PAYMENTS SYSTEM BOARD

ANNUAL REPORT 2001 RESERVE BANK OF AUSTRALIA



Payments System Board

It is the duty of the Payments System Board to ensure, within the limits of its powers, that:

- the Bank's payments system policy is directed to the greatest advantage of the people of Australia;
- the powers of the Bank which deal with the payments system, set out in the *Payment Systems* (*Regulation*) Act 1998 and the *Payment Systems* Netting Act 1998, are exercised in a way that, in the Board's opinion, 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; and

• the powers of the Bank which deal with clearing and settlement facilities, set out in Part 7.3 of the *Corporations Act 2001*, are exercised in a way that, in the Board's opinion, will best contribute to the overall stability of the financial system.

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Overview

The Payments System Board of the Reserve Bank was established over three years ago with a mandate to promote safety, efficiency and competition in the payments system in Australia. It has now been given additional responsibility for the safety of systems that clear and settle securities transactions in Australia's wholesale financial markets.

The focus on safety is a recognition of the importance of well-designed and smoothly functioning payments and settlements systems for the overall stability of the Australian financial system. Australia rates highly on safety matters - a judgment confirmed by the Board's assessment a year ago of Australia's compliance with emerging international norms in this area - and these matters have not become major agenda items for the Board. The broader mandate for efficiency and competition in the payments system is a recognition that Australia is not at international best practice and that existing market and governance arrangements are not an assured route to that goal. Not surprisingly, efficiency and competition issues have occupied most of the Board's attention over the past year and more.

In the retail payments area, the Board has concentrated particularly on the price incentives facing consumers of different payment services and on the strength of competition in providing these services. If consumers are to make well-informed choices and resources are to be allocated efficiently in the payments system, price incentives should reflect demand and relative cost conditions. The Board's initial stocktake of the Australian payments system identified some unusual features about the pricing of payment services, and these were investigated more fully in the study of interchange fees and conditions of entry in debit and credit card networks, undertaken in conjunction with the Australian Competition and Consumer Commission and published in October 2000. The study's conclusion, that competition in card networks is not working as it should, has provided the direction for the Board's subsequent work.

In 2001, a major milestone for the Board was its decision to endorse the use, for the first time, of the Bank's formal powers in the payments system. The Bank brought the credit card schemes in Australia under its regulatory oversight and, after extensive consultation and detailed evaluation, it has now proposed a series of reform measures designed to promote greater efficiency, transparency and competition in the Australian payments system, to the benefit of the community as a whole. Underlying these reforms is the Bank's judgment that the restrictions that are imposed by credit card schemes and their members are not in the public interest and result in the community paying a higher cost for its retail payments system than is necessary. The Bank is using its payments system powers, not to regulate the credit card market, but to end the restrictions already in place that do not allow competitive forces to work. A further round of consultations with interested parties will take place before the Bank finalises the reform measures. These developments naturally take up the larger part of this Report.

Inadequacies in price incentives in ATM and debit card networks were also identified in the joint study and remain on the Board's agenda. These issues are yet to receive the same attention from industry participants as credit card reform but the Board welcomes the reviews which are now underway, which the Bank is helping to facilitate. The Board also remains committed to improving consumer safeguards in the use of the direct debit system. The Charter for Direct Debit Customers that was developed with billing organisations, and published in last year's Report, was an important step forward but the Board also looks to financial institutions to play their part in promoting the use of this highly efficient payment instrument.

In the safety and stability area, the Board's main objective has been to prepare for the new responsibilities it has been given to ensure that securities clearing and settlement facilities conduct their affairs in a way that is consistent with financial system stability. The Bank's new standards-setting powers in this area are being developed in the context of an industry undergoing considerable rationalisation - a process that should provide a welcome boost to efficiency, given Australia's previously fragmented arrangements, but one that can lead to a concentration of financial and operational risks. The Bank's standards will be addressed particularly to these risks. Risk reduction is also the objective of a global initiative to develop a special-purpose bank -CLS Bank - to handle the settlement of foreign exchange transactions in major currencies, including the Australian dollar. This initiative has been underway since 1997 and, although the start-up date has now slipped well into 2002, the Board remains a strong supporter. The Australian market is now well-prepared for these new settlement arrangements.



The Role of the Board

The Board's responsibility and powers

The Payments System Board was established on 1 July 1998 with a mandate to promote the safety and efficiency of the payments system in Australia, and the backing of strong regulatory powers. That mandate was expanded in September 2001 when the Board was also given responsibility for the safety of systems that clear and settle securities transactions in Australia.

The Reserve Bank's formal involvement in the payments system was one of the key reforms to Australia's financial regulatory structure recommended by the Financial System Inquiry (the Wallis Committee). The Inquiry concluded that Australia's payments system fell short of international best practice - particularly as far as the efficiency of retail payments was concerned - and questioned whether the existing governance arrangements based on co-operation between participants, with only a limited role for the Reserve Bank, could be relied upon to lift Australia's performance. The Inquiry saw the Board as a "separate and stronger structure" within the Reserve Bank to give it greater authority to pursue improvements in efficiency and competition in the payments system.

The Board's mandate in the payments system is set out in the amended *Reserve Bank Act 1959*. The Board is responsible for determining the Reserve Bank's payments system policy and it must exercise this responsibility 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 regulatory powers which support this mandate are set out in three separate Acts. Pivotal is the *Payment Systems (Regulation) Act 1998*, under which the Reserve Bank may:

- "designate" a particular payment system as being subject to its regulation. Designation is the first of a number of steps the Bank must take to exercise its powers;
- determine rules for participation in that system, including rules on access for new participants;

- set standards for safety and efficiency for that system. These may deal with issues such as technical requirements, procedures, performance benchmarks and pricing; and
- arbitrate on disputes in that system over matters relating to access, financial safety, competitiveness and systemic risk, if the parties concerned wish.

These powers are intended to be exercised if the Bank is not satisfied with the performance of a payment system in improving access, efficiency and safety, and other means of achieving these objectives have proved ineffective.

The Reserve Bank formally exercised these powers for the first time in April 2001, when it designated the credit card schemes operated in Australia by Bankcard, MasterCard and Visa as payment systems subject to its regulation. This action followed the publication in October 2000 of a study on debit and credit card schemes in Australia - undertaken jointly with the Australian Competition and Consumer Commission (ACCC) - which identified a number of shortcomings in competition in the provision of credit card services, and subsequent advice from the ACCC that alternative approaches to addressing these shortcomings under the Trade Practices Act 1974 did not appear promising. In December 2001, after discussions with a wide range of interested parties, the Reserve Bank released a consultation document on reform of credit card schemes in Australia, proposing standards and an access regime that will promote greater efficiency, transparency and competition in the Australian payments system. These developments are described later in this Report.

The Reserve Bank's powers under the two other relevant Acts are designed to strengthen the legal underpinnings of the Australian payments system. The Payment Systems and Netting Act 1998 allows the Reserve Bank to clarify the legal rights and obligations of participants in payment systems that operate both on a real-time gross settlement (RTGS) basis or on a multilateral net basis. Under the Cheques Act 1986, the Reserve Bank may determine that a settlement system for cheques is a "recognised" clearing and settlement system, allowing cheques cleared through that system to be deemed dishonoured if the financial institution on which they are drawn is unable to provide the funds.

The broadening of the Board's mandate to encompass securities clearing and settlement facilities was foreshadowed in last year's Report, and was confirmed with the passage of the *Financial Services Reform Act 2001* in September 2001. The additional responsibility is a recognition of the importance of safe and well-functioning clearing and settlement facilities for financial instruments to overall financial system stability and to Australia's standing as a centre for global financial services in the Asia-Pacific region, and of the Reserve Bank's interest and expertise in these matters.

The new regulatory regime, established as part of the Government's Corporate Law Economic Reform Program (CLERP), has however taken a somewhat different form than that envisaged a year ago. At that time, the proposals were for a single statutory regime for the licensing and regulation of clearing and settlement facilities. Regulation was to be the responsibility of the Australian Securities and Investments Commission (ASIC), unless "the Minister" (ie the Treasurer or a Minister in his portfolio) declared that a particular clearing and settlement facility was of sufficient significance to the stability and integrity of the payments system that it should be regulated by the Payments System Board.

Since then, the rationalisation which has taken place in securities clearing and settlement arrangements in Australia has prompted a revision of the proposed allocation of regulatory responsibilities between the Reserve Bank and ASIC, to one based on a sharing of responsibilities along functional lines. The new arrangements enshrine the single statutory regime with licensing by the Minister, who will also have power to disallow changes to facility rules, to suspend or cancel licences and to issue directions to facilities. The Reserve Bank has formal responsibility for ensuring that all clearing and settlement facilities conduct their affairs in a way that is consistent with financial system stability. As part of this role, the Reserve Bank has the power to set and monitor compliance with financial stability standards for clearing and settlement systems. ASIC has responsibility for all other matters, such as those relating to corporate governance, market integrity and investor protection. Because it is particularly well-equipped to do so, ASIC also has responsibility for undertaking any legal action to enforce compliance with the requirements of either agency, including financial stability standards.

As with the payments system, the Board has been given responsibility to determine policies with respect to clearing and settlement facilities while the powers to carry out those policies, which are set out in Part 7.3 of the *Corporations Act 2001*, are vested in the Reserve Bank. Under recent amendments to the *Reserve Bank Act 1959*, the Board's mandate in this area is to ensure, within the limits of its powers, that the powers and functions of the Bank under Part 7.3 of the *Corporations Act 2001* are exercised in a way that, in the Board's opinion, will best contribute to the overall stability of the financial system. The new regulatory regime comes into force in March 2002, with a two-year transition period for securities clearing and settlement systems that are not explicitly regulated under the existing regime. The development of the Bank's financial stability standards is discussed later in this Report.

The functional approach to regulation under this new regime is common in the financial sector, both in Australia and overseas. In most instances, the regulatory responsibilities and functions of the agencies concerned are clearly defined; occasionally, however, the activities of one regulator may impinge on those of another and, if not carefully co-ordinated, may impose an unnecessary compliance burden on regulated entities. The Reserve Bank and ASIC have released a Memorandum of Understanding (MOU) intended to promote transparency and regulatory consistency and help prevent unnecessary duplication of effort.

The Board's approach

The Board has now been in operation for three years. As it has turned out, safety and stability issues have not dominated its agenda, a testament to earlier initiatives to make the Australian payments system more robust, particularly the introduction of the real-time gross settlement (RTGS) system for high-value payments. Rather, the Board's main focus has been the pursuit of greater competition and efficiency in the retail payments system. This is the area in which the Financial System Inquiry issued its call to action; it is also the area in which the Board's own work has confirmed that there is scope for significant improvement. The Inquiry itself placed weight on Australia's heavy dependence on cheques and saw potential for substantial gains in efficiency through a greater uptake of electronic means of payment. While this is clearly so, the Board acknowledges that there is a good deal more to the question of payments system efficiency than the substitution of electronic payments for cheques.

The payment instruments available to Australians - whether they be cash, cheques, debit (EFTPOS), credit and charge cards or direct entry - have a number of different dimensions. One is the quality of service, covering such features as the speed with which payments are processed, convenience and accessibility for users and the reliability and security of the payment instrument. A second dimension is the cost to financial institutions of providing each of the payment instruments; a third is the structure and level of fees and charges levied for their use. Broadly speaking, an efficient retail payments system is one in which the relative prices of payment instruments reflect demand conditions and their relative costs, so that users have appropriate signals on which to base their

choices. Promoting efficiency in this way is a major policy objective of the Board. Efficiency does not mean, however, that the lowest cost payment instruments should necessarily prevail; on the contrary, Australians benefit from having a range of payment instruments from which to choose, provided they are prepared to meet the costs of the services they use. In this sense, markets for payment instruments are little different from other markets. First-class hotels co-exist with camping sites and expensive restaurants with take-away outlets. The community benefits from this diversity of choice even though the camping site and takeaway meals are less costly to produce; it would not do so, however, if consumers did not have to meet the cost of their more expensive choices and these costs were borne by others.

Price signals are very likely to be one of the factors that explain the continued popularity of the cheque as a payment instrument, despite its high cost to providers. In some cases, inertia or fear of customer opposition have left financial institutions reluctant to pass on the resource costs of using cheques. In others, financial institutions follow a clear strategy of offering a package of deposit, lending, payment and other services to customers in which some services are subsidised by others.

Competition is the mechanism that, in the normal course, drives markets to outcomes

competitive market, prices allocate resources efficiently to meet demand while the free movement of resources ensures that, over time, firms earn no more than a competitive return on their investments. Successive Australian Governments have made a strong commitment to promoting competition and this is echoed in the Board's mandate in the payments area. Markets for payment services, at the same time, can admit a role for co-operation between participants. Modern payment systems are complex networks of linkages between financial institutions, which generally need to co-operate to build and operate them. Cooperation in some areas can clearly be in the public interest. For example, the implementation of technical standards for electronic payments reduces costs to institutions, improves the speed of processing and reduces error rates, enhancing efficiency and convenience for consumers. In other cases, the establishment of shared or centralised processing and distribution facilities can reduce costly duplication. Modern payment networks are unlikely to develop without some private-sector regulations on technical standards and procedures and co-operation on at least some aspects of physical infrastructure.

that benefit the community. In an active

However, when co-operation between competitors interferes with the normal competitive mechanisms, the public interest case is much harder to make. It is against this background that the Board, along with regulatory agencies in other countries, has from the outset taken a close interest in card payment networks, particularly credit card schemes which operate under a number of restrictions imposed by their members. These restrictions involve the collective setting of wholesale ("interchange") fees, restrictions on the freedom of merchants recovering their credit card costs from cardholders and restrictions on entry to the schemes. The Board has concluded, after extensive consultation and detailed evaluation, that these restrictions in credit card schemes in Australia are not in the public interest. The pricing of credit card services, in which interchange fees and restrictions on merchant pricing play an integral role, is sending consumers a quite misleading signal about the cost to the community of different payment instruments, while barriers to entry are quarantining the credit card schemes from competitive pressures. Overall, the community is paying a higher cost for its retail payments system than is necessary.

The reform measures proposed by the Reserve Bank, and discussed in the next part of this Report, are designed to end credit card scheme restrictions that prevent competitive forces from operating as they should. The Bank is not adding a further layer of regulation to the credit card market; on the contrary, the reform measures, taken together, will ensure that where competitive forces have not been allowed to work because of card scheme restrictions, they will now be better able to do so. In endorsing these reforms, the Board has no view about the "right" mix of payment instruments in Australia; that is for consumers to decide in the market place in response to appropriate price signals. Giving greater rein to the price mechanism also underlies the Board's approach to overhauling interchange fee arrangements in ATM and debit card networks in Australia, a task to which industry participants, working with the Reserve Bank, have now begun to turn.

In a completely different context, the complexity of modern payment networks and the need for co-operation in technical matters has another consequence which is relevant to the Board's mandate - the difficulty of achieving innovation and progress in payment systems. False starts and stuttering reform are not an uncommon experience. The electronic presentment and payment of bills via the Internet is an example of a business opportunity that is proving difficult to bring to fruition. Expectations a year or so ago that such initiatives might develop quickly remain unfulfilled, in the face of disillusionment with the dot.com environment but also because of the need to build arrangements that allow customers banking with one financial

institution to pay billers whose accounts are at another. Understandably, financial institutions may be cautious about signing up to industry initiatives over which they might exert only limited control and where they see many of the benefits accruing to competitors; at the same time, systems developed solely by one institution can rarely achieve the necessary market penetration. As a result, progress can sometimes be frustratingly slow.

Beyond its on-going monitoring of developments in this area, the Board is willing to work with industry participants if that would help to exploit the potential of electronic commerce. It would see its role as that of catalyst, bringing to bear a combination of analysis, facilitation and encouragement; without a catalyst, many initiatives can go unexplored or undeveloped. The Board has already played this type of role in developing consumer safeguards for the use of direct debits, which are probably the most efficient means of paying regular bills or recurring obligations. Work with billing organisations has resulted in a Charter for Direct Debit Customers, first published in last year's Report, but subsequent reminders that the direct debit system needs to be made yet more userfriendly confirm that the Board's involvement in this area is not finished.



Competition and Efficiency

Since its last Report, the Board's pursuit of its mandate to promote competition and efficiency has centred on credit card schemes in Australia. The Board had begun to focus on these schemes when it undertook its initial stocktake of the safety and efficiency of the Australian payments system. Its work was given impetus by the findings of the Reserve Bank/ACCC study of interchange fees and conditions of entry in debit and credit card schemes, released in October 2000, which raised a number of public interest issues relating to competition and efficiency in credit card schemes. These issues have now been aired in extensive consultations with interested parties, culminating in the Board's decision to use its powers to promote reform in this area. The study also identified shortcomings in competition in ATM and debit card (EFTPOS) networks on which industry participants have taken time to focus, although useful work is now under way on ATM and EFTPOS interchange fee arrangements, with the Bank's involvement. In other areas, the Board has continued to work with industry participants to improve consumer safeguards in the direct debit system but acknowledges that more ambitious projects to link payment arrangements to electronic commerce have made little headway.

Credit card schemes

"Four party" credit card schemes, familiar to Australians as the Bankcard, MasterCard and Visa credit card schemes, operate under a set of regulations which their Australian members collectively determine or agree to enforce. Three particular regulations that raise public interest questions were highlighted by the study:

- the schemes have interchange fees set collectively by members that are otherwise competitors in providing credit card services to cardholders and merchants. The fees are paid to the credit card issuer by a merchant's financial institution (known as the acquirer) whenever that merchant accepts a credit card for payment. The study found that interchange fees, though an important influence on the fees facing credit cardholders and merchants, are not regularly reviewed on the basis of any formal methodologies and are higher than can be justified by costs;
- the international card schemes (MasterCard and Visa) have regulations that prevent

merchants recovering from cardholders the cost of accepting credit cards; and

• membership of the schemes is, broadly speaking, restricted in Australia to authorised deposit-taking institutions supervised by the Australian Prudential Regulation Authority (APRA). The study concluded that membership rules based on institutional status may be more restrictive than necessary to protect the safety and integrity of the schemes.

Release of the study was followed by a period of discussions with a range of parties, many of which made detailed submissions. Over this same period, public scrutiny of credit card schemes continued on a separate front with a review by the ACCC of the legal status of interchange fee arrangements under the Trade Practices Act 1974. The ACCC had earlier announced that it had formed the view that arrangements for the collective setting of credit card interchange fees were a breach of the Act and it had encouraged the credit card schemes and their members to seek formal authorisation of these arrangements. Proposals were subsequently submitted to the ACCC by a group of banks, but the ACCC concluded that the proposals did not address sufficiently a number of the deficiencies in credit card schemes identified in the study, including membership issues. In March 2001, the Chairman of the ACCC wrote to the Governor of the Reserve Bank recommending that the Board consider using its powers to achieve

reform of the credit card schemes in Australia in the public interest.

Before determining its position, the Board considered the views of parties likely to be affected, including the credit card schemes, their members, retailers and consumers. It also noted the ACCC's judgment that the authorisation process was unlikely to meet competition and efficiency concerns, in an appropriate time frame. The Board gave particular weight, of course, to the clear mandate that had been given to it by the Government only three years earlier, to act in the interests of the Australian community as a whole. Against this background, the Board decided that it would be appropriate to use the formal powers available to it to promote competition and efficiency.

That process began on 12 April 2001 when the Reserve Bank designated the Bankcard, MasterCard and Visa credit card schemes in Australia as payment systems subject to its regulation under the Payment Systems (Regulation) Act 1998. The Bank announced that it would proceed to establish, in the public interest, a standard for the setting of interchange fees and, if necessary, a standard for merchant pricing of credit card purchases, as well as a regime for access to these credit card schemes. The Bank did not designate the "three party" card schemes in Australia, American Express and Diners Club, which do not have collectively determined interchange fees nor restrictions on access enforced by

existing members. They do, however, impose restrictions on the freedom of merchants to recover credit and charge card costs from their cardholders, and the Bank confirmed that any decisions it took in this area would apply to all card schemes in Australia.

Following designation, the Reserve Bank undertook a detailed evaluation of whether the main restrictions established by the credit card schemes are in the public interest. As it has from the outset, it gave high priority to the consultation process, receiving views on the operation of credit card schemes in Australia in formal submissions and across the table in a series of meetings, some of which lasted many hours. Over 30 separate organisations have contributed to this process. A commissioned report by an international expert in network economics also helped the Bank assess the various submissions.

Three key features of the credit card market in Australia have provided the context for the Bank's deliberations. The first is the strong growth in credit card usage over recent years. When the study was published, credit cards had just overtaken debit cards as the main noncash means of payment for the first time since 1994, and this diverging trend has continued. The second is that credit card services are more costly to provide than most other payment instruments. Recent data show that, from a merchant's perspective, credit card transactions cost several times as much as debit cards. The third feature of credit card schemes, however, is that they are organised so that those who ultimately meet the costs are not necessarily those who enjoy the benefits. In Australia, the costs of credit card schemes are borne by credit cardholders using the revolving line of credit, who pay interest rates significantly above rates on other forms of unsecured lending, and by the community generally, to whom merchants pass on their credit card costs. The group of cardholders (known as "transactors") who settle their credit card account in full each month contribute very little directly to costs.



Source: Reserve Bank of Australia Bulletin and ABS Catalogue No. 3101.0

The recent growth of the credit card market in Australia is a clear illustration, if one were needed, of the potency of price incentives in the retail payments system. Consumers using a debit card (EFTPOS) generally pay a transaction fee to their financial institution (beyond a feefree threshold) for accessing their own funds; "transactors" using a credit card pay no transaction fees, and may be paid in the form of loyalty points, for using the funds of their financial institution. Banks and other deposittaking institutions promote the credit card most actively because it is the payment instrument for which they receive the highest return, even though it is one of the most expensive for merchants to accept. The Board's concern about this structure of price incentives, which it had noted in the study, is that it is not the result of normal competitive processes. Rather, it is the consequence of the restrictions imposed by the credit card schemes and their members and the fact that it is the same group of banks and other deposit-taking institutions that sets the fee



Source: Australian Retailers Association

ATM, debit card and credit card costs

per \$100 transaction, \$				Costs passed
	Acquirer	Issuer	Total cost	to cardholder
Foreign ATM ^a	0.49	0.21 ^b	0.70^{b}	1.40
Own ATM ^a	0.49	0.21^{b}	0.70^{b}	0.65
Debit card ^a	0.26	0.21	0.47	0.50
Credit card	0.43	1.58	2.01	-0.42 to -1.04 ^c

a For transactions beyond the fee-free threshold.

 $b\$ Does not allow for a difference in switching costs between own ATM and foreign ATM withdrawals.

c Includes costs of interest-free period and loyalty points.

Source: Reserve Bank of Australia and Australian Competition and Consumer Commission (2000) and Reserve Bank of Australia, *Bulletin*, July 2001.

payment instruments in Australia.

structures for credit cards and the other main

In its review of *interchange fee* arrangements, the Reserve Bank considered whether such fees are needed in credit card networks and whether card scheme members, acting in their own selfinterest, will collectively set the "right" interchange fees from the community's perspective. Interchange fees are a type of transfer payment that enables credit card issuers to recover some of their costs from acquirers and, in turn, from merchants. Revenues from interchange fees allow credit card issuers to "subsidise" cardholders to use their credit cards. by charging them less than the cost of the credit card payment services they use or by offering rebates in the form of loyalty points. The burden of this subsidy ultimately falls on the community through higher prices for goods and services. This subsidy, it is claimed, is needed to ensure that credit card networks reach their optimum size, with commensurate benefits for society in the form of lower cost payments and higher levels of consumption. The Bank was unconvinced by these claims and by claims that the forces of competition ensure that interchange fees evolve in a manner consistent with the public interest.

The Bank concluded that, while there may be a case for issuers to pass some of their costs onto merchants through interchange fees, current arrangements for the collective setting of interchange fees are not in the public interest. It has proposed a standard that provides an objective and transparent method of determining interchange fees in the designated credit card schemes, based on the costs of specific credit card payment services provided to merchants.

The Bank also assessed restrictions on merchant pricing imposed by the international card schemes, which prevent merchants recovering from cardholders the costs of accepting these credit cards. As a consequence, merchants pass their credit card costs onto all consumers - not just those using credit cards - in the form of higher prices of goods and services. Though some other countries have prohibited such restrictions on anticompetitive grounds, the schemes claim that merchants benefit from these restrictions because they preserve the subsidy to credit cardholders and, hence, their willingness to use credit cards. Merchants themselves, however, argue strongly against the restrictions. The restrictions have a number of adverse consequences, principally that they suppress the price signals that normally guide markets to an efficient use of resources.

The Bank concluded that restrictions on merchant pricing are not in the public interest: in no other market can suppliers of a widelyused input promote that input over others by preventing merchants passing its cost onto final customers. The Bank has therefore proposed a standard for merchant pricing that prohibits credit card schemes and their members from preventing merchants recovering from cardholders the costs of accepting credit cards.

Finally, the Reserve Bank examined

restrictions on entry to the credit card schemes which, broadly speaking, rely on prudential supervision by APRA as a screening device to determine eligibility for membership. The Bank acknowledged that some minimum entry standards can be justified because credit card issuing and acquiring does generate risks. At the same time, however, current barriers to entry deny access to non-financial institutions that may have the skills, financial substance and distribution networks to provide the spark for more intense competition in the credit card market – as did specialist mortgage originators in the residential mortgage market some years earlier.

The Bank concluded that scheme restrictions on entry, and some additional restrictions on the range and scale of activities that members may undertake, unduly restrict competition. It has proposed an access regime that liberalises access to the credit card schemes by allowing non-financial institutions of substance to become eligible to enter these schemes in their own right. Such institutions will need to be authorised and supervised by APRA and will need to meet ongoing prudential standards no less strict than those currently imposed by APRA for given types of risks. The draft access regime will make credit card issuing and acquiring open to greater competition, while preserving the comfort and cost savings provided to the schemes by APRA's involvement.

After a detailed assessment of the issues by the Board, the Bank released a Consultation Document in December 2001 outlining its proposed reforms to the designated credit card schemes in Australia. It also published the commissioned report by the international expert and two volumes of submissions that parties were prepared to put on the public record. A further round of consultations with interested parties will take place before the reform measures are finalised. The Bank is also consulting with American Express and Diners Club as to why they should not also be required to meet the proposed standard on merchant pricing.

ATM networks

Interchange fees are also a feature of ATM networks in Australia. In this case, the fees are paid by the card issuer to the financial institution which owns the ATM, and they are designed to reimburse the ATM owner for costs incurred in providing a cash dispensing service to the issuer's customers. Unlike credit card arrangements, interchange fees in ATM networks are determined by bilateral negotiation but they share the same feature of having been quite rigid over many years.

The study investigated whether ATM interchange fees reflected the costs of providing ATM services to customers and found that they did not. Interchange fees for cash withdrawals average \$1.03 per transaction, double the cost of providing this service, which averages around \$0.49. Card issuers normally pass these fees onto their cardholders – and often add their own charge – whenever they use another institution's ATM through "foreign ATM fees", which average around \$1.35 per transaction. As a



Source: Cannex Australia & Reserve Bank of Australia

consequence, cardholders using another institution's ATM are paying considerably more than the cost of providing the service.

The study concluded that competitive forces are not working to bring interchange fees and foreign ATM fees more into line with costs. Financial institutions as a whole receive a flow of net revenue from foreign ATM fees and have little incentive to negotiate lower interchange fees; the bilateral nature of interchange fee negotiations was also a source of inertia. Against this background, the study considered an alternative pricing regime – that of "direct charging" – that would encourage competition and greater transparency in the pricing of ATM services. Under this regime, there would be a direct relationship between the ATM owner and cardholders wishing to withdraw cash. The ATM owner would charge customers of other financial institutions a transaction fee which would be clearly posted at each ATM. That fee would be debited to the cardholder's account along with the cash withdrawal, and the resulting amounts settled between card issuers and ATM owners as at present.

Responses to the study indicated a willingness on the part of many participants in the ATM system to consider more efficient and transparent pricing arrangements. In July 2001, the Bank convened a meeting of interested parties, including financial institutions and operators of independent ATM networks, to explore options for reform. In undertaking this role, the Bank has liaised closely with the ACCC to ensure that there is no unintentional infringement of provisions of the Trade Practices Act 1974 which prohibit competitors agreeing on practices that might lessen competition. The meeting led to the formation of a working group, chaired by the Bank, to canvass alternatives to current ATM interchange fee arrangements and analyse their costs and benefits. The Board hopes that the working group will release a report on its findings, for public discussion, in the first half of 2002.

Debit card payment networks

In Australia, interchange fees for proprietary debit card (EFTPOS) payments are negotiated bilaterally and are paid by the card issuer to the acquirer. This direction of interchange flows is unique. In other countries the flow is to the card issuer, or there are no interchange fees at all: the most heavily used debit card payment systems – in Canada and the Netherlands – have developed without interchange fees while a recent proposal by banks to introduce interchange fees in the German debit card system was rejected by competition authorities.

The study concluded that, on the basis of the current cost structure, there was no convincing case for an interchange fee in Australia's debit card payment system, in either direction.

In last year's Report, the Board noted that interchange fee arrangements for debit cards have been in place for a decade and are under no strong competitive pressure to change. That view was confirmed by the initially muted response of industry participants to the study's findings. Subsequently, as the Bank's review of the credit card market proceeded, several submissions argued that debit card interchange fees should be reformed at the same time as those for credit cards, so that consumers and merchants can face more efficient prices for both payment instruments. The Board agrees that this is a desirable objective but it would emphasise that, under the present coregulatory arrangements, the initiative for reform in the debit card market is, in the first instance, in the hands of industry participants. The release of the Consultation Document is likely to prompt further consideration of debit card issues and the Bank has now begun to work with industry participants to consider options for change.

The Board remains concerned about interchange fee arrangements in one particular debit card product – the Visa-branded debit card. The study noted that issuers of this card earn credit card interchange fees for what are essentially debit card transactions. The Bank has advised Visa and issuing members that this practice imposes an inappropriate burden of costs on merchants and has no place in the Australian payments system. In the Board's view, two steps are necessary to deal with this issue. On the technical level, Visa debit card transactions need to be identified separately from Visa credit card transactions at point-ofsale, as they are in other countries. On the pricing level, card issuers will need to demonstrate that a case can be made for a collectively set interchange fee for Visa debit card transactions that would meet the appropriate public interest test.

Direct debits

The Board has been keen to encourage greater use of direct debits as a very efficient means of paying regular bills or recurring obligations. Compared with countries which have similar retail payments systems, Australians have been cautious about adopting this means of payment, although usage has grown in recent years. The Board's focus has been the development of safeguards that would give Australian consumers greater confidence that they will be able to stop any incorrect payments under direct debit arrangements.

The Board's work with billing organisations resulted in the Charter for Direct Debit Customers, first published in last year's Report, which guarantees service levels for retail customers. Over 30 billing organisations committed to the Charter from the outset and that list has now been augmented by Brisbane City Council and Integral Energy.

The Charter confirms that customers will be given adequate notice of debits to be made to

their accounts and will be able to stop the debit if they believe that they have been incorrectly billed, provided they give the required notice. However, there is no guarantee of a refund if the bill is disputed after payment. These safeguards, though a very useful first step, fall short of the "direct debit guarantee" arrangements which have operated successfully in the United Kingdom for many years. These arrangements provide that if a customer claims a mistake was made in having a direct debit made to their account, their financial institution will refund them immediately, and the refund is not limited by amount or time. Although refunds are initially paid by the financial institutions, they are borne by the billers under an indemnity.

Since the Charter was published, two developments have turned the spotlight onto direct debits and the importance of consumer safeguards. The first was a review of the Code of Banking Practice (the Viney report) conducted for the Australian Bankers' Association (ABA), which concluded that current arrangements did not provide sufficient protection to customers of financial institutions paying by direct debit. The report recommended that greater protection, including a guaranteed refund, be included in the Code of Banking Practice. The second development arose out of the difficulties which faced a number of customers of One.Tel, the telecommunications company, where they tried to stop direct debit payments and cancel direct debit authorities after that company collapsed. Community concerns on this score were taken up by the Government with the ABA and One.Tel's liquidator.



* 1990, 1997 and 1998

In response, the Australian Payments Clearing Association (APCA) moved quickly to introduce more streamlined procedures that allow customers to cancel direct debit authorities directly through their bank, building society or credit union. At the same time ASIC, which has responsibility for consumer issues in the financial sector, convened a round-table discussion on direct debits and consumer protection issues, in which the Bank took part. The discussion highlighted that customers making payments by credit cards have refund rights similar to those under the UK direct debit guarantee but financial institutions and billers have not been prepared to offer the same guarantee for direct debits.

These two developments promise a further strengthening of consumer safeguards for direct debits. Customers can now quickly cancel direct debit authorisations and stop

CHARTER FOR DIRECT DEBIT CUSTOMERS

1 Notification that payment is due Where the amount of payment due varies from bill to bill (eg phone and electricity), we will always provide you with a bill at least 10 business days (or such time as agreed with you) before payment is due. On the due date, the amount will be debited from the account you have nominated at your financial institution.

Where the amount of payment due is "fixed" according to a pre-agreed arrangement (eg health insurance), we will always notify you at least 10 business days (or such time as agreed with you) before the due date if there is a change in the amount to be paid.

2 Direct debit guarantee

If you dispute any amount on a bill, or on a notification of payments due under a preagreed arrangement, and let us know at least 2 business days before payment is due, we guarantee we will not debit your account

individual payments through either their financial institution or the biller; financial institutions cannot deflect requests back to the biller. The ABA has also endorsed the Viney report, which includes the recommendation that the Code of Banking Practice include a clause that "banks will take all reasonable steps to facilitate the amendment of the APCA rules by no later than 1 July 2002 to provide for a direct debit guarantee with the principal for the amount in dispute until the dispute is resolved. This notice will allow us enough time to resolve the problem or to halt processing of the payment.

3 Change in payment method or cancellation

You may cancel the direct debit or change your nominated account by simply letting us know at least 2 business days (or such time as agreed with you) before payment is due.

4 Privacy

We will maintain strict control over the information you provide to us. We will act only on your instructions or those of your authorised representative.

5 Complaints

We will provide you with contact details for lodging complaints when the direct debit is established, and these details will be repeated on regular bills. We will respond to any complaint promptly.

features of the UK guarantee, but subject to such limitations and conditions as are prudentially necessary". The Board fully supports this recommendation and encourages APCA to bring it to fruition as soon as possible.

Electronic commerce and the payments system

Electronic commerce will inevitably transform the payments landscape over time. Businessto-business e-commerce, in particular, has already established a substantial foothold in Australia and this is setting challenges for the associated payments processes. Businesses adopting this powerful technology at the ordering stage are looking for systems which also automate the payment and reconciliation legs. Systems are needed that can attach messages to payment instruments in a form that can be automatically captured by recipients, or that can reconcile payments data and invoices that are transmitted separately.

A year ago hopes were beginning to build, both in Australia and abroad, that traditional payment systems could be transformed to meet the demands of e-commerce. Australian banks were developing interfaces and software to strengthen links with their customers, although industry initiatives to establish standards and systems to improve the flow of information between financial institutions were only at the embryonic stage. Since then, the slowing in economic activity in major countries and the bursting of the dot.com bubble has robbed the various development efforts of momentum. Payment system initiatives to support e-commerce are being reassessed and there is a reluctance to commit substantial resources to proprietary or industry-wide projects that aim to transform existing systems or develop new ones.

Even in this more difficult environment, however, there have been some steps forward. In the United States, the payment system operated by the New York Clearing House (known as CHIPS) has changed its orientation from one focussed on plain-vanilla payments to settle the US dollar leg of foreign exchange transactions, to a much more flexible approach designed to support e-commerce. The key to the greater flexibility is improved message formats that allow a wide range of information to be exchanged in lock step with payment messages. In contrast, proposals to redevelop Australia's direct entry system to give it similar flexibility have so far borne no fruit. APCA has been considering how the direct entry system might be adapted to the needs of e-commerce but there appears no appetite for proposals involving new message formats. Efforts to enhance the security of messages across open networks, including the Internet, also remain largely at the development stage. These efforts have been aimed at establishing sound public key infrastructure (PKI) that allows transactors to establish their identity using certificates issued and managed by trusted third parties.

In the consumer area, a compelling case for smart cards and "electronic cash" remains elusive. These products are examples of purchased payment facilities, which consumers pay for in advance and use to make various types of payments; smart cards, as the name indicates, are card-based while electronic cash is network- or software-based. Cards for specific "closed" applications such as telephones, public transport and tollways have been the main market for purchased payment facilities in Australia, though cards with broader application, which have enjoyed a measure of success in some other countries, are also being introduced. However, very few countries have seen network-based schemes move beyond the trial stage.



Safety and Stability

The safety and stability of the payments system, and systems for clearing and settling securities transactions, are of fundamental importance to overall financial system stability. Design flaws or inadequate risk controls in such systems can allow difficulties facing an individual financial institution, or disturbances in a financial market, to be transmitted throughout the financial system generally. Australia has a very robust payments system, a judgment confirmed by the Board's detailed assessment, in last year's Report, of Australia's compliance with the Core Principles for Systemically Important Payment Systems, which were developed by the Committee on Payment and Settlement Systems (CPSS) at the Bank for International Settlements (BIS) and released in final form in 2001. During 2000/01, the Board focussed on two main issues under its safety and stability mandate. The first was the introduction of CLS Bank, a global initiative to reduce foreign exchange settlement risk which has been strongly supported by the Board, but which has been delayed in implementation. The second was the development of financial stability standards for securities clearing and settlement systems, in anticipation of the Board's new regulatory responsibilities in this area.

Foreign exchange settlement risk

The reduction of risks associated with the settlement of foreign exchange transactions has been a continuing priority for the Board. These risks can be substantial. A foreign exchange transaction involves the payment of one currency for another; under current arrangements, the settlement of each leg occurs in the domestic payment system of each country, often in different time zones and commonly using correspondent banks to settle on behalf of banks not represented locally. For these reasons, the settlement processes are not usually co-ordinated and there is a risk that one party could pay out currency it has sold, but not receive currency it has bought, because its counterparty fails to deliver. Even if this failure were due only to short-term operational problems, the party expecting funds remains without these funds and there could be "knock-on" effects if the funds were needed to complete another transaction. The amounts involved in foreign exchange settlements can be very large - exceeding \$A100 billion of Australian dollar transactions on some days so the scope for disruption is substantial. For Australian banks, the time zone dimension is a particular disadvantage: over 90 per cent of Australian dollar trades are against the US

dollar, which is settled in New York some 14 to 16 hours behind Sydney.

Individual banks, including those providing correspondent services, have taken steps to reduce foreign exchange settlement risk by improving back office reconciliation procedures and introducing legally robust netting arrangements. Settlement risk can only be completely removed, however, through a "payment-versus-payment" (PvP) mechanism under which banks pay away currencies only if they are guaranteed to receive the counterpart funds. In 1997, a group of major international banks agreed to develop such a mechanism in the form of a "continuous linked settlement" or CLS Bank.

CLS Bank is a special purpose bank which will link the settlement of both legs of foreign exchange transactions in eligible currencies. Banks using the service will maintain accounts with CLS Bank in each currency and

transactions will be settled simultaneously across these accounts. To minimise its exposure to member banks, CLS Bank will settle transactions if, and only if, each member retains an overall positive balance across its currency accounts after each settlement. Individual transactions will be finalised on a gross basis but, to keep liquidity needs in each currency to a minimum, banks will need to pay in, through the relevant domestic RTGS system, only their net short position or will receive from CLS Bank their net long position. Settlements will ordinarily occur during the European morning because that provides the most convenient overlap of time zones around the world. Australian dollar receipts and payments by CLS Bank will therefore be made late afternoon or early evening Sydney time, using an Exchange Settlement Account it will hold with the Reserve Bank. An example of how CLS will settle trades in Australian dollars and US dollars is in the box opposite.

RISK REDUCTION IN CLS BANK

Transaction I. Bank A buys \$A100 from and sells US\$50 to Bank B.

Existing arrangements

Bank A receives \$A100 from Bank B, via the latter's Australian correspondent bank, at (say) 1.00 pm Sydney summer time.

Bank A delivers, via its US correspondent bank, US\$50 to Bank B in New York at (say) 11.00 am New York time (3.00 am the following day Sydney summer time).

Bank B is at risk that it delivers the \$A but Bank A fails to deliver the US\$.

CLS settlement arrangements

The transaction is submitted to CLS Bank, which settles the buy and sell legs simultaneously during the European morning.

Neither Bank A nor Bank B is at risk to the other because the two currencies are settled simultaneously. Transaction II. Bank A sells \$A150 to and buys US\$75 from Bank C.

Existing arrangements

Bank A delivers \$A150 to Bank C, via the latter's Australian correspondent bank, at (say) 11.00 am Sydney summer time.

Bank A receives, via its US correspondent bank, US\$75 from Bank C in New York at (say) 1.00 pm New York time (5.00 am the following day Sydney summer time).

Bank A is at risk that it delivers the \$A but Bank C fails to deliver the US\$.

CLS settlement arrangements

The transaction is submitted to CLS Bank, which settles the buy and sell legs simultaneously during the European morning.

Neither Bank A nor Bank C is at risk to the other because the two currencies are settled simultaneously.

CLS funding arrangements (Transactions I and II)

Netting transactions I and II, Bank A has sold \$A50 and bought US\$25.

Bank A delivers \$A50 to CLS Bank and receives, via its US correspondent, US\$25 from CLS Bank progressively between 7.00 am and 10.00 am Central European Time (5.00 pm and 8.00 pm Sydney summer time).

The development of CLS Bank has proven more difficult than originally anticipated and its introduction has been delayed a number of times. Operations are now expected to begin around the middle of 2002. The Board is disappointed that progress has not been more rapid. On a positive note, the delays have allowed for more rigorous testing of CLS systems, and banks proposing to use CLS Bank, as well as central banks and banking supervisors, are now much better prepared for its operation. Support for CLS Bank within the global banking community also remains strong. New shareholders are joining and, in conjunction with the relevant monetary authorities, "in principle" agreements have been reached to add the Singapore dollar, the Swedish krona, the Danish kroner and the Norwegian krone to the original seven currencies (which include the Australian dollar). The New Zealand dollar and Hong Kong dollar are also expected to become eligible currencies in due course.

The CLS project is being overseen by central banks from countries whose currencies and banks are involved. Supervisory arrangements are being co-ordinated through a sub-group of the CPSS chaired by the Federal Reserve Bank of New York (which will supervise CLS Bank itself) and including the Reserve Bank. The focus of supervisory arrangements, and of CLS Bank's own risk management policies, is ensuring that when the new institution commences business it is operationally robust and is protected against the failure of one or more of its settlement members; the success of a centralised settlement system, such as that to be provided by CLS Bank, relies heavily on the confidence of its users that the system is free of risks.

Another issue for central banks is ensuring that the impact on liquidity in the domestic payment systems of currencies settled by CLS Bank is readily manageable. In this context, the Reserve Bank has been working closely with CLS Bank and with banks active in the Australian market to prepare for the inclusion of the Australian dollar. Arrangements for varying the opening hours for Australian payment and securities settlement systems to overlap with the core hours of CLS Bank are well advanced, as are preparations for the management of payment system liquidity during the extended hours. The Payments System Board will be considering an application by CLS Bank for an Exchange Settlement Account. The Reserve Bank will also be asked to approve formally the inclusion of the Australian dollar as an eligible CLS currency. In common with the central banks of the other "first wave" CLS currencies, approval will be based on the minimum standards and principles for central bank oversight set out in the Report of the Committee on Interbank Netting Schemes (the Lamfalussy Report), published by the BIS in 1990. These were the standards in place when the development of CLS Bank got under way. In due course, it is anticipated that the Core Principles for Systemically Important Payment Systems, which have a somewhat

broader basis, will be applied to CLS Bank. CLS Bank is also seeking protection for its netting arrangements under the *Payment Systems and Netting Act 1998*.

For currencies that will not be settled by CLS Bank, banks are working on other ways of reducing foreign exchange settlement risk. Work aimed at raising banks' awareness of this risk, and promoting best practice in its control and management, has been underway in the East Asia-Pacific region for the past three years, under the auspices of a Working Group of EMEAP central banks and monetary authorities. The Working Group has conducted a survey of the foreign exchange risk management and settlement practices of regional banks and released a report, containing a number of recommendations for central banks and commercial banks, in December 2001. The Reserve Bank co-ordinated this work on behalf of the Working Group.

Securities clearing and settlement

Facilities that clear and settle transactions in securities such as bonds and equities, and in derivative instruments such as options and futures, are a critical part of Australia's financial infrastructure. Once such transactions have been entered into, either on an organised exchange or in an over-the-counter (OTC) market, information about the trade is passed to the relevant clearing and settlement facility, so that details of the trade can be confirmed, titles to securities transferred and relevant payments made. The smooth operation of these "back office" functions is essential to the stability of Australia's financial system. Turnover in wholesale securities and derivatives markets, particularly the bond market, is very high and the failure of transactions to settle on schedule could have serious flow-on effects to other participants.

Turnover in wholesale markets

average daily turnover 2000/2001

(\$ billion)

Austraclear	22.4
RITS ¹	16.7
CHESS	1.7
OCH ²	0.5
SFECC ²	46.5

1 From the end of February 2002, Commonwealth Government securities previously settled in RITS are being settled in Austraclear.

2 The OCH and SFECC data represent the notional values of derivatives contracts traded, and are not comparable with the values of debt and equities securities trades.

There are two types of clearing and settlement systems. "Scorecard" systems, such as the Austraclear system for debt securities owned by the SFE Corporation Limited and the Clearing House Electronic Subregister System (CHESS) for equities owned by the Australian Stock Exchange (ASX), maintain a record of title to securities and ensure that title changes take place according to instructions from the seller of the securities. Scorecard systems are not counterparties to the trades they record. In contrast, "central counterparties" such as the ASX's Options Clearing House (OCH) for options and some futures transactions, and the SFE Clearing Corporation (SFECC) for futures and options and some debt transactions, interpose themselves between the two parties to a trade and become the buyer to every seller and the seller to every buyer. As such, they become parties to trades and take on the same risks as any other market participant. If a party cannot meet its obligations to a central counterparty, the central counterparty could face liquidity pressures and eventual losses; if such difficulties were to threaten the solvency of the central counterparty itself, the consequences for financial stability could be severe.

In recognition of their importance for financial stability, both types of clearing and settlement facilities have become more closely integrated with Australia's RTGS system for high-value payments. This has allowed the scorecard systems to transfer title to securities on a "delivery-versus-payment" (DvP) basis where transfer of the title, irrevocable payment and interbank settlement occur simultaneously; the risk that participants to a transaction might deliver securities (or make a payment) but not receive funds (or securities) in return is thereby eliminated. For central counterparty systems, settlement of obligations between the central counterparty and its members on an RTGS basis provides greater certainty and security for all parties.

As mentioned earlier in this Report, the Board has been granted formal responsibility for ensuring that clearing and settlement facilities conduct their affairs in a way that is consistent with financial system stability. To this end, clearing and settlement facilities will be required to comply with financial stability standards set by the Reserve Bank. The Board has been overseeing the development of such standards, which will take a separate form for scorecard systems and central counterparties because of the difference in their risk profiles. The standards will reflect international best practice and will be consistent with the CPSS/IOSCO Recommendations for Securities Settlement Systems, which were released in November 2001. The standards will emphasise that primary responsibility for maintenance of appropriate risk control measures for a clearing and settlement facility lies with that facility's board and senior management.

Under transitional arrangements announced by the Government, clearing and settlement facilities that are explicitly regulated under the current Corporations Act regime have been granted a licence from 11 March 2002 and will have to comply with the Bank's financial stability standards from the date they come into force. CHESS and the SFECC fall into this category. Those not explicitly regulated under the existing regime will have to obtain a licence by the end of a two-year transition period and will then have to comply with the full requirements of the new regime, including the Bank's standards. Austraclear, the OCH in its capacity as a central counterparty to exchangetraded options and the ASX's TSN Clearing, which acts as a central counterparty to equities trades between brokers, fall into this category.

Draft financial stability standards will be released for public comment after consultations with ASIC and with industry, but the broad approach endorsed by the Board is described below.

Standards for central counterparties

A central counterparty usually provides three core services for its members: calculation of financial obligations arising from trades (ie clearing services); a guarantee that trades will be settled in the event that a counterparty becomes insolvent; and associated risk management services. These services commence when the original contract between the two parties to the trade is replaced, or "novated", with two separate contracts - one between the buyer and the central counterparty, and the other between the central counterparty and the seller.

Well-designed central counterparty arrangements have a number of attractive features for financial market participants. All novated trades are netted, with the result that each member has only a net position in each security against the central counterparty. This can mean substantial savings for members in the value of cash and securities needed to meet their obligations, compared with the alternative of settling bilateral obligations with each of their original counterparties. In addition, a central counterparty takes on the credit risk associated with the trading of its members and manages this risk centrally. This reduces the need for members to monitor the creditworthiness of other market participants and allows them to focus, instead, on monitoring their credit risk against the central counterparty. The role of a central counterparty in managing risk is particularly important in markets where the creditworthiness of participants is variable or difficult to determine.

At the same time, a central counterparty concentrates risks in the financial system. If these risks are not managed prudently, a central counterparty may be the source of systemic risk in the event of financial market instability or shocks to the economy. Central counterparties globally use three main techniques to control their credit risk and the costs of replacing trades in the event of member default:

- membership requirements that ensure that prospective members have sufficient financial substance;
- "margining" techniques that provide the central counterparty with funds to cover possible failures of members during periods of anticipated market volatility; and
- settlement guarantee funds and losssharing commitments if market volatility is more extreme than anticipated.

The Bank's financial stability standards will seek to ensure that any central counterparty in Australia conforms with international best practice in each of these three areas. They will also deal with other matters relevant to risk management including the need for a sound legal framework, the way in which obligations between the central counterparty and its members are settled and procedures to be followed in the event of member default. Operators of such facilities will also need to demonstrate that they have adequate contingency plans to deal with operational difficulties.

Standards for settlement (scorecard) systems

A securities settlement system which acts as a scorecard provides a mechanism for counterparties to meet their obligations to each other. Typically, final settlement of a securities trade requires three steps: title of the security needs to be transferred from seller to buyer; funds must be transferred from the buyer's to the seller's deposit account at their respective financial institutions; and central bank funds must be transferred from the buyer's to the seller's financial institution across accounts held at the central bank.

The Bank's financial stability standards will emphasise that the regulations and operational procedures of any such securities settlement system should have sound legal underpinnings and that members have certainty of title to securities in all circumstances. The standards will also be designed to ensure that transfer of title to securities occurs if, and only if, cash payment occurs and that the operations of a system do not give rise to a build-up of settlement exposures between members. Securities settlement systems will need to have sound risk management practices, including procedures to deal with member insolvency and adequate contingency plans.

The Bank's standards for clearing and settlement facilities are being developed against the background of an industry undergoing considerable rationalisation. As noted in last year's Report, the Board is keen to support initiatives to improve the efficiency of Australia's clearing and settlement arrangements, particularly given the prospect of competition from large overseas operators. The past year has seen some important steps in this direction.

In September 2000, the SFE and Austraclear announced a proposed merger, which was completed in December 2000 after regulatory approval. Further rationalisation took place in February 2002, with the transfer of Commonwealth Government securities from the Reserve Bank Information and Transfer System (RITS) to the SFE's Austraclear system. These developments have reduced the number of clearing and settlement system operators in Australia from four to two.

Following consultation with ASIC and the Reserve Bank, the SFECC introduced central counterparty clearing for trades in Commonwealth and state government securities in September 2001, through its Bond and Repo Clear (BRC) service. The SFECC already acted as a central counterparty for futures contracts traded on the SFE and the New Zealand Futures and Options Exchange. This



Australia's Clearing and Settlement Facilities

service will encourage a more standardised approach to credit risk management across the industry and enable users to reduce their liquidity needs by being able to settle securities and cash positions on a net basis against a single counterparty. Central counterparty clearing services for debt securities are also offered in the United States and the United Kingdom and in a number of other countries.

Approval 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. Under this rule, a court may date the bankruptcy of an institution from the midnight before the bankruptcy order was made; transactions settled between midnight and the time of the bankruptcy order would be void. The application of this rule

would threaten the irrevocable nature of RTGS transactions. Before approval is granted to a system, 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 misuse the protection extended to them.

In November 2000, the Board declared CHESS to be an approved RTGS system in terms of the Act. With the introduction of an RTGS facility in CHESS, CHESS members now have the option of settling high-value or time-critical equities transactions on an RTGS basis rather than on a net deferred basis. The Bank has previously issued similar approvals to RITS and Austraclear under the Act. The approval for CHESS means that individual trades in both debt securities and equities can now be settled on an RTGS basis under the protection of the Act.

Glossary of Terms and Abbreviations

- ACCC Australian Competition and Consumer Commission
- Acquirer an institution that provides a merchant with facilities to accept card payments, accounts to the merchant for the proceeds and clears and settles the resulting obligations with card issuers
 - ADI authorised deposit-taking institution
 - APCA Australian Payments Clearing Association Limited
 - APRA Australian Prudential Regulation Authority
 - ASIC Australian Securities and Investments Commission
 - ASX Australian Stock Exchange
 - ATM Automated Teller Machine
- Austraclear a securities clearing and settlement company
 - BIS Bank for International Settlements
 - BRC Bond and Repo Clear
- Card issuer an institution that provides its customers with debit or credit cards
 - CHESS Clearing House Electronic Subregister System
 - Clearing the process of transmitting, reconciling and in some cases confirming payment instructions prior to settlement; it may include netting of instructions and the calculation of final positions for settlement
 - CLERP Corporate Law Economic Reform Program
 - CLS Bank Continuous Linked Settlement Bank
 - CPSS Committee on Payment and Settlement Systems

Deferred net settlement system -	a settlement system in which each settling participant settles
	(typically by means of a single payment or receipt) its net
	settlement position which results from the payments made
	and received by it at some defined time after payments have
	been made
Direct debit –	a pre-authorised debit on the payer's bank account initiated
	by the recipient
DvP –	Delivery-versus-Payment
EMEAP -	Executives' Meeting of East Asia-Pacific Central Banks and
	Monetary Authorities
EFTPOS —	Electronic Funds Transfer at Point of Sale
Exchange Settlement (ES) Account –	an account held at the Reserve Bank of Australia to settle
	obligations arising from the clearing of payments
G10 -	Group of Ten Countries: Belgium, Canada, France,
	Germany, Italy, Japan, Netherlands, Sweden, Switzerland,
	United Kingdom, United States
Interchange fee –	a fee paid between card issuers and acquirers when
	cardholders make transactions
IOSCO —	International Organisation of Securities Commissions
OCH –	Options Clearing House
PvP –	Payment-versus-Payment
RTGS (real-time gross settlement) -	a payment system in which processing and settlement take
	place in real time (continuously)
RITS —	Reserve Bank Information and Transfer System
Settlement –	the discharge of obligations arising from fund transfers
	between two or more parties
SFE —	Sydney Futures Exchange
SFECC -	Sydney Futures Exchange Clearing Corporation

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Payments System Board



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Deputy Chairman since 24 July 1998. Assistant Governor (Financial System) Reserve Bank of Australia.



G J THOMPSON

Chief Executive Officer. Australian Prudential Regulation Authority. Member since 17 August 1998.



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Director. Member since 15 July 1998. Present term expires 14 July 2003.



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Managing Director Gersh Investment Partners Ltd. Member since 15 July 1998. Present term expires 14 July 2003.



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