments* like the headline budget position and not on the actual economic outcomes that are or should be the actual *goals* of policy-making. We hope that one silver lining from the the current crisis is that Australian public policy debate develops a more balanced understanding of the uses of fiscal policy both for stabilisation policy over the business cycle and to lay the foundations for longer-term prosperity. Adjacent to this, we hope that the public policy debate begins to have a proper understanding of the role of monetary policy in supporting fiscal policy.

Endnotes

1. The Reserve Bank of Australia is committed to low interest rates for at least the next three years.
2. Conceptually speaking, net government debt would be the more relevant concept. International comparisons of government debt tend to focus on gross debt because of cross-country accounting differences in the valuation of government assets.

References

- Auerbach, A. J. and Gorodnichenko, Y., 2012, "Fiscal multipliers in recession and expansion", *Fiscal Policy after the Financial Crisis*, NBER, pp. 63–98.
- Barro, R. J. 2020, " r minus g ", NBER working paper 28002.
- Blanchard, O. 2019, "Public debt and low interest rates", *American Economic Review*, vol. 109, no. 4, pp. 1197–1229.
- Caggiano, G., Castelnuovo, E., Colombo, V. and Nodari, G. 2015, "Estimating fiscal multipliers: News from a non-linear world", *Economic Journal*, vol. 0, no. 584, pp. 746–776.
- McCririck, R. and Rees, D. 2017, "The neutral interest rate", *RBA Bulletin*, pp. 9–18.
- Mehrotra, N., 2018, "Implications of slow productivity growth for debt sustainability," Federal Reserve Bank of New York working paper.
- Del Negro, M., Giannone, D., Giannoni, M. P. and Tambalotti, A. 2019, "Global trends in interest rates", *Journal of International Economics*, vol. 118, no. C, pp. 248–262.