



*The Board remains concerned that not all customers are sharing in improvements in cheque clearing*



## THE BOARD'S FIRST YEAR

The initiatives taken by the Payments System Board during 1998/99 have addressed both aspects of its mandate: the promotion of competition and efficiency on the one hand, and safety and stability on the other. The Board has liberalised access to Exchange Settlement (ES) accounts and has taken advantage of the new regulatory framework to strengthen the foundations of the RTGS system. In other areas, the Board has relied on information-gathering and consultation with industry participants rather than on the formal exercise of its regulatory powers.

### COMPETITION AND EFFICIENCY

#### ELIGIBILITY FOR EXCHANGE

#### SETTLEMENT ACCOUNTS

In its January 1997 submission to the Financial System Inquiry, the Reserve Bank noted that the introduction of Australia's RTGS system for high-value payments provided scope to widen access to ES accounts at the Bank. ES accounts are the means by which providers of payment services settle obligations which they have accrued in the clearing process. Under the RTGS system, ES accounts are conducted on a strictly prefunded basis and the Reserve Bank does not take on a credit exposure to account-holders. There is also less risk of disruption spreading throughout the system if one participant were to fail.

The Financial System Inquiry recommended that access to ES accounts be liberalised, and the Government agreed that access should be

widened on the basis of clear and open guidelines determined by the Payments System Board.

For many years, access to ES accounts was restricted to banks. Banks were the only providers of payment services and were required by the *Banking Act 1959* to hold such accounts (this requirement was removed from July 1998). The Reserve Bank's supervision of banks gave it a degree of confidence that banks would be able to meet their settlement obligations and maintain their ES accounts in credit at all times.

When building societies and credit unions developed as alternative providers, their industry organisations argued that their members were competitively handicapped by having to depend on banks, with which they were directly competing, for some critical payment services. While building societies and credit unions could provide card and direct entry payments, they needed to rely on banks to settle their obligations. This added operational complexity, gave competitors insight into their business and increased their costs. In response, Special Service Providers (SSPs) were established to provide settlement services for building societies and credit unions, respectively, giving these industries greater ability to compete with banks. Two SSPs, then supervised by the Australian Financial Institutions Commission, were granted ES accounts in 1994. Because they were new organisations with relatively untested capacity in the settlement process, restrictions were placed on the transactions they could settle and collateral had to be posted to protect against the risk that they might be unable to meet their obligations.

Since the mid 1990s, there has been a second wave of competition in the payments business. A wide range of non-traditional payment providers, some of which are not deposit-takers or supervised financial institutions, are now playing a more active role. Some new participants believe that their ability to compete with traditional providers is limited in much the same way as building societies and credit unions had been.

Although an ES account is not a prerequisite for participation in the payments system, holding one can reduce participants' risks by allowing them to use a risk-free settlement medium. It can also affect their competitive position and lower their costs by reducing dependence on agency arrangements with an institution that is otherwise a competitor in payments.

At the same time, conducting ES accounts can pose risks to a central bank in multilateral net settlement systems, such as those used to settle low-value payments in Australia. These risks arise because the central bank is also responsible for financial system stability. If an institution did not have funds to meet its settlement obligations, settlement could not proceed and other institutions might, in turn, be unable to meet their obligations. Such a result would be very disruptive to the payments system and could threaten overall financial system stability. Different types of collateral arrangements can be built into multilateral net settlement systems to deal with the failure of a participant, but if these protections proved ineffective, the threat of systemic disruption could pressure the central bank to fund the settlement obligations of the failed institution.

If it did so, it would put its balance sheet (and ultimately taxpayers' funds) at risk by providing funds that may not be repaid.

In widening eligibility for access to ES accounts, the Board sought to strike a balance between enhancing efficiency and limiting the Reserve Bank's exposure to unacceptable risk. The new arrangements it announced in March 1999 allow all providers of third-party (customer) payment services to seek access to an ES account. However, applicants must have a need to settle clearing obligations with other providers and the liquidity to meet these obligations under routine, seasonal peak and stress conditions.

Institutions authorised and supervised by the Australian Prudential Regulation Authority (APRA) are already required to meet rigorous capital and liquidity requirements on an ongoing basis. Provided they can satisfy the Reserve Bank that they have the capacity to meet their settlement obligations, they are eligible for ES accounts without special conditions. However, where institutions have only limited payments experience, they may be required to lodge collateral to cover their participation in retail systems for a transition period, until it is clear that their business is consistent and predictable and their competence has been demonstrated.

Organisations not supervised by APRA will need to demonstrate that they have sufficient financial substance and that they have liquidity policies appropriate to their business. Where these organisations operate in deferred net settlement systems (but not RTGS), they will, with one exception, be required to lodge



collateral on an ongoing basis. The exception is that there are no collateral requirements for organisations that are always net receivers in payments clearing arrangements. Where collateral requirements apply, they will be set in relation to an institution's maximum expected net settlement obligations.

The Board's expectation is that this liberalisation of access should contribute to competition and efficiency, but probably at the margin. Since the new eligibility criteria were announced, the Reserve Bank has held discussions with a number of non-bank institutions about the possibility of opening ES accounts, but no new accounts have been set up.

#### CHEQUE-CLEARING TIMES

Cheques remain an important payment instrument in Australia, largely because they are convenient and give customers a good degree of control over the timing of payments. Nonetheless, the cheque is old technology and expensive compared to electronic means of payment, and some have argued that it is counterproductive for financial institutions to invest in making cheque processing more efficient. The Board does not accept this argument; it believes that the Australian community is entitled to a payments service that is of world standard. It has shared the community's longstanding frustrations at the costs imposed on customers - small to medium-sized businesses and retail customers alike - who have had to wait up to five business days or more to gain access to cheque deposits.

The decision about when to provide access to a cheque deposit is currently one for each

individual deposit-taking institution. When a cheque deposited at one financial institution is drawn on another institution, the industry rules and processes under which the cheque is cleared and a dishonour advised can limit how quickly an institution can make funds available to its customer, without incurring the risk that the cheque will subsequently be dishonoured. Speeding up industry cheque-clearing processes is therefore a prerequisite to making funds available more quickly.

For this reason, the Board took an early and close interest in APCA's project to introduce electronic clearing and dishonour of cheques. This project had been some years coming to fruition. Late in 1998, responding to concerns that its momentum might be flagging, the Chairman of the Payments System Board wrote to the chief executives of banks, and the industry associations for building societies and credit unions, seeking their assurance that they would provide the staffing and other resources needed to meet APCA's timetable. The Board is pleased that they did so and that APCA's project was implemented on schedule on 30 April this year.

Under the new electronic arrangements, an institution at which a cheque is deposited on a Monday will be in a position to know by Tuesday evening (either directly or through its clearing agent) whether the cheque has been paid. The institution could thus make the funds available on the Wednesday - that is, on a "three-day" cheque-clearing cycle - without the risk of a late dishonour. Such a cycle would bring Australia close to world's best practice in this area.

**AVAILABILITY OF CHEQUE FUNDS\*  
(NUMBER OF BUSINESS DAYS)**

|                | <b>FUNDS AVAILABLE<br/>FOR WITHDRAWAL</b> | <b>FUNDS EARNING<br/>INTEREST</b> |
|----------------|---|-----------------------------------|
| Australia      | 3-4                                       | 1                                 |
| Canada         | 1   | 1                                 |
| New Zealand    | 5   | 1                                 |
| United Kingdom | 4-5                                       | 3                                 |
| United States  | 2-6                                       | 1                                 |

\* Day of deposit is day 1

The Board would like to see the three-day cheque-clearing cycle become standard in Australia. The only impediments now to achieving this result are the internal systems and procedures of the institutions themselves. Accordingly, the Chairman of the Board has again written to the chief executives seeking details of when their institution makes funds available to its retail and small business customers, and of its plans for moving to three-day cheque-clearing.

Two major banks, three retail banks and twelve other banks have reported to the Board that they now make funds for cheques cleared electronically available on a three-day cycle (many also have special arrangements with some customers to make funds available more quickly). Some building societies and credit unions also meet this standard. The Board commends those institutions for this progress, but it remains concerned that not all customers of financial institutions are sharing in the improvement in efficiency.

**BANKS WITH THREE-DAY AVAILABILITY  
OF FUNDS\* (AS AT 31 AUGUST 1999)**

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Adelaide Bank  
Australia and New Zealand Banking Group  
Asahi Bank  
Bank of Queensland  
Bank of America  
Banque Nationale de Paris  
Chase Manhattan Bank  
Deutsche Bank  
Dresdner Bank  
IBJ Australia Bank  
Macquarie Bank  
National Australia Bank  
Reserve Bank of Australia  
Standard Chartered Bank Australia  
State Street Bank and Trust Company  
Toronto Dominion Bank  
United Overseas Bank

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\*Some banks operating in wholesale markets do not have retail or small business customers



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#### STUDY OF INTERCHANGE FEES FOR DEBIT AND CREDIT CARDS

Debit and credit card transactions involve a series of "interchange fees" between the financial institutions involved. These are the bank, building society or credit union which issues the card (the card issuer) and the institution which provides banking services to the merchant in conjunction with the transactions (the merchant acquirer). For example, when its customer withdraws cash from another institution's ATM, the issuer pays a fee to the operator of the ATM; this fee is often passed on to the consumer. Similarly, when its customer uses an EFTPOS facility provided by another institution, the issuer pays that institution and, again, the fee may be borne by the consumer. In credit card transactions, the interchange fee flows from acquirers to issuers. The merchants pay merchant service fees to their acquirers at least equal to the interchange fee.

While these interchange fees are usually not transparent to the card-holder or sometimes to the merchant, they are an essential part of the pricing structure in card schemes. They determine the revenue flows associated with card transactions, the costs ultimately borne by merchants and card-holders, the incentives to use and accept credit and debit cards, and the terms on which financial institutions and other payment providers can gain access to card networks. Interchange fees therefore have important implications for the efficiency of the retail payments system and they have been an obvious focus of attention for the Board.

Other recent developments on this issue have attracted the Board's attention:

- in 1997, the ACCC asked APCA to require its members to implement "efficient pricing principles" in setting interchange fees for EFTPOS and ATM interchanges, as a condition for authorisation of its proposed rules for the Consumer Electronic Clearing System. The ACCC was concerned that interchange fees could unreasonably restrict access to ATM and EFTPOS networks. APCA has subsequently advised the ACCC that it does not have the capacity to undertake self-regulation of interchange arrangements;
- some participants in ATM and EFTPOS arrangements have suggested that interchange fees for EFTPOS, in particular, are anti-competitive, making it difficult for new and smaller players to enter the business. Interchange fees for EFTPOS in Australia run in the opposite direction to those overseas, suggesting that the bilateral negotiation of fees in Australia has a different rationale from the centralised setting of fees in many other countries;
- interchange fees for credit cards may be encouraging the use of credit cards relative to more efficient instruments; and
- merchants have expressed concerns that restrictions on membership of credit card schemes place them in a worse competitive position on the fees they bear than is the case for debit card transactions.

Against this background, the Board and the ACCC have agreed to conduct a study of interchange fees for ATMs, EFTPOS and credit cards. This is in line with the recommendations of the

Financial System Inquiry, which itself lacked access to sufficient data in this area to reach any conclusions.

The objectives of the study are to:

- obtain information on interchange fees paid by financial institutions;
- clarify the basis on which interchange fees are currently set, looking particularly at the role of costs. For ATM and EFTPOS systems, this will require an understanding of how the bilaterally negotiated fees are arrived at; for credit cards it will be how common fees are determined;
- obtain information on current restrictions on credit card scheme membership; and
- assess whether interchange fees and membership arrangements are encouraging efficient provision of debit and credit card services.

The study will draw on the Reserve Bank's specific knowledge of payments issues and the ACCC's wide experience in access and pricing issues. It is expected to take around 12 months to complete.

## DIRECT DEBITS

Direct debits are probably the most efficient means of paying regular bills or recurring obligations. However, while all major countries are further embracing this means of payment, Australia is slipping backwards. The Board believes that a greater take-up of direct debits can be achieved, and would deliver a substantial improvement in the efficiency of Australia's retail payments system.

Details of how Australian households pay their bills are not available but the Reserve Bank has gathered some information from some major billers, which together issue around 140 million bills each year.

## BILL PAYMENTS PER CENT, 1998

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|                             |     |
|-----------------------------|-----|
| Over-the-counter            | 59  |
| Mail - mainly cheques       | 19  |
| Credit cards over the phone | 15  |
| Direct debits               | 4   |
| Direct credits              | 2   |
| BPAY                        | 1   |
| Total                       | 100 |

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The charges facing billers for these different payment methods vary widely. The most expensive are over-the-counter payments through agents; the least expensive are direct debits, though they can involve set-up costs for billers.



## DIRECT CHARGES TO BILLERS FOR A \$250 UTILITY BILL

|                             | \$         |
|-----------------------------|------------|
| Over-the-counter            | 1.00-5.05* |
| Mail - mainly cheques       | 0.40-0.90  |
| Credit cards over the phone | 3.75       |
| Direct debits               | 0.15       |
| BPAY                        | 0.60       |

\*Including merchant service fees if credit card used

The Board has been exploring with major billers the types of initiatives that might increase acceptance of direct debits in Australia. It has also been talking to participants in direct debit systems in the United Kingdom, France and Germany. Its assessment, at this stage, is that a greater take-up of direct debits is unlikely without the kind of consumer safeguards that have been introduced abroad and without concerted industry promotion. Consumer safeguards could include:

- assurances that any payment queried will be refunded promptly and unconditionally and that any disputes will be resolved quickly;
- caps on the amount that can be taken in any single bill payment;
- flexibility in nominating days for payments; and
- arrangements to allow the customer to approve each direct debit as it falls due.

To provide a basis for promoting direct debits to the Australian community, the Board would like to see the development of a Code of Conduct for direct debit billers. The Code would include a range of safeguards for consumers, and billers who adhere to the Code could be clearly identified. The Reserve Bank will be

working with billers, financial institutions and customers over the next twelve months to develop the Code.

## SAFETY AND STABILITY

### FOREIGN EXCHANGE SETTLEMENT RISK

During the 1980s and early 1990s, central banks in industrial countries concentrated attention on reducing settlement risks in their high-value domestic payment systems. In Australia's case, the effort culminated in the introduction of the RTGS system in June 1998. More recently, with their domestic payment systems strengthened, central banks and supervisory authorities have turned their focus to the risks associated with the settlement of foreign exchange transactions. Reflecting the enormous volume of foreign exchange market turnover in global markets, foreign exchange settlement risk facing individual market participants (which are mainly banks) can be large. If a participant failed to meet its settlement obligations, this might cause significant problems for other participants and could, in the first instance, threaten domestic payment systems.

The settlement of foreign exchange transactions faces particular complexities because, although each leg is settled through domestic RTGS (or other high-value) systems, settlement occurs in different countries, often in different time zones and frequently through the use of agent (correspondent) banks. Settlement risk lasts from the time at which the payment instructions for the currency sold can no longer be cancelled until the time at which the currency bought has been received with finality. This risk is more than just a time zone problem.

A report by G10 central banks (the "Allsopp Report", 1996) found that foreign exchange settlement risk was too large - frequently exceeding a bank's capital - and lasted too long. The Reserve Bank's 1997 survey of authorised foreign exchange dealers in Australia reached similar conclusions. It found that exposures lasting in excess of 24 hours were the norm and, in some cases, the period of exposure was more than three business days. At any point in time, the settlement exposure of the Australian market represented a multiple of its capital base. Follow-up reports, by G10 central banks (the "Sweet Report", 1998) and the Reserve Bank in 1999, have identified significant progress in the management of foreign exchange settlement risk but see the need for more to be achieved.

There are a number of avenues for reducing foreign exchange settlement risk. Individual banks can improve their own internal procedures and renegotiate arrangements with their correspondents, so that they can cancel payment instructions as late as possible (within the rules of the relevant payments system) and can confirm receipt of the currency bought as early as possible. Arrangements can also be put in place to make net rather than gross payments. These steps, respectively, can reduce the duration and amount of risk, but they do not remove it. Risk is fully removed only if both currencies in a foreign exchange transaction are settled simultaneously or on a "payment-versus-payment" basis: in simple terms, a bank pays if and only if its counterparty pays.

The pursuit of "payment-versus-payment" in foreign exchange transactions has been behind

proposals for a "continuous linked settlement" or CLS Bank, which is being developed by a group of major international banks. The CLS Bank will be a limited-purpose vehicle to facilitate the simultaneous settlement of participants' foreign exchange transactions in eligible currencies, across different time zones. It will be a US-chartered and supervised bank, operating in London for time zone reasons.

The initial proponents of the CLS Bank did not have any Australian representation and there was no early push for the inclusion of the Australian dollar in the scheme. The Australian dollar, however, is a major traded currency and one for which settlement risk is exacerbated by the time zone. The counterpart currency to over 90 per cent of Australian dollar transactions is the US dollar, which is settled in New York, 14 to 16 hours behind Sydney depending on the time of year. Australian banks also rely heavily on correspondent banks to settle US dollars, adding to the duration of risk because they must wait for statements from their correspondents before reconciling receipts.

The Australian dollar could be included as an eligible CLS currency only if there were a core of banks operating in Australia willing to be settlement members of the CLS Bank. A number of foreign banks operating in the Australian market were already shareholders in CLS Services (the holding company for the CLS Bank) and therefore eligible to be settlement members for the Australian dollar. The four major Australian banks became shareholders in CLS Services during 1998.



The Payments System Board recognises the importance of the CLS initiative in reducing foreign exchange settlement risk and has been keen to have the Australian dollar included as soon as practicable. Early in 1999, the Chairman of the Board wrote to the Chairman of CLS Services expressing concerns about apparent delays in including the Australian dollar in the initial "wave" of currencies to be settled by the CLS Bank. The letter drew out the importance of the Australian dollar in global foreign exchange market turnover and the tyranny of the time zone. In June 1999, CLS Services formally included the Australian dollar in an initial "wave" of seven eligible currencies, with settlement of the Australian dollar scheduled to begin by the end of March 2001. The Board welcomes this decision.

The Board is now taking a close interest in preparations for the inclusion of the Australian dollar; it will also have to formally approve an ES account for the CLS Bank to enable it to become a participant in Australia's RTGS system. The Reserve Bank is working productively with CLS Services and the local payments industry on the prudential and operational issues involved. These include the opening hours of the RTGS system and the implications for domestic liquidity management.

Payments to and from the CLS Bank will be made through settlement accounts it will hold with the central banks of eligible currencies. To achieve that, the opening hours of the various payment systems will have to overlap with the core hours of the CLS Bank, which will be 7.00am to midday Central European Time. In Australia's case, the RTGS system will need to

remain open into the evening, as late as 10.00pm during daylight saving. This will require changes in the RTGS system as well as the internal systems used by banks operating during the extended hours. Some changes might also be required of banks that do not have significant foreign exchange business.

Although individual transactions will be settled gross across the books of the CLS Bank, banks will pay in only their net short positions. On occasions, however, these net positions may be quite large and this may have implications for liquidity management by Australian banks, particularly since CLS payments will be made late in the Australian day. The advent of the CLS Bank may also significantly reduce the number of foreign-exchange-related transactions, which are currently an important component of the high-value payments made in Australia.

#### APPROVALS UNDER THE *PAYMENT SYSTEMS AND NETTING ACT 1998*

Under the *Payment Systems and Netting Act 1998*, the Board is able to grant protection to transactions in approved RTGS systems from a possible "zero hour" ruling. Before granting approval, the Reserve Bank must ensure that the regulations of the system are consistent with the conditions set out in the Act and do not allow participants to abuse the protection extended to them. In particular, the Reserve Bank must be satisfied that:

- there is potential for systemic disruption should a system participant go into external administration;
- there is a clear legal basis for the system;

- the rules governing the system identify a system administrator which has the appropriate resources, competence and integrity;
- there are system rules enabling the system administrator to suspend a settling participant, and/or any institution which it sponsors, which goes into external administration; and
- the system rules require a settling participant to assume the obligations of any participant whose transactions it settles, if that participant fails to fulfil those obligations. (A settling participant is an institution which can settle transactions on its own behalf and for other participants.)

In October 1998, the Board declared that the Reserve Bank Information and Transfer System (RITS) and Austraclear are approved RTGS systems in terms of the Act. The approvals ensure the finality of all RTGS transactions (including those delivered to RITS by APCA's SWIFT PDS), thus providing a legal underpinning for the elimination of settlement risk in Australia's RTGS system.

Under this same legislation, the Board also anticipates applications from APCA for protection of the multilateral netting arrangements that apply in its low-value clearing streams, and from APCA and Austraclear for their RTGS systems in fall-back mode, where they would operate as netting systems.

#### YEAR 2000 PREPARATIONS IN THE PAYMENTS SYSTEM

Because of its mandate for safety and stability, the Board has been overseeing the Year 2000 preparations of the Australian payments system. Like most other key sectors of the economy, the payments system is highly dependent on computer systems and telecommunications for its basic operations. This is true both with newer payment methods, such as EFTPOS, and more traditional means such as the cheque. With this in mind, the payments industry has undertaken a great deal of work to ensure that the various elements of the payments system continue to operate as usual in the Year 2000.

A comprehensive program to test the Year 2000 readiness of the Australian payments system got under way in October last year. The program was co-ordinated by APCA and covered the exchange of cheques, direct debit and credit transactions, debit and credit card payments in ATM and EFTPOS terminals, BPAY transactions and high-value payments. Importantly, it included the posting of transactions to the appropriate customer accounts. Banks, building societies and credit unions, as well as key payment service providers, participated in this industry-wide testing. They could do so only if they could confirm that their relevant internal systems were Year 2000 ready.

The Reserve Bank closely followed the progress of the testing program through direct contact with APCA staff and other specialists undertaking the work, receipt of regular written progress reports and membership of the industry



group responsible for monitoring the program. Where necessary, the Bank also lent its support to ensuring that deadlines were met. In this role, the Bank kept in regular contact with the Australian Prudential Regulation Authority (APRA) and other financial sector regulators. In its role as a provider of banking and settlement services, the Bank also participated directly in tests of the cheque, direct entry and high-value systems and a senior Bank officer co-ordinated the industry testing for high-value payments.

The testing program was successfully completed, on time, by 30 June. Because of this effort, the Australian public can expect that their electronic payment mechanisms, such as ATMs, EFTPOS and credit cards, will continue to work as usual over the New Year period.

The Reserve Bank is now working closely with the payments industry on contingency planning, to ensure that the payments system is well prepared for any unexpected disruptions. The Bank is co-ordinating a review of contingency procedures for systems which settle on an RTGS basis and has developed specific contingency procedures for the deferred net settlement arrangements applying to the cheque, direct entry and card-based clearing streams. The Bank has also been involved in industry contingency planning for low-value retail payment systems, including cheques, direct entry, ATMs and EFTPOS; plans were finalised at the end of August and will be refined and tested during the remainder of this year.

The Bank and APRA are establishing a joint communications centre which will operate over the New Year period. The centre will monitor

the operational status of the payments system and developments more generally, and will allow both institutions to communicate as necessary with financial institutions and other central banks and supervisory authorities.

Further details of the Reserve Bank's role in preparations for the Year 2000 can be found in *Year 2000 Preparations in the Australian Banking and Financial System*, available on the Bank's web site at [www.rba.gov.au](http://www.rba.gov.au).