

PART 3

PORTFOLIO MANAGEMENT

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Overview

The stock of net Commonwealth debt has declined by more than half over the past four years. Sustained budget surpluses have seen the face value of the Commonwealth's portfolio of debt securities, net of financial assets, reduce from a peak of around \$107.3 billion as at 30 June 1997 to around \$52.3 billion as at 30 June 2001.

The policy focus in managing this substantial decline in Commonwealth net debt has been to ensure an orderly and coherent process of debt retrenchment. This objective has been met through surplus proceeds being applied to a combination of:

- financing of maturing debt;
- debt repurchase ahead of scheduled maturity; and
- investment in a portfolio of low risk financial assets.

Applying a proportion of surplus proceeds to financial asset acquisition smooths the impact of net debt reduction on the Australian fixed interest market over time, reducing risk for all market participants in the adjustment process, while allowing fiscal net debt reduction objectives to be realised.

The reduction in Commonwealth debt has been managed by reference to an explicit policy framework governing acceptable market risk exposures at the portfolio level. Market exposures arise from the potential for changes in financial prices, such as interest and exchange rates, to affect the ongoing economic cost and market value of the Commonwealth portfolio. While exposure to market risk is unavoidable where there is an outstanding portfolio of debt, portfolio management operations aim to ensure that this risk is taken on as efficiently as possible.

Determining a portfolio structure or benchmark that meets this goal of efficiency is not a straightforward proposition for a sovereign issuer. Observed best practice in the financial sector can certainly provide useful guidance in constructing hypothetical benchmark structures, but private sector methodologies have to be adapted to the particular constraints faced by a sovereign. Public policy considerations necessarily shape the objectives of

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sovereign portfolio management and require consideration of the consistency of debt management policies with broader government policies.

In addition, given the size and pre-eminence of the Commonwealth in domestic fixed income markets, it is critical that the scope for Commonwealth debt management transactions to destabilise financial markets, or give rise to any perception of opportunistically exploiting the dominant position of the Commonwealth, remain a paramount consideration. To summarise, public policy considerations place some boundaries around the size and nature of market activities that a sovereign debt manager will pursue in seeking commercial outcomes.

As well as incorporating public policy considerations, the Commonwealth is cognisant of the need to ensure the sound management of all other financial risks including funding, credit, liquidity and operational risks in pursuing the market risk benchmark.

Bounded as appropriate by these public policy constraints and the sound management of all financial risks, the Commonwealth's portfolio benchmark serves as a target for the composition and nature of acceptable market exposures within the Commonwealth portfolio of debt securities (CGS) net of financial assets. The benchmark was developed within a long-term analytical framework based upon assumptions about structural factors in financial markets that influence the expected cost and risk of different market exposures. Within this framework, the benchmark is a hypothetical structure found to minimise the expected cost of debt over the long-term, subject to acceptable risk.

This explicit long-term approach to the management of portfolio cost and risk is appropriate for a sovereign debt manager. Debt instruments and financial techniques utilised have economic consequences for many years into the future. A consequence of this approach is that, with the benefit of hindsight, many other portfolio structures may out-perform the benchmark portfolio in particular periods and there may be large short-term fluctuations in market value. However, the Commonwealth has deliberately eschewed an approach that would involve taking a view on the short-term path of interest or exchange rates in an attempt to outperform the market.

The benchmark is defined in terms of exposures to exchange rate and interest rate risks, measured by target ranges for portfolio currency shares and the modified duration of each currency exposure in the portfolio. Operationally, the Commonwealth directs portfolio management towards maintaining the portfolio near the mid-point of these benchmark ranges. A broad indicator of AOFM performance in managing the Commonwealth portfolio is the extent to

which the portfolio is maintained within the benchmark ranges. The benchmark ranges themselves reflect the precision bounds of the benchmark analysis and are an implicit recognition of public policy considerations that affect the ability to pursue a precise target.

Table 1: Benchmark parameters

Portfolio Component	Lower Bound	Mid-point	Upper Bound
AUD Sector			
Currency Share	85%	87½%	90%
Modified Duration ^(a)	3	3¼	3½
USD Sector			
Currency Share	10%	12½%	15%
Modified Duration ^(a)	1	1¼	1½

(a) Percentage change in market value arising from a one percentage point change in nominal interest rates.

In most debt management operations that follow a benchmark approach to managing risk, it is common practice to periodically review the portfolio benchmark for its continued relevance in meeting portfolio management objectives. The current benchmark was established in 1996 and last fully reviewed in June 1998, although more frequent reviews of key assumptions have been conducted while it has been in operation. In 2000-01, the AOFM commenced a full review of the portfolio benchmark that is expected to conclude in 2001-02. This review is expected to result in an updated benchmark that reflects considerable evolution in the prospective fiscal outlook, Budget reporting frameworks and market factors since the original 1996 exercise.

Portfolio management in 2000-01

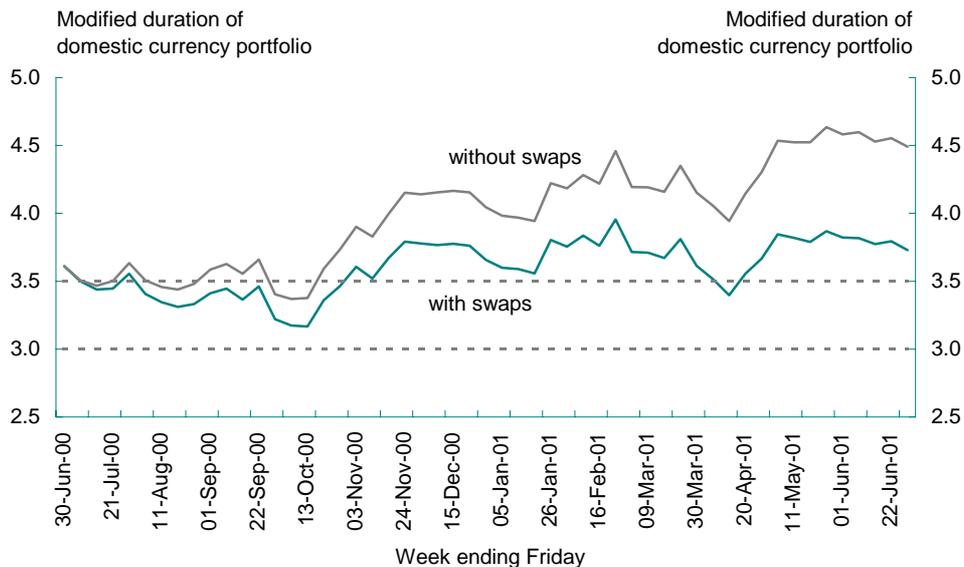
The Commonwealth's portfolio benchmark sets the broad framework within which the Commonwealth's domestic interest rate swap program was planned and executed. While the Commonwealth's debt issuance and redemption programs affect the market risk of the Commonwealth portfolio, the Commonwealth's swap program was the primary instrument used to manage market risk.

The major source of market risk in the Commonwealth portfolio is the exposure to Australian interest rates. Chart 1 illustrates the domestic interest rate exposure of the Commonwealth debt portfolio and the impact of the Commonwealth's domestic interest rate swap program through the course of

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2000-01. Australian interest rate exposure is measured here by the modified duration of the AUD portfolio. This portfolio includes Treasury Fixed Coupon Bonds (net of those held by the Commonwealth), Treasury Adjustable Rate Bonds¹, Treasury Indexed Bonds and Treasury Notes, all AUD denominated derivative legs and Commonwealth term deposits with the RBA.

Chart 1: Australian dollar exposure, 2000-01



The chart indicates an underlying upward trend in the modified duration of the AUD portfolio in 2000-01. As in past years, this outcome was underpinned by the established strategy of directing new issuance of Treasury Fixed Coupon Bonds towards the long end of the curve to support maintenance of the yield curve (see the 'without swaps' profile). However, a number of other factors, set out below, amplified this trend through the course of the year (see Chart 2).

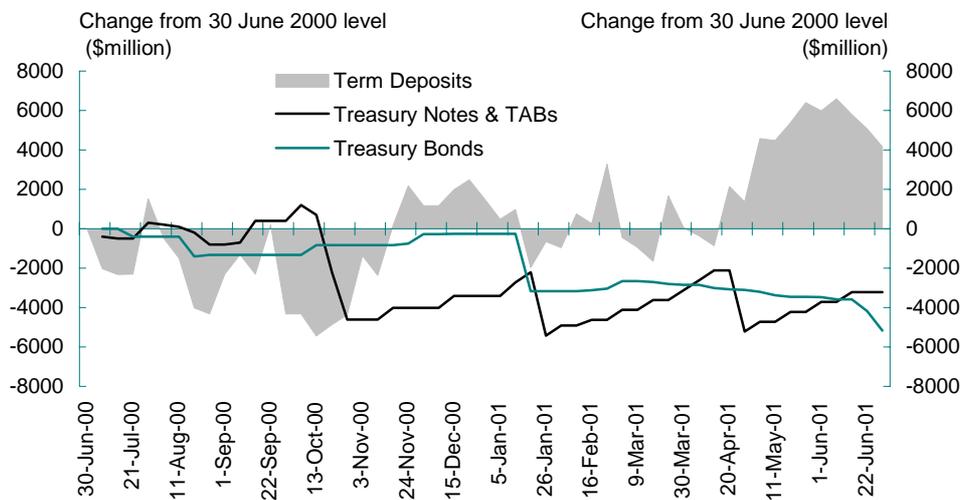
- Financial asset acquisition, as part of a broader strategy to achieve an orderly reduction in CGS outstandings, added significantly to upward pressure on total portfolio duration. A growing portfolio of term deposits with the RBA effectively offset the interest rate exposure on a significant portion of short-term debt in the portfolio.²

1 The last TAB line matured in October 2000.

2 The yield paid on these deposits is calculated at the time they are placed, by reference to the secondary market yield applying to Treasury Notes with a similar term to maturity.

- The maturity, in October 2000, of the last remaining tranche of the Treasury Adjustable Rate Bond line also boosted the average duration of the portfolio.
- The rally in the Government yield curve during the year, particularly between November and April, was also a factor in boosting portfolio duration. (The effect of the rally on market values was to increase the portfolio weight of longer-dated vis-a-vis short-dated Treasury Fixed Coupon Bonds.)

Chart 2: Changes in composition of the Commonwealth portfolio, 2000-01



A further important development in the profile of the AUD duration in 2000-01 was the volatility observed within the year. An examination of the 'without swaps' profile in Chart 1 shows that cyclical peak-to-trough fluctuations greater than the width of the benchmark range were prevalent in 2000-01. This reflected significant volatility in term deposits holdings through the year which, in turn, reflected greater cash management volatility than experienced in recent years, associated with the introduction of *A New Taxation System*.

Consistent with established portfolio management strategy, the Commonwealth implemented a domestic interest rate swap program over the course of 2000-01 aimed at maintaining domestic interest rate exposure around the mid-point of the benchmark modified duration range of 3 to 3½. Swaps transacted under this program typically swapped fixed rate AUD exposures to floating rate AUD exposures. The impact of the interest rate swap program on the duration of the Commonwealth's domestic debt portfolio is highlighted in the 'with swaps' profile in Chart 1.

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The modified duration of AUD exposure in the Commonwealth portfolio was largely maintained within the benchmark range of 3 to 3½ up until late October/early November 2000. At this time, however, there was a significant increase in AUD portfolio duration, reflecting a co-incidence of a number of the factors canvassed above, including a significant unanticipated increase in cash inflows (mirrored in term deposit holdings). It was not clear at this time whether the sharp implied improvement in the budget position reflected a transitory or more sustained improvement in the fiscal position.³

Internal analysis suggested that a very substantial increase in the size of the swap program would be required to return the duration to the benchmark range if this position was maintained. With the planned domestic swap program already at the higher end of past programs, it was assessed that there were good public policy reasons not to expand the program further and risk destabilising the market with large transaction volumes (see Box 1 for further analysis).

Chart 3: US dollar exposure, 2000-01

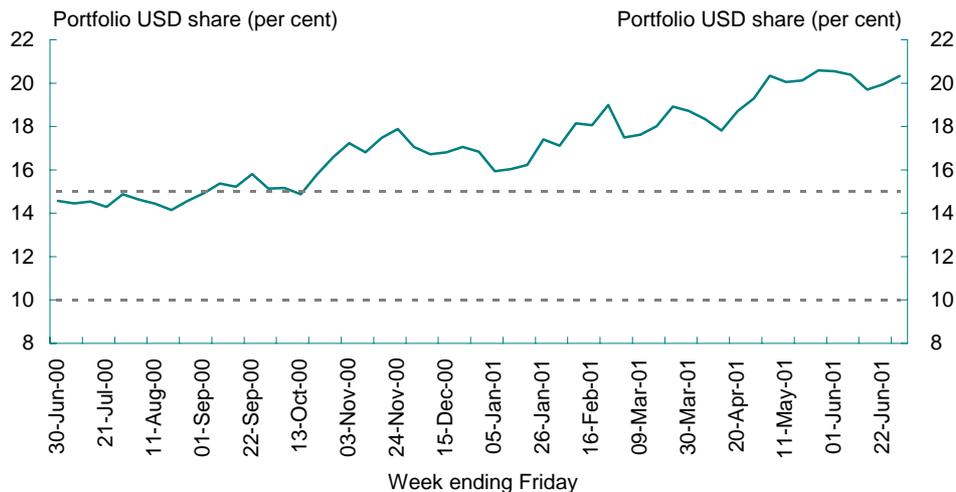


Chart 3 illustrates the United States Dollar (USD) exposure of the Commonwealth debt portfolio through the course of 2000-01. The exposure is measured as the AUD value of the market value of USD denominated loans and swaps legs as a percentage of the Commonwealth portfolio.

³ It was subsequently confirmed by stronger Mid-Year Economic and Fiscal Outlook (MYEFO) forecasts later in the year to be a sustained improvement.

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There was an overall upward trend in the USD exposure in 2000-01 that reflected two factors, namely:

- a reduction in the Commonwealth portfolio faster than the decline in outstanding USD denominated exposures during the year; and
- further currency weakness through the course of the year which increased the AUD value of this exposure.

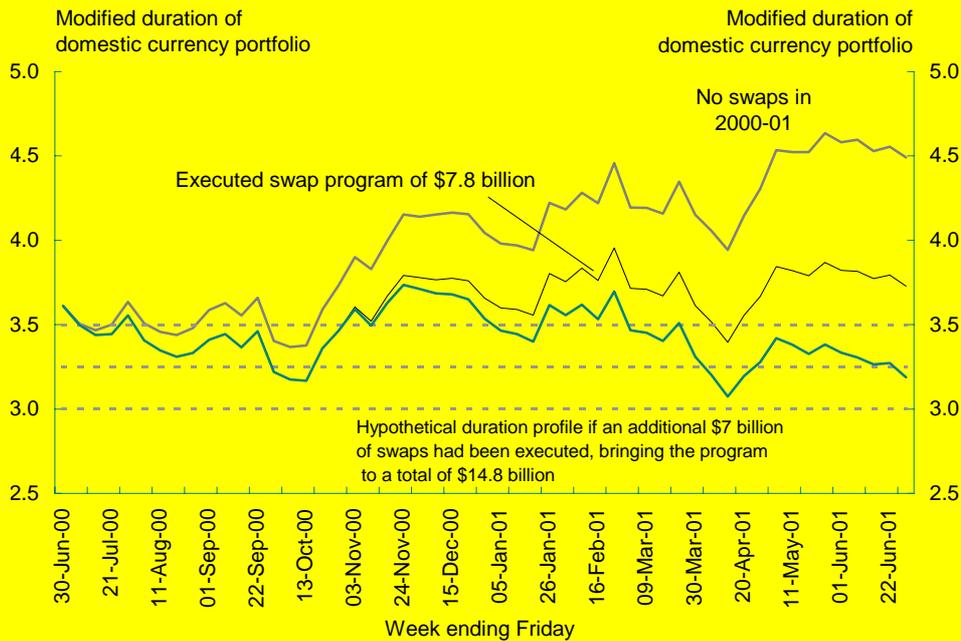
The USD exposure in the Commonwealth net debt portfolio hovered around the top of the benchmark range of 10 to 15 per cent until mid October 2000, notwithstanding the valuation effects from some currency weakness. However, a significant fall in the size of the net Commonwealth portfolio resulting from the unanticipated increase in term deposits in late October/early November (see above), combined with the effect of a weaker currency to push the currency share outside the benchmark range.

Given the planned review of the portfolio benchmark and, as a result, a necessity to reconsider the general strategy on portfolio foreign currency exposure, a decision was taken to suspend the foreign currency benchmark target and rollover existing exposures pending the outcome of the review. A consequence was that the currency share remained outside the benchmark range for the remainder of 2000-01. The review of foreign currency exposure was completed towards the end of 2000-01 and its findings are now under consideration.

Box 1: Swap program required to meet benchmark duration target

In the discussion of the evolution of the Commonwealth AUD portfolio duration during 2000-01, it was noted that the AOFM decided not to expand the domestic interest rate swap program in early November 2000 when duration exceeded the upper bound of the benchmark range. This box provides some ex post analysis that illustrates the additional swap program volumes that would have been required to meet the target.

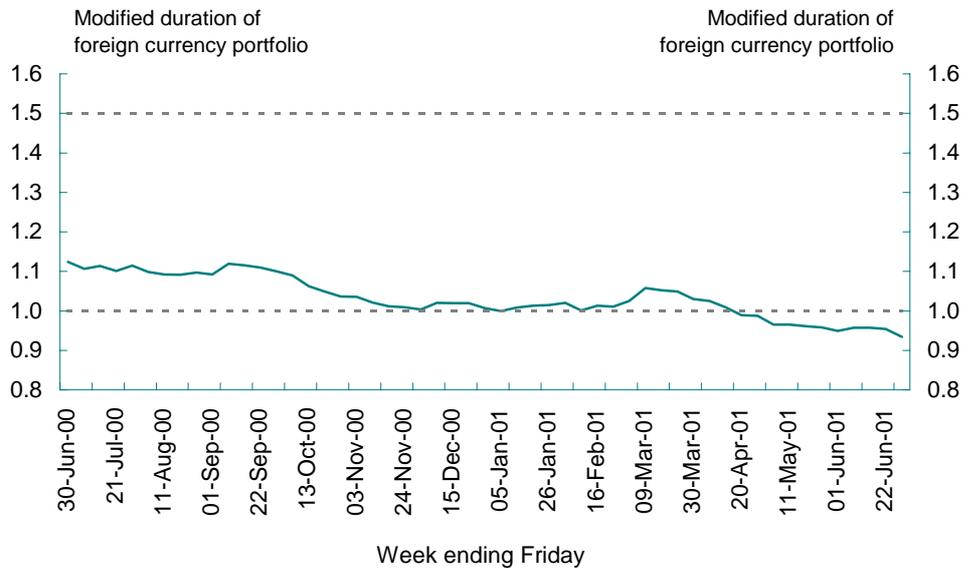
The analysis examines the increase in the domestic swap program that would have been required to move the portfolio duration towards the mid point of the benchmark range. It is assumed that the program would have been implemented smoothly from early November 2000 through the remainder of 2000-01. Further, it is assumed that the Commonwealth would have been able to transact the additional swaps in the form of five year fixed to floating interest rate swaps, at end of day close rates, on the Wednesday of each week in this period.



The analysis suggests that an additional \$7 billion notional value of five year fixed to floating swaps would have been required to return the portfolio duration to the mid point of the benchmark range (illustrated in the above chart). This would have translated to an additional \$200 million of swaps per week from November 2000 onwards.

Chart 4 illustrates the exposure of the Commonwealth debt portfolio to United States interest rates through the course of 2000-01. Interest rate exposure is measured here by the modified duration of all USD denominated loans and cross-currency swap legs. The modified duration of the USD portfolio fell over the course of the year, broadly consistent with the shortening tenor of fixed interest USD exposures in the portfolio.

Chart 4: US interest rate exposure, 2000-01



The modified duration of the Commonwealth portfolio’s USD exposure remained well within its benchmark range of 1 to 1½ until April 2001 when it dipped marginally below the benchmark range. This departure was accepted as it was regarded as non-material and ultimately tied to decisions to be made in regard to the foreign currency exposure.

Market value of the Commonwealth portfolio at 30 June 2001

The market value of the Commonwealth portfolio (after swaps) takes into account the net present value or market price of all cash flows on CGS and Commonwealth swap transactions. Portfolio market value provides a very broad indication of the liquidation cost of buying back all Commonwealth debt and unwinding the Commonwealth swap portfolio. The market value and risk

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characteristics of the Commonwealth portfolio are presented in Table 2. These data differ from other CGS data in the Appendices of this report in that aggregates are reported primarily on a fair market value rather than face value basis (and incorporate the effects of Commonwealth swaps).

The CGS data underlying this table exclude CGS issued on behalf of the States and Territories, holdings of CGS by the Commonwealth and non-marketable CGS (Peace Savings Certificates, overdue CGS). In addition, the table also includes Commonwealth term deposits with the RBA.

The market value of the Commonwealth portfolio after swaps at 30 June 2001 was around \$63.2 billion with a corresponding face value of \$56.0 billion.

At 30 June 2001, the *domestic currency* exposure of the Commonwealth portfolio (after swaps) had a market value around \$50.2 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 and the AUD receive side of Commonwealth cross-currency swaps. The modified duration of the domestic currency component of the Commonwealth portfolio (after swaps) was around 3.7.

At 30 June 2001, the *foreign currency* exposure of the Commonwealth portfolio (after swaps) had a market value around \$13.0 billion and was primarily denominated in USD. There remains a small residual currency exposure in Sterling. The modified duration of the USD component of the Commonwealth portfolio (after swaps) was around 0.9.

Table 2: Broad characteristics of the Commonwealth portfolio (after swaps)

Commonwealth Portfolio (a)(b)	Portfolio at 30 June 2000	Portfolio at 30 June 2001
Face Value (\$ billion)	67.2	56.0
Ratio to GDP	10.7	8.4
Market Value (\$ billion)	75.3	63.2
Average Period to Maturity (years)(c)	6.3	6.9
Foreign Currency Share (%) (d)	14.8	20.6
Domestic Currency Portfolio		
Market Value (\$ billion)	64.2	50.2
Treasury Fixed Coupon Bonds	65.6	59.2
Maturing within:		
0-1 year	5.0	4.8
1-5 years	22.8	24.0
5-10 years	31.9	26.6
10+ years	5.8	3.9
Treasury Indexed Bonds	7.5	8.1
Treasury Adjustable Rate Bonds	2.5	0.0
Treasury Notes	5.8	5.1
\$A derivative cash flows(f)	-8.3	-9.1
Term Deposits	-9.3	-13.4
Other(e)	0.3	0.3
Modified Duration	3.6	3.7
Treasury Fixed Coupon Bonds	4.2	4.1
Treasury Indexed Bonds	10.5	9.9
Treasury Adjustable Rate Bonds	0.0	0.0
Treasury Notes	0.1	0.2
\$A derivative cash flows(f)	14.3	15.3
Term Deposits	0.1	0.0
Other(e)	2.0	1.7
Average Period to Maturity (years)(c)	6.8	8.2
Foreign Currency Portfolio		
Market Value (\$ billion)	11.1	13.0
By Currency		
US Dollars	10.9	12.8
Non-US Dollars	0.2	0.2
By Instrument		
Loans	0.6	0.5
Non-\$A derivative cash flows (f)	10.5	12.5
Modified Duration	1.2	1.0
By Currency		
US Dollars	1.1	0.9
Non-US Dollars	5.8	7.1
By Instrument		
Loans	4.8	4.5
Non-\$A derivative cash flows(f)	1.0	0.9
Average Period to Maturity (years)(c)	4.3	2.7

(a) The Commonwealth portfolio is defined here as all Commonwealth Government securities on issue excluding those issued on behalf of the States and Territories or held by the Commonwealth. Also excluded are Peace Savings Certificates and overdues. Commonwealth cash balances held on term deposit with the RBA are included.

(b) Not all totals may sum exactly due to rounding.

(c) The average period 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 Australian National Railways and the Federal Airports Corporation.

(f) Includes forward foreign exchange contracts, cross currency swaps and interest rate swaps.

Swap transactions

As noted in the previous section, the Commonwealth utilises swaps to assist in portfolio management. In 2000-01, sixty-five new swaps were transacted with eighteen counterparties. Table B5 of Appendix B provides summary details of these swaps.

- All the new swaps were AUD interest rate swaps. The notional principal value of these swaps was \$7.85 billion. 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.

At 30 June 2001, the aggregate Commonwealth swap portfolio consisted of two hundred and ninety-nine swaps with twenty-four counterparties. The outstanding notional principal value of these swaps was approximately \$40 billion. Details of the composition of the Commonwealth's swap portfolio at 30 June 2001 are provided in Table A6 of Appendix A.

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.

In 2000-01, mark-to-market adjustments were undertaken in respect of a number of existing swaps. These adjustments substantially reduced the Commonwealth's credit exposure to several swap counterparties.

Table 3 provides details of the Commonwealth swap portfolio by counterparty credit rating at 30 June 2001, 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	11	Aaa	9
AA+	15	Aa1	16
AA	28	Aa2	17
AA-	45	Aa3	57
A+	0	A1	0
A	0	A2	0
A-	0	A3	..
BBB+	..	Baa1	0
	100		100

.. Less than 1 per cent

