

# PART 2: OPERATIONS AND PERFORMANCE

## CONTENTS

Introduction.....	9
Low net debt environment.....	10
Physical debt issuance — the review of the Commonwealth Government securities market.....	11
A new interest rate benchmark.....	12
Credit management.....	20
Foreign currency risk .....	21
Funding operations .....	23
Building infrastructure.....	29
Agency financial performance .....	30
Annex: Market value of the net debt portfolio.....	32



## OPERATIONS AND PERFORMANCE

### Introduction

At the highest level, the Australian Office of Financial Management (AOFM) undertakes three core activities. First, the AOFM issues debt securities. Second, the AOFM manages the overall cost of the net debt portfolio by undertaking interest rate swaps. Third, the AOFM continues to manage the unwind of foreign currency exposure resulting from the cross-currency swap program commenced in 1988.

This chapter deals with each of these three activities. All three have been substantially influenced by the low debt environment, an environment that makes Australia almost unique in the OECD. There have been significant developments related to each of the three key aspects during the year.

The conclusion of the review of the Commonwealth Government securities market has resulted in a clearly defined physical issuance program over the medium-term. Bond issuance is expected to average around \$5 billion per year and to be concentrated in bond lines with initial terms to maturity of around five years and 13 years.

The conclusion of the interest rate benchmark review has resulted in a clear medium-term framework for debt management operations. Interest rate swaps will be used to manage the modified duration of the nominal component of the long-term net debt portfolio to a new target of 2.0. The level of short-dated interest rate exposure will also now be managed for the first time. Short-dated exposure is a measure of the proportion of the net debt portfolio subject to immediate repricing.

Over the year substantial progress has been made towards eliminating the residual foreign currency exposure of the net debt portfolio. It is expected that by June 2004 net foreign currency exposure will have been completely eliminated.

Following a brief review of the low net debt environment, the discussion in this chapter deals with each of these three key areas in more detail. The chapter also reviews credit management, funding and liquidity management transactions through the year, governance issues and the implementation of the Quantum treasury management system. The discussion concludes with a

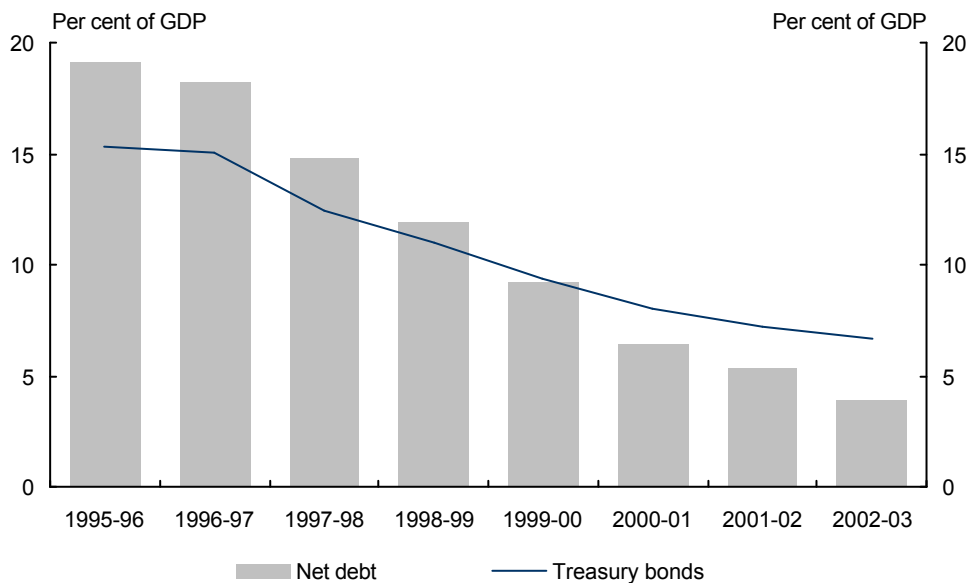
brief statistical annex that covers a range of data relating to the market value of the net debt portfolio.

## Low net debt environment

The level of Australian Government general government net debt has been reduced substantially since 1996. Net debt has declined from a peak of around 19 per cent of GDP in 1995-96 to some \$29.7 billion (3.9 per cent of GDP) in 2002-03. Net debt is estimated to fall further in the period ahead.

Reductions in Commonwealth Government securities have accompanied this sustained fall in net debt. Treasury Bonds on issue have fallen by more than half since 1995-96 to some 6.6 per cent of GDP in 2002-03 (Chart 1).

Chart 1: Net Debt and Treasury Bonds as a per cent of GDP



Along with the conclusion of the review of the Commonwealth Government securities market, the completion of a review of the net debt portfolio benchmark represents an important response to the challenges of managing debt in a continuing low debt environment. The new benchmark has been approved by the Treasurer.

- In tandem with decisions stemming from the review of the Commonwealth Government securities market, the new benchmark will have direct implications for the Commonwealth's interest rate swap operations going forward.

## Physical debt issuance — the review of the Commonwealth Government securities market

Over the past few years, the reduction in net debt has been managed with a view to maintaining a viable Commonwealth Government securities market. However, the continuing decline in debt led to concern from some market participants that greater clarity was required about the longer term future of the market. Essentially this was a concern that the volume of physical bonds issued by the AOFM would be insufficient to meet a number of financial market needs.

These concerns led to a formal review of the issues by the Government during the year. The Government released a discussion paper in October 2002, and undertook an extensive process of public consultation. The outcome of the review was announced in the 2003-04 Budget.

The principal outcome of the review was that sufficient Treasury Bonds should be issued to support the Treasury Bond futures market. The review concluded that, without a bond futures market, higher costs associated with managing interest rate risk would lead to slightly higher interest rates across the economy.

Treasury Bond issuance going forward will be tightly targeted to underpin the three and 10 year Treasury Bond futures contracts. In practical terms, this will mean:

- A new Treasury Bond line with a term to maturity of around five years will need to be issued every two years.
- Issuance of a new long-dated Treasury Bond with a term to maturity of around 13 years will also be required every two years.
- For each line, issuance of around \$5 billion will be undertaken over the course of the two-year period.

The issuance outlined above is likely to exceed the Government's funding requirement over the medium-term. As a result, the average level of term deposits with the Reserve Bank of Australia is likely to increase over time. The Government is prepared to hold financial assets in the form of term deposits in order to maintain an adequate Commonwealth Government securities market. However, the Government wishes to maintain as small an asset position as possible.

Accordingly, no additional bond issuance, other than that required to support the Treasury Bond futures market, is envisaged over the medium-term.

## A new interest rate benchmark

The key determinant of the average cost of a net debt portfolio is the average term to maturity of the portfolio. This is because the yield curve is generally upward sloping — that is, interest rates on longer-dated debt are generally higher than the interest rates on shorter-dated debt. The lower the average term to maturity, the lower the expected cost of the portfolio.

Expected cost of the portfolio is not the only consideration that a portfolio manager, such as the AOFM, must take into account. The AOFM also needs to take account of the risk associated with a particular portfolio. For the Commonwealth, the shorter the average term to maturity of the portfolio, the greater the risk borne by the Commonwealth because the Government does not have a particular interest rate locked in beyond the maturity date. The Government is exposed to the risk that it will have to pay higher interest rates at the point of refinancing.

Overall, choosing the right average term to maturity involves a balance between the lower expected costs associated with a lower average term to maturity and the higher risk associated with not having a particular interest rate locked in for a long period of time.

With debt issuance at low levels, the Commonwealth uses another instrument to manage the cost/risk tradeoff — interest rate swaps. Use of interest rate swaps allows the Commonwealth to manage the cost/risk tradeoff independently of the physical debt issuance program.

The Commonwealth has two goals: financial market efficiency and achieving an appropriate cost/risk tradeoff. The physical debt issuance program is targeted at the financial market efficiency goal, whilst the interest rate swap program is targeted at achieving an appropriate cost/risk tradeoff.

- Interest rate swap operations also play an important role in influencing the aggregate return on the debt portfolio (see box for a fuller discussion).

The issue of the optimal debt management cost minimisation/risk tolerance trade-off has been examined in depth over the past twelve months through the review of the interest rate benchmark. The outcome of the review, discussed in the following section, has particular implications for the AOFM's use of interest rate swaps going forward.

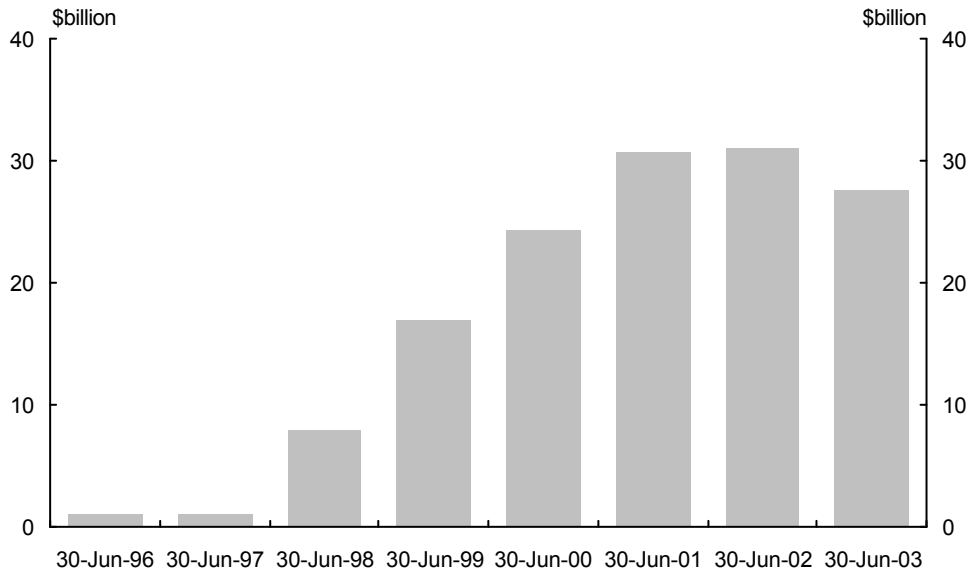
### The existing benchmark

From 1996-97 until 2002-03, the interest rate risk of the Australian dollar share of the net debt portfolio was controlled through managing the portfolio to a benchmark modified duration target range of 3.0 to 3.5. The modified duration target range balanced the aims of minimising the expected debt servicing cost and minimising the risk to the expected debt servicing cost in a dynamic interest rate environment.

In general, interest rate swap contracts have been used in the past to meet the benchmark modified duration target range, with Treasury Bond issuance for some years largely having been directed to supporting a viable Commonwealth Government bond market. The current Treasury Bond portfolio, the major component of the gross debt portfolio, typically has a relatively high modified duration of between four and five. The net debt portfolio modified duration is lower due to the transaction of interest rate swap contracts that effectively exchange some of the Treasury Bond portfolio's fixed interest rate obligations for floating interest rate obligations with a modified duration of less than 0.5.

As at 30 June 2003, the notional face value of interest rate swap contracts outstanding stood at \$27.6 billion (Chart 2).

Chart 2: Notional face value of interest rate swap contracts



## Benchmark performance

Measures of performance would typically reflect cost and risk implications of both physical debt and derivative instruments. However, with the lower level of the Commonwealth's physical issuance program, interest rate swaps represent the substantive discretionary instrument available to the AOFM in managing net debt portfolio performance in line with the benchmark target. The long-term performance of the interest rate swap portfolio therefore provides a valid measure of portfolio management performance.

Since the Commonwealth first entered into interest rate swap transactions, these swaps have realised a gain of \$1,440 million (\$1,630 million in current dollar terms), which is the excess of Commonwealth interest rate swap receipts over payments. On a broader economic return basis, the economic performance of the program has been a gain of \$2,977 million, which is the aggregate of the cumulative realised gain in current dollar terms and the market value of outstanding interest rate swaps.

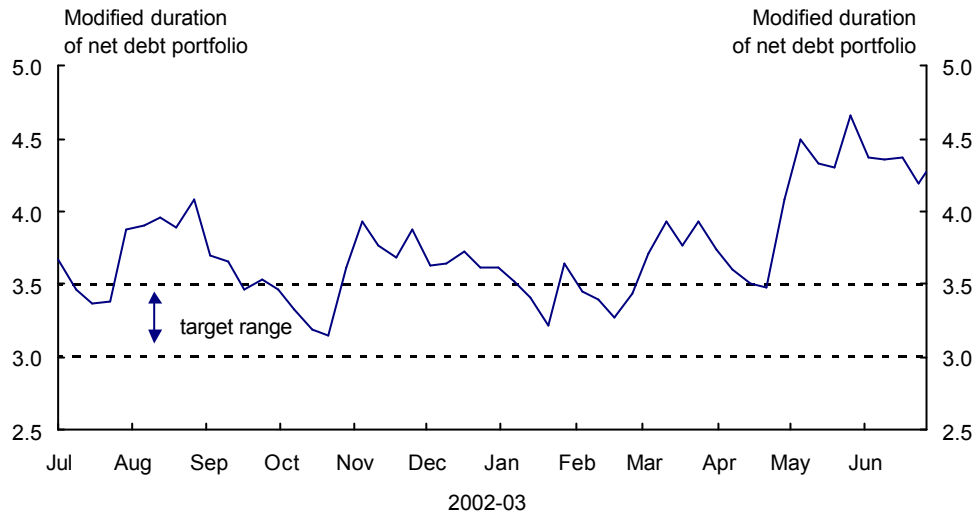
## New interest rate benchmark

In 2002-03, the AOFM completed a review of the benchmark. This review was undertaken partly because of changes in the net debt portfolio's composition that have been driven by the reduction in net debt achieved since 1996. The findings of the review were subsequently verified by consulting firm Deloitte Touche Tohmatsu. This process took place in the new financial year and so the details of the consultancy will be reported in the 2003-04 AOFM Annual Report.

- First, Treasury Indexed Bonds have become a more important part of the portfolio as budget surpluses have been used to repay other debt.
- Second, due to the lower level of net debt, the seasonality of the Commonwealth's cash flow profile has caused the portfolio's modified duration to be highly volatile in recent years.

The impact of net debt reduction and cash flow seasonality on net debt portfolio modified duration was discussed in the 2001-2002 Annual Report. The net debt portfolio modified duration continued to be volatile in 2002-03 (Chart 3).

Chart 3: Interest rate risk exposure



The new benchmark is based on the same philosophy as the old benchmark — to use interest rate swaps to shorten the duration of the net debt portfolio in order to achieve a lower average cost outcome. However, the new benchmark enhances the former approach by, among other things, taking better account of the very low debt environment.

### Aggregate return on the Commonwealth's net Commonwealth Government securities position

The AOFM holds assets in the form of term deposits with the Reserve Bank of Australia. The AOFM's term deposits have a short term to maturity and therefore typically earn a return that is less than the market yield on the longer-term physical debt securities managed by the AOFM. This comparison, however, does not capture the additional return generated by the AOFM using interest rate swaps.

Where there is an upward trend in the level of term deposits in the portfolio, this places upward pressure on the duration of the portfolio that moves this measure of interest rate risk away from the benchmark target. The AOFM offsets this pressure by undertaking interest rate swaps, to bring the net debt portfolio duration back to the target.

The combination of a term deposit and interest rate swap has a more comparable return to yield on long-term Commonwealth debt. This is because the interest rate swap involves the Commonwealth agreeing to pay a short-term or floating interest rate in exchange for receiving a long-term fixed interest rate. Very broadly, the short-term interest rate received by the AOFM on the term deposit is offset by the payment by the AOFM of a short-term interest rate on the interest rate swap. This leaves the AOFM receiving the long-term interest rate on the swap, broadly consistent with the market yield on the longer-term physical debt securities in the portfolio.

The new benchmark has two major aspects. First, four changes have been made to ensure that more appropriate measures of cost and risk are used to define the benchmark and that the link between these measures and the actual level of management discretion for the AOFM is more clearly stated. Second, once these measurement and governance issues have been clarified, the new benchmark parameters have been reviewed to ensure that they represent an appropriate balance between cost and risk.

### Enhanced measurement and governance

The four key changes to improve measurement and governance are set out below.

First, for management purposes, the net debt portfolio is decomposed into a Long-Term Debt Portfolio and a Cash Management Portfolio. The Long-Term Debt Portfolio holds the debt required for the Commonwealth's ongoing borrowing need and is quarantined from the effects of large swings driven by the Commonwealth's within-year financing needs. This enhancement

has been required as declining net debt has resulted in within-year financing swings having a proportionately larger impact on the overall duration of the net debt portfolio.

- The Australian dollar Long-Term Debt Portfolio holds all domestic currency financial assets, liabilities and derivatives under the AOFM's management and control, except those required for cash management purposes. The new benchmark applies to this portfolio.
- Transfers between the Long-Term Debt Portfolio and the Cash Management Portfolio should ensure the Long-Term Debt Portfolio reflects the trend level of net debt. Transfers will be made on the basis of Budget and Mid-Year Economic and Fiscal Outlook information. Accordingly, all transfers will be fully transparent, ensuring that the AOFM is not able to inappropriately use transfers to artificially meet risk targets.

Second, the benchmark is defined in terms of modified duration and also short-dated exposure. Short-dated exposure is a measure of the proportion of the portfolio subject to immediate repricing. In a rising interest rate environment, a portfolio with higher short-dated exposure will generate increasing debt servicing costs sooner than a portfolio with lower short-dated exposure and the same modified duration. The inclusion of a target for short-dated exposure enhances the current approach by providing more information on the extent to which interest rate changes may quickly affect Commonwealth net debt.

Third, the new benchmark distinguishes between nominal interest rate debt and inflation-indexed debt. This is important, as the interest rate risk for inflation-indexed debt is not the same for real rate and inflation shocks.

- Inflation-indexed debt behaves similarly to nominal fixed interest rate debt with regard to real interest rate movements.
- Inflation-indexed debt behaves similarly to floating interest rate debt with regard to inflation rate movements.

To recognise these differences, the AOFM will manage to a benchmark based upon the modified duration and short-dated exposure of the nominal component of the Long-Term Debt Portfolio. In this regard, it should be noted that, as announced in the 2003 Budget papers, the issuance of the Commonwealth's inflation-indexed debt instrument, Treasury Indexed Bonds, is suspended. However, there is no intention to repurchase current Treasury Indexed Bond outstandings in the debt portfolio. To ensure that information is retained on the risk of the overall net debt portfolio, the modified duration and short-dated exposure of the Long-Term Debt Portfolio will also be reported under both treatments of inflation-indexed debt.

Fourth, the governance framework applying to the benchmark will be enhanced by providing greater clarity regarding the nature of the benchmark limits. Two types of limits around the benchmark parameters set out the level of discretion that can be exercised by the AOFM and by the Secretary to the Treasury. The Treasurer has approved Policy Interest Rate Limits around the benchmark parameters. The AOFM would need to seek approval from the Treasurer to breach these limits. The AOFM will operate within narrower Operational Interest Rate Limits. The AOFM would need to seek approval from the Secretary to the Treasury if it wished to breach or vary these Operational Interest Rate Limits.

### New benchmark parameters to achieve an appropriate balance between cost and risk

The modified duration and short-dated exposure levels for the nominal component of the Australian dollar Long-Term Debt Portfolio are key risk parameters. The new benchmark parameters and associated limits approved by the Treasurer are outlined in Table 1. These will be reviewed periodically.

Table 1: Australian dollar Long -Term Debt Portfolio benchmark parameters and limits

	<b>Nominal portfolio</b>
<b>Modified Duration</b>	<b>2.00</b>
Operational Interest Rate Limit	1.75-2.25
Policy Interest Rate Limit	1.50-2.50
<b>Short-Dated Exposure</b>	<b>35%</b>
Operational Interest Rate Limit	30%-40%
Policy Interest Rate Limit	27%-43%

The previous benchmark's modified duration target range of 3.0 to 3.5 was inclusive of the impact of Treasury Indexed Bonds, where these were treated as being equivalent to Treasury Bonds. Based upon the current mix of inflation-linked and nominal debt within the net debt portfolio, the new benchmark's modified duration target of 2.0 for the nominal component equates to a modified duration target of 2.9 when Treasury Indexed Bonds are included in the traditional manner. Therefore, the reduction in the modified duration target has been relatively minor.

### Considerations underlying the benchmark parameter levels

The benchmark levels of modified duration and short-dated exposure primarily reflect a judgment about the desired balance between the expected debt servicing cost (assuming stable interest rates) and the variability above the expected debt servicing cost level (assuming increasing interest rates). A third consideration in selecting the benchmark is the transparency and simplicity implied by the portfolio structure required to meet the benchmark parameters.

Currently the Australian dollar Long-Term Debt Portfolio has a higher modified duration but also a higher short-dated exposure than the new benchmark levels. A lower modified duration would reduce the expected debt servicing cost. A lower short-dated exposure would reduce short-term risk to debt servicing cost in the event of higher interest rates, with the corollary being an increase in expected debt servicing cost. Overall, compared with the current net debt portfolio, the new benchmark should result in broadly the same expected debt servicing cost but reduced exposure to short-term interest rate increases.

Debt servicing cost outcomes associated with the approved portfolio benchmark and many alternative benchmarks were estimated by applying various interest rate shocks and measuring the results over different time horizons. Market value outcomes were also modelled. The net debt portfolio's market value will become less variable as modified duration is reduced.

### Benchmark reporting

The AOFM will alter its reporting to reflect the newly defined benchmark. Reporting will primarily focus upon the modified duration and short-dated exposure of the Australian dollar Long-Term Debt Portfolio and compliance with the associated limits. Benchmark cost outcomes will also be compared against outcomes associated with 'naïve' portfolios. Additionally, the AOFM will report on the interest rate risk associated with the Cash Management Portfolio and any remaining foreign currency exposure within the net debt portfolio.

### Portfolio transition

A transitional period of up to three years may be necessary to alter the Australian dollar Long-Term Debt Portfolio so that its parameters are within the approved Operational Interest Rate Limits. Transitional interest rate limits will guide the management of the portfolio during this period. The Treasurer will approve these limits on an annual basis. However, these limits will not be made public as publication may prejudice the Commonwealth's financial interests.

The AOFM will need to transact interest rate swap contracts to reduce the modified duration and short-dated exposure of the Australian dollar Long-Term Debt Portfolio, and subsequently

maintain the levels of these parameters in accordance with the new benchmark. In 2003-04, the AOFM plans currently to transact around \$2 billion to \$4 billion of interest rate swap contracts with terms of at least seven years that require the Commonwealth to pay floating interest rate obligations, and around \$4 billion to \$6 billion of interest rate swap contracts with terms up to four years that require the Commonwealth to pay fixed interest rate obligations. The AOFM's participation in the interest rate swap market will depend upon prevailing market conditions.

## Credit management

Use of interest rate swaps to manage portfolio interest rate risk means that the Commonwealth is exposed to swap counterparty credit risk. This risk is managed by reference to a detailed Credit Policy approved by the Treasurer.

Increases in the market value of the derivatives portfolio in light of falling interest rates and increases in the Australian dollar/US dollar exchange rate have posed challenges for credit management in 2002-03. However, the AOFM's robust credit policy has provided a sound framework for addressing these challenges, and has underpinned a strengthening of credit management and reporting processes.

While the AOFM undertakes derivative transactions only with counterparties of high credit standing, the Commonwealth is still exposed to the risk of default on payments under these contracts. This is the AOFM's only material credit risk.

The basic tenets of the credit policy are to:

- incur credit risk only for approved purposes and only within limits delegated by the Treasurer; and
- operate within an annual credit strategy approved by the Secretary to the Treasury. The strategy includes individual counterparty limits on-delegated to the Chief Executive Officer of the AOFM.

There are two components to these delegated limits — current exposure and potential exposure limits. Current exposure is the current market value of all transactions with a particular counterparty (if positive) and represents the amount at risk in the event of an immediate default. Potential exposure estimates positive future market values of the derivative portfolio for each counterparty. The AOFM's counterparty credit limits are scaled principally by reference to the counterparty's credit rating as determined by Moody's, and Standard and Poor's rating agencies.

Financial conditions in the banking sector have led to a modest decline in the average credit rating of the AOFM's swap counterparties over 2002-03 (Table 2).

**Table 2: Derivative counterparties by credit rating**  
as at 28 June 2002 and 30 June 2003

<b>Ratings Moody's Standard and Poor's</b>	<b>Number of AOFM counterparties with a given credit rating 28 June 2002</b>	<b>Number of AOFM counterparties with a given 30 June 2003</b>
Aaa/AAA	3	3
Aa1/AA+	1	1
Aa2/AA	6	4
Aa3/AA-	11	9
A1/A+	0	3
A2/A	0	1
A3/A-	0	0

Note that where a split rating is present, the AOFM uses the lower rating.

Total current exposure as at 30 June 2003, was \$1,026 million, spread across 21 counterparties. The largest exposure to a single counterparty was \$135 million.

The credit policy requires that the AOFM manage credit exposures within limits, utilising market credit mitigation techniques where appropriate. Credit mitigation involves entering into financial arrangements with individual counterparties that have the effect of reducing credit exposure to counterparties.

## Foreign currency risk

The third element of the AOFM's operations is the management of residual foreign currency risk associated with the cross-currency swap program.

The AOFM commenced in 1988 a program of cross-currency swaps to maintain a 10-15 per cent share of the portfolio in US dollars. In December 2000, the Treasurer initiated a review of this policy. In September 2001, the Treasurer endorsed the AOFM review's conclusion to discontinue the policy. The Treasurer then instructed the AOFM to commence an orderly elimination of this US dollar exposure according to a run down schedule agreed between the AOFM, Treasury and the Reserve Bank of Australia.

To reduce foreign currency exposure in line with the schedule, the AOFM has entered into forward contracts with the Reserve Bank of Australia. The forward contracts were entered into without increasing net foreign exchange exposure.

The US dollar exposure of Commonwealth debt peaked at US\$9.2 billion (face value) in 1997-98. At the start of 2002-03, the US dollar exposure of the Commonwealth debt portfolio stood at US\$5.6 billion. During 2002-03, the net impact of forward foreign exchange contracts entered into, maturing cross-currency swap contracts and early repurchases of physical debt reduced the US dollar exposure in the portfolio by just over US\$2 billion. The US dollar exposure stood at US\$3.6 billion in face value terms as at 30 June 2003.

The appreciation in the Australian dollar over 2002-03 led to a foreign currency gain on the Commonwealth debt portfolio of \$1,296 million as at 30 June 2003.

Since the cross-currency swap strategy began in 1987-88, the realised gain on the total foreign currency portfolio was \$311.1 million in nominal terms and \$982.9 million in net present value terms, as at 30 June 2003.

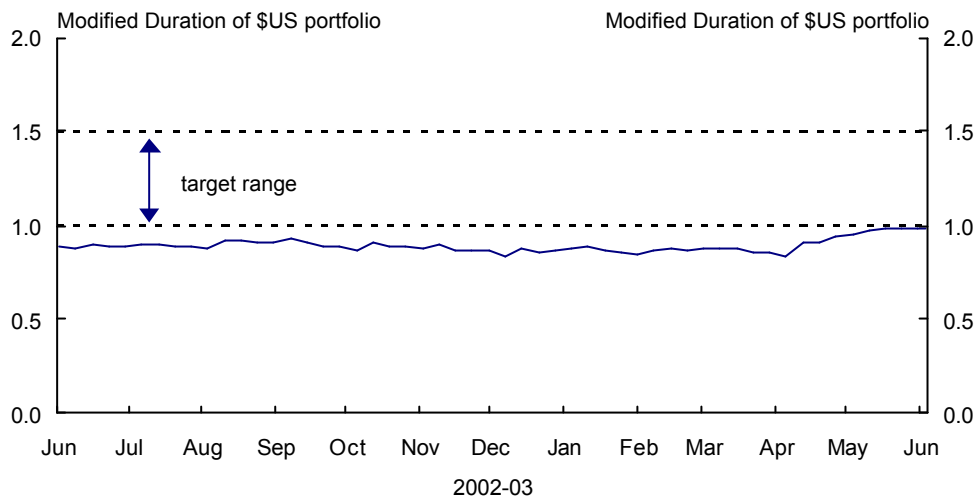
On a broader economic return basis, the economic performance of the strategy since it commenced in 1987-88 is a gain of \$599.2 million as at 30 June 2003.

### Foreign currency interest rate risk

The AOFM manages the exposure to US interest rates by reference to a target for the modified duration of US dollar denominated physical debt and US dollar cross-currency swap contracts. The benchmark modified duration for the Commonwealth portfolio's US dollar exposure that applied from 1996-97 to 2002-03 was expressed as a target range of 1.0 to 1.5.

The modified duration of the US dollar interest rate risk exposure was below the lower bound of the target range during 2002-03 (Chart 4). This was largely a function of the scheduled run down in the US dollar exposure.

Chart 4: US dollar interest rate risk exposure



In June 2003, the Secretary to the Treasury approved a new modified duration target for the Commonwealth portfolio's US dollar exposure that is expressed as an Operational Limit of 0.5 to 1.5. The AOFM anticipates that the modified duration will be able to be maintained within this limit until the only remaining US dollar exposure is in the form of a relatively minor amount of physical debt, at which time the limit will be suspended.

## Funding operations

The Commonwealth had a negative net funding requirement of \$6.9 billion in 2002-03 (Table 3). This means that in net terms, the Commonwealth had no need to issue additional Commonwealth Government securities. Hence, as in recent years, Commonwealth net debt fell in 2002-03.

The Commonwealth also had a negative gross funding requirement of \$2.8 billion. This means that after allowing for the funding of debt that matured or was repurchased in 2002-03 the Commonwealth had surplus funds to invest.

Table 3: Funding requirement and funding sources

	Actual 2002-03 (\$billion)		Actual 2002-03 (\$billion)
<b>Funding requirement</b>		<b>Funding sources</b>	
Net funding requirement		Debt issuance(c)	
Headline budget balance(a)	-7.3	Treasury Bonds	2.4
Other financing(b)	0.4	Treasury Indexed Bonds	0.2
<b>Total</b>	<b>-6.9</b>	Treasury Notes	-4.2
		(net change in outstandings)	
		Treasury Bond conversions	0.3
		(destination stock)	
		<b>Total</b>	<b>-1.4</b>
<b>Debt redemption(c)</b>		<b>Asset balances</b>	
Maturing debt	3.7	Change in overnight cash balance	0.4
Early debt repurchases	0.1	at the RBA(d)	
Treasury bond conversions	0.3	Change in term deposits	-1.8
(offered stock)		at the RBA(e)	
<b>Total</b>	<b>4.1</b>	<b>Total</b>	<b>-1.4</b>
<b>Gross funding requirement</b>	<b>-2.8</b>	<b>Total funding sources</b>	<b>-2.8</b>

(a) A negative sign denotes a surplus.

(b) Includes receipts and payments relating to swap transactions, the difference between the face value of debt securities and the cash value of transactions involving debt securities and other transactions not elsewhere identified.

(c) Based on face value of securities.

(d) A positive sign denotes a decrease in overnight cash balances.

(e) A negative sign denotes an increase in term deposits at the RBA.

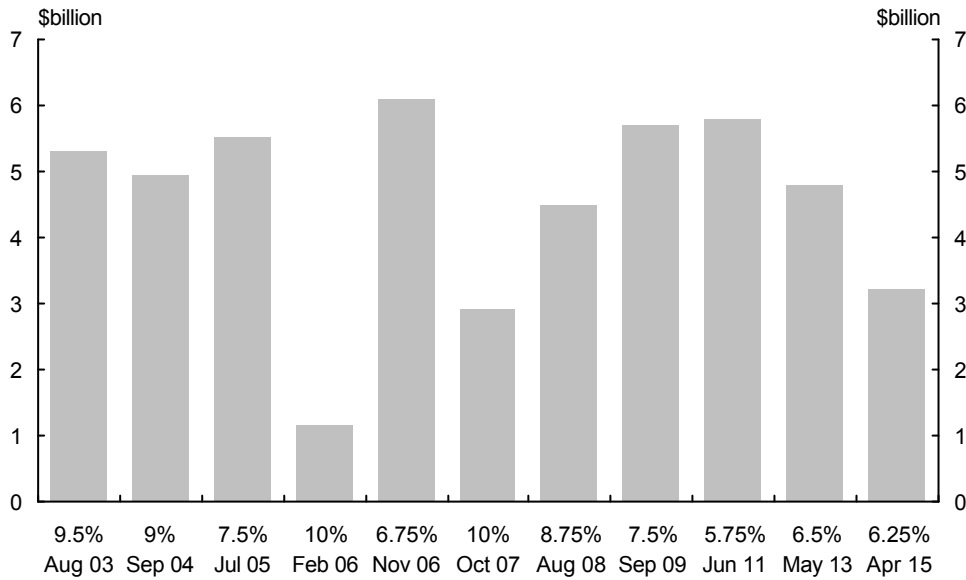
Note: Not all totals may sum exactly due to rounding.

## Funding sources

The surplus funds flowing from the negative gross funding requirement were augmented by funds raised from gross issuance of Treasury Bonds. The funds from these two sources were used to finance a run down in the stock of Treasury Notes on issue, and an increase in financial asset holdings at the Reserve Bank of Australia (overnight cash and term deposits).

Treasury Bonds continued to be the main debt instrument the AOFM issued in 2002-03. Issuance focused solely on the long-end of the Commonwealth yield curve, consistent with managing liquidity in longer-dated benchmark bonds and maintaining the length of the yield curve (Chart 5).

Chart 5: Maturity profile of Treasury Bond benchmark lines



The AOFM conducted six tenders for the issue of the April 2015 line in 2002-03. The tenders were well bid, with better than long-term average results being achieved for both the range of bids accepted and spread between the yields at which the bonds were issued at tender compared to secondary market yields prevailing at the time of the tenders (Table 4). However, the times covered ratio (volume of bids received relative to the volume of stock offered) was mostly lower compared to both the three and 10 year averages.

Table 4: Treasury Bond tender results

Tender date	Coupon and maturity	Face value amount allocated (\$m)	Weighted average issue yield (%)	Spread above secondary market yield (basis points)	Range of bids accepted (basis points)	Times covered
13-Aug-2002	6.25% 15-Apr-2015	401	5.73	0.50	1.50	2.78
15-Oct-2002	6.25% 15-Apr-2015	402	5.72	0.37	1.00	2.58
10-Dec-2002	6.25% 15-Apr-2015	398	5.56	-0.41	1.00	2.78
25-Feb-2003	6.25% 15-Apr-2015	401	5.22	-0.01	1.00	2.71
29-Apr-2003	6.25% 15-Apr-2015	399	5.36	0.21	1.50	3.67
17-Jun-2003	6.25% 15-Apr-2015	399	4.76	0.50	2.00	3.34
10 year average				0.68	2.43	3.07
3 year average				0.30	1.53	3.30

Only one Treasury Bond conversion tender was conducted in 2002-03, with \$300 million of the October 2007 line being offered for conversion into the May 2013 line on 16 July 2002. The spread to the prevailing secondary market yield was only 1.0 basis point and the range of accepted bids was a relatively narrow 1.5 basis points. However, the times covered ratio was a low 1.5, compared with an average of 3.1 for previous conversion tenders.

Three tenders of Treasury Indexed Bonds occurred during 2002-03. Total issuance of Treasury Indexed Bonds was \$150 million (original face value), \$50 million less than in 2001-02 (Table 5).

Table 5: Treasury Indexed Bond tender results

Tender date	Coupon and maturity	Face value and amount allocated (\$m)	Weighted average issue yield (%)	Spread above secondary market yield (basis points)	Range of bids accepted (basis points)	Times covered	
22-Aug-2002	4.0%	20-Aug-2015	50	3.44	4.88	5.00	3.38
21-Nov-2002	4.0%	20-Aug-2015	50	3.10	-4.55	0.50	6.82
20-Feb-2003	4.0%	20-Aug-2015	50	3.18	-3.50	0.00	5.46
Average since August 1994					0.04	5.03	3.89
5 year average					-0.55	4.10	3.79

On 13 May 2003 the Government announced that further issuance of Treasury Indexed Bonds was suspended and the proposed Treasury Indexed Bond tender of 22 May 2003 was cancelled. The decision reflects the fact that future issuance will need to be concentrated in Treasury Bonds to support the Treasury Bond futures market and the Government's desire to minimise the level of financial assets it must accumulate to support this market.

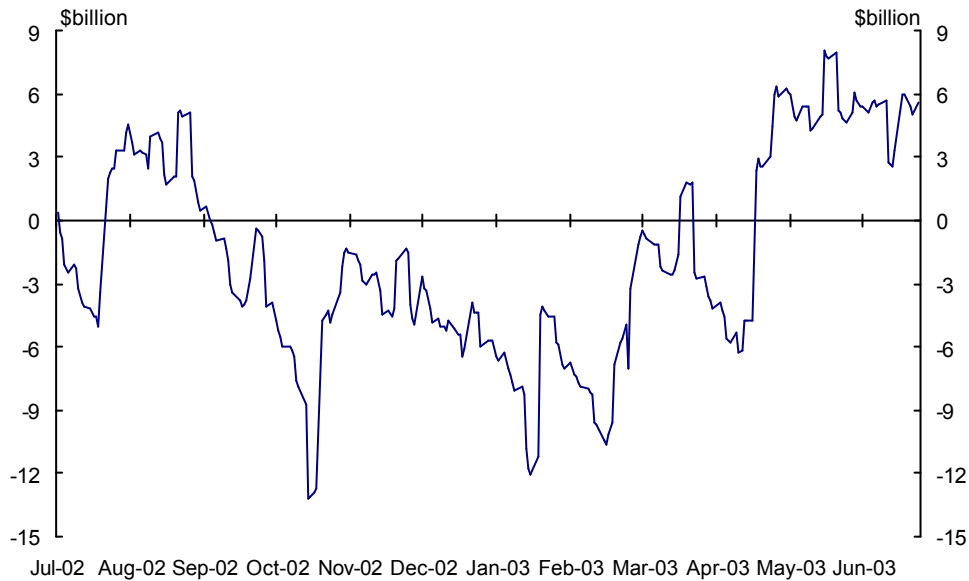
As noted earlier, surplus funds were used to finance a run down in the stock of Treasury Notes on issue, and an increase in financial asset holdings at the Reserve Bank of Australia. At 30 June 2003 there were no Treasury Notes on issue compared with \$4.2 billion on issue at 30 June 2002. End-year financial asset balances held at the Reserve Bank of Australia increased by \$1.4 billion in 2002-03.

### Within-year funding in 2002-03

There is a significant within-year funding task, given the uneven pattern of Commonwealth revenues and expenditures throughout the year. In addition, considerable forecast uncertainty occurs during the year about the timing and magnitude of short-term cash financing requirements.

Changes in Commonwealth financial asset holdings at the Reserve Bank of Australia, after excluding the impact of transactions involving Treasury Notes demonstrate the size and volatility of the within-year funding requirement in 2002-03 (Chart 6).

Chart 6: Within-year funding requirement 2002-03



The challenge of managing Commonwealth within-year funding is to minimise net interest outlays through minimising Treasury Note issuance to cover cash needs while, at the same time, avoiding use of the Commonwealth's (more costly) overdraft facility with the Reserve Bank of Australia.

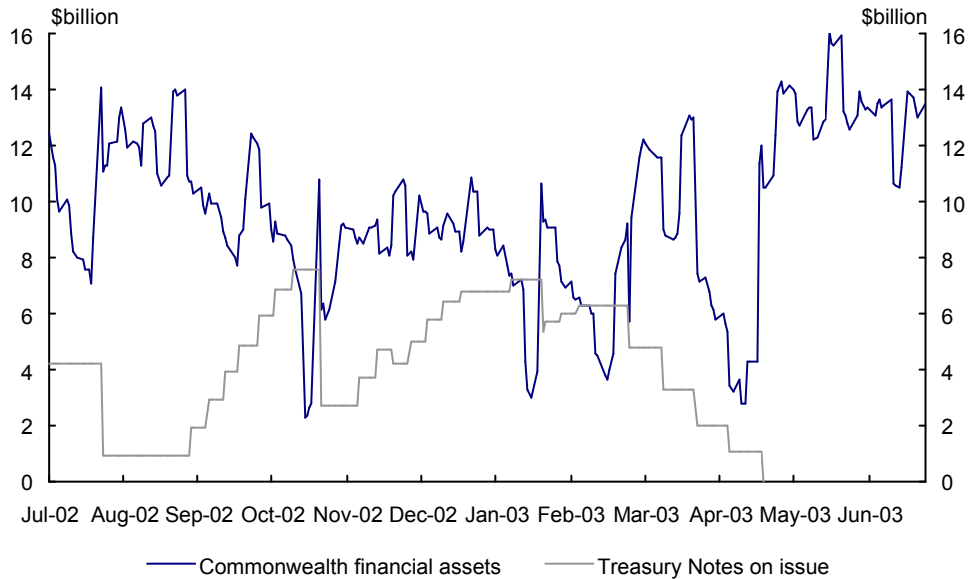
Term deposits with the Reserve Bank of Australia are the primary instrument the AOFM uses to manage within-year cash flows. The AOFM issues Treasury Notes when term deposits are insufficient to fund all of the short-term financing requirement.

During the year, the AOFM placed 257 term deposits with the Reserve Bank of Australia and the stock of term deposits fluctuated from a minimum of \$900 million in October 2002, to a maximum of \$14.6 billion in May 2003. The movement in the Commonwealth's financial asset position in 2002-03, which includes term deposits with the Reserve Bank of Australia, is highlighted in Chart 7.

The AOFM held 18 tenders for the issue of \$13.6 billion of Treasury Notes in 2002-03. The peak volume of Treasury Notes on issue in 2002-03 was \$7.6 billion in October 2002, and for the first

time in over four decades, no Treasury Notes were outstanding during part of the financial year, including the financial year end (Chart 7).

Chart 7: Commonwealth financial asset holdings at the Reserve Bank of Australia and Treasury Notes on issue, 2002-03



The AOFM did not use the overdraft facility with the Reserve Bank of Australia in 2002-03.

Performance in managing the within-year funding task is measured by reference to a target for average cash balances. In 1996, the Treasurer, in consultation with the Minister for Finance, determined that the year-average balance as at 30 June each year for the Commonwealth's overdraft group of accounts at the Reserve Bank of Australia should not exceed \$1.5 billion. The AOFM successfully met this target. The year-average balance in 2002-03 for the overdraft group of accounts was \$1.3 billion.

## Building infrastructure

### Quantum system

The AOFM successfully concluded the initial phase of the implementation of the Quantum/QRisk treasury management system in 2002-03. Quantum is the deal capture, back office and accounting system and Qrisk is the market risk management system.

With the conclusion of the first implementation phase, the AOFM is now operating on a single database for all settlements, accounting and risk management activities with straight through processing and single deal entry. Phase 2 of the project is now underway, with the AOFM now looking to take advantage of the Quantum platform to further enhance risk reporting capabilities.

An internal IT steering committee and the internal auditors, PriceWaterhouseCoopers, continue to oversee the implementation of the system, providing an appropriately rigorous governance framework through the course of the implementation phase.

### Corporate governance

The Chief Executive Officer of the AOFM is accountable to the Treasurer, through the Secretary to the Treasury, for the management and performance of the AOFM. The AOFM Advisory Board provides advice to the Secretary to the Treasury on strategic debt management issues. The Board met on nine occasions in 2002-03.

In 2002-03 the AOFM formalised governance arrangements surrounding the debt management function in the shape of a Commonwealth Debt Management Charter. The Charter defines the scope of the roles and accountabilities of all the principal stakeholders in the conduct of Commonwealth debt management — the Treasurer, the Secretary to the Treasury, the AOFM Advisory Board, the AOFM itself and the Treasury.

Both the Secretary to the Treasury and the Chief Executive Officer of the AOFM are signatories to the Charter, which was formally approved by the Treasurer during the year. Under the terms of the Charter, the AOFM is accountable for all operational aspects of debt management, including the design and execution of debt management operational policy. Treasury is responsible for advising the Treasurer on strategic debt policy issues and wider policy issues as they relate to debt management.

The Commonwealth debt management governance framework is discussed further in Part 3.

## Legal and legislative issues

Consistent with market practice, the terms and conditions governing the AOFM's derivative transactions are governed by standard Master Agreements with counterparties developed by the International Swap and Derivatives Association. This document establishes the terms and conditions of derivatives transactions with individual counterparties. The AOFM transacts only with counterparties with which it has a signed Master Agreement in place.

The AOFM is a member of both the International Swap and Derivatives Association and the Australian Financial Markets Association. Engagement with these associations ensures that the AOFM is kept abreast of changes in industry best practice and legal developments relating to swap transactions.

The AOFM administered debt issue, repurchase and redemption programs in 2002-03 in line with legislative requirements. Likewise, the AOFM met all relevant accountability requirements and handled promptly inquiries from State and Territory Treasuries concerning debt redemption matters.

The AOFM continues to review, at least annually, the Chief Executive Instructions and other delegations, providing assurance that legal authority for debt management and other administrative activities is monitored and managed in line with legislative requirements.

## Settlement operations

During the year the AOFM settled all payment obligations in line with contractual agreements with counterparties. There were four occasions during 2002-03 where the AOFM counterparties failed to meet payments obligations in accordance with contractual obligations. These instances were followed up by the AOFM in line with established internal business procedures. In each case, the counterparty provided a 'make-good' payment to the AOFM, consistent with prevailing market practice.

## Agency financial performance

Agency activities recorded an operating surplus of \$1.8 million for 2002-03, comprising revenues of \$7.3 million and expenses of \$5.5 million. As at 30 June 2003, the AOFM was in a sound net worth and liquidity position, reporting positive net assets of \$7.4 million, represented by assets of \$8.6 million (with \$3.4 million in current assets) and liabilities of \$1.2 million.

The AOFM conducted a revaluation of its property plant and equipment assets as at 30 June 2003 by reference to the fair value method of valuation. The revaluation had a \$0.061 favourable impact on the financial position of the AOFM.

In late June 2003, the AOFM completed the first phase implementation of a specialist debt management system. The total capitalised cost of the first phase implementation is \$2.3 million, with \$1.6 million expended during 2002-03.

As at 30 June 2003, the AOFM maintained cash at bank and unspent output appropriations totalling \$3.3 million. These reserves are to be applied to future asset replacement and the future settlement of employee liabilities.

During 2002-03 the AOFM did not return or establish a provision for the return, by way of dividend, of unspent appropriation monies to Government.

## Annex: Market value of the net debt portfolio

The market value of the Commonwealth net debt portfolio reflects the net present value of all cash flows on Commonwealth Government securities and Commonwealth derivative contracts. Portfolio market value very broadly indicates the cost of repurchasing all Commonwealth debt as well as the cost of unwinding Commonwealth derivative contract positions.

The market value of the Commonwealth net debt portfolio at 30 June 2003 was \$52.3 billion with a corresponding face value of \$45.2 billion (Table 6). The net debt portfolio includes Commonwealth term deposits held with the Reserve Bank of Australia. However, reflecting materiality considerations, the data excludes non-marketable Commonwealth Government securities, such as Peace Savings Certificates and overdue Commonwealth Government securities (having a total face value of \$6.2 million at 30 June 2003).

At 30 June 2003, the domestic currency exposure of the net debt portfolio had a market value of \$46.6 billion. The main contributor to the domestic currency component of the portfolio was Treasury Bonds, with other significant elements being Treasury Notes and Treasury Indexed Bonds. These liabilities were partially offset by term deposits held with the Reserve Bank of Australia, Australian dollar interest rate swap contracts and the Australian dollar receive-fixed side of foreign currency derivatives. The modified duration of the domestic currency component of the net debt portfolio was 4.3 years.

At 30 June 2003, the foreign currency exposure of the net debt portfolio had a market value of \$5.7 billion. The foreign currency exposure is composed of US dollar physical debt (\$0.2 billion), US dollar cross-currency interest rate swap and forward foreign exchange contracts (\$5.4 billion) and sterling physical debt (\$0.1 billion). The modified duration of the foreign currency component of the Commonwealth net debt portfolio was 1.0 year for the US dollar component and 6.5 years for the sterling component.

Table 6: Summary of the net debt portfolio's market value

<b>Commonwealth net debt portfolio (a)(b)</b>	<b>Portfolio at 30 June 2002</b>	<b>Portfolio at 30 June 2003</b>
Face value (\$billion)	53.7	45.2
Ratio to GDP	(c) 7.6	6.0
Market value (\$billion)	60.0	52.3
Average period to maturity (years)(d)	6.6	7.2
Foreign currency share (e)(e)	17.5	11.0
<b>Domestic currency portfolio</b>		
Market value (\$billion)	49.5	46.6
Treasury Bonds	55.4	55.5
Maturing within:		
0-1 year	3.7	5.5
1-5 years	24.9	22.8
5-10 years	21.3	23.6
10+ years	5.5	3.6
Treasury Indexed Bonds	8.6	9.5
Treasury Notes	4.2	0.0
A\$ derivative cash flows(g)	-8.6	-6.4
Term deposits	-10.4	-12.2
Other(f)	0.4	0.3
Modified duration	3.6	4.3
Treasury Bonds	4.0	3.9
Treasury Indexed Bonds	9.4	9.0
Treasury Notes	0.1	0.0
A\$ derivative cash flows - pay legs(g)	0.2	0.2
A\$ derivative cash flows - receive legs(q)	3.2	3.1
Term deposits	0.1	0.1
Other(f)	1.7	1.2
Average period to maturity (years)(d)	7.6	7.9
<b>Foreign currency portfolio</b>		
Market value (\$billion)	10.5	5.7
By currency		
US\$	10.3	5.6
Non-US\$	0.2	0.1
By instrument		
Loans	0.4	0.3
Non-A\$ derivative cash flows(g)	10.1	5.4
Modified duration	1.0	1.1
By currency		
US\$	0.9	1.0
Non-US\$	6.8	6.5
By instrument		
Loans	4.0	4.0
Non-A\$ derivative cash flows(q)	0.9	1.0
Average period to maturity (years)(d)	2.1	2.2

(a) The Commonwealth net debt 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, and overdues.

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

(c) Differs from that published in the 2001-02 Annual Report due to revised GDP figure.

(d) The average period to maturity is weighted by face value.

(e) Currency shares are based on market values.

(f) Includes Treasury Indexed Bonds and liabilities assumed from the Federal Airports Corporation and the Snowy Mountains Hydro-Electric Authority.

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

### Sensitivity of the Commonwealth net debt portfolio

The market value of the Commonwealth net debt portfolio is exposed to fluctuations in interest rates and exchange rates. For the Commonwealth net debt portfolio, increasing market interest rates decrease the portfolio's market value. This occurs because debt securities have set coupons that are less valuable when market rates increase. Generally, the higher the modified duration of the portfolio, the more sensitive the market value of the portfolio is to interest rate movements. Changes in the market value of the portfolio reflect the opportunity cost or benefit of having a particular debt structure when rates move.

The sensitivity of the Commonwealth net debt portfolio to interest rate and foreign exchange rate movements is tied to the size of the portfolio and the magnitude of market movements. A one-cent *depreciation* of the Australian dollar against the US dollar *increases* the market value of the Commonwealth net debt portfolio by \$85 million (*a deterioration in the net debt position*) (Table 7). As the run down of the Commonwealth portfolio's foreign exchange exposure continues towards a zero position, the portfolio's sensitivity to exchange rates will correspondingly decline.

A broad based half percentage point *increase* in domestic interest rates *reduces* the market value of the Commonwealth net debt portfolio by \$997 million (*an improvement in the net debt position*) (Table 7). Within the portfolio, a greater decline in the market value of physical debt is offset by deterioration in the market value of derivative contracts. Conversely, a broad based half percentage point *decrease* in domestic interest rates would *increase* the market value of the Commonwealth net debt portfolio by around \$997 million. In this case, the greater increase in the market value of physical debt is offset by an improvement in the market value of derivative contracts.

Table 7: Market value sensitivity of the Commonwealth net debt portfolio as at 30 June 2003

		Physical debt (net of term deposits) \$million	Interest rate swaps \$million	Currency swaps and forward contracts \$million	Total \$million
<b>Market value sensitivity</b>					
<b>Exchange rate sensitivity</b>					
One cent depreciation of A\$ against the US\$	Domestic	0	0	0	0
	Foreign	5	0	80	85
		5	0	80	85
<b>A\$ yield curve sensitivity</b>					
Broadly based 0.50 per cent increase in domestic interest rates	Domestic	-1,478	440	41	-997
	Foreign	0	0	0	0
		-1,478	440	41	-997
<b>Foreign yield curve sensitivity</b>					
Broadly based 0.50 per cent increase in foreign interest rates	Domestic	0	0	0	0
	Foreign	-1	0	-26	-27
		-1	0	-26	-27

(a) Data is consistent with the Commonwealth portfolio definitions in Table 6.

(b) All shocks are considered independently of changes in other market variables.

(c) Liability balances (stocks) and increases in liability balances (flows) are represented by positive numbers.

(d) Where foreign debt is denominated in currencies other than US dollar, it is assumed that the Australian dollar appreciates in the same proportion as the US dollar.

(e) Attribution between domestic and foreign categories is determined by the currency denomination of discounted cashflows. The domestic component accordingly includes balances from the Australian dollar legs of cross-currency swaps and forward foreign exchange contracts.



