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Memorandum

To: Department of the Treasury

cc:

From: Mr Robert Mann

Date: 6 December, 2002

Subject: **Commonwealth Debt Management Review**

Please find attached a signed written submission for the Commonwealth Debt Management Review. There's nothing in this submission that needs to be treated as commercial-in-confidence.

The original signed copy is in the post.

Regards,

Robert Mann
Chief Investment Officer.

Executive Summary

The Outline

Do you accept that the well-functioning fixed interest market we have in Australia has important benefits for the country as a whole?

The details of these benefits are quite widely known, but in part A of our submission we offer a few extra observations, particularly those reflecting the needs of our superannuation investor clients.

Do you accept that the abolition of the Commonwealth Bond market risks destroying or at least severely damaging the Australian fixed interest market?

In part B we discuss the effect of removing Commonwealth bonds from the fixed interest market. Some have argued that alternative instruments would take the place of Commonwealth bonds. We point out some reasons why such a substitution is unlikely to be successful.

Wouldn't one only consider running this risk if there is a tangible and significant benefit from eliminating Commonwealth bonds compared to alternative uses of fiscal surpluses?

In part C we examine the potential savings and the risks associated with maintaining the Commonwealth bond market and investing in assets as an alternative to buying back Commonwealth bonds. With the most conservative investment strategy possible, there are clear cost savings and less risk involved with the bond market maintenance strategy. A less conservative investment strategy could bring greater long-run savings still.

Note that individuals and small companies are often well advised to use their savings to pay off their debts rather than investing. This is because their borrowing costs tend to be quite high. Industrialised country governments are in the enviable position of being able to borrow at a lower rate than any other borrower – they borrow at the "risk free" rate. That means it is profitable for the Australian government to maintain its borrowings and invest in other extremely safe assets.

If there is risk and no clear advantage in eliminating the Commonwealth bond market, why are we even considering it?

Summary

Part A

Main points:

- Academic research concludes that domestic Government Bonds represent a unique and important asset class for portfolio investors.
- From Australian superannuation investors' perspective, foreign bonds, corporate bonds and cash do not have all the desirable properties of government bonds.
- The existence of the Commonwealth bond market promotes financial stability in the sense that Australia is currently a noticeable part of global bond indices.
- The IMF has pointed out that Australia's fixed interest market functions well compared with other countries of comparable size.

Conclusion:
The Australian fixed interest market is identified as being among the world's better-developed markets. The development and maintenance of the Australian fixed interest market brings significant advantages to users of capital and to the financial system as a whole. Financial stability in a volatile world, capital market efficiency and domestic risk management are all made possible with domestic government bonds. These ensure that Australia maintains its position as a global financial centre.

The maintenance of the fixed interest market in Australia provides significant benefits to Australian investors, through direct portfolio advantages and broader gains from a stable and well-functioning financial system.

Part B

Main points:

- Removing Commonwealth bonds from the Australian fixed interest market would lose Australia its current presence in the global bond market.
- State government bonds, major bank issued bonds and interest rate swaps are the most realistic candidates as substitutes for the role currently played by Commonwealth bonds.
- Each candidate is currently much less liquid than Commonwealth bonds – none of them have liquid futures contracts.
- State government bonds or bank issued bonds would create a "moral hazard" for the Commonwealth in that if the financial system depends on them, the government has the incentive and possibly the responsibility to guarantee them. It is questionable whether such a guarantee is something that it makes sense for the Commonwealth to give to such entities, especially if it is given for free.

Conclusion:
The Australian fixed interest market may continue to function without Commonwealth bonds but would lose much of its functionality. The redemption of Commonwealth bonds risks making Australia so illiquid, small and insignificant that Australia would lose its footing on the global financial stage. The realistic candidates to replace Commonwealth bonds as the new benchmark derive their liquidity from Commonwealth bonds themselves. Without Commonwealth bonds, these potential substitutes will lack the size and liquidity to adequately fill the gap.

Most investors and issuers would look to global markets for capital and investment, perhaps with the exception of market participants who themselves are too small to access global markets. The situation would be similar to that in countries such as New Zealand.

The government would achieve its ostensibly praiseworthy achievement of eliminating Commonwealth debt (net debt is gone even if the government sits on its hands) but leaves itself an uncomfortable dilemma. Whether it explicitly or implicitly provides a guarantee for the substitute benchmark security, it has to live with a liability if the relevant institutions ever find themselves in financial trouble.

Part C

It is more cost effective to maintain the Commonwealth bond market by running an asset book than it is to eliminate Commonwealth bonds because:

- The administrative cost of running the debt and asset portfolios would be minimal. The debt portfolio would continue to be run by Treasury and the asset portfolio could be run by the Reserve Bank – who already manage $35bn of foreign reserves.
- Even for a very conservative investment strategy, the average borrowing cost is less than the average investment rate (after hedging away interest rate and currency risk) so there would be an economic benefit rather than a cost.
- There are two extra transaction costs of buying back Commonwealth bonds to be considered, namely: the direct transaction cost in the secondary market and the potential cost of re-issuance should the Commonwealth later go into deficit.
- Norway is a successful example of a country maintaining a bond market while investing fiscal surpluses.

Conclusion:
Of the options available to the government, that of retaining the Commonwealth bond market is most beneficial. Eliminating the Commonwealth bond market is a substantially more expensive task than its maintenance. The costs of eliminating the bond market and subsequently re-establishing are quite substantial. It is unrealistic to believe the Commonwealth will never again run a structural deficit, therefore significant re-establishment costs are a real probability. In addition to the non-monetary benefits to the financial system and Australian investors, the maintenance of the government bond market will actually provide net monetary benefits to the Commonwealth.

One is left wondering why the possibility of eliminating the Commonwealth bond market is even being considered, let alone seriously considered.

Part A – Australia Benefits from a Well-functioning Fixed interest Market

A domestic risk free asset is important for Australian investors

Academic Research concludes that domestic Government Bonds represent a unique and important asset class for Australian investors.

Government bonds provide investors with an important diversification tool, particularly as protection against negative returns in times of financial crises or equity market turmoil[1]. A US study estimated that removal of domestic government bonds would cost investors between 0.1 to 0.4% per annum as a result of the lost diversification benefits[2].

Suggested substitutes for domestic government bonds fail in this role:

Cash – provides lower risk, but also lower returns to a portfolio. Cash and government bond returns experience a relatively low correlation (only around 40%). Therefore, government bonds provide investors with the ability to achieve a higher return for a given level of risk.

Corporate bonds – despite the high correlation of their returns in stable/normal times with government bonds, corporate bonds tend to become negatively correlated with government bonds in times of volatility and financial crises. Corporate bond values, at these times, are dominated by their equity exposures rather than interest rate exposures. Therefore, corporate bonds are not a substitute for government bonds.

Global government bonds – are not a perfect proxy for Australian government bonds, as about 30% of the variation in the values of Australian government bonds cannot be explained by movements in global government bonds. Domestic government bonds therefore provide investors with improved diversification benefits when used in conjunction with global government bonds. For example, in an environment of stable Australian inflation, Australian government bonds would provide Australian investors with protection against global inflationary pressures.

Those investors set to lose most from the removal of domestic government bonds are those with mid to low risk appetite - those with a significant proportion of assets in bonds – those similar in profile to that ever-growing part of the Australian population approaching or already in retirement.

For this set of Australian investors the Australian government bond plays an important role. Australian government bonds are free from default risk. They provide defensive investors with a reliable income stream, and stability over their investment horizon. Moreover they compliment the investors' holdings of cash and equities in a diversified portfolio.

Should the Australian government bond become extinct, Australian investors will be forced to alter their risk appetite. Cash, corporate bonds and global government bonds are not perfect substitutes for domestic government bonds. Therefore, the removal of Australian government bonds would force Australian investors to incur some unnecessary and avoidable costs.

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[1] Gulko, L (2002), "Decoupling", *Journal of Portfolio Management,* 28(3), 59-66.

[2] Bomfim, A N (2001), "Optimal Portfolio Allocation in a World Without Treasury Securities," *Finance and Economics Discussion Series,* 2001-11, Federal Reserve Board, Washington, DC.

The strong domestic bond market is important for domestic financial growth and stability

Dedicated investor base: A liquid government bond market would support Australia's inclusion within global bond indices. This would ensure a dedicated investor base in Australia, maintaining its importance as a financial centre and preventing volatility and instability of the type experienced in some emerging countries during the Asian and Tequila crises in the late 1990s.[3]

Domestic risk management: The IMF suggests that a domestic government bond market improves domestic risk management thereby reducing global financial instability. Local currency bonds dampen the effect of crises created by international capital flows by locking in interest rates and local currency funding. Domestic government bond markets increase the competitiveness and efficiency of the financial system and enhance the stability of that system by creating alternatives to banks, reducing their relative power and related moral hazard problems. [4]

Australia as a global example: The IMF suggests that the development and improvement (maintaining liquidity, supporting a yield curve etc) of a government bond market is crucial to further capital market development in emerging countries.[5] In fact, the World Bank (in their guide to emerging countries seeking to establish and develop a sustainable capital market) use the development of the Australian Government Bond Market as an example of prudential bond market development.[6] They highlight that Australia's government bond market is one of the better functioning government bond markets in the world.

Given the importance placed upon the development of a government bond market for those countries trying to ensure a stable financial centre and capital market, it appears counter productive for the Australian Government to undo that development and risk financial instability and its loss of recognition as a financial centre.

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[3] Eduardo Aninat, Deputy MD IMF, Inter American development bank Conference on Developing Capital Markets in Latin America 5th May 2001

[4] Bank for International Settlements, (2002), " The development of bond markets in emerging economies," Paper No. 11, (June-July)

[5] World Bank and International Monetary Fund, (2001), *Developing Government Bond Markets: A Handbook.*

[6] Harwood, A (eds, 2000), *Building local bond markets: an Asian perspective,* International Financial Corp and World Bank

Part B - Eliminating Commonwealth Government Bonds will seriously damage the Australian Fixed Interest Market

Australian Government Bonds play an irreplaceable role in domestic and global fixed interest markets

The most actively traded non-Commonwealth fixed interest instruments are semi-government bonds (issued by the state governments), interest rate swaps and bonds issued by the four major Australian banks. It is certainly conceivable that these could individually or collectively provide a suitable "risk-free" interest rate even in the absence of Commonwealth bonds.

We argue, under this scenario, that the Australian bond market loses the key characteristics, which put Australia on the global investment map. As a result, the Australian bond market risks becoming so small, it would become insignificant and irrelevant in the global investment scene.

- Australia's representation in global government bond indices is entirely by virtue of the outstanding Commonwealth bonds (state government and corporate issues do not qualify). Therefore, elimination of Commonwealth bonds would mean that Australia would no longer be a relevant market for many fixed interest traders around the world. Note that in the case of the JPMorgan index, Australia has the smallest weighting (0.4% compared with the second smallest, Sweden with 0.9%) and would likely drop out of the index even if the volume of bonds outstanding were to fall somewhat from its current level.

  In the case of the Lehman Global Aggregate bond index, some semi-government and corporate issues do qualify. Even in this case, however, elimination of the Commonwealth sector would reduce Australia's weighting substantially.

  In either case the lack of a dedicated investor base increases the risk of financial market instability/volatility as investors allocate to and from Australia, as experienced in some emerging countries (see Part A).

- Issue size: a successful pricing benchmark should be tradeable in large volume, even QTC issues are small compared with their Commonwealth counterparts. The disadvantage of being small is that market participants are quite naturally reluctant to have short or long positions that are a high percentage of the total issue. A fact that diminishes the instrument's usefulness as a pricing benchmark.

- Bid-offer spread for size: The non-Commonwealth instruments are less liquid as indicated by the following table:[7]

Instrument	Bid-offer spread (yield bps)	Tradeable size at that bid-offer spread (A$ million)
Commonwealth bonds	1	100
Semi-government bonds (QTC, NSW and TCV)	1.5	50
Interest rate swaps	2	75
Major bank bonds	4	10

[7] The data is an indication of CSAMA's fixed interest trading experience

- Most trading involves switches using Commonwealth bonds: The non-Commonwealth instruments' liquidity at present is created by the fact that there is an active switch-for-Commonwealth market. That means that the liquidity available, as shown in the table above, is due to the fact that traders can create an outright price by combining an outright Commonwealth price with a switch-for-Commonwealth price. Therefore, if one were to take away the Commonwealth market it is very likely that the liquidity for non-Commonwealth instruments would deteriorate.

- Lack of associated futures markets: Recently the Sydney Futures Exchange listed 3- and 10-year swap futures contracts, but to date there has been negligible trading activity in them. A number of years ago a semi-government contract was launched, but that was not a success and was soon withdrawn.

- Lack of fungibility: The difficulty with the non-Commonwealth instruments is that there is inevitably more than one institution involved (the various Australian states in the case of the semi-government market and the different banks in the case of either the swap or bank bond market). This implies that the strength of those institutions becomes relevant for determining the "risk free" rate, meaning that one perhaps ends up with more than one "risk free" rate – that represents something of a problem.

- Moral Hazard for the Commonwealth government: State government bonds or bank issued bonds would create a "moral hazard" for the Commonwealth in that if the financial system depends on them, the government has the incentive and possibly the responsibility to guarantee them. It is questionable whether such a guarantee is something that it makes sense for the Commonwealth to give to such entities, especially if it is given for free. If private institutions and investors believe these large private issuers are too large to fail (in a sense are quasi government guaranteed) they will in turn, driven by the profit motive, seek to exploit this status – compounding the government's moral hazard.

While it is not inconceivable that the Australian fixed interest market would continue to function without Commonwealth bonds, such a decision would place Australia's position in global financial markets at risk.

A substantial reduction in the size of government bonds on issue risks greatly reducing Australia's importance on the global investment map and, as a result, diminishes the liquidity of all domestic fixed interest securities. Furthermore, semi-government bonds, interest rate swaps and bank bonds are unable to adequately substitute Commonwealth bonds in the role they play in the Australian fixed interest market.

Should the size of Australian bond market shrink as a result of the elimination or significant reduction of the government bond market, Australia risks becoming a small and illiquid market. Those securities anticipated to take the place of the government bond would not be able to save the Australian market. Because of the lack of size and illiquidity, domestic and international investors alike would be forced to invest in overseas markets. In turn domestic issuers (corporates and state governments) would be forced overseas to access capital and global issuers would not even consider Australia as a source of capital. The Australian fixed interest market would be left to small investors and companies unable to access international markets. In summary, large domestic and all international players would avoid the Australian market as a source of capital and investment – in much the same way as they do in New Zealand. As a result Australia would significantly lose its footing as a financial centre and risk becoming small, irrelevant and insignificant in global financial markets.

Part C - The Cost of Eliminating Commonwealth Bonds and the Cost of Keeping them

In this section we take a look at the various costs associated with the two distinct choices that the government faces. We show that there are actually net benefits to the government from maintaining the Commonwealth bond market, while the costs of eliminating (and perhaps subsequently re-establishing) the Commonwealth bond market are likely to be large.

We have already discussed the cost to the private sector that would be associated with the damage that eliminating the Commonwealth bond market would do to the fixed interest market.

Eliminating the market

The Initial Cost

There are two distinct routes to eliminating gross debt, either buying it back or just gradually letting it mature.

1. Buying Back in the Secondary Market

There are large transaction costs involved in buying back outstanding issues, because the market will price in a premium as soon as it sees the government's intentions. The buyback process would likely be staged over a lengthy timeframe, but lowering the shock impact would be offset by the impact of increased scarcity value as the buyback progresses.

We estimate the one-off transaction cost of this process would be 0.5 to 1.0%. Made up by:

- The "bond-swap" yield spreads widening by 5 to 10 basis points (corresponding to a 0.2-0.4% cost because of the market's 4-year duration). An estimate supported by our observation that AOFM's conversion tenders affect market prices by about 5 basis points.
- The impact on the absolute level of long term interest rates from such a large transaction.

2. Gradually Letting Outstanding Issues Mature

Naturally there is no transaction cost involved here, but the disadvantage in this route is that there will still be Commonwealth bonds outstanding for the next 10 years or so.

The Contingent Cost of Re-establishing the Market

The elimination of gross debt assumes that there will be no need for long-term government borrowing in the future (however the government will continue to operate an account with the RBA and probably still issue T-notes to manage short-term cashflow timing mismatches). We believe this assumption is not only unrealistic – in that it assumes structural budget deficits will never occur again – but will also prove very costly as the contingent costs of re-establishing the Commonwealth bond market are likely to be high.

The first group of contingent costs relates to market demand. Given the lack of liquidity and transparency in the absence of a functioning secondary market, market participants are likely to bid for new bonds very defensively, especially since they would do so with the assumption

that more supply is on the way. If we assume that the government could reissue bonds at the prevailing semi-government rate (that is currently 15-20 basis point higher in yield than Commonwealth bonds), this would represent a cost of approximately 0.6-0.8%.

One then needs to take into account the fact that semi-government interest rates might well be higher in the absence of government bonds. Without a domestic government bond market, investor allocations to $A bonds may have been reduced substantially in favour of hedged global bonds, meaning structural demand for new government and semi-government issues would be lower.

The timing of these transactions is a further risk. Under the current government debt program, regular issuance over the course of the interest rate cycle reduces the government's financing risk. In contrast, the re-establishment of the bond market at the top of the interest rate cycle would prove very costly. Note that bond yields are currently near historical lows, so to buy debt back now runs a definite risk that later refinancing would have to take place at a much higher interest rate.

In conclusion, of the two separate costs, that of re-establishing the Commonwealth bond market would quite likely exceed that of buying back all the Commonwealth bonds.

Maintaining the market

The central argument for the maintenance of the Commonwealth bond market assumes that the government's surplus cash, rather than being used to retire debt, is put to work as a managed portfolio of financial assets. As well as allowing the debt market to continue performing its vital functions, such a strategy would be cost-efficient for the government.

Although a spectrum of possibilities exists as to the purpose and scope of the asset portfolio, we will assume to start with that the asset portfolio will have characteristics similar to the maintained debt portfolio – in that it will be largely composed of interest bearing securities. We therefore believe it is incorrect to view the cost of maintaining the debt portfolio as simply the interest costs that might otherwise have been saved. Rather, the cost/return and risk characteristics of the two portfolios should be analysed on a net basis.

We use bank bills as our reference point for assessing costs and returns of the debt and asset portfolios, because AOFM often uses (and would no doubt continue to use) the interest rate swap market to hedge the interest rate risk of the bonds they issue. That effectively translates the cost of issuing Commonwealth bonds to something very similar to the interest cost of bank bills.

Cost and risk of maintaining the debt portfolio

We estimate, based on historical averages in bond-swap spreads, that the Commonwealth government can borrow money at approximately 0.20%pa less than the bank bill rate. The estimate assumes the government issues debt at various points along the yield curve and swaps the duration back to leave only floating rate liabilities. In terms of risk – the volatility of the bond-swap spread would be the prime driver - we estimate that the debt portfolio could be managed with a tracking error of about 0.20% pa versus the bank bill index.

Return and risk for managed asset portfolio

In the most conservative case the funds would be invested only in foreign AAA-rated securities hedged back to $A. That means the portfolio would have no foreign currency exposure, no interest rate exposure and have similar credit quality to that of the Australian government. In this instance the manager should be able to achieve a return equal to that of the bank bill index. The tracking error would be low, between 0.1% and 0.2% depending on the strategy. In tandem with the debt strategy outlined above, this approach alone would realise net returns for the government (before administrative costs) of about 0.2% pa with very little risk.

. Administrative Cost

On the debt side, the government has AOFM already in place and the cost of running it is about $6mm pa.

On the asset side, the RBA could be given portfolio management responsibility for the asset portfolio. As the RBA is already a substantial fund manager through the RBA's holding of about $35 billion in foreign reserves, we expect additional administrative costs would be small. Given the government's powerful bargaining position, we expect any external management and custodial fees would be negotiated to a low level.

Case Studies: Norway & Ireland

The Norwegian government maintains a bond market despite zero net debt, and successfully invests surplus funds in an asset portfolio (the Government Petroleum Fund). The risk/return profile is moderate, with a 60:40 benchmark allocation to fixed interest versus equities and specific regional, currency and company constraints. The tracking error around the benchmark is about 0.30%pa.

Management of the fund is the responsibility of the Norwegian Central Bank, which in turn outsources to external managers. Management fees paid to the external managers average 0.075%pa.

While Norway's fund has not been established with a specific purpose, other countries have done so. For example, Ireland has made use of (largely telco) privatisation proceeds to start the National Pensions Reserve Fund – international precedent for those arguing that Australia's asset portfolio should be established to provide for the government's unfunded superannuation liabilities and future requirements of an aging population arising from Treasury's Intergenerational Report.

Summary

The following table summarises the costs and benefits outlined above:

Option	One-off costs (%)	Annual net returns v bank bills (%pa)
Eliminate market		
Buy-back cost	0.5-1.0%	
Re-establishment cost	1%+	
Minimum elimination cost	**0.5%**	
Maintain market		
Debt portfolio		0.2%*
Asset portfolio (conservative case)		0.0%
Net benefit from maintaining market		**0.2% (pa)**

* cost saving

The table illustrates that even in the case where the asset portfolio is managed very conservatively, maintaining the bond market provides a recurring net financial benefit to the government, while the costs of eliminating (and potentially re-establishing) the market are large. When you apply these percentages to a current bond market size of approximately $50 billion, the dollar values are considerable!

References

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[i] Their collapse would have disastrous implications for the stability of the financial system via confidence, wealth effects and lending.