

Surveillance of the Financial System

In announcing its response to the Financial System Inquiry, the Government confirmed that the role of the Reserve Bank will be “... *focused on the objectives of monetary policy, overall financial system stability and regulation of the payments system*” (Ministerial Statement by the Treasurer, 2 September 1997). Consistent with this decision, responsibility for supervision of banks in Australia was transferred to the newly established Australian Prudential Regulation Authority (APRA) from 1 July 1998; at the same time, the Reserve Bank gained extensive regulatory powers in the payments system to be exercised by a new Payments System Board within the Bank. These major changes in the structure of financial regulation coincided with the commencement of Australia’s real-time gross settlement (RTGS) system for high-value payments, which has made the payments system substantially less vulnerable to risk.

The New Division of Responsibilities

Maintenance of overall financial system stability has always been a core central bank responsibility. This reflects the importance – underscored by the Asian economic crisis – of a smoothly functioning and efficient financial system for community confidence, macroeconomic stability and economic growth. The Reserve Bank’s broad mandate in this area is not a new one. Indeed, the evolution of the central banking functions of the Commonwealth Bank owed much to the memory of the economic damage wrought by the banking crisis of the 1890s and the economic and financial distress of the early 1930s. (The establishment of the US Federal Reserve System in 1913 was also based on the need to ensure the stability of the financial system; the monetary policy role came later.)

Over time, the Reserve Bank’s approach to its system stability responsibilities has changed. Until the early 1980s, banks, which comprised the core of the financial system, were heavily regulated primarily for monetary policy purposes. These regulations also had the side effect of severely limiting banks’ capacity to take risks, and so no specific system of prudential regulation was required. In the subsequent deregulated environment, the Bank introduced a framework of prudential standards for banks and began to monitor their risk-management systems closely to ensure that they managed their affairs prudently. This prudential framework for banks has now been adopted by APRA.

Under the new regulatory structure, the Reserve Bank no longer has an obligation to protect the interests of bank depositors and it will not supervise any individual financial institutions. Rather, it will focus more broadly on potential risks to system stability, on how these risks might be reduced without unduly

discouraging financial efficiency and innovation, and on how the Bank should respond to financial disturbances. While the causes of such disturbances can vary, experience abroad suggests a number of recurring factors. These include macroeconomic imbalances and asset price “bubbles” and their subsequent collapse; dislocation in the payments system; inadequate prudential supervision; distortions in the incentives faced by depositors, supervisors, and the managers and owners of financial institutions; and poor-quality information and market signals. Japan’s present difficulties, for example, are testament to the interaction between the macroeconomy and the financial system: the bursting of the “bubble economy” of the late 1980s substantially weakened the Japanese banking system and this, in turn, is now acting as a major drag on economic growth.

The Reserve Bank cannot eliminate risk from the financial system, and its system stability responsibilities do not require it to prevent unprofitable financial institutions from going out of business. The taking and managing of risk are an integral part of the process of financial intermediation and essential for the efficient allocation of resources. The task for the Bank is to help ensure that shocks to any part of the financial system do not ultimately threaten the stability of the Australian economy. The Reserve Bank, alone of the regulatory agencies, has the wherewithal to respond to financial shocks by providing emergency liquidity support to the financial system. However, it does not see its balance sheet as available to bolster the solvency of an ailing financial institution. The Bank’s most enduring contribution to financial stability, of course, is the preservation of a low-inflation environment.

A new System Stability Department has been established within the Financial System Group to conduct analysis and research on financial stability issues, including developments in financial products, technology and risk management, and to support the Reserve Bank’s involvement on the APRA Board and the Council of Financial Regulators (see below). The new Department will not, however, shadow APRA in its supervisory role; the Bank will rely on APRA for its assessments of the health of individual financial institutions. That said, from time to time the Bank may participate in APRA’s on-site reviews of, and prudential consultations with, supervised institutions as a way of keeping up-to-date on risk-management techniques and the operations of different types of financial institutions. Such participation was envisaged by the Financial System Inquiry.

The Reserve Bank’s mandate for financial system stability and APRA’s role in supervising individual institutions are largely complementary. Problems in individual institutions may give rise to broader systemic instability; in turn, systemic risks of domestic or external origin may themselves threaten even well-managed institutions. For these reasons, clear and effective co-ordination between the Bank and APRA will be essential. The Bank’s representation on the APRA Board (two members on a Board of nine) is one crucial element of this

co-ordination. Another is full and timely exchange of information, on a two-way basis. For its part, through participation in financial markets and its pivotal role in the payments settlement system, the Bank may glean information on individual institutions which would be relevant to APRA; the Bank also envisages sharing with APRA its assessments of domestic and international economic and financial developments.

A formal Memorandum of Understanding now being developed between the Reserve Bank and APRA will be made public in due course, and will cover such matters as information sharing and co-ordination arrangements for the handling of liquidity and solvency problems in financial institutions. A bilateral Reserve Bank/APRA co-ordination committee has also been established to ensure that the co-ordination arrangements work smoothly, particularly in responding to threats to system stability.

The Reserve Bank's Final Year as Prudential Supervisor

The Reserve Bank retained responsibility through 1997/98 for prudential supervision of banks in Australia. Towards the end of the financial year, preparations for the establishment of APRA absorbed increasing resources, culminating in the formal transfer of the Bank's supervision staff to APRA on 1 July. The following gives an account of developments in supervision during the year and the Reserve Bank's assessment of the health of the Australian banking system at the time of the transfer of supervisory responsibilities to APRA.

Developments in supervision

New guidelines for Australian banks covering capital standards for market risk were introduced in January 1998. These guidelines, which follow closely the recommendations of the Basle Committee on Banking Supervision, require banks to hold capital against the risk of losses from movements in interest rates, exchange rates, equity prices and commodity prices. Banks may calculate this requirement using either a standard method or, subject to the agreement of the supervisor, their own risk-measurement models; in the latter case, banks must meet stringent criteria regarding their risk-management practices. By June 1998, the Reserve Bank had granted "internal model status" to ten banks. Visits by supervision staff confirmed that the risk-measurement models of these banks were comparable to the approaches adopted by major international banks. Most banks have sharpened the separation between their trading and risk-management areas by creating an independent risk-control unit with separate reporting lines to senior management; they have also been enhancing the expertise of staff in their settlements and accounting areas (the back office).

The capital charge for market risk was \$1.1 billion at end June 1998 and was easily accommodated by banks' total capital of \$60.8 billion. The low charge confirmed that most of the market risk assumed by Australian banks is effectively hedged.

The new capital requirement for market risk rendered superfluous the limits which the Reserve Bank had previously imposed on banks' overnight foreign currency positions. Accordingly, these limits were abolished in March 1998. A similar set of limits applying to non-banks authorised to deal in foreign exchange was also abolished.

In April 1998, the Reserve Bank issued new prudential guidelines dealing with liquidity management by banks, which will replace the Prime Assets Requirement (PAR). The PAR arrangements required banks to hold a minimum level of Commonwealth Government securities (CGS), notes and coin and balances with the Reserve Bank. Over recent years, PAR was reduced and its definition broadened in response to concerns about the availability of CGS.

The Reserve Bank came to the view that it was no longer appropriate to mandate a common ratio or minimum holdings of liquid assets for all banks. Instead, the new guidelines place greater emphasis on banks' internal management practices. Under the new framework, the Reserve Bank (then APRA after 1 July) has been meeting with individual banks to reach agreement on a liquidity policy which sets out how each bank plans to manage liquidity under different circumstances. The policy needs to cater for two specific scenarios, namely day-to-day liquidity management and a bank-specific or "name" crisis. Banks can use a range of strategies to manage liquidity, including setting limits on maturity mismatches, holding liquid assets, diversifying liability sources and developing asset sales strategies. Once a liquidity policy is agreed with a bank, that bank will no longer be required to observe PAR. The new arrangements are expected to come fully into effect by the end of 1998.

A pressing operational risk for banks is the Year 2000 problem, which arises because some computer hardware and software will be unable to deal correctly with dates beyond 31 December 1999. Left unchecked, the problem would threaten dislocation within banks and in their dealings with customers and counterparties, with potentially serious disruption to the financial system. For this reason, central banks and other prudential supervisors are taking a close interest in the issue. A generally recommended target date for banks to have their computer systems ready for the century date change is the end of 1998, to allow a full year for testing within each bank and with counterparties.

Australian banks expect to meet this target substantially. Where slippage into 1999 might occur, banks have organised their remedial programs to ensure that critical systems receive the highest priority. The Reserve Bank (and APRA more recently) has been monitoring banks' progress through two comprehensive surveys and in regular prudential consultations. Collectively, banks have allocated the equivalent of over 1 600 of their IT staff and 1 000 non-IT staff to resolving the Year 2000 problem and expect to spend almost \$1 billion on corrective actions. Shortages of specialist staff have not been a constraint to this point, but could become so during the complex testing stages or if Australian

banks and companies were to lose staff to the global marketplace. Banks are finalising formal contingency plans in the event that their systems are not fully compliant. In July 1998, the Reserve Bank and APRA jointly published a booklet, *Year 2000 Preparations in the Australian Banking and Financial System*, which discusses these issues.

The Reserve Bank has been participating in an interbank working group on the Year 2000 problem and has been liaising on Year 2000 activities with other regulatory agencies in Australia through the Council of Financial Regulators (previously, the Council of Financial Supervisors). Internationally, the Bank is involved in various Year 2000 initiatives, mainly under the aegis of the Bank for International Settlements (BIS). A major focus of international efforts is the development of standardised check-lists and disclosure statements, which will assist financial institutions in monitoring the state of preparedness of their peers. Details on the Reserve Bank's approach to dealing with the Year 2000 problem internally are discussed in "Management of the Bank".

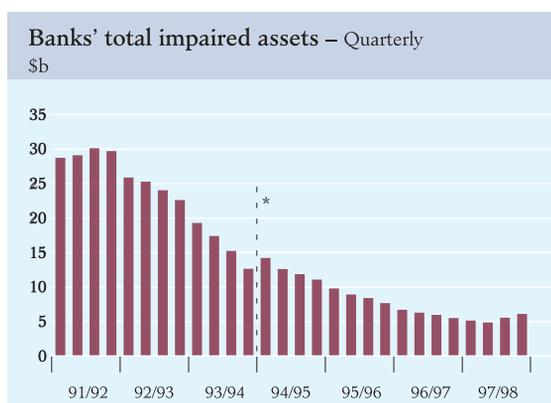
The legal strength of netting arrangements in Australia has been resolved with passage of the *Payment Systems and Netting Act 1998* in June. Typically, banks active in foreign exchange and derivatives markets enter into a large number of contracts with counterparties and generate obligations in both directions; offsetting these obligations in a legally robust way reduces the credit risks facing these banks. The 1988 Basle Capital Accord allows netting arrangements to be reflected in lower capital requirements, at the discretion of a country's bank supervisor; however, the Reserve Bank was unwilling to move in this direction until the legal position had been clarified. The new legislation allows Australian banks to enter into netting contracts with legal certainty; in turn, this will allow the recognition of netting for capital adequacy purposes.

The Australian banking system

APRA has inherited a banking system in very sound financial condition. Notwithstanding some fall-out from the Asian crisis and further pressure on

interest margins, returns on equity are high and capital ratios, though below the very high levels reached in the mid 1990s, remain comfortably above minimum requirements.

Impaired assets of banks continued to fall through the first half of 1997/98. At their lowest, they represented only 0.6 per cent of banks' total assets, one-tenth of their



* Break in series

peak early in 1992. The reversal of the trend in the second half of the year reflected some domestic corporate exposures as well as exposures to Asia. Mirroring the trading patterns of Australian business in the Asian region, the major Australian banks have exposures to banks, other financial institutions and corporate customers in most countries in Asia. However, Asian exposures are only a modest proportion of their global business – equivalent to a little over 5 per cent of total assets – and are unlikely to injure significantly the balance sheet strength of any of the Australian banks.

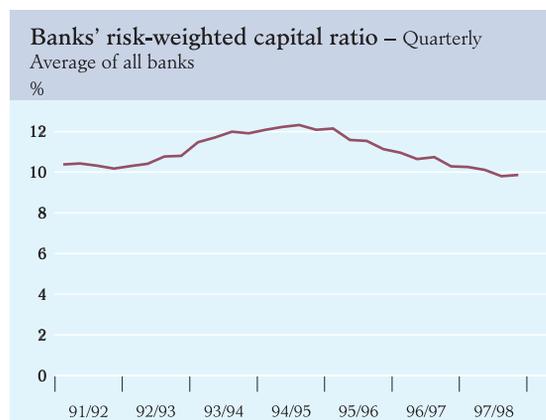
Increased lending volumes, reductions in capital ratios and growth in non-interest income have enabled banks to maintain returns on equity in the 14–15 per cent range, notwithstanding a continued contraction in interest margins and stubbornly high cost-to-income ratios. These returns are broadly in line with those of comparable banks in other Anglo-Saxon countries. Nonetheless, they are high

when compared with the benchmark of a risk-free rate of return, measured by the yield on CGS; this benchmark has halved since the late 1980s, when banks' returns on equity were last in the 14–15 per cent range.

The aggregate risk-weighted capital ratio for banks has fallen from a peak of just over 12 per cent early in 1995 to a little under 10 per cent as a consequence of strong asset growth, acquisitions and more active conservation of capital resources (including buy-backs of capital instruments).



* First half annual rate



The number of authorised banks in Australia has changed little over recent years, as foreign bank entrants have made up for exits through domestic mergers.

Authorised banks in Australia

August	1996	1997	1998
Banks	52	50	53
of which:			
- Domestically owned	20	17	16
- Foreign-owned	32	33	37
locally incorporated	13	12	12
branches	19	21	25

Over the past year, banking authorities were granted to AMP Bank and NM Rothschild & Sons (Australia), and branch banking authorities to the Taiwan-based International Commercial Bank of China, ING Bank, Dresdner Bank, ABN Amro and Toronto-Dominion Bank. Banking authorities were relinquished by Advance Bank and Bank of Melbourne after their takeovers by St. George Bank and Westpac, respectively; by NatWest Markets Australia after its businesses were sold to Salomon Smith Barney Australia; and by Bank of New Zealand after its Australian business was absorbed by National Australia Bank.

In September 1997, the Reserve Bank, in consultation with the Australian Securities Commission, formalised the arrangements under which representative offices of foreign banks may operate in Australia. There are at present 34 such representative offices, a number which has declined over the past year or so as many Asian banks have withdrawn their Australian representation to concentrate their energies on their domestic markets.

Payments System

The Reserve Bank's new payments system responsibilities

The new financial regulatory structure gives the Reserve Bank formal responsibility for the safety and efficiency of the payments system in Australia. A Payments System Board has been established in the Bank to determine its payments system policy (see box). The Board's task has been rendered easier by the successful implementation of Australia's RTGS system over the past year.

The payments system began in Australia as an arrangement between private banks. The Reserve Bank has a central role as provider of Exchange Settlement (ES) accounts, which ensure final settlement of payments system obligations, but it has been only one participant in influencing development of the system. This raised two issues as the financial sector developed in sophistication: first, would these institutional arrangements, decided by the interests of the members of the payments system, produce an efficient outcome for the economy as a

The Payments System Board

The Payments System Board has power to determine the Reserve Bank's payments system policy. In terms of the *Reserve Bank Act 1959*, the Board must exercise this power in a way that will best contribute to:

- controlling risk in the financial system;
- promoting the efficiency of the payments system; and
- promoting competition in the market for payment services, consistent with the overall stability of the financial system.

The Payments System Board has a maximum of eight members, comprising the Governor, a representative of the Bank appointed by the Governor, a representative of APRA appointed by its Chief Executive Officer, and up to five other members appointed by the Governor-General for terms of up to five years.

Members of the Payments System Board are not directors of the Reserve Bank in terms of the *Commonwealth Authorities and Companies Act 1997*. However, they are subject to those sections of the Act which deal with the conduct of officers and directors, including disclosure requirements, improper use of inside information and disqualification.

The *Reserve Bank Act 1959* provides a clear delineation of responsibilities between the Payments System Board and the Reserve Bank Board. Instances of conflict over policies should therefore be rare. However, if a conflict were to arise, the view of the Reserve Bank Board would prevail to the extent that there is any inconsistency in policy. If there are disagreements between the Boards on questions of jurisdiction or inconsistency of policy, they are to be resolved by the Governor, who is Chairman of both Boards.

The Payments System Board is required to inform the Government of its policies. In the event of a difference of opinion between the Government and the Board, the provisions of the *Reserve Bank Act 1959* provide a mechanism for dispute resolution.

The members of the Payments System Board appointed in July 1998 are:

IJ Macfarlane	Chairman	Governor
JF Laker	Deputy Chairman	Assistant Governor (Financial System)
GJ Thompson		Chief Executive Officer, APRA
JI Gersh		Partner, Arnold Bloch Leibler
S McCarthy		Director
JG Thom		Visiting Professor, Macquarie Graduate School of Management

The first meeting of the Payments System Board will take place in August.

whole; and second, were the risks to financial stability posed by a disruption to the payments system sufficiently taken into account. Importantly, there was a concern that, *in extremis*, the Reserve Bank could be forced to underwrite the payments system from its own balance sheet. As the issues became better understood by the authorities, pressures for reform of payments system arrangements grew. Against this background, the two recent steps – formalisation of the Bank’s role in the payments system and the introduction of RTGS – represent fundamental improvements.

The Reserve Bank’s responsibility for safety of the payments system is in line with international trends and reflects the potential of the payments system, if not soundly constructed, to transmit destabilising shocks throughout the financial system more generally. In contrast, the Bank’s legislative responsibility for efficiency of the payments system is a world first for a central bank. It acknowledges the conclusion of the Financial System Inquiry that there was considerable scope to increase efficiency; in particular, current arrangements based on industry self-regulation were not necessarily conducive to innovation and the entry of new participants.

The Government saw advantages in a co-regulatory approach and for this reason considerable flexibility has been built into the new regulatory regime. In the first instance, the private sector will continue to operate its payment systems and may enter into co-operative arrangements. If the Australian Competition and Consumer Commission (ACCC) authorises these arrangements as being, on balance, in the public interest, then they can continue.

The Reserve Bank now has an independent responsibility to assess the efficiency of payment systems. If it is satisfied with the performance of a payment system in improving access, efficiency and safety, it may not need to use its powers. Where performance on these scores is not satisfactory, however, the Bank will be able to designate the system concerned as being subject to its regulation. It may then, in the public interest, impose an access regime on that system and/or set standards for safety or efficiency. When it does so, the payment system and its participants would not be subject in that regard to action by the ACCC under the *Trade Practices Act 1974*. The effect is that the ACCC retains responsibility for competition and access in a payment system, unless the Reserve Bank imposes an access regime and/or sets standards for it. If the Bank does so, its requirements are paramount. The Bank and the ACCC are developing a Memorandum of Understanding, to be made public, to promote a consistent approach to policies on access and competition in the payments system.

The Reserve Bank’s extensive powers in the payments system are balanced against safeguards for private-sector operators. The likely outcome, in many cases, is that no explicit regulation will be needed. Where the Bank does decide to set access conditions or impose standards, it is required to take into account

the interests of all those potentially affected, including existing operators and participants. Full public consultation is required and the Bank's decisions can be subject to judicial review.

As well as its broad responsibilities in the payments system, the Reserve Bank sets the terms for access to its ES accounts. At present, only banks and two Special Service Providers for building societies and credit unions have such accounts. This limitation on access dates from the time when all payments were settled on a deferred net basis; in extreme circumstances, the Reserve Bank could have ended up with credit exposures to payments system participants if an account holder were unable to meet its settlement obligations. The Bank has been reviewing its eligibility criteria to determine what might be appropriate following the introduction of RTGS. Because ES accounts conducted exclusively on an RTGS basis do not expose the Reserve Bank to credit risk, there is scope to offer these accounts to a wider range of institutions which are significant providers of payment services. Such institutions would need to demonstrate that they meet appropriate operational standards, including the ability to manage real-time demands on liquidity.

Retail payment systems will continue to settle on a deferred net basis. Where they are settled across ES accounts, the Reserve Bank could still be exposed to risk, though the value of transactions settled in this way has fallen sharply and a range of risk-management techniques can reduce risks further. In considering requests for ES accounts that will be used to settle retail payments, the Bank will need to balance the competitive advantages of wider access against the credit risks it might assume.

Real-time gross settlement

Australia's RTGS system for high-value payments went "live" on 22 June 1998. This has greatly strengthened the safety of the payments system by replacing a deferred net settlement system, with its attendant settlement risks, with one under which high-value payments are settled individually, as they are made, using funds in members' ES accounts at the Reserve Bank (see box on page 18). It is the culmination of a substantial three-year endeavour by the Bank and other payments system participants.

The elements that make up RTGS were developed separately but co-ordinated by a Cross-Project Steering Committee chaired by the Reserve Bank. The core element – where the exchange of value takes place – was developed from the Reserve Bank Information and Transfer System (RITS), the Bank's existing system for electronic settlement of CGS (which has been operating since 1991). This was modified to make it suitable for settling a wider range of transactions in real time. RTGS business and technical requirements were issued by the Reserve Bank in August 1995 and May 1996, and building and testing took place over the following year. The enhanced RITS system commenced operations in July 1997.





Many of the staff who had been involved in the RTGS project were on hand to witness the new system going “live” on 22 June 1998, launched by Deputy Governor Graeme Thompson, assisted by Bill Hands and Nola McMillan.

Why RTGS?

The reduction of settlement risk in domestic high-value payments systems has been a principal objective of many central banks over the past decade. This risk arises when payment instructions are sent and acted upon by banks and their customers, but settlement of the resulting net obligations occurs some time later. In Australia's deferred net settlement system, final settlement of interbank obligations was not completed until 9.00 am the day following the sending of payment instructions. In the interim, a bank could find itself unable to meet its settlement obligations. Because of the very large values and the multitude of individual transactions involved, the result could have been a serious disruption to payment flows, leaving other banks facing liquidity pressures and even insolvency. The Reserve Bank could provide emergency liquidity to try to stem this type of systemic risk, but in doing so could take on large exposures to payments system participants.

The RTGS system addresses this problem at source by preventing the build-up of unsettled obligations. It is based on the simple premise that if a bank does not have sufficient funds in its ES account, any payment it wants to make will have to be queued until there are funds available. Since payments are not made unless they can be settled, settlement risk is eliminated. If a bank were to fail during the course of the day, there would be no need to unwind a chain of payments or put the Reserve Bank's balance sheet at risk.

Deferred net settlement

During day

1. Payer instructs bank to make payment
2. Banks exchange payment instructions
3. Beneficiary's bank credits account of beneficiary
4. Beneficiary may withdraw funds and make further payments

Overnight

5. Banks calculate net obligations and notify RBA

Next day

6. RBA posts debits and credits to banks' ES accounts.

Previous day's payments would be thrown into doubt if a bank were unable to settle its net obligations.

Real-time gross settlement

During day

1. Payer instructs bank to make payment
2. Payments sent to RBA's RTGS queue
3. Payments for which ES funds not available remain in queue
4. If ES funds available, payer's bank has its ES account debited and beneficiary's bank has its ES account credited
5. Beneficiary's bank notified of payment
6. Beneficiary's bank credits account of beneficiary
7. Beneficiary may withdraw funds and make further payments

Each payment is final as it is made and not at risk if payer's bank subsequently fails.

From that time, ES account holders have been able to monitor the intra-day movements in their settlement obligations arising from transactions in RITS, and in the two other high-value systems which were linked to RITS over the following two months.

Progressively, other payments elements were linked with this. Development by the payments industry of a new high-value payments system using a commercial financial message system (SWIFT) was the second stage. The SWIFT Payment Delivery System (PDS), which is managed by the Australian Payments Clearing Association (APCA), was linked to RITS and commenced operations in August 1997. Migration of payments to the SWIFT PDS was completed in March 1998, mostly from an electronic payments system which has now ceased operation. The third stage, completed in September 1997, linked to RITS the settlement system for semi-government and private-sector debt securities operated by Austraclear. The remaining element was the upgrading of internal procedures and systems by individual members of the payments system to cater for the RTGS environment. This included technical linkages to the SWIFT PDS and changes to the management of within-day liquidity and customer credit limits.

Early in May 1998, as part of the phasing-in of the RTGS system, the Reserve Bank imposed a limit on the extent to which each member's settlement obligations arising in the various high-value systems could exceed its ES account balance. Transactions which would have breached this limit were queued within RITS pending the receipt of sufficient incoming funds; settlement still took place the following day. This limit was gradually reduced to zero over a period of six weeks. From 22 June 1998, high-value payments between members have been processed and settled in real time.

Australia's RTGS system has a number of features which make it equal to world best practice. It has particularly wide coverage, including securities settlements, and accounts for around 90 per cent of the total value of payments exchanged between members. RTGS payments average up to \$115 billion a day but have exceeded \$150 billion on peak days. Members can perform their within-day customer credit checks and liquidity management on a fully automated basis in their own proprietary systems. They can reserve funds in their ES accounts for priority payments and both bank and non-bank members of RITS can lodge transactions for processing up to five days ahead. Technically, the RTGS system has an extremely high standard of availability and back-up. In the event of a disaster, for example, back-up facilities at a remote site would be able to restore operations within 30 minutes. Contingency arrangements are rigorously re-tested.

The introduction of RTGS has also brought settlement arrangements in Australia's debt securities markets in line with world best practice. Both RITS and Austraclear now provide irrevocable real-time transfer of title to securities at

the same time as the corresponding cash payment, including interbank settlement, is completed.

RTGS transactions

(22 June – end July 1998, daily average)

	Value (\$ billion)	Number (thousands)
Securities markets settlements:		
- RITS	16	1
- Austraclear feeder system	23	3
Foreign exchange transactions and customer payments:		
- SWIFT PDS feeder system	74	12
Total (excluding intra-day repos with Bank)	113	16

The RTGS system has special features designed to promote efficient use of liquidity during the day, a critical requirement of such systems. The queuing mechanism in RITS has proven helpful in economising on liquidity, while an auto-offset facility within RITS monitors the queue and automatically settles offsetting payments between pairs of banks. As well, an intra-day repo facility provides secured within-day funds, interest-free at banks' discretion. Amendments to the Reserve Bank's operating procedures to improve RITS members' access to liquidity, in preparation for RTGS, are described in "Operations in Financial Markets".

Passage of the *Payment Systems and Netting Act 1998* has underpinned the RTGS system. The Act ensures the finality of RTGS transactions by allowing the Reserve Bank to exempt such transactions from possible application of the "zero hour" rule, which would date the insolvency of an institution from the midnight before it was declared. Such a rule would have threatened the irrevocable nature of RTGS payments and created potentially severe liquidity problems in the payments system. The Act also gives legal certainty to multilateral net settlement arrangements for low-value payments.

To ensure that the RTGS system remains responsive to the needs of users, the Reserve Bank has established two consultative groups with industry participants, which will deal with RITS business and technical operations.

Foreign exchange settlement risk

In December 1997, the Reserve Bank released the results of a survey of foreign exchange settlement practices in Australia. The survey was based on an earlier study undertaken by the BIS in the G10 countries and confirmed that Australian

banks face risks similar to those identified by the BIS. The Bank has discussed settlement practices with individual respondents, noting where improvements need to be achieved; a follow-up survey will be undertaken late in 1998 to assess progress.

Banks can reduce their exposure to foreign exchange settlement risk in a number of ways. Some, such as tightening up their own back-office procedures, are within their direct control. Others require legislative change and international co-operation at industry level. As noted above, the recognition in the *Payment Systems and Netting Act 1998* of financial markets' netting allows Australian banks, with legal certainty, to enter into foreign exchange netting contracts to reduce their counterparty credit risk. Enactment of this legislation was a precondition for Australian banks' joining the Exchange Clearing House Limited (ECHO), a private-sector initiative based in the United Kingdom aimed at limiting foreign exchange settlement risk by netting. Three of the major Australian banks have signed letters of intent to join ECHO.

Well-designed netting schemes can substantially reduce foreign exchange settlement risk, but cannot eliminate it. To reduce such risk further, a group of major international banks is planning to establish a limited-purpose vehicle – the Continuous Linked Settlement (CLS) Bank – to facilitate the simultaneous settlement of participants' foreign exchange transactions in eligible currencies across different time zones. The CLS Bank will be supervised by US authorities. All payments to and from the CLS Bank will be through the domestic RTGS systems of those currencies in which the CLS Bank operates. The Reserve Bank has informed CLS Services Limited (the holding company for the CLS Bank) that it would like to see the Australian dollar included as an eligible currency and that the CLS Bank can have access to Australia's RTGS system for this purpose. The four major Australian banks have taken an equity holding in CLS Services Limited. In December 1997, this company merged with ECHO and Multinet, a New York-based foreign exchange netting scheme. These companies had some common owners and the merger enables a pooling of efforts to reduce foreign exchange settlement risk.

Supervisory Co-ordination

The new financial regulatory structure will mean changes in the Reserve Bank's relationship with other agencies involved in the supervision of the financial system. The Bank will maintain a broad range of contacts helpful in carrying out its mandate for financial stability but some specific aspects will be shared with or pass to APRA.

The Reserve Bank and APRA are members, along with the Australian Securities and Investments Commission (ASIC), of a new Council of Financial Regulators. This non-statutory body comprises the head and one other senior representative of the three agencies, with the Governor as chair. Its role, like that of its predecessor

– the Council of Financial Supervisors – is to contribute to the efficiency and effectiveness of regulation by providing a high-level forum for co-operation and collaboration among its members. Focal points of attention for the Council over the past year have been, on the domestic front, preparations for the new regulatory structure and, at the international level, the emerging framework for supervising financial conglomerates being developed by banking, securities and insurance regulators from various countries, including Australia, at the Joint Forum on Financial Conglomerates.

The Reserve Bank works closely with the authorities which have principal responsibility for Australia's anti-money laundering efforts – the Australian Transaction Reports and Analysis Centre (AUSTRAC), the National Crime Authority and Federal and State police. It participates in the Financial Action Task Force and has supported the Asia-Pacific Group on Money Laundering, a group of 13 regional countries, by seconding an officer to its secretariat for the past year.

In the payments area, the Reserve Bank has provided the chair and secretariat for the Australian Payments System Council, a forum for users and providers of payments services. The Council was disbanded in June 1998, following the transfer of payments system responsibilities to the Payments System Board of the Reserve Bank and consumer responsibilities to ASIC. With the changes to the Reserve Bank's role in prudential supervision of banks and the assumption by ASIC of responsibility for all consumer matters in the financial sector, the Bank has stepped down from its position on the Board of the Australian Banking Industry Ombudsman Scheme.

The Reserve Bank has provided the chair of APCA since its inception. In view of the establishment of the Payments System Board, the Bank has relinquished this role but it remains a shareholder of APCA and will continue to appoint a director and participate in the company's activities.

Internationally, the Reserve Bank retains close links with bank supervisors abroad and with various committees based at the BIS. In 1997/98, the Bank accepted an invitation (subsequently passed to APRA) to become a member of the Core Principles Liaison Group of the Basle Committee on Banking Supervision. This Group will be responsible for developing strategies to encourage countries to embrace the Core Principles for Effective Banking Supervision promulgated by the Basle Committee in 1997. The Reserve Bank will host the biannual International Conference of Banking Supervisors, held under the auspices of the Basle Committee, in Sydney in October.

The Reserve Bank also participates in the activities of the Committee on Payment and Settlement Systems (CPSS), also based at the BIS. During the year the Bank accepted invitations to join two CPSS groups. The first of these groups, the Task Force on Principles and Practices for Payment Systems, aims to

produce a set of recommendations to guide development of payments systems similar to the Core Principles of the Basle Committee. The second group, the Working Group on Retail Payments, is analysing the factors driving developments in retail payments markets; the opportunity to join this group has been timely given the Reserve Bank's new responsibilities for efficiency of the payments system.

The Reserve Bank takes part in a banking supervision study group formed by the Executive Meeting of East Asia and Pacific central banks (EMEAP) forum; APRA will join the Bank for future meetings. The Bank is also involved in a working group on payments and settlement systems under the auspices of EMEAP, which produced *Financial Markets and Payments Systems in EMEAP Economies* (the full document is available on the EMEAP web site, while the chapter on Australia's system is on the Reserve Bank's site).