OPERATIONS IN FINANCIAL MARKETS

DOMESTIC MARKET OPERATIONS

Monetary Policy Implementation

As in most developed economies, the stance of monetary policy in Australia is expressed in terms of a short-term market interest rate. In Australia's case it is the cash rate – the interest rate at which banks borrow and lend overnight funds among themselves. The Reserve Bank Board announces its policy decisions in terms of an operational target for the cash rate and the staff then conduct market operations each day to maintain the actual rate around the target.

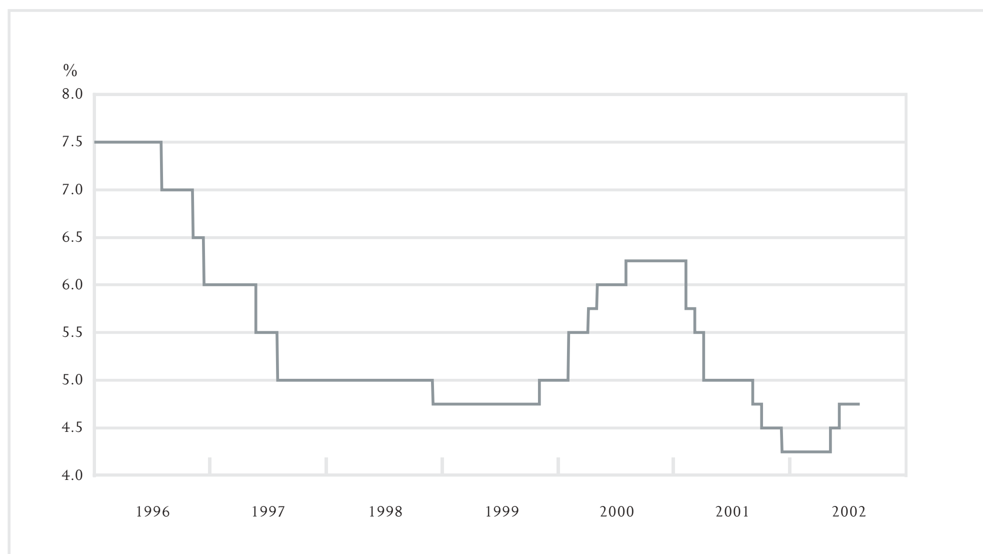
The stance of monetary policy was changed five times in 2001/02. The Board eased policy three times in the second half of 2001, reducing the cash rate target from 5.0 per cent to 4.25 per cent, the lowest level since the early 1970s. In the first half of 2002, policy was tightened twice, taking the target cash rate back to 4.75 per cent. The background to each of these changes was provided at the time through media releases and has been discussed in detail in the quarterly *Statements on Monetary Policy*.

Movements in the Target Cash Rate in 2001/02

	Change (percentage points)	New Level (per cent)
5 Sep 2001	-0.25	4.75
3 Oct 2001	-0.25	4.50
5 Dec 2001	-0.25	4.25
8 May 2002	+0.25	4.50
5 June 2002	+0.25	4.75

The actual cash rate is maintained very close to the target, the average difference in 2001/02 being

GRAPH 1 / TARGET CASH RATE



around 1 basis point. The greatest deviation from the target cash rate occurred in the days immediately following September 11, 2001 when the RBA's market operations increased the supply of funds available to banks – i.e. increased their liquidity – to ensure the continued smooth operation of financial markets (see section on Events of September11, page 9). This meant that the cash rate fell below the target for a few days, though the deviation was only about 6 basis points.

Market operations have traditionally been conducted in domestic securities markets. Until the mid 1980s, these operations were implemented entirely through outright purchases (to inject funds) and sales (to withdraw funds) of Commonwealth Government securities (CGS). The RBA remains willing to undertake such transactions but in recent years has come to rely more heavily on repurchase agreements (repos) (see table). Repos involve the purchase or sale of securities with a simultaneous agreement to reverse the transaction on an agreed date, and at an agreed yield. Because the transaction is generally reversed within a relatively short period, repos involve little market risk. In addition, the fact that the maturity terms can be agreed mutually means that repos provide an ideal liquidity management tool for central banks as they facilitate the reallocation of large amounts of cash to specific dates.

Structural Changes in Financial Markets

As discussed in recent Annual Reports, structural changes in financial markets have meant that the RBA has had to adjust the arrangements under which it conducts its market operations in recent years. The introduction of real-time gross settlement (RTGS) and new arrangements for Commonwealth tax collections have boosted the demand for funds in financial markets. At the same time, the decline in the amount of CGS on issue has reduced the instruments available to the RBA, either to purchase or accept as collateral, in supplying cash to the system. The amount of CGS on issue (excluding the Commonwealth's own holdings) has declined from a peak of $115 billion in early 1997 to $62 billion in mid 2002.

The RBA has adapted to these developments by broadening the range of collateral it is prepared to accept in its domestic repo operations. This started with the decision in 1997 to accept Australian dollar domestic securities issued by State and Territory

Market Operations ($ billion)

	1997/98	1998/99	1999/00	2000/01	2001/02
Repurchase agreements (a)					
– Purchases	275	300	244	376	423
– Sales	8	13	14	17	16
Short-term CGS					
– Purchases	26	21	9	5	1
– Sales	0	0	0	0	0
Total domestic operations	309	334	267	398	440
Foreign exchange swaps (a)	33	52	67	90	90

(a) First leg of transaction

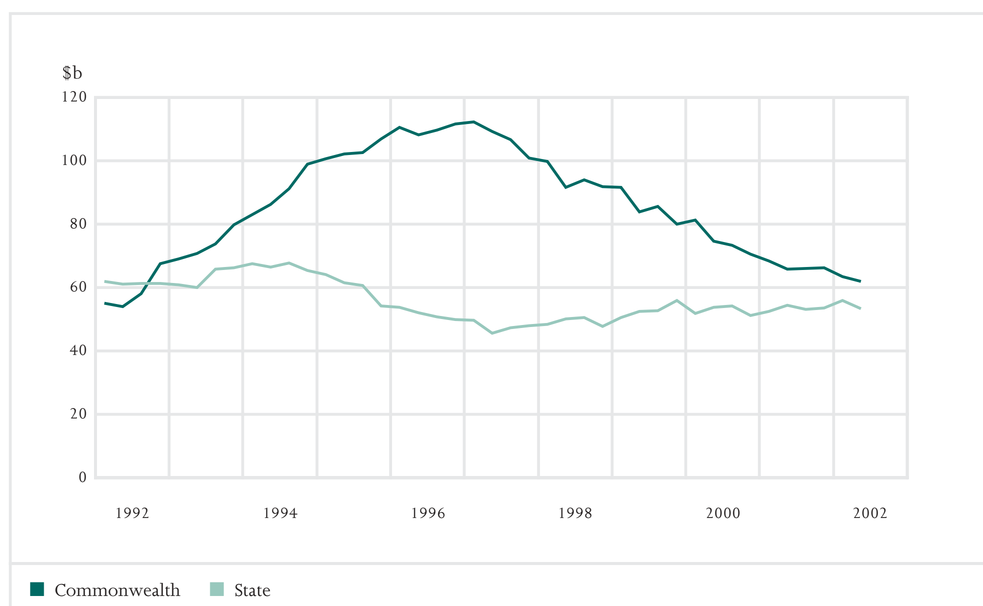
borrowing authorities. This increased the pool of securities available for repo by over 40 per cent at the time. Declines in CGS on issue since then mean that, in June 2002, the repo collateral pool was effectively double what it would have been if the RBA had not made this change. Market participants adjusted quickly to the new arrangements, and between 50 and 60 per cent of the domestic collateral held by the RBA on repo is now typically State government debt.

In October 2000, the RBA announced that it would also accept AAA-rated Australian dollar domestic debt securities issued by select supranational organisations. The range of acceptable supranational issuers was broadened in June 2001, at the same time as the RBA announced that it would also accept Australian dollar securities issued offshore by State and Territory borrowing authorities but lodged in the domestic Austraclear settlement system in a form known as Euroentitlements.

These more recent changes have increased the collateral pool by a relatively slight amount and, to date, less than 5 per cent of domestic collateral on average held by the RBA has been supranational securities or Euroentitlements. However, these securities represent market sectors that have the potential to expand in the years ahead.

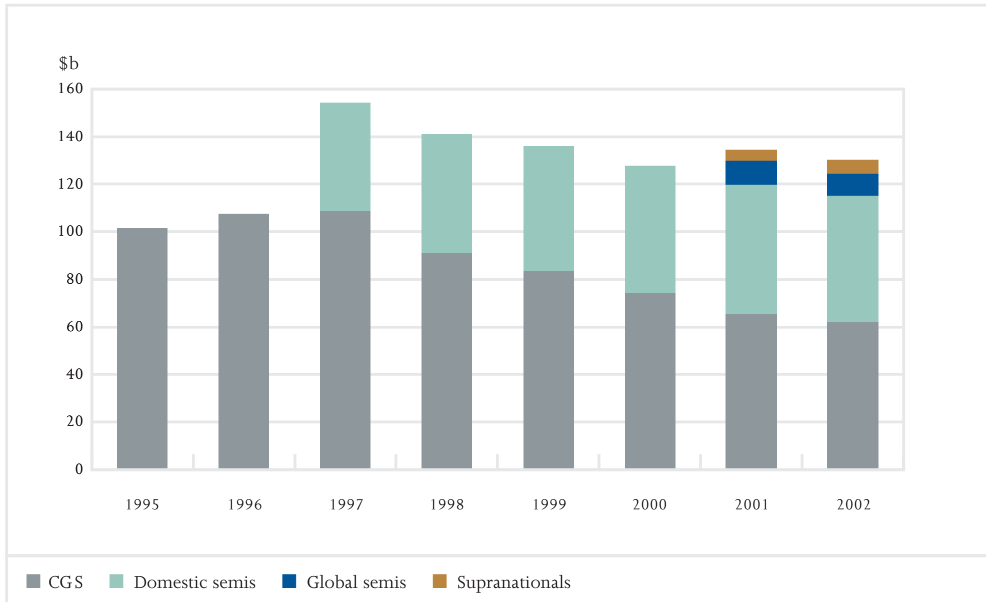
Another key adjustment made in recent years has been the increased use of foreign exchange swaps for domestic liquidity management. To the extent that foreign exchange swaps work in essentially the same way as repos, their use can be seen as an extension of the collateral pool to include foreign currency government securities.[1] The use of swaps was outlined in some detail in last year's Annual Report. RBA turnover in foreign exchange swaps was $90 billion in the year to June 2002, unchanged from the previous year but roughly three times the turnover of four years earlier. Foreign exchange swaps accounted for around

GRAPH 2 / **SUPPLY OF GOVERNMENT SECURITIES** End quarter



[1] In a foreign exchange swap, the foreign currency delivered against the Australian dollars represents collateral in the same way that securities do in a domestic repo. The foreign currency is invested offshore in government debt on either a repo or outright basis.

GRAPH 3 / **TOTAL ELIGIBLE COLLATERAL FOR DOMESTIC MARKET OPERATIONS** End June



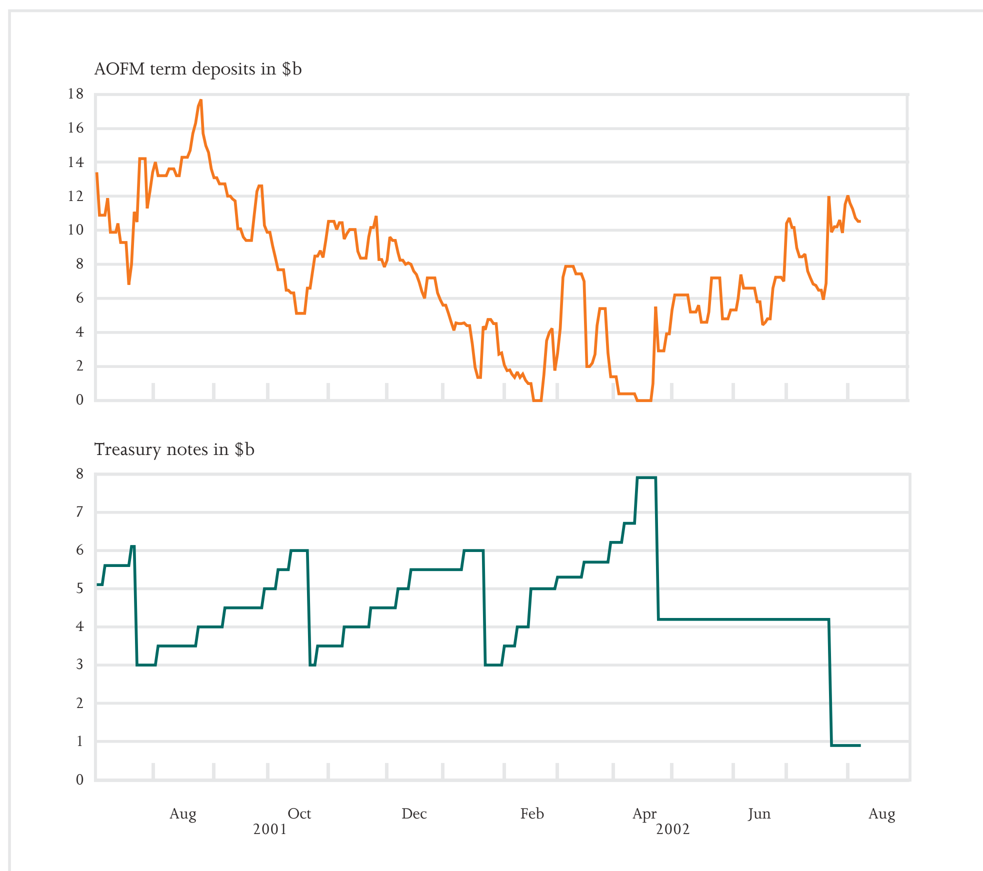
17 per cent of all RBA market operations in 2001/02, essentially unchanged from 2000/01.

These adjustments have proved successful in facilitating the RBA's market operations without creating difficulties in the markets themselves. In addition, the pace at which CGS on issue are falling slowed during the past year. As a result of these developments, the total amount of collateral potentially available for repos with the RBA has increased by 30 per cent since the mid 1990s and the share of the potential collateral pool held by the RBA has remained constant, at around 15 per cent.

As outlined in the 2001 Annual Report, changed taxation collection arrangements, which were aimed at minimising the number of separate tax payments by businesses, have led to a greater concentration of tax payments into a few key dates. Some fine tuning of the new tax arrangements, however, has made these periods easier to handle from a liquidity point of view. In February 2001, the transitional arrangement whereby small and medium companies could stagger their tax payments around two days per quarter, rather than one, was made a permanent feature of the new framework. While peak tax flows have proved somewhat larger than the $15 billion per quarter expected at that time, they have been spread across more days than initially expected. This has meant correspondingly smaller daily peaks in demand for liquidity by banks and less pressure on the collateral pool.

These developments contributed to the decision by the Australian Office of Financial Management (AOFM) to alter the arrangements for the issuance of Treasury notes. Traditionally an instrument used by the Government for within-year cash management, Treasury notes have become less important for this purpose in recent years as the AOFM has been able to use its term deposits at the RBA, on which it receives market rates of interest, to manage within-year fluctuations in its cash position. Balances in these

GRAPH 4 / AOFM TERM DEPOSITS AT THE RBA AND TREASURY NOTES OUTSTANDING



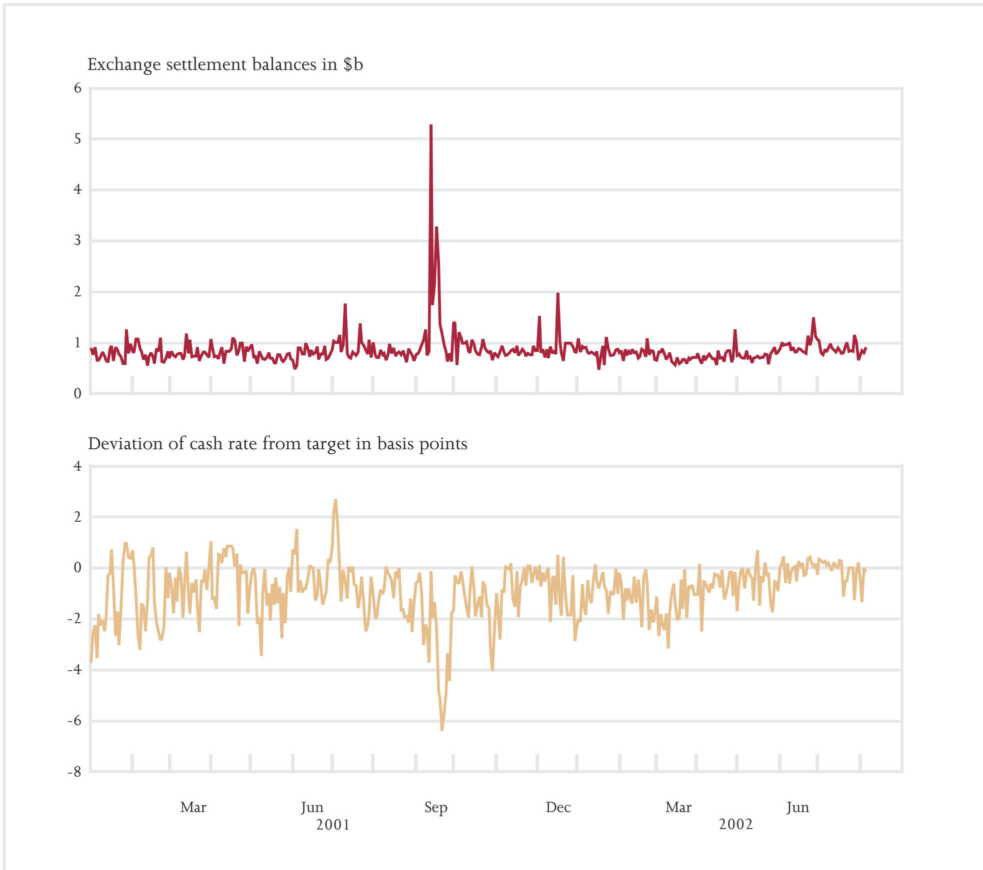
term deposits fluctuate considerably; during the past year, they varied between zero and $18 billion. At end – June 2002, they were $10 billion, compared with $13 billion a year earlier. In May 2002 the AOFM announced that it would in future issue Treasury notes only when needed, rather than maintain a regular issuance schedule.

Events of September 11

Liquidity management arrangements were tested, as they were in most countries, by the events of September 11 in the United States. The September 12 payments day in Australia commenced only hours after the terrorist attacks and some banks were uncertain whether payments due to them as a result of international transactions would be received. There was a risk that this uncertainty would significantly constrain the normal functioning of the interbank money market, as individual banks sought to bolster their own liquidity by delaying payments, thereby contributing to other banks' problems.

The first step taken by the RBA early on the morning of September 12 was to issue a statement confirming that the payments and settlements infrastructure would be operating normally and that the RBA would provide the financial system with as much liquidity as required. In the event, the RBA boosted the amount of Exchange Settlement funds

GRAPH 5 / **EXCHANGE SETTLEMENT BALANCES AND CASH RATE DEVIATION FROM TARGET**



held by banks at the end of the day to over $5 billion, more than six times the amount banks had been demanding in the period leading up to the attacks. Around one-third of these net additional funds was supplied through the normal 10.00 am market operations. The balance was provided through a second round of operations conducted mid-afternoon (one of only four second rounds conducted all year). All funds were secured under repurchase agreement against eligible collateral.

Liquidity in domestic securities markets (i.e. the ability to trade at very fine margins) deteriorated sharply in the immediate aftermath of September 11. Interbank price-making for Treasury and semi-government bonds contracted and, for a few days, client business was undertaken on a "best endeavours" basis. Trading in the corporate bond market virtually ceased.

Activity in the repo market also fell sharply. With borrowers finding it extremely hard to obtain funds in the interbank market, even on a secured basis, the RBA played a critical role in meeting the demand for funds. Overnight Exchange Settlement balances averaged over $2 billion for several days as demand for funds remained high. Conditions returned to more normal levels within a week or so.

In contrast to the lower activity in physical bond and repo markets, turnover in interest rate futures and

options traded on the Sydney Futures Exchange held up in the days following September 11. The futures market played an important role in facilitating risk management and price discovery through this period.

Preparation for Continuous Linked Settlement

More recently, the focus has turned to preparing for the introduction of "continuous linked settlement" (CLS). As discussed in last year's Annual Report, CLS is a new system for settling foreign exchange transactions designed to reduce settlement risk. Almost all major banks in the world will participate. One consequence of CLS, however, is that it may increase banks' demand for liquidity. For Australian banks, this may pose particular problems as the period chosen for the global settlement of transactions through CLS Bank is late in the Australian day. Payments to and from CLS Bank will take place between 3.00 pm and 7.00 pm during Eastern Standard Time and between 5.00 pm and 9.00 pm during Eastern Daylight Saving Time in Australia.

Following consultation with market participants, the RBA came to the view that there was a need to provide banks with a new facility designed to meet periodic and potentially large demands for intra-day liquidity at relatively short notice. The existing facility for intra-day liquidity, which is based on government securities, was unlikely to meet banks' needs, particularly as a further decline in the amount of government securities on issue is likely.

Details of the new facility were announced on 15 July 2002. Funds will be provided under repo, as they are under the existing intra-day facility, but the range of acceptable collateral will be widened to include selected bank bills and certificates of deposit. Banks whose securities are eligible must have a short-term credit rating of A1+ or equivalent (the highest possible) and a long-term credit rating of at least AA or equivalent . They must also have maintained a significant amount of eligible securities on issue in the Austraclear settlement system over the previous year. For 2001/02, this has been taken as $1 billion. The RBA will accept only third-party securities – i.e. a bank will not be able to present its own securities to the RBA. This provides an additional layer of protection against credit risk for the RBA. Use of the facility will involve a fee, as opposed to current intra-day repos in government securities, which are provided without charge. This is designed to discourage banks from shifting their holdings of liquid assets from government securities to bank securities. The RBA will review the effectiveness of the new facility on an ongoing basis.

At the same time as the new intra-day facility was announced, the RBA also made some changes to its procedures for normal market operations. It began specifying the preferred maturity date of repos which it is offering to buy or sell, rather than leaving it to the market to nominate maturities. This is designed to give market participants a clearer signal of where the RBA's dealing preferences are. It also announced that, effective 22 July, it would commence offering three and six-month repos at its 10.00 am market operations on a regular basis (usually weekly). Repos undertaken in daily market operations have traditionally been for terms of less than one month, a term structure that suits the RBA's liquidity management requirements. The decision to introduce three and six-month repos followed approaches by market participants and was taken in the interests of the development of the maturity profile of the repo market and indirectly in supporting liquidity in the secondary bond market.

RBA Liquidity Facilities

	Market Operations	Standard Intra-day Repo	New Intra-day Repo	Overnight Repo
Term	Varied	Intra-day but may be extended overnight via Overnight Repo Facility	Intra-day only	Overnight only
Collateral	CGS State Gov debt Supranational debt	CGS State Gov debt Supranational debt	Bank bills CDs	CGS State Gov debt Supranational debt
Rate	Market-determined	Free	5 basis points	Cash rate target + 25 basis points
Overcover	2 per cent	None	None	2 per cent

Other Domestic Operations

In recent years, the RBA has been active in the government bond market in its capacity as fiscal agent for the Commonwealth. These operations, which have been carried out under instruction from the AOFM, have largely involved the retirement of outstanding debt through direct repurchases. In 2001/02, the RBA undertook no transactions of this type and, in future, the AOFM will undertake direct repurchases in its own name. Over the year, the AOFM pursued a consolidation program through the use of conversion tenders rather than direct repurchases.

The other main area of domestic operations is securities lending. The RBA maintains a securities lending facility through which it lends from its outright holdings of CGS on an issue-by-issue basis. The RBA undertakes this activity to assist market participants to cover temporary shortages of particular issues of Treasury bonds. However, the RBA prices its stock lending so as to be a less attractive lender in the market to avoid the risk of displacing private activity. Use of the facility more than doubled in 2001/02 from the very low level recorded the previous year. This increase in activity may reflect an increase in offshore demand for Australian dollar denominated assets as the outlook for the Australian dollar improved. However, at $3.1 billion, turnover remains low compared with some years ago when stock lending was undertaken at near-market rather than penalty rates.

Securities Lending by the RBA

	Number of Transactions	Amount Lent (face value, $ billion)	Net Income ($ million)
1996/97	540	11.9	0.7
1997/98	935	16.7	1.1
1998/99	805	14.6	0.9
1999/00	510	8.9	0.6
2000/01	75	1.2	0.1
2001/02	119	3.1	0.3

FOREIGN EXCHANGE OPERATIONS

The RBA undertakes transactions in foreign exchange markets for several reasons. The least frequent, but most prominent, are those to influence the Australian dollar exchange rate, typically referred to as intervention. More regular, but much lower-key, are transactions associated with the RBA's foreign currency asset management and those on behalf of the RBA's customers, chiefly agencies of the Commonwealth Government.

Australia has a flexible exchange rate regime, and the RBA is prepared to accept substantial fluctuations in the exchange rate, both day-to-day and over the

course of the economic cycle. RBA intervention in the market is infrequent, and is undertaken during periods in which the exchange rate appears to be overshooting (either up or down) and is intended to signal to market participants that the RBA believes that the exchange rate is behaving in a way that does not seem warranted by the underlying economic factors in the market. Any potential impact of intervention on the domestic money market is sterilised.

During 2001/02 the only significant intervention occurred just after September 11, and was motivated mainly by the RBA's concerns about the extreme uncertainty in markets generally at that time. That intervention resulted in net purchases of Australian dollars of $1.1 billion. Through the rest of the year, the RBA did not intervene in the market because the exchange rate, even though it has remained low by comparison with its longer-run average level, tended to be either relatively stable or rising.

The RBA also sold $5.3 billion of foreign exchange to the Commonwealth in 2001/02. Early in the year these sales were met partly from reserve assets and partly from interest earnings on foreign investments and other transactions. By the June quarter, however, the RBA began to cover these Government transactions directly in the market, given that the exchange rate had risen significantly from its earlier lows. This is the normal practice.

For the year as a whole, net purchases of foreign exchange from all sources, plus interest earnings on reserves, were slightly larger than sales of foreign exchange to the Government, so overall transactions added to net reserves.

Part of the foreign exchange sold to the Commonwealth during the year was for repayments of some of the foreign currency swaps which the Commonwealth had previously entered into. These repayments were part of a set program agreed between the RBA and the Commonwealth following a review of the Commonwealth swap operations which concluded that all the Commonwealth's outstanding foreign currency swaps should be gradually run off.

That review had been conducted in the previous year after the combination of a falling exchange rate (which boosted the Australian dollar value of swap obligations) and declining Commonwealth (net) debt on issue highlighted the difficulties in managing the swap portfolio. The RBA became involved around the middle of 2000 when the AOFM signalled its intention to accelerate swap repayments in order to prevent the ratio of swaps to total debt on issue from rising above 15 per cent, which had some years earlier been adopted as the top of the benchmark range.

The RBA believed that accelerated repayments at that time (which would have involved sales of Australian dollars and purchases of foreign exchange) would have added substantial further downward pressure on the exchange rate and would have led to realisation of unnecessarily large losses by the Commonwealth, since it would have been selling at what were likely to be historically low levels for the dollar. On RBA advice, the Treasury instructed the AOFM in October 2000 to suspend the benchmark. This decision was formally approved by the Treasurer in December 2000, at which time he also initiated a longer-term review of foreign currency swaps. That review was completed by mid 2001, and a program of gradual reductions in swaps outstanding began to be implemented in October of that year.

RESERVES MANAGEMENT

The RBA holds a portfolio of foreign currency assets which form the major part of Australia's official reserve assets. It has always been the RBA's view that

these assets should be invested in very secure instruments and, accordingly, it has traditionally confined its investments mainly to securities issued by AAA-rated foreign governments. This preference was reflected in the benchmark which was adopted in 1991, which weighted the portfolio 40 per cent to US assets, 30 per cent to German assets and 30 per cent to Japanese assets.

That benchmark had remained unchanged until the past year, when two changes were made. First, the weight previously given to German assets was reallocated across both German and French assets. This change followed the high liquidity attained by the French government securities market following the introduction of the euro. Like German government bonds, French government securities are rated AAA.

The second change involved reducing the weight given to Japanese assets, following the substantial reductions in the credit rating of Japanese government securities. With the rating falling to levels five rungs below the AAA standard the RBA normally seeks in its foreign investments, it was felt that a weight of 30 per cent to Japanese assets could no longer be justified. The weight was reduced to 10 per cent. Most of the funds were moved into the European portfolio, though some also went to the US. The result is that the weight of US and Europe are now equal, at 45 per cent.

No changes were made to the duration benchmarks for the various portfolios. Details of the new benchmark portfolio are summarised in the next table.

Composition of the Benchmark Portfolio (previous composition in parentheses)

	US	Europe	Japan
Asset allocation (%)	45 (40)	45 (30)	10 (30)
Currency allocation (%)	45 (40)	45 (30)	10 (30)
Duration (months)	30	30	30

The RBA continued the policy adopted last year of maintaining the portfolio close to benchmark. Deviations from benchmark duration averaged less than one month, while average deviations from benchmark weights for asset and currency composition were very small. These deviations, which reflected transactions by portfolio managers to take advantage of short-term market anomalies, contributed $28 million to returns over the past year. In addition, the RBA sought to enhance returns through securities lending. The return from securities lending has been relatively high in recent years, especially in the US market where debt repayment by the US government has added to the scarcity of the most liquid "on the run" bonds which comprise the bulk of the RBA's investments. The lending of these bonds to other market participants generated $35 million during the past year. This was a little less than in the previous year, in part because of the relative lack of activity during the period of market disruption which followed September 11.

The RBA's New York Office is in a building adjacent to the World Trade Center site and had to be evacuated on September 11. The building remained closed for about three months. The RBA's London office immediately took over responsibility for the US dollar portfolio following September 11 and staff from the US were relocated to London over the following few days to help ensure continuity of operations. The Federal Reserve Bank of New York, which acts as the

RBA's clearing and settlement agent for US securities transactions, continued to provide an uninterrupted service throughout. The New York Office had resumed normal operations by December 2001.

The total return on foreign reserves for 2001/02 was 3.9 per cent (measured in SDRs), compared with a benchmark return of 3.7 per cent. This difference, measured in Australian dollar terms, was equivalent to $63 million. As noted above, this excess return over benchmark came from securities lending and some limited trading of securities and currencies within delegations approved by the Governor.

Actual and Benchmark Returns

	Actual (%)	Benchmark (%)	Value of difference (A$ million)
1991/92	9.8	8.9	165
1992/93	16.3	11.6	420
1993/94	4.0	3.8	31
1994/95	5.2	7.4	-331
1995/96	4.0	3.7	40
1996/97	4.5	4.2	34
1997/98	4.5	4.6	-19
1998/99	4.9	5.1	-26
1999/00	2.8	3.8	-202
2000/01	11.0	10.8	74
2001/02	3.9	3.7	63

The RBA's New York Office is at 1 Liberty Plaza, which is the building at the top right-hand corner of the photo. Although this building was adjacent to the World Trade Center, the suite of offices occupied by the RBA faced away from the area of devastation. © Reuters

MONETARY POLICY / MARKETS / STABILITY / PAYMENTS / CURRENCY / BANKING

In addition to its foreign currency assets, the RBA also holds about 80 tonnes of gold, valued at the end of 2001/02 at about $1.5 billion. The return on these holdings consists of the capital gain or loss which result from changes in gold prices, plus the small interest return available through the gold-lending market. Over the past year, interest rates on gold loans declined as gold producers seemed to have less demand for borrowed gold (which they sell to hedge future production). The average rate on one-year loans in 2001/02 was 1.2 per cent, down from 1.4 per cent in the previous year and 2.0 per cent in 1999/2000. Even though there was some decline in the general level of interest rates on gold loans, the RBA's total revenue from gold loans increased over the year from $17 million to $22 million. This is because the maturity of loans was increased to take advantage of the higher interest rates on longer-term loans.

Taking account of the interest on gold loans and the increase in the price of gold, the total return on gold assets in 2001/02 (measured in SDRs) was 13 per cent. This was higher than the return on other official reserve assets for the year, though longer-term comparisons still show the return on gold as falling short of those on interest-earning assets. Since 1997, when the RBA sold 167 tonnes of gold, earnings on the overseas government securities and other foreign currency investments purchased with the proceeds have substantially exceeded those which the RBA would have received if it had held onto the gold. As shown in the table, the Australian dollar equivalent of the proceeds of the gold sales in 1997 was A$2 434 million. The value of the investments purchased with these proceeds had increased to A$3 846 million by June 2002, taking account of interest received and changes in exchange rates. This is a cumulative return of A$1 412 billion, or 58 per cent. If the RBA had retained the gold, its value would have increased by June 2002 to A$3 221 million (taking account of both the increase in the gold price and the interest earned by lending the gold). This is a cumulative return of A$787 million or 32 per cent. The difference between the two amounts (A$625 million) represents the cumulative return achieved by the RBA from switching some of its gold holdings into interest-earning foreign currency assets.

	Value of Gold Sold (A$ million)	**Value of Investment of Proceeds (A$ million)**
Value at time of sale/investment	2 434	2 434
Value at June 2002	3 221	3 846
Absolute return	787	1 412
Percentage return	32%	58%

RISK MANAGEMENT DERIVATIVES

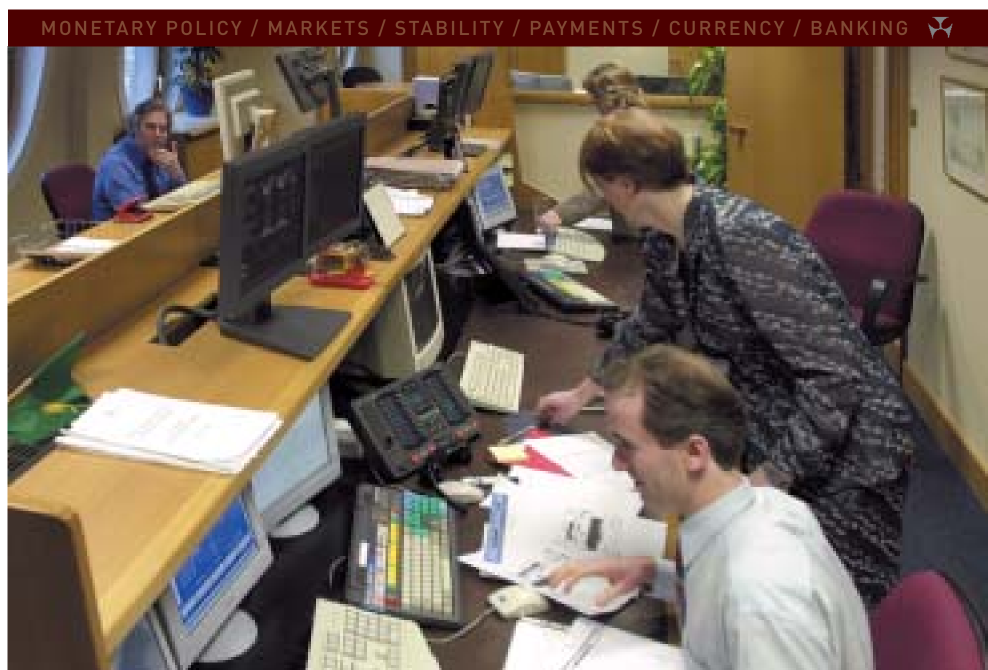
The nature of the RBA's operations means that it is unavoidably exposed to fluctuations in the value of its assets when exchange rates and interest rates rise and fall. For example, when the Australian dollar falls, the Australian dollar value of the RBA's foreign currency assets rises; conversely, when the exchange rate rises, the value of these assets falls. The RBA's exposure is determined by the size of net reserves, which in turn is determined by its intervention activity undertaken to influence the Australian dollar exchange rate. The RBA has no choice but to accept whatever level of reserves, and hence exposure to the Australian dollar exchange rate, that results from its intervention policy. Any attempt to manage that exposure would undo the original policy intent of the intervention.

Similarly, the value of the RBA's holdings of securities rises when market yields fall and falls when yields rise. The RBA holds government securities in Australia to support its domestic market operations, and in foreign currencies as part of official reserve assets.

At present about 70 per cent of the RBA's assets are in foreign currency and about 30 per cent in Australian dollar securities. However, as described earlier in this chapter, a large proportion of the foreign reserve assets are held under "foreign exchange swap" agreements. In a foreign exchange swap, the RBA buys foreign currency today and simultaneously sells the same parcel of currency forward. For the duration of the swap, the RBA holds foreign currency and invests it in foreign securities or deposits. Under these agreements, as the RBA is already committed to sell the foreign exchange at an agreed future date and at an agreed future price, there is no exposure to movements in the exchange rate on this part of the portfolio. Also, the interest rate earned is essentially an Australian dollar interest rate; any difference in the general levels of interest rates between the two currencies in the swap is offset by the difference in the forward exchange rate.

It will be recalled that the RBA's large holdings of foreign exchange swaps have been built up in recent years because it has been convenient to use them for domestic liquidity management, including the sterilisation of foreign exchange intervention transactions. With the supply of domestic government securities in decline, the RBA has been unable to buy securities (either outright or under repurchase agreements) in the volumes required to supply

The dealing room in the RBA's London Office. From left: Eric Lymer; Anita Godden; Stephanie Weston, Deputy Chief Representative; Sean Maloney.



domestic liquidity consistent with its monetary policy stance. It has therefore increased its use of foreign exchange swaps – which are exactly equivalent to buying foreign currency under repurchase agreements – to meet these needs. The RBA would have acquired the same exposure to Australian interest rates in the process of pursuing its monetary policy goals whether it used purchases of domestic securities or foreign exchange swaps to achieve the outcome. In other words, the foreign exchange swaps have had no material effect on the RBA's exposure to interest rate or exchange rate risk.

The swaps the RBA undertakes are confined to these very simple transactions. They are of very short-term maturity, generally less than three months, and counterparties are confined to highly rated banks so as to keep credit exposures to a minimum.

Apart from these transactions, the RBA undertakes two other types of derivative transactions. The first involves the purchase or sale of interest rates futures contracts on major overseas futures exchanges, to help manage the duration of foreign currency assets. For example, rather than selling securities outright to reduce duration, it is possible to achieve the same effect by selling a futures contract. In that case, even though the RBA has an obligation to deliver securities or cash under the futures contract, it holds the underlying physical security against this. No interest rate futures transactions are undertaken in Australia. The second is the purchase of call options on the Australian dollar as part of exchange rate intervention operations. Such transactions are rare. None was undertaken in 2001/02. They involve an up-front payment by the RBA to purchase a right to buy Australian dollars at a specific exchange rate, but carry no obligation to do so. If, after the RBA bought an option the exchange rate were to continue to fall, the RBA simply would not exercise the option. The risk of loss to the RBA is therefore limited to the amount of the premium paid for the option.