The Reserve Bank's Domestic Market Operations

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The Reserve Bank implements its monetary policy primarily through operations in domestic money and securities markets. The nature of those operations has altered over recent years as a result of new instruments, improved operating techniques and changes in market practices more generally.

The broad objective of monetary policy is non-inflationary growth of the economy. Policy seeks to achieve monetary and credit conditions consistent with that objective. Market operations in Australia, as in other developed countries, influence the availability and cost of funds and thus, over time, the demand for money and credit.

As a secondary objective, the Bank operates to smooth major seasonal and other short-term funds imbalances in the market. These arise mainly from the pattern of Commonwealth Government transactions, particularly tax collections.

1. The policy framework

The Bank monitors closely a wide range of financial and economic indicators to judge whether monetary policy is having the desired effect or whether some tightening (or easing) in financial conditions might be appropriate. Allowance must be made for effects already in train from earlier policy action.

If consideration of all the factors were to point to money and credit growth stronger than desirable, the Bank would "tighten up" its market operations. If money and credit growth were too low, the Bank's operations would be more "accommodating".

2. How the money market works

In the first instance, the Bank's market operations affect the supply/demand for "cash" (also known as "same day funds" or "exchange settlement funds"[1]). Banks use cash to settle outstanding indebtedness resulting from transactions between themselves and the Reserve Bank. Most transactions between authorised money market dealers and the Reserve Bank are also settled in cash. Banks hold call funds with authorised money market dealers, which are good for cash and are available as required.

Not all transactions in money markets are cash transactions. The bulk – between commercial banks, or other financial institutions, and their clients – are in clearing

1 Roughly equivalent to "federal funds" in the U.S.A.

house funds (also known as "bank cheque money" or "next day funds"). Cheques paid into bank accounts are aggregated at the end of each day and balances owed by one bank to another (including the Reserve Bank) are cleared through individual banks' exchange settlement accounts on the following morning. The net outcome of clearing house transactions i.e. the net amount owed to the Reserve Bank by the commercial banks or vice versa, affects cash with a day's delay. The amount involved (for an individual bank or for the banking system as a whole) is known as the "float" or the "overnight settlements figure".

Some transactions can affect both the cash and the clearing house funds markets, in effect straddling the two. For instance, an authorised money market dealer may bid for non-bank funds in the market to square its books. The clients give bank cheques to the dealer which deposits them in its account with the Reserve Bank. The Reserve Bank gives the dealer immediate value for the cheques (that is, treats them as though they were cash) but does not itself receive value until they are cleared on the following day. In this way, through the medium of the authorised dealers, the system can square its funds position on a day by "borrowing from the following day" through the float. The float can also work in the opposite direction, shifting cash from today to the following day.

An appreciation of this relationship is important to the Reserve Bank when it is planning its daily operations in the market. One day cannot be viewed in isolation. It is also important to anyone interested in following closely the rationale of Reserve Bank operations.

3. Reserve Bank operations and their transmission

Flows of cash into and out of the financial system each day can be substantial; the main sources and uses are outlined in the Attachment. In its smoothing (liquidity management) operations, the Bank seeks to reposition surpluses of cash to coincide more closely with cash deficits e.g. by selling short-term securities or repurchase agreements to mature in deficit periods; or by buying, on a deficit day, securities that would otherwise mature in periods when surpluses were expected. Such transactions would affect the availability of cash on a day or for a short period but would have no net effect on cash availability in the medium term.

The other (monetary management) aspect of the Bank's operations is quite different. It sets out to influence the availability and cost of cash for broader policy reasons. The two types of operation may be discussed separately but are inseparable in practice. If, for instance, the Bank were seeking to tighten financial conditions through its market operations, it would be more rigorous in selling securities to absorb surplus cash on a day – or over a period; it would be more sparing in its purchases to relieve cash shortages. The first round result would be to reduce the supply of cash, and the cost of cash would tend to rise.

The higher cost of cash (reflected initially in market rates for overnight and call funds), if sustained or expected to be sustained, would tend to feed into higher yields on bills and other short-term traded securities. Gradually, the process would feed also into rates paid and charged by banks and other financial intermediaries; and thus into the demand for money and credit. Over time the effects would show up in money and credit aggregates and, less obviously, other economic statistics. This chain of events flowing from Reserve Bank transactions is the transmission mechanism by which the Bank's actions work through to affect the real economy. The timing and precise relationships involved cannot be gauged with certainty, particularly in rapidly changing market circumstances.

Central banks in some other industrialised countries have institutional arrangements a little different from Australia's and there may be some different links in the policy transmission chain. However, the process is basically the same.

4. The role of interest rates

Interest rates are a vital element in transmitting the effects of monetary action. The Bank does not set out in its operations to achieve a particular level or pattern of interest rates; it does not have an interest rate target or objective in that sense. The Bank's market transactions affect interest rates, and changes in interest rates or in the slope of the "yield curve" are important indicators of changes in financial conditions, including as a result of the Bank's market operations. However, such indicators need to be interpreted with great care. Interest rates can be affected by factors other than Reserve Bank operations – for instance, changes in private demand for funds, market sentiment, or changes in inflationary expectations.

5. Instruments of market operations

The bulk of the Bank's market operations are with the authorised dealers in the short term money market (the "official market"). These dealers act as a conduit between the Bank and the financial system.

In contrast with practice in some other countries, banks in Australia do not normally hold liquid deposits of any size with the Reserve Bank. Their principal source of cash, i.e. funds they can use to settle with the Reserve Bank on the day, is their funds on call with authorised money market dealers. If banks require cash on a day, they tend to withdraw funds from the dealers; if in surplus they will tend to increase their holdings with dealers.

The authorised dealers maintain portfolios of Commonwealth Government securities (and some private sector securities) funded by loans from banks and non-bank clients. By trading in securities with the dealers, the Reserve Bank can influence their funding needs and funding conditions in the market more generally. As explained earlier, the dealers' operations straddle the cash and clearing house funds markets. Reserve Bank transactions with them affect, initially, the availability and cost of cash but this is quickly transmitted to the unofficial (clearing house funds) market.

The Bank trades with the authorised dealers in Treasury notes and bonds within a year of maturity. Depending on circumstances, transactions may involve outright purchases/sales or repurchase agreements. Repurchase agreements provide greater flexibility in handling cash surpluses or deficits likely to be reversed within a short period and are used mainly for that purpose or to overcome a shortage of desirable maturities in dealers' portfolios.

Where liquidity conditions warrant it, the Reserve Bank may, at its discretion, buy very short Treasury bonds direct from banks on a cash basis. This occurs infrequently.

The Reserve Bank also deals in Treasury bonds with more than a year to maturity with a group of reporting bond dealers. These transactions are settled by bank cheque on the day following purchase or sale and therefore affect cash only with a delay.

6. The "safety valves"

In the last resort, the financial system can usually satisfy its needs for cash on a day. All developed countries have "safety valves" provided by the monetary authorities for this purpose, so called because they are available even if the market has badly misjudged the funds situation. They typically involve some price penalty. In Australia, the two main safety valves are the Treasury note rediscount facility and the lines of credit provided by the Reserve Bank to authorised money market dealers.

Use of these facilities affects cash availability in the same manner as the Bank's market operations. However, market operations are at the Bank's discretion. Treasury notes may be rediscounted at the discretion of the holder[2]; central bank loans may be drawn at the discretion of the authorised dealer. The rediscount rate and the central bank loan rate are at the Bank's discretion and each incorporates a penalty above relevant market rates. Both are adjusted from time to time to take account of movements in market rates.

A choice on whether to make use of the safety valves, say by an authorised dealer, will depend upon a range of factors including:

- the amount needed to balance its books;
- the marginal interest rate that would be needed to raise that amount in the market;
- the yields it might need to give up on sale of assets;
- the rediscount rate and the maturity of re-discountable Treasury notes held (the effect of the rediscount rate is to increase the penalty element as the period to maturity rises);
- the interest rate on central bank loans (usually for a minimum of 7 days);
- the likely trend in market conditions over the period ahead.

More generally, use of the safety valves will tend to produce a higher average cost of funds to banks and authorised dealers (and thus to the market generally).

7. Daily arrangements

The Reserve Bank maintains progressive forecasts of the daily cash position of the system for some time ahead. These form the basis for setting Treasury note tenders and for planning the Bank's general approach to its market operations. Forecasts of this nature are necessarily subject to considerable risk of error and planning must allow flexibility.

By the morning of a particular day the Bank has a good idea of the opening cash position (see Attachment). In deciding upon the type and volume of the Bank's operations, the cash position is weighed against other factors likely to influence the market during the course of the day and the shape of the succeeding days. Among these additional factors are the volume of Treasury bonds or notes remaining to be settled, loans to dealers that are within the optional repayment period, and how transactions in the clearing house funds market might affect authorised dealers' needs for cash.

The first decision to be taken each morning is whether the Bank should be in the market, as either a buyer or a seller. A preliminary view is also formed on the volumes the Bank might seek to achieve, i.e. how much cash it might provide or absorb. That view also takes into account the general stance of policy and whether financial conditions are seen as appropriate, too tight or too easy.

The next decision concerns the securities to be bought or sold. That depends to some extent upon broader policy objectives but primarily on the known structure of dealers' portfolios and market portfolios more generally, the forecast pattern of days and weeks ahead and also the shape of the Bank's own portfolio. Where appropriate, sales or purchases take account not only of conditions on a day but also of problems likely to confront the market and the Bank down the track.

At about 9.30 a.m. the Bank publishes[3] the system's opening cash figure ("Money Market Cash Position") and, commencing 24 May 1985, an indication of its dealing intentions for the day. Normally the Bank will indicate whether it proposes to be a seller or buyer on the day and whether it will be inviting bids/offers from authorised dealers for short bonds, Treasury notes or repurchase agreements.

2. Any holder of eligible Treasury notes may use the rediscount facility but only rediscounting by banks and authorised dealers affects cash on the day.
3. The "Money Market Cash Position" is displayed on AAP-Reuters Domestic Money Rates Service (MONITOR) page RBAU; and AP-Dow Jones Tolerate Financial Information Network page 2675.

Soon after 9.30 a.m., authorised dealers contact the Bank and are told in greater detail the types of securities it is looking to buy or sell. All bids/offers must normally be received by 10 a.m. and the Bank responds shortly after that. By the time the Bank needs to respond to dealers' bids or offers, it is in a better position to assess market conditions and to firm up its views on the volumes it should be looking to buy or sell.

The cash figure announced at 9.30 a.m. is not varied during the day unless a discrepancy of substance in the estimate is discovered. The only component subject to variation in the normal course is the figure for notes and coin drawn by/returned by banks. However, if the estimate for that figure were to be wrong, the error would not usually show up until close of the day. The high proportion of bank transactions which take place on a next-day basis avoids many of the unanticipated changes in the day's cash situation which can lead, for example, to amendments during the day to the similar figure provided in the U.K. by the Bank of England.

The Bank continues to monitor market conditions throughout the day. If unanticipated pressures arise (e.g. because non-bank clients have withdrawn more funds than expected from the official market) the Bank may enter the market again as a buyer or a seller. This would be regarded as within the normal pattern of Bank operations although it does not happen often.

When the Bank has completed its market transactions for the day, any remaining cash deficits are handled by dealings within the market itself—by use of the float – and/or by use of the safety valves (see above). Dealers' drawings on their lines of credit with the Bank must be notified by 3.15 p.m. EST(4p.m. on Fridays). Treasury notes may be rediscounted until close of normal business hours at the Reserve Bank office at which the notes are inscribed.

The flexibility of market processes means that cash available tends to be fully absorbed one way or another. Cash surpluses remaining at the end of market trading are rare.

After the day's trading has ended, the Bank reviews what has happened in the market. For this purpose it considers its own operations, the source and uses of banking system cash, changes in authorised dealers' balance sheets, volumes of Treasury notes and bonds settled, interest rate movements, use of the "safety valves", if any, and other market information available (including any new data on money and credit growth).

Many of the day's transactions have implications for succeeding periods. Necessary amendments are made to the Bank's projections and preliminary consideration is given to the conduct of operations for the following day, and days beyond that.

Reports on market operations

Commencing 24 May 1985, the Bank will be publishing after close of business each Friday a summary of its domestic market operations over the past week and of major factors likely to influence the availability of cash over the period immediately ahead.

A more detailed report is published in the Reserve Bank *Bulletin* each quarter, covering market developments and the Bank's operations in both the foreign exchange and domestic financial markets.

ATTACHMENT: FACTORS AFFECTING THE MONEY MARKET CASH POSITION

This attachment describes the factors that influence the availability of exchange settlement funds.[1]

1. The Reserve Bank's overnight settlements position

In the Australian banking system, inter-bank settlement for cheque clearances is effected with a day's lag. Each day, after the last cheque clearance, the net position for each participating bank is established and banks then settle the net amounts owing to each other the next morning through exchange settlement accounts each holds at the Reserve Bank. A bank's position as a result of the day's clearances is known as its overnight settlements position.

Cheques paid into or drawn on accounts at the Reserve Bank also pass through the clearing process. The overnight settlements position of the Bank is of particular relevance since it represents the net credit or debit position that the commercial banks as a group will face in their exchange settlement accounts the next morning. When the overnight settlements position is favourable to the Reserve Bank, the other bank's holdings of cash will therefore be reduced – and vice versa.

All transactions that involve cheques being paid into or drawn on accounts at the Reserve Bank will affect the Bank's overnight settlements position. Some of these will be transactions undertaken by clients of the Bank; others will be transactions undertaken by the Bank on its own behalf.

- **Transactions by the Reserve Bank's clients** (other than authorised dealers): The Commonwealth Government is the Bank's biggest customer. Most of the Commonwealth's payments to the private sector and to other levels of government are by cheque or equivalent instrument, as are its tax and other revenue collections. When the Commonwealth is a net spender on a day, the banks as a group will experience an increase in cash the next day, and vice versa. The Commonwealth's transactions are usually the major item affecting the Reserve Bank's overnight settlements position. Other customers of the Bank include some State governments, marketing boards and a number of international and foreign official institutions.
- **Transactions by authorised dealers:** The authorised dealers' borrowings from and repayments to banks are effected through direct credit/debit of their respective accounts with the Reserve Bank; however, their other transactions (borrowings from and repayments to non-bank clients, purchases and sales of securities with both bank and non-bank clients) involve the use of cheques cleared in the normal fashion.
- **Transactions by the Reserve Bank:** Many of the Reserve Bank's own transactions are by cheque, including the transactions it undertakes with the reporting bond dealers. Some others, e.g. transactions with authorised dealers and some transactions with banks such as payments for currency notes and coin are

1. Cash is sometimes defined more broadly than this so as to include all the liabilities of the central bank to the private sector. That concept is not very meaningful in an operational sense. It includes components such as currency notes on issue and fixed or statutory deposits at the Reserve Bank such as 3RD accounts. Increases in these items lead to a reduction in the availability of exchange settlement funds. For instance, if the non-bank public wished to hold more currency notes – e.g. at Christmas – the banks would ultimately have to meet this demand by purchasing more notes from the Reserve Bank; in effect this reduces banks' exchange settlement funds. Similarly, banks must draw on exchange settlement funds when they lodge funds into the SRD accounts or interest bearing accounts at the Bank.

handled by direct debit/credit of exchange settlement accounts. Transactions undertaken by the Bank on its own behalf usually make up only a minor part of its overnight settlements position.

2. Other influences on cash

While the Reserve Bank's overnight settlements position is an important component of day-to-day movements in cash, there are several other influences. These comprise transactions involving banks and the authorised dealers which are settled by direct credit or debit to the accounts these groups hold at the Reserve Bank. They have a same-day effect on the availability of cash. These transactions include the following:

- settlements for Reserve Bank foreign exchange transactions with banks (sales of foreign exchange to banks are debited to banks' exchange settlement accounts and reduce cash; purchases from banks are credited and increase cash);
- Commonwealth loan interest paid to banks and authorised dealers (these add to cash);
- settlements by banks and authorised dealers for Treasury notes and bonds allotted to them at tenders (these reduce cash);
- redemptions of CGS held by banks and dealers (these add to cash);
- purchases and return of currency notes and coin by banks (purchases from the Reserve Bank reduce cash; returns increase cash);
- changes in SRD accounts (lodgments to these accounts reduce cash while reductions in balances and payment of interest on these accounts add to cash);
- Reserve Bank market operations undertaken with authorised dealers (sales of securities or repurchase agreements and repayments of last resort loans reduce cash; purchases of securities or repurchase agreements, rediscounts of Treasury notes or the granting of loans all increase cash). In addition, when the Bank buys short bonds from banks it mostly credits banks' exchange settlement accounts with the proceeds on the same day; banks also receive same-day funds when rediscounting Treasury notes at the Bank.

3. Daily estimate of market cash position

Many of the factors that will work during a day to affect the amount of cash, and hence conditions in the money market, are known accurately at the start of the day. There is a variety of reasons why this is so:

- In the case of the Reserve Bank's overnight settlements position, the net outcome is the result of previous day's transactions and is known precisely at the start of each business day. Each branch of the Reserve Bank reports its position to the Securities Markets Department prior to 9.00 a.m. each morning.
- Any foreign exchange transactions by the Reserve Bank with other banks are arranged two business days prior to cash settlement taking place.
- Banks' and authorised dealers' holdings of maturing CGS are known at the start of the day from records held in the Registries. On days when Commonwealth loan interest is payable, the amounts due to these groups are also known.
- Adjustments to SRD accounts are known at the start of the day since SRD accounts are adjusted on the second Wednesday of each month in line with the change in the average level of deposits in the previous month. Interest payments on these accounts are also known as interest is paid at regular intervals.
- Flows of currency notes and coin between the banks and the non-bank public, and consequent transactions between the Bank and other banks, are not precisely known at the start of each day but, as they follow

a regular pattern, reliable estimates may be made each morning.

- The amounts of repurchase agreements to be reversed are known at the start of the day since the reversal date is specified at the time the agreements are entered into.
- Banks' holdings of maturing interest-bearing deposits at the Reserve Bank are known at the start of the day since each deposit is for a fixed term.

Balances held by banks in their exchange settlement accounts at the start of the day have relevance to money market conditions on the day. These are minimal, except on rare occasions.

These various pieces of information are incorporated in the figure for "Money Market Cash Position" which the Bank makes available to the public at around 9.30 a.m. each day.