PORTFOLIO MANAGEMENT

Overview

As noted earlier, there was a significant decline in net CGS on issue for the Commonwealth during 1997-98 of over $15.5 billion. Net CGS on issue for the Commonwealth fell from around $107.3 billion (or 20.8 per cent of GDP) at 30 June 1997 to around $91.8 billion (16.9 per cent of GDP).

Notwithstanding this significant reduction in debt, the size of the Commonwealth debt portfolio outstanding still presents the Commonwealth with a major exposure to market risk.

Market risk refers to the risk to the value and on-going, post-issue cost of the Commonwealth portfolio as a result of movements in financial prices such as interest rates and exchange rates. Market risk, which is intrinsic to all debt portfolios, cannot be avoided, making it essential that the risk be taken on efficiently across the portfolio as a whole. Market risk is managed, not eliminated, through portfolio management. Portfolio management aims to ensure that the structure of the Commonwealth portfolio is such that the level of market risk is acceptable and is taken on at the lowest possible long-term expected cost.

The Commonwealth has, for a number of years, adopted a defined portfolio benchmark, with a trade-off between cost and risk, that serves as a target for the structure of the Commonwealth debt portfolio. The benchmark analysis is a framework for analysing the trade-off between the long-term expected cost and risk of different portfolio structures and for making informed decisions about the nature of Commonwealth market exposures and risk. The benchmark reflects a hypothetical portfolio structure that, based on this *ex ante* analysis, can be expected to minimise the expected cost of the Commonwealth debt over the long-term, subject to an acceptable expected degree of volatility in annual debt services costs (ie, risk).

It is worth noting that the benchmark is long-term in orientation and not based upon forming views about the future levels of interest and exchange rates. In the short-term, there may be other possible portfolio structures that may out-perform or under-perform the benchmark from an *ex post* perspective. However, the benchmark represents a portfolio structure that is expected to minimise cost over the long-term (subject to acceptable risk) based on structural market factors. The benchmark analysis is reviewed periodically to ensure that the underlying assumptions and analyses remain valid in the light of market and other developments.

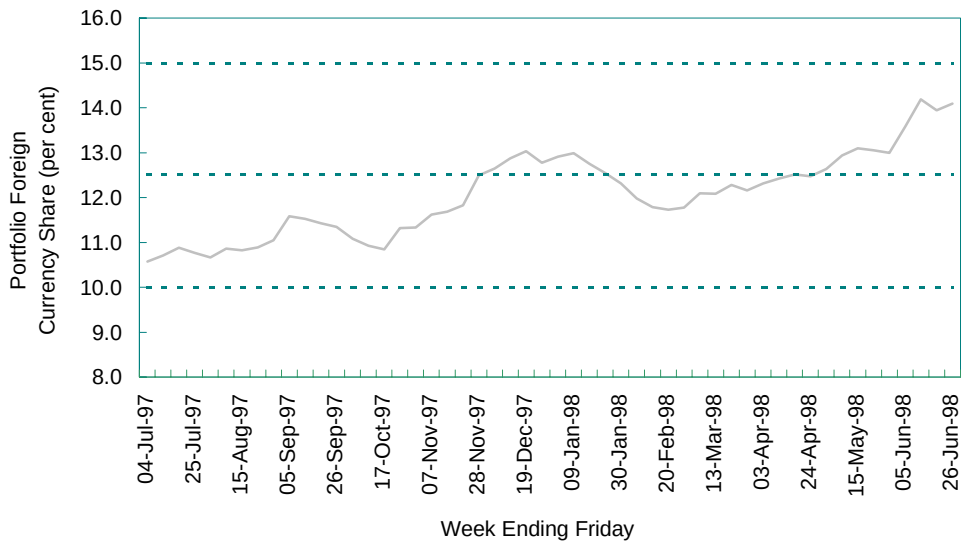
The benchmark is defined in terms of exposures to exchange rate and interest rate risks, measured by ranges for currency shares and the modified duration of each currency exposure in the portfolio. The benchmark currency shares are for between 85 to 90 per cent Australian dollar exposure with the remaining 10 to 15 per cent exposure in United States dollars. The benchmark Australian dollar interest rate exposure is for a modified duration between 3 and 3½. The benchmark United States dollar interest rate exposure is for a modified duration between 1 and 1½.

Portfolio management considerations — ie, seeking to maintain the Commonwealth own debt portfolio broadly consistent with the benchmark — set the broad framework within which the Commonwealth's domestic interest rate and cross-currency swap programs are developed and implemented. The issuance of Treasury Fixed Coupon Bonds, Treasury Indexed Bonds and Treasury Adjustable Rate Bonds for long-term financing and the issuance of Treasury Notes for cash management purposes also affect the market risk of the Commonwealth debt portfolio. However, these operations are more influenced by funding risk considerations, ie, the risk of being unable to raise required funds in an orderly manner and without financial penalty, rather than considerations of market risk. Swap transactions are an important means for managing the Commonwealth's market risk.

Portfolio Management in 1997-98

Through the course of 1997-98 there were a variety of factors influencing the structure, duration and currency shares of the Commonwealth's debt portfolio, including movements in market interest rates and exchange rates, time decay, and the form, maturity and timing of new debt issuance and swap transactions.

Chart 11: Currency Exposure, 1997-98



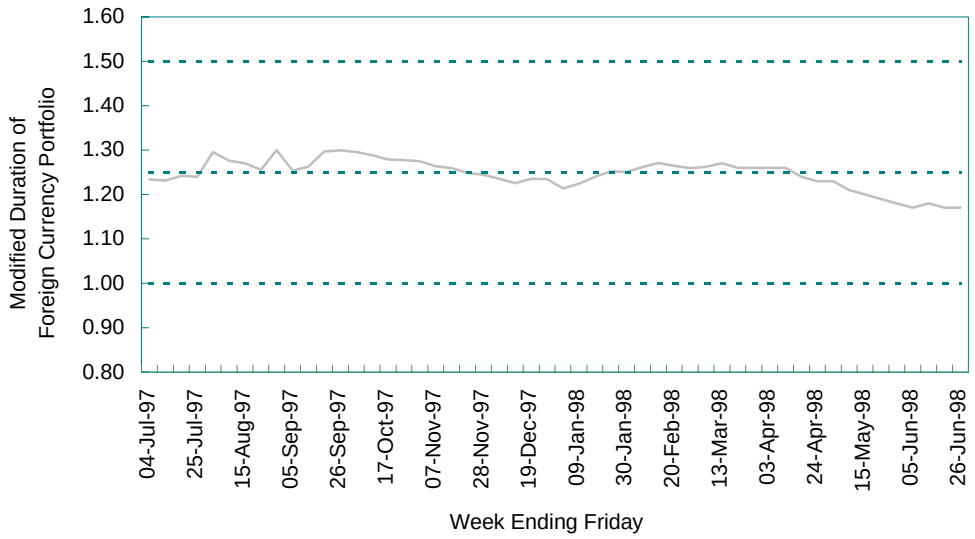
The foreign currency exposure of the Commonwealth debt portfolio through 1997-98 is depicted in Chart 11. The exposure is measured as the Australian dollar market value of foreign currency denominated liabilities and swaps legs as a percentage of the Australian dollar market value of the Commonwealth debt portfolio after swaps. While the foreign currency share of the Commonwealth debt portfolio (primarily denominated in United States dollars) rose steadily through the year, it remained within the benchmark range for foreign currency exposure. There were a number of significant factors behind the movement of foreign currency exposure during 1997-98.

- The most dominant factor was the depreciation in the $A/$US exchange rate over the course of 1997-98 and in particular, the significant falls from mid-November 1997. This increased the Australian dollar value of the Commonwealth's foreign currency denominated loans and foreign currency swap legs and hence the foreign currency exposure of the portfolio.

- During the first four months of the year, a number of cross-currency swaps out of Australian dollar exposure into United States dollar exposure were undertaken to move foreign currency exposure closer to the mid point of the benchmark range. With the significant exchange rate depreciation in mid-November and resultant increase in foreign currency exposure, there was no requirement for any further cross-currency swaps in 1997-98.

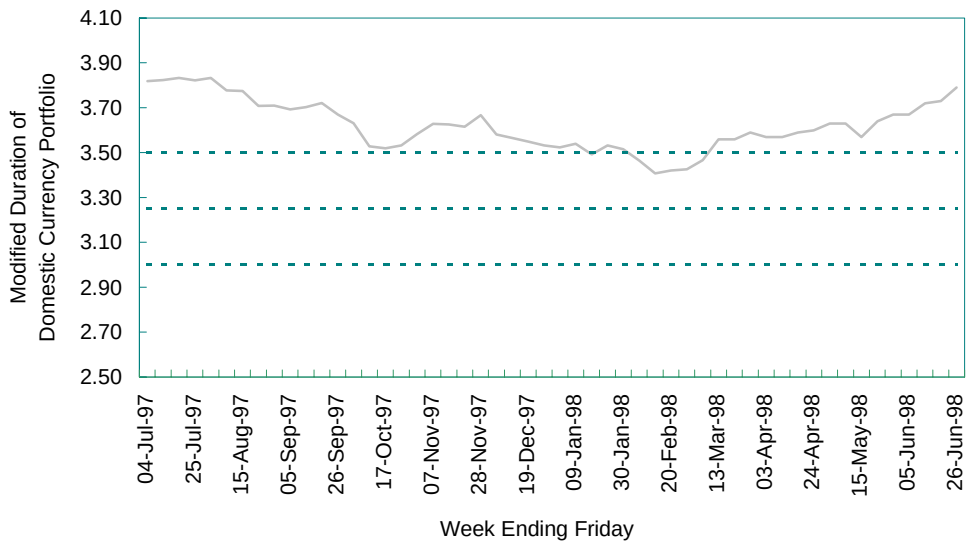
- Also, partially offsetting the exchange rate depreciation induced rise in foreign currency exposure through the course of 1997-98, was the maturity of a number of cross-currency swaps in September-October 1997 and in December 1997 to February 1998.

Chart 12: Foreign Interest Rate Exposure, 1997-98



The foreign interest rate exposure of the Commonwealth debt portfolio through the course of 1997-98 is shown in Chart 12. Foreign interest rate exposure is measured here by the modified duration, ie the sensitivity of market value to a change in interest rates, in Australian dollar terms, of all foreign currency denominated loans and swap legs. The modified duration of foreign currency exposure in the Commonwealth portfolio remained broadly around the mid-point of the benchmark range throughout 1997-98.

Chart 13: Australian Interest Rate Exposure, 1997-98



The domestic interest rate exposure of the Commonwealth debt portfolio through the course of 1997-98 is illustrated above in Chart 13. Australian interest rate exposure is measured here by the modified duration of all Australian dollar denominated debt (including Treasury Fixed Coupon Bonds, other than those held by the LCIR, Treasury Adjustable Rate Bonds, Treasury Indexed Bonds and Treasury Notes) and all Australian dollar swap legs. The Australian interest rate exposure of the Commonwealth debt portfolio remained above the benchmark range for most of 1997-98.

There were a number of broad factors that tended to keep the modified duration of the Commonwealth domestic portfolio above the benchmark range through most of 1997-98.

- As noted earlier, the Commonwealth's new bond issuance of around $4.5 billion face value was directed primarily at building liquidity at the long end of the yield curve which added to portfolio duration.

- The $10.2 billion of scheduled domestic Commonwealth maturities in 1997-98 (excluding Internal Treasury Bills) and $8 billion of early debt purchases in 1997-98, led to a reduction in the proportion of shorter term debt in the Commonwealth debt portfolio, thereby increasing the modified duration of the portfolio.

- The flattening of the yield curve over 1997-98, whereby longer term interest rates declined, tended to increase the modified duration of the domestic portfolio as the market value of longer-term debt and therefore its weighting in the portfolio increased.

As a counter to these broad factors tending to raise the modified duration of the Commonwealth domestic portfolio, the Commonwealth implemented a significant program of domestic interest rate swaps. Without this program of domestic interest rate swaps, the modified duration of the Commonwealth's domestic portfolio would have moved further from the benchmark range. As the modified duration of the domestic portfolio was above the benchmark range through most of 1997-98, these transactions tended to be from fixed Australian dollar exposure into floating Australian dollar exposure. For the first eight or nine months of 1997-98, the domestic interest rate swaps program maintained the modified duration of the domestic portfolio close to the upper end of the benchmark range. Late in the year, the better than anticipated fiscal outcome for 1997-98 underpinned a temporary increase in the modified duration of the domestic portfolio in light of a consequential significant rundown in the stock of Treasury Notes.

The Commonwealth Marketable Debt Portfolio at 30 June 1998

The market value of Commonwealth marketable debt (after swaps) takes into account the net present value or market prices of all cash flows on CGS and Commonwealth swap transactions. This represents a very broad indication of the liquidation cost of buying back all Commonwealth debt and unwinding the Commonwealth swap portfolio. The market value and other market risk characteristics of the Commonwealth debt portfolio are presented below in Table 2. This data differs from other CGS data in the Appendices of this report, in that it is primarily on a fair market value rather than face value basis and incorporates the effects of Commonwealth swaps (ie, it is on an after swaps basis). The CGS data underlying this table excludes CGS issued on behalf of the States and Territories, that held by the Loan Consolidation and Investment Reserve (part of the Reserved Money Fund) and non-marketable CGS (Peace Savings Certificates, overdue CGS and Income Equalisation Deposits).

Table 2: Broad Characteristics of Commonwealth Marketable Debt (After Swaps)

Commonwealth Marketable Debt (a)(b)	Portfolio at 30 June 1997	Portfolio at 30 June 1998
Face Value ($ billion)	107.4	94.1
Ratio to GDP	21.1	17.3
Market Value ($ billion)	117.0	106.4
Average Period to Maturity (years) (c)	4.9	5.2
Foreign Currency Share (%) (d)	10.3	14.0
Domestic Currency Portfolio		
Market Value ($ billion)	105.0	91.5
Treasury Fixed Coupon Bonds	89.2	81.8
Maturing within:		
0-1 year	6.5	5.4
1-5 years	37.3	30.6
5-10 years	35.3	35.0
10+ years	10.0	10.8
Treasury Indexed Bonds	5.0	6.3
Treasury Adjustable Rate Bonds	8.0	4.3
Treasury Notes	13.2	10.2
$A swap cash flows	-10.9	-11.6
Other (e)	0.4	0.4
Modified Duration	3.6	3.7
Treasury Fixed Coupon Bonds	4.0	4.2
Treasury Indexed Bonds	10.5	10.8
Treasury Adjustable Rate Bonds	0.1	0.1
Treasury Notes	0.2	0.2
$A swap cash flows	3.2	6.0
Other (e)	2.9	2.9
Average Period to Maturity (years) (c)	5.0	5.5
Foreign Currency Portfolio		
Market Value ($ billion)	12.0	14.9
By Currency		
US Dollars	11.7	14.5
Non-US Dollars	0.4	0.4
By Instrument		
Loans	1.4	1.3
Non-$A swap cash flows	10.7	13.5
Modified Duration	1.2	1.2
By Currency		
US Dollars	1.1	1.1
Non-US Dollars	4.2	4.7
By Instrument		
Loans	3.2	3.5
Non-$A swap cash flows	1.0	0.9
Average Period to Maturity (years) (c)	4.2	3.9

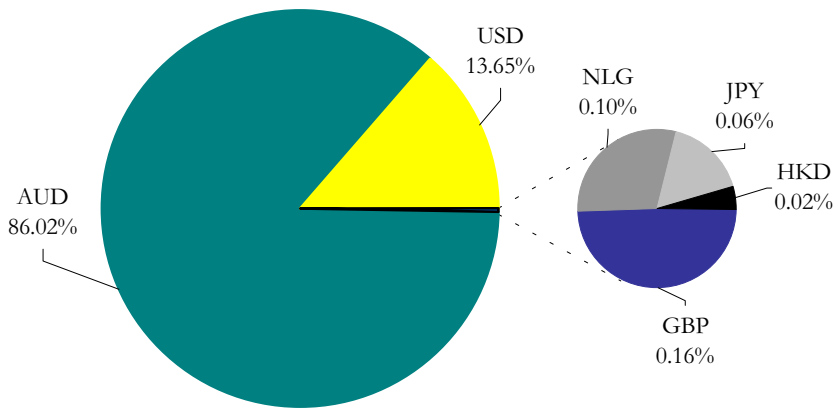
(a) Commonwealth marketable debt consists of all Commonwealth Government securities on issue excluding those issued on behalf of the States and Territories or held by the Reserved Money Fund. Also excluded are Peace Savings Certificates, overdues and Income Equalisation Deposits.
(b) Not all totals may sum exactly due to rounding.
(c) The average term to maturity is weighted by face value.
(d) Currency shares are based on market values.
(e) Includes Treasury Interest Indexed Bonds and liabilities assumed from the Pipeline Authority, the Canberra Commercial Development Authority and the Federal Airports Corporation.

The market value of Commonwealth marketable debt after swaps at 30 June 1998 was around $106.4 billion, which is well above its corresponding face value of $94.1 billion. This reflects the high proportion of fixed interest coupon debt in the portfolio that was first issued when market interest rates were higher than current levels. The current low interest rate environment makes this relatively high coupon debt more attractive to investors and increases its market value.

- Over the year, the face value of Commonwealth marketable debt (after swaps) declined by around $13.3 billion. The corresponding decline in the market value of the portfolio was somewhat less at $10.6 billion, reflecting the decline in long term market yields and hence the increase in the market value of the remaining debt.

At 30 June 1998, the Commonwealth marketable debt portfolio (after swaps) consisted primarily of Australian dollar currency exposure (around 86 per cent). There remained a small foreign currency exposure (around 14 per cent) held for long-term portfolio management reasons. This small, core holding of foreign currency exposure was within the benchmark range of 10 to 15 per cent, which Treasury portfolio analysis indicates will offer cost and risk reducing properties for the portfolio as a whole over the longer term. The currency exposure of the Commonwealth marketable debt portfolio (after swaps) is illustrated in Chart 14.

Chart 14: Commonwealth Currency Exposure (after swaps) at 30 June 1998



At 30 June 1998, the *domestic currency* component of the Commonwealth marketable debt portfolio (after swaps) had a market value around $91.5 billion. The majority of the domestic currency component of the portfolio consisted of Treasury Fixed Coupon Bonds, with the other significant elements being Treasury Notes, Treasury Indexed Bonds, Treasury Adjustable Rate Bonds and the Australian dollar receive side of Commonwealth cross-currency swaps. The modified duration of the domestic currency component of the Commonwealth marketable debt portfolio (after swaps) was around 3.7. This domestic interest rate exposure is just above the benchmark range of 3 to 3.5 suggested by Treasury portfolio analysis.

At 30 June 1998, the *foreign currency* component of the Commonwealth marketable debt portfolio (after swaps) had a market value around $14.9 billion. Over 97 per cent of this foreign currency exposure is denominated in United States dollars. This dominance of United States dollar exposure reflects analysis that suggests that no other foreign currency exposure offers a long-term portfolio management benefit for the Commonwealth. There remain some very minor currency exposures (less than 3 per cent of the foreign currency portfolio), to Sterling, Netherlands Guilders, Japanese Yen and Hong Kong Dollars (in order of significance). It is not considered cost-effective to completely eliminate these residual exposures.

The foreign currency exposure is a result of both foreign currency loans and cross-currency swaps. With the Commonwealth not having issued debt offshore since 1987 and the maturing of foreign currency loans, such loans provide a very minor source of foreign currency exposure in the Commonwealth portfolio. Details of the outstanding loans denominated in foreign currencies are provided in Table 11 of Appendix 6. The major approach to maintaining the small, core foreign currency exposure in the Commonwealth portfolio has been through cross-currency swaps from Australian dollar to United States dollar exposure. This reliance on cross-currency swaps reflects the historical cost advantage of this approach over direct issuance since 1987.

Of the foreign interest rate exposure of the foreign currency component of the Commonwealth marketable debt (after swaps) portfolio, only the exposure to United States interest rates is significant. The modified duration of the United States dollar component of the foreign currency portfolio is around 1.1, which is within the benchmark range of 1 to 1½ suggested by Treasury portfolio analysis.

Swap Transactions

As noted in the previous section, the Commonwealth utilises swaps to assist in portfolio management. In 1997-98, fifty six new swaps were transacted with twenty one counterparties. Table 5 of Appendix 5 provides summary details of these swaps.

- Forty-eight of the new swaps were $A interest rate swaps. The notional principal value of these swaps was $6.9 billion. This was the first year that the Commonwealth has transacted $A interest rate swaps in any significant volume. For each of these swaps the Commonwealth will receive a fixed rate cash flow in exchange for undertaking to pay a floating rate cash flow. In the absence of these swaps, the duration of the domestic currency component of the portfolio would have been much higher than benchmark duration.

- Eight of the new swaps were $A/$US cross currency interest rate swaps. The notional principal value of these swaps was $1.2 billion. These swaps were transacted to maintain the foreign currency component of the portfolio close to benchmark.

The Commonwealth also assumed three $A interest rate swaps from the Australian National Railways Commission, following the sale of the operating businesses of the Commission.

At 30 June 1998, the aggregate Commonwealth swap portfolio consisted of one hundred and fifty seven swaps with twenty six counterparties. The outstanding notional principal value of these swaps was around $20 billion. Details of the composition of the Commonwealth's swap portfolio at 30 June 1998 are provided in Table 6 of Appendix 6.

The management of counterparty credit risk associated with swaps is governed by a comprehensive Swap Counterparty Credit Policy, approved by the Treasurer. The policy establishes minimum credit rating standards for acceptable counterparties and defines limits on the level of credit exposure the Commonwealth may have with individual counterparties. The policy requires that the Commonwealth deal only with highly rated counterparties. Additionally, exposure limits are set at relatively conservative levels, offering a further level of protection.

Table 3 provides details of the Commonwealth swap portfolio by counterparty credit rating at 30 June 1998 measured by notional principal amounts.

Table 3: Swap Portfolio by Counterparty Credit Rating

Standard & Poor's Rating	Per cent of Portfolio	Moody's Rating	Per cent of Portfolio
AAA	27	Aaa	18
AA+	21	Aa1	28
AA	31	Aa2	22
AA-	20	Aa3	31
A+	0	A1	0
A	0	A2	0
A-	1	A3	1
	100		100