RESERVE BANK *of* AUSTRALIA

PAYMENTS SYSTEM BOARD

ANNUAL REPORT 2004

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 and 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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Reform of the Australian Payments System

The Payments System Board was established in 1998 in response to the recommendations of the Wallis Inquiry into Australia's financial system. In the payments area, the Inquiry focussed primarily on the scope for gains in the efficiency of the system rather than improvements in its safety and stability. This reflected, in large part, the fact that the main safety and stability issues had been addressed through the 1990s. In particular, the real-time gross settlement (RTGS) system for high-value payments between banks was virtually complete by the time the Inquiry reported, and was in operation when the Board first met in August 1998. The RTGS system settles a range of high-value payments, including large-value securities transactions, on a delivery-versus-payment basis, and accounts for around 90 per cent of the value of settlements between banks.

In contrast, at the time that the Board first met, relatively little attention had been paid to the efficiency of the payments system. In particular, in its early meetings the Board noted the paucity of data on the use of various means of payment and the costs of providing and using them. This was despite the considerable aggregate cost to the community of making payments. While precise estimates of these costs are not available, a conservative estimate would be ½ per cent of GDP, or $4 billion annually. In many cases, these costs go unobserved by the consumers of goods and services, often being borne in the first instance by merchants and financial institutions before being passed onto consumers in the form of higher prices.

Given the considerable resources that go into making payments there is a strong public interest in ensuring that Australia's payments system – and of necessity the individual systems that comprise it – operates in a competitive and efficient manner. The efficiency of the retail payments system is particularly important given that over 10 million non-cash payments are made each day. Given this large number, small gains in efficiency at the individual transaction level can add up to substantial gains at the aggregate level.

In its early deliberations, the Board noted that a useful starting point for evaluating the efficiency of the system was to consider whether the relative prices that individuals face when choosing amongst payment methods reflect the relative costs to society of those methods. If the price charged is below the cost to society of providing a particular method of payment, that method is likely to be overused. Similarly, if the price is above cost, then the payment method is likely to be underused.

Accordingly, much of the Board's work has been focussed on understanding the relative prices for using different payment methods and the relative costs of these methods. When prices do not reflect costs it is often a sign that competitive forces are not working adequately or that, at the least, analysis is needed to clarify whether the system is working competitively and efficiently. Two issues have received particular attention. The first of these is the relationships amongst different payment systems and the factors that make one payment system more attractive to use than another. The second is the nature of the competitive forces within any given payment system.

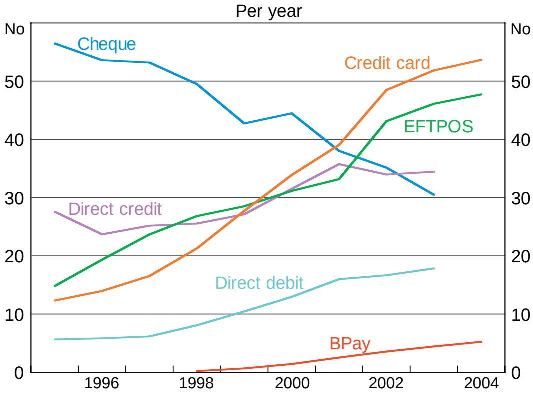
Relationships Amongst Payment Systems

The Australian non-cash payments system is made up of a number of separate payment systems. These include:

- the debit and credit card payment systems predominantly used for retail payments by consumers;
- direct credits and debits to bank accounts used by both consumers and businesses;
- the cheque payment system that, today, is mainly used by businesses; and
- the RTGS system primarily used by banks for settlement of money market and foreign exchange transactions.

Graph 1

Non-cash Payments per Capita



Source: ABS, APCA, BPay, RBA

Over time the use of these different payment systems has changed substantially (Graph 1). The use of credit cards has grown particularly strongly, as has EFTPOS, albeit less rapidly than that of credit cards. In contrast, the use of cheques has declined, displaced, at least in the case of bill payments, by direct credits, direct debits, credit cards and BPay.

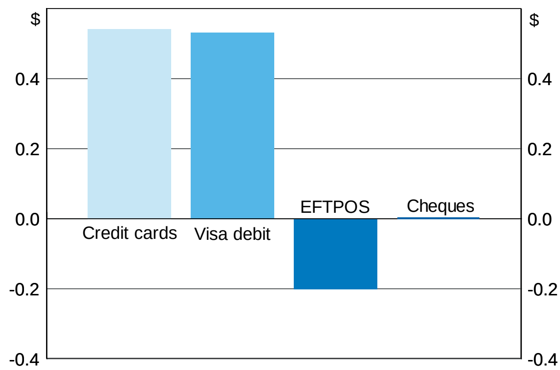
For many payments, individuals clearly have a choice about which payment method to use. For instance, to pay for a trolley of groceries at a supermarket checkout, credit cards and debit cards can be used along with cash, more or less interchangeably. Similarly, cheques, credit cards, direct debits, direct credits and BPay can all be used to pay most household bills. Given this abundance of choice, no one payment system can be considered in isolation from others. As an example, as banks have gradually increased the price charged to their customers for using cheques to more accurately reflect the costs of processing, the use of other payment methods has increased and the number of cheques written has declined.

A number of factors influence the choice of payment method. These include the convenience and security of the method, as well as whether a receipt is required. Another important factor is the price. For some payment methods, prices largely reflect the resource costs of the institutions offering the service. This has increasingly become the case with cheques and it is also largely the case with the direct entry system. In a number of other payment systems, however, the price charged for each transaction bears little resemblance to the underlying costs of making that transaction. Perhaps the clearest example is credit cards. For many individuals, once they have decided to hold a credit card, the effective price of using the card to make a payment is negative; that is, they are effectively paid by their financial institution to use the card through the combination of interest-free credit and reward points. In contrast, there are real resource costs to society in processing a credit card payment.

An important factor influencing the prices charged for a number of payment methods is the interchange fee – the fee paid between banks each time a payment is made using the method. In Australia, interchange fees currently exist in the credit card, debit card and BPay payment systems (Graph 2). In the case of credit cards and scheme-based debit cards the fee is paid to the cardholder's bank and is based on the size of the payment. In the case of EFTPOS it is paid to the merchant's bank and is typically a flat fee (i.e., not based on the value of the transaction). In BPay, the fee is paid by the merchant's bank to the payer's bank. BPay has provided details of its interchange fees to the Reserve Bank but has not consented to their publication at this stage.

Graph 2

Interchange Fees on a $100 Transaction



Source: RBA

Whatever the form, size or direction of interchange fees, they increase the net costs of the bank paying the fees, and reduce the net costs of the bank receiving them. This can create an incentive for banks receiving interchange fees to charge customers a price lower than the underlying cost of providing the payment service, and an incentive for banks paying interchange fees to charge their customers more than the underlying cost of providing the service. In this way, interchange fees alter the usually direct link between costs and prices on both sides of a payment system.

Given the importance that interchange fees play in determining the prices that individuals and merchants face for using and accepting various payment methods, the Board has spent considerable time examining whether they are subject to normal competitive pressures. It has also considered the underlying rationale for these fees.

Quite early on the Board came to the view that interchange fees are subject to little, if any, competitive pressure when they are set by the members, or management, of a payment network and apply to all members of that network. In the case of credit cards, all banks in the scheme pay the same interchange fees and this is reflected in the fees that merchants face. Merchants cannot force interchange fees lower by the threat of moving from one bank to another for supply of the scheme's credit card services.

International experience suggests that interchange fees set in this way can potentially be used to improve the position of a payment system with respect to other payment systems. A higher interchange fee paid to the issuer allows the issuer to reduce the effective price faced by the cardholder (perhaps through a more generous reward scheme) and, thus, encourages use of the card. It also increases the costs to merchants of accepting the card. If merchants are not prepared to (or able to) pass the higher charges on to customers using the cards, or cease accepting the cards, the forces constraining the use of interchange fees as a competitive weapon by the scheme can be relatively weak.

When the fees are *bilaterally* set, as they are in Australia's EFTPOS system, the dynamics of competition are different, but, again, normal competitive forces tend to be weak or absent. In general, neither acquirers nor issuers are willing, or able, to initiate a process of competition over the interchange fee.

The main reason for this on the issuing side is that an issuer cannot credibly threaten to end a current interchange agreement with an acquirer if lower interchange fees are not agreed to. Ending the agreement would mean that the issuer's cardholders were not able to use their cards at merchants serviced by the acquirer. For most issuers, this would be seen as unacceptable. Similarly, an acquirer attempting to expand its business would have difficulty doing so if it were to offer, or agree to, a lower interchange fee. If the acquirer were receiving less revenue from interchange payments than its competitors, it would be unlikely to be able to offer merchants as competitive pricing as other acquirers. Accepting a lower fee can hurt, not improve, the competitive position of acquirers.

The one qualification to this arises from the possibility of large merchants bypassing their acquirers and connecting directly to issuers. Under such an arrangement both issuer and merchant can be better off by sharing any margin earned by the merchant's existing acquirer. However, the gains to be achieved from this source are limited. Only large merchants are likely to be able to undertake such negotiations and once the merchant has established a direct connection with the issuers there is likely to be little further competitive pressure on interchange fees.

These considerations suggest that one cannot have confidence that bilaterally set interchange fees will reflect normal competitive pressures. The rigidity of interchange fees in the EFTPOS payment system over the 1980s and 1990s supports this conclusion.

It is important to note that although interchange fees are not subject to normal competitive pressures, their existence does not necessarily reduce the efficiency of the payments system. Nonetheless, because interchange fees break the normal link between costs and prices, the reasons for their existence and magnitude need to be analysed. In some payment systems, interchange fees may be necessary to ensure that all the parties are prepared to participate to provide the service. For instance, in a credit card system, if issuers cannot recover all their costs from cardholders an interchange fee paid by the merchant's bank might be necessary to make the issuers' participation in the system viable. In theory, one could calculate the socially optimal interchange fee taking into account the full range of factors that influence the demand and supply for various payment instruments. In practice, this has not proved to be possible. Current models of payment systems are not sufficiently advanced to be applied in this way, and the data available are insufficient for use in even those simple models that are available.

The Board accepts that there may be a public benefit from interchange fees in some payment systems. Whether or not a particular fee enhances the efficiency of the system needs to be assessed on a case-by-case basis, taking into account the totality of the payments system.

Competition Within Payment Systems

In terms of the competitive forces within a given payment system, the Board has focussed primarily on the issue of access to the payment system.

Financial institutions that want to provide facilities for making and receiving payments to their customers need to establish arrangements for exchanging payment instructions between institutions. Because of the efficiencies they bring, these arrangements are usually established co-operatively between the participants, so that all financial institutions participating in the payment system meet the same standards, and payments can be exchanged between all members of the system without the need for special arrangements between particular institutions. This can require the adoption of common procedures and technical standards and controls over access.

One factor influencing the extent of competition within a payment system is the ease of access to the system. Accordingly, the Board has given a high priority to identifying and addressing inappropriate restrictions on entry to a range of payment systems.

The Reform Process

Given the initial paucity of data and analysis, an early action of the Board was a comprehensive study of credit card, debit card and ATM systems, conducted jointly with the Australian Competition and Consumer Commission (ACCC). This study, *Debit and credit card schemes in Australia, a study of interchange fees and access* (the Joint Study), was published in October 2000. It emphasised both the substitutability of individual payment systems and the need for a system-wide approach when analysing them. The Joint Study:

- detailed publicly for the first time the interchange fees then applying in the credit card, debit card and ATM systems;
- collected data from the issuers and acquirers in these systems on their costs of providing these services and published them in aggregate form;
- analysed the effects of the incentives created by these arrangements on payment system use and efficiency; and
- sought explanations from the participants in the various payment systems about their rationale for the various interchange fees.

The Joint Study found that credit card interchange fees encouraged the provision of credit card services at effectively negative prices to consumers, while debit card interchange fees increased the cost to consumers of using the EFTPOS system. The study also found that the case for an interchange fee in debit card systems on the grounds of balancing issuers' and acquirers' costs was not strong, a conclusion supported by overseas experience.

The Joint Study concluded that '[a] major consequence of current interchange fee and access arrangements in Australia is that the credit card network has been encouraged to grow at the expense of a less costly alternative, the debit card'.[1] At the time the study was undertaken a cardholder's bank *received* an interchange payment averaging 0.95 per cent of the value of the transaction whenever a credit card was used to make a payment. In contrast, if the same purchase

1 *Joint Study p76.*

had been made by EFTPOS, the cardholder's bank would have had to *pay* the merchant's bank around 20 cents.

Given the results of the Joint Study, subsequent deliberations and industry consultations, the Board came to the view that the efficiency of the payments system would be improved if the relative prices faced by consumers for using debit and credit cards were more in line with their relative costs. It also viewed the 'no surcharge' rule as detrimental to the efficient and competitive functioning of the credit card payment system. Furthermore, the Board came to the view that reform of the credit card schemes was unlikely to be achieved through a voluntary process.

Consequently, in April 2001, the Board exercised the Bank's formal powers under the *Payment Systems (Regulation) Act 1998,* designating the Bankcard, MasterCard and Visa credit card systems. Subsequently the Bank set standards regarding merchant pricing and interchange fees and introduced an access regime. Details of these developments are presented in the following chapter. The reforms came into effect over the course of 2003 and the early months of 2004.

These reforms were expected to lead to an adjustment in the effective price of credit card payments relative to the price of payments by debit card. It was, however, recognised that even after the reforms, the interchange arrangements would still create incentives for consumers to use credit cards and scheme debit cards such as Visa Debit, in preference to EFTPOS. Given this, the Board encouraged industry to review the interchange arrangements that apply to debit cards. The result was a proposal by the industry to abolish interchange fees in the EFTPOS system. This proposal was approved by the ACCC in December 2003, although the ACCC's decision was overturned by the Australian Competition Tribunal (ACT) on appeal.

After taking account of the ACT's decision, consultation with interested parties and other relevant information, the Bank designated the EFTPOS system in September 2004. In reaching the decision that designation was in the public interest, the Board took into account how EFTPOS interchange fees affect the totality of the payments system, and how the system is likely to evolve over the medium to long term. It judged that a further narrowing of the relative price and cost differential between credit and debit cards would be beneficial to the overall efficiency of the payments system.

Earlier in the year, the Bank also designated the Visa Debit card system. Currently, the same interchange fees apply to Visa Debit and credit cards, with the result that users of Visa Debit cards typically face lower prices than users of the EFTPOS system. An important lesson from the Wal-Mart case against MasterCard and Visa in the United States is that if the interchange fees for two debit card systems are significantly different from one another, the one with the higher interchange fee may ultimately grow at the expense of the one with the lower interchange fee. This is because the higher interchange fee can be used to subsidise cardholders. In the Australian context, if the interchange fees for Visa Debit and EFTPOS were to remain at current levels there would likely be a move away from the PIN-based EFTPOS system towards a signature-based debit card system with considerably higher fraud costs. This runs counter to initiatives around the world to improve security on card based payments and would be contrary to the promotion of the efficiency and stability of the payments system.

The Board is now proceeding to consider the desirability of setting standards for interchange fees for both the EFTPOS debit card system and the Visa Debit system.

Competition and Efficiency

As noted in the previous chapter, in terms of the efficiency of the payments system, the Board's main work has been in the area of retail payments, particularly card-based payments. The reform process has, however, been relatively protracted, running over a number of years. This reflects several factors, including the need to explore with industry the possibility of voluntary reform, the extensive consultations undertaken by the Bank, and the need to respond to legal challenges to the reforms.

The most recent year was marked by two main developments: the new standards on credit cards coming into force, and the designation of the Visa Debit and EFTPOS payment systems.

The Credit Card Reform Process

The credit card reform process was initiated around four years ago with the publication of the Joint Study. This study highlighted three aspects of credit card scheme rules that seemed to be impeding the efficiency of the overall payments system. These were:

- the collective setting of interchange fees;
- the so-called 'no surcharge' rule that prevented merchants from passing on the cost of accepting credit cards; and
- restrictions on scheme membership that appeared to be stronger than needed to protect the integrity of the schemes.

Concurrent with the Joint Study, but quite separately, the ACCC had asked the Australian banks to consider having the setting of interchange fees on credit cards subjected to the test of authorisation under the *Trade Practices Act 1974*. In early 2001, however, the ACCC suggested that the Bank's powers could better address concerns with competition and interchange fees. After a period of consultation, the Bank designated the credit card schemes of Bankcard, MasterCard and Visa in April 2001 as payment systems subject to its regulation under the *Payment Systems (Regulation) Act*. It then undertook a comprehensive process of consultation and analysis to determine whether it would be in the public interest to set standards and impose an access regime on these schemes. Following this process, final standards relating to interchange fees and the no-surcharge rule were published in August 2002 while the access regime was finalised in February 2004 after a further round of consultation.

In September 2002 the reforms were challenged in the Federal Court on procedural and jurisdictional grounds by MasterCard International and Visa International. The Court rejected the challenge in September 2003, finding decisively against MasterCard and Visa.

Standard on merchant pricing

The first of the reforms – the standard on merchant pricing – came into effect on 1 January 2003. Under this standard, the designated credit card schemes of Visa and MasterCard are not permitted to prohibit merchants from passing on the cost of accepting credit cards to customers that use them. Bankcard was not subject to the standard as it had no such prohibition. The Bank also obtained undertakings from American Express and Diners Club to eliminate such prohibitions.

Prior to the standard coming into effect, all acquirers wrote to merchants advising them of their ability to charge a fee for the use of a credit card. Similarly, American Express and Diners Club advised merchants of their ability to charge for accepting their cards.

Standard on interchange fees

The second standard – the standard on interchange fees – came into effect on 1 July 2003. This standard requires that the weighted average of any interchange fees set within schemes not be higher than a cost-based benchmark based on issuers' eligible costs as detailed in the standard. The new interchange fees were required to be published by the schemes and to be in force by 31 October 2003.

In early 2003 each of the schemes appointed an independent expert, agreed to by the Bank, whose role was to gather cost data and calculate the appropriate benchmark. Each of the schemes submitted their benchmarks and supporting analysis to the Bank by end September 2003. With Bankcard and Visa, a series of questions and answers satisfied the Bank that the calculations had been satisfactorily undertaken. In the case of MasterCard, the Bank formed the view that the calculations submitted were not in conformity with the standard. The matter was settled by a ruling in the Federal Court in the Bank's favour, with MasterCard providing revised calculations in line with the Court's ruling. Each of the schemes then set interchange fees such that their weighted average did not exceed their cost-based benchmarks and published their fees on their websites.

As required, the new interchange fee arrangements became effective on 31 October 2003, with the new fees varying slightly across the schemes reflecting differences in costs. MasterCard and Visa have retained a separate rate for electronic transactions and apply the 'standard' rate to those transactions that are either manually processed or are not verified by the cardholder's signature, e.g., transactions over the telephone or Internet (Table 1). MasterCard and Visa also apply a commercial rate for corporate and purchasing cards, and Visa applies a separate

Table 1: Interchange Fees
Per cent of transaction value

	Pre Reform	Post Reform		
		Bankcard	MasterCard	Visa
Standard	1.20	0.49	0.62	0.60
Electronic	0.80	0.49	0.46	0.44

Source: RBA and schemes' websites

rate for recurring debits such as mobile phone accounts. Bankcard applies a single rate to all transactions.

Overall, the new standard has seen interchange fees fall from an average of around 0.95 per cent to around 0.55 per cent.

Access regime

The final element of the reforms was the access regime.

Under the access regime established by the Bank, the card schemes are not permitted to discriminate against potential entrants on the basis of whether they are a traditional authorised deposit-taking institution (ADI) (such as a bank, building society or credit union) or an ADI that is a Specialised Credit Card Institution (SCCI). They are also not permitted to discriminate on the basis of whether the potential entrant will be an issuer of credit cards only, an acquirer of credit card transactions only or both.

The new class of credit card scheme members – SCCIs – was established by the Australian Prudential Regulation Authority (APRA) as part of the overall package of credit card reforms. SCCIs must meet prudential guidelines set by APRA related to the risks they incur as credit card issuers or acquirers.

The regime was not gazetted at the same time as the standards because the prudential requirements that would apply to SCCIs had not been finalised by APRA. APRA released the final prudential standard in July 2003. Following a further period of consultation, the Bank gazetted the access regime in February 2004.

This regime also requires that the schemes publish the conditions for entry of new members and the process they would follow when considering applications. All schemes have met this requirement and potential new entrants will find information on application procedures on the schemes' websites, although the amount of detail varies. Visa has provided a lengthy section on how applications will be assessed. In contrast, Bankcard and MasterCard have provided brief descriptions with a more detailed information pack available on request.

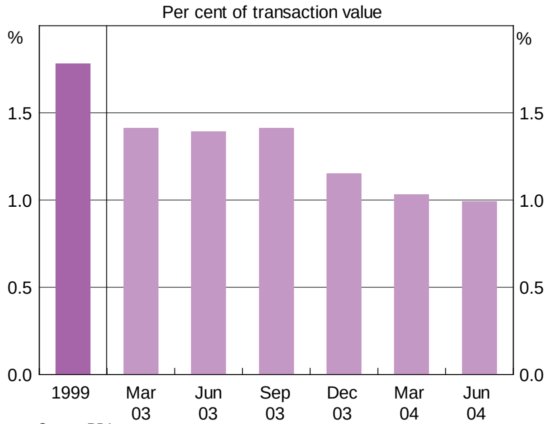
Effect of the Credit Card Reforms

While it is still early days, the reforms have had a number of significant effects on the payments system and on the credit card market in particular. Amongst these, perhaps the most obvious are: a significant reduction in merchant service fees, the introduction of new credit card products and repricing of existing products, the introduction of charges for using credit cards and the announcement of new entrants. Less obvious, but no less important, is the downward pressure on the prices of goods and services that has resulted from a lowering of merchants' costs.

Merchant service fees

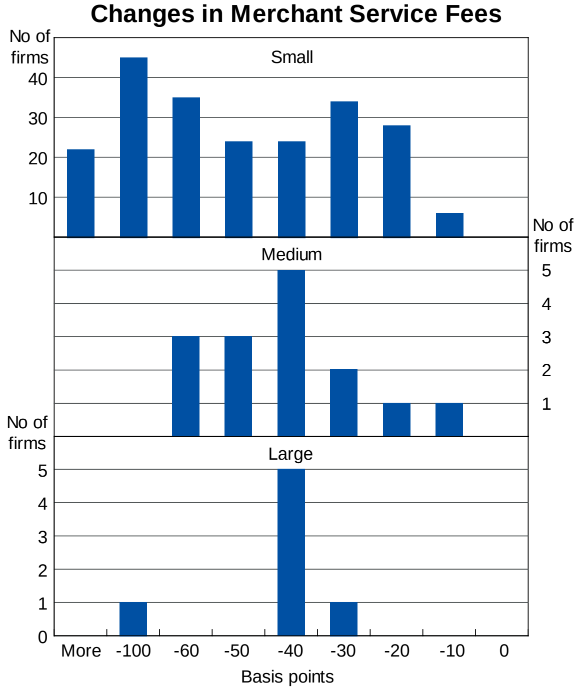
Merchant service fees in the regulated credit card schemes have fallen significantly since the introduction of the reforms. According to data collected by the Bank from financial institutions, the average merchant service fee in the June quarter 2004 was 0.99 per cent, compared with 1.41 per cent immediately prior to the standard on interchange fees becoming effective (Graph 3). This fall is broadly in line with the fall in the average interchange fee. Most of the decline

Graph 3
Banks' Average Merchant Service Fee



Source: RBA

Graph 4
Changes in Merchant Service Fees



Source: Merchant Broking Services Australia; RBA

in merchant service fees occurred immediately after the standard became effective on 31 October, although downward pressure on fees appears to be continuing. Based on current spending levels, the fall in merchant service fees represents a saving to merchants of just over $500 million per annum.

In addition to collecting data on merchant service fees, the Bank has met with a large number of merchants in Sydney and Melbourne and obtained detailed data on merchant service agreements for over 200 other merchants. Most merchants visited received substantial unilateral fee reductions, generally matching the reduction in the interchange fees. Many have also been able to negotiate larger reductions than those initially offered, as some banks have used the increased focus on interchange fees as an opportunity to expand their business. Small merchants appear to have done particularly well, although they still face higher fees than large merchants (Graph 4).[2] The liaison also suggests that the average merchant service fee may fall a little further as banks continue to vie for business.

One factor enhancing competition has been the emergence of brokers and industry organisations assisting small businesses to find the best deals. These brokers can save merchants the time involved in negotiating with a range of banks, in return receiving a share of the savings achieved in the first year.

2 *The Bank has data on 218 small firms (annual turnover less than $10 million), 15 medium firms (turnover between $10 million and $500 million), and 7 large firms (turnover greater than $500 million).*

Merchants have also reported that while there have been some increases in terminal fees, charges for paper, and fees for transactions that are charged back, the increases have generally been small. The data collected from the banks confirm this.

Product restructuring

Most credit card issuers have restructured their credit card offerings and pricing over the past year. Annual and other fees have been increased, particularly with cards that offer frequent flyer points as rewards. Some banks have also increased the spending needed to redeem particular rewards. Three out of the four major bank issuers have capped the number of reward points that can be earned in a year: the ANZ Frequent Flyer Visa card limits the total points a cardholder can earn to under 40 000 per year; the Commonwealth Bank limits earnings to 50 000 points per year in its standard rewards program; and the NAB limits earnings to 150 000 points per year. Offsetting this, many issuers have introduced cards featuring introductory low interest rates, both on purchases and balance transfers and Virgin Money entered the market with a credit card featuring a permanently lower interest rate.

On balance, those customers taking advantage of reward programs are paying more, while those who do not pay off their balance in full each month have a greater choice of low-interest rate cards without the more traditional, and more expensive, extra features.

Charging for credit cards

Removal of the so-called 'no surcharge' rule has led some merchants to introduce charges for the use of credit cards. While there are no comprehensive data on the number of merchants that are doing so, examples can be found in a wide range of industries including airlines, business suppliers, computer retailers, clubs, councils, fashion retailers, furniture retailers, government departments, hotels, hardware and gardening retailers, kitchen manufacturers, motorways, removalists, restaurants, schools, supermarkets, travel agents and utilities. In some cases, the ability to charge has allowed merchants to introduce credit cards as a means of payment where previously they did not offer customers this option. Examples of this can be found in competitive low-margin retailing as well as the provision of services by local government.

Most merchants that do charge for credit cards impose a uniform charge across credit and charge cards although some merchants are imposing higher charges for the more expensive American Express and Diners Club cards. There are also a number of examples in which merchants are charging for payments on American Express and Diners Club but not for payments on credit cards.

One effect of the charging for credit and charge card payments is the provision of better price signals to consumers about the relative costs of different means of payment. As such, charging can contribute to the overall efficiency of the payments system. The ability to charge may have also contributed to the downward pressure on merchant service fees discussed above. In particular, the threat of imposing a charge may allow merchants to negotiate a lower fee from their acquirer in exchange for agreeing not to impose a charge.

Access regime

APRA has been working with a number of organisations interested in pursuing SCCI applications. Approval as an SCCI will allow these organisations to apply for participation in the credit card schemes under the provisions of the access regime. In August 2004 GE Money announced that it had received approval by APRA for three of its subsidiaries to become SCCIs under the new arrangements. GE Money is already a member of one of the credit card schemes, but issues cards in Australia on the basis of its ownership of a bank in Ohio in the United States. That business will now be transferred to the new Australian entities.

As required by the access regime, each of the card schemes has either amended its rules to allow members to specialise in acquiring, to remove penalties related to the relative importance of acquiring (so called 'net issuer' rules and penalties) and to allow self acquiring, or has provisions in its rules that make them subject to local regulatory requirements.

Other effects

As noted above, merchants have gained significant savings in merchant service fees as a result of the lower interchange fees. Given the competitive environment in which most merchants operate, these lower fees are likely to eventually find their way into lower prices of goods and services than would have otherwise have been the case. When fully passed through, the reduction in fees would be expected to reduce the Consumer Price Index (CPI) by between 0.1 and 0.2 percentage points. While important, this change is difficult to observe in the overall CPI, which is increasing, on average, by around 2½ per cent per year.

In time, merchants may also receive cost savings through slower growth in credit card use as consumers respond to changed price signals and use other payment options. It is, however, too early to tell what effect the reforms have had on the relative growth of credit cards and other payment methods.

Overall, the changes seen to date are largely as expected. For many consumers, the effective price they face when deciding whether or not to use a credit card has increased, with less generous reward points and charging in some cases. This increase has effectively removed some of the subsidy that frequent users of credit cards have been receiving. In part, this subsidy has been at the expense of users of other payment methods who have been paying higher prices for goods and services as a result of the high merchant service fees. To the extent that prices are lower than they would have otherwise been, users of other payment methods are better off than they were prior to the reforms.

Three-Party Schemes

The credit and charge card schemes operated by American Express and Diners Club are not subject to the Bank's standard on interchange fees. This reflects the fact that, at the time the reforms were implemented, these schemes were almost exclusively three-party schemes with no interchange fee being paid. As noted above, they have removed their 'no-surcharge' rules.

Despite not being subject to the interchange standard, merchant service fees for these schemes have been under downward pressure; over the year to the June quarter the average fee fell by around 13 basis points. This fall, however, is considerably less than that in the four-party schemes, with the gap between the average fees in the three and four-party schemes widening by around 30 basis points over the past year. While over time this differential would be expected to narrow under competitive pressure, the extent and speed with which this occurs will depend upon the success that merchants have in negotiating with American Express and Diners Club.

A notable development over the past year was the agreement between the traditional three-party schemes and banks to market and issue their cards. Two major banks have entered into agreements with American Express to issue American Express cards. These agreements are similar to those American Express has reached with banks in many other countries and involve the payment of fees to the banks by American Express. A third bank has entered into an agreement with Diners Club under which Diners Club issues cards to the bank's customers and the bank shares the resulting net profits.

One motivation for these arrangements from the banks' perspective is to move customers who accumulate very high reward points on their conventional credit card programs to different cards. The credit card business of many of these customers is unprofitable given the subsidy that is effectively offered for credit card payments. Shifting these customers to American Express and Diners Club, with their higher merchant service fees, may increase the profitability of the overall credit card portfolio, particularly if the higher merchant service revenue leads to a larger payment to the issuing bank than under the traditional four-party scheme.

Whether or not these arrangements have the potential to undermine the Bank's reforms is yet to become clear. Over the past year, there has been a small increase in market share of American Express and Diners Club but this has been from a low base. Many cardholders have yet to decide whether to keep these cards once they have to pay annual fees. Nevertheless, the Board is currently looking closely at the structure of the agreements to assess whether it would be in the public interest to regulate the arrangements. In particular, the Board is focussing on the various fees being paid by American Express and Diners Club to their partner banks and the extent to which they have similar characteristics to interchange fees in the Bankcard, MasterCard and Visa schemes. If competition is putting downward pressure on the merchant fees of American Express and Diners Club, these payments would also be expected to be under downward pressure. The Board is therefore also closely monitoring changes in merchant fees for American Express and Diners Club.

EFTPOS and Visa Debit

The Board has also spent considerable time examining debit cards over the past year. In particular, it has focussed on the issues of whether the interchange fee arrangements in the EFTPOS and Visa Debit card systems promote the efficiency of the overall payments system and whether access arrangements to the EFTPOS system are conducive to strong competition.

Although both the EFTPOS and Visa Debit systems allow cardholders to make point-of-sale purchases using a deposit account, they have very different interchange fee arrangements. In the EFTPOS system the interchange fee is normally a flat fee and paid by the issuer of the card to the institution that acquires the transactions. The fee is negotiated bilaterally and averages around $0.20 per transaction. In contrast, in the Visa Debit system the interchange fee flows the other way and, as with credit card purchases, is based on a percentage of the amount spent – 0.44 per cent for a transaction at the point of sale and 0.60 per cent for all other transactions.

The Joint Study and subsequent analysis have not found a convincing rationale for either of these fees. In the case of EFTPOS, the evidence suggested that the costs and revenues on the issuing and acquiring sides of the business were not significantly different. As a result, the standard 'balancing' argument that interchange fees are necessary for a payment system to operate does not appear to be relevant. This conclusion was supported by the observation that Australia is almost unique in having interchange fees flow from the issuer to acquirer. In the case of Visa Debit, the Joint Study noted that there seemed no justification for the same interchange fee to apply as in credit cards. In particular, a scheme-based debit card, unlike a credit card, does not involve the extension of credit on interest-free terms.

Over the past year the Board has analysed how these differences in interchange fees have affected, and are likely to affect, the behaviour of cardholders, merchants and issuers. It has also considered the relationship between the interchange fees in the credit card and EFTPOS system. It concluded that these interchange fees were likely to have significant effects on the long-term incentives for issuers to support both schemes.

The potential for interchange fees and scheme rules to affect the structure of the payments system was well illustrated by a recently concluded court case in the United States. A large group of merchants, led by Wal-Mart, sued MasterCard and Visa over their activities related to their debit cards and, in particular, the 'Honour All Cards' (HAC) rule. This rule required merchants that accept MasterCard and Visa credit cards to also accept their debit cards, despite the fact that competing PIN-based debit cards (equivalent to Australian EFTPOS cards) were significantly cheaper to accept. Compounding the merchants' concern was the fact that spending on scheme debit cards was considerably larger than spending on PIN-based debit cards (Table 2). The case was eventually settled when MasterCard and Visa agreed to: revoke the rule as it applied to their debit cards; reduce their interchange fees for debit cards; clearly identify their debit cards; and pay a multi-billion dollar settlement.

Table 2: United States Debit Card Transactions

Market share

	1993	2003
MasterCard	7	12
Visa	32	48
PIN-based	61	40
TOTAL	**100**	**100**

Source: Nilson Report, Issue 809,April 2004

In Australia, Visa Debit has not achieved the same market penetration as in the US. This reflects the fact that it is mainly smaller institutions that issue the card. Nonetheless, the same concerns as applied in the US are relevant in Australia. Looking forward, given the large differences in interchange fees in the EFTPOS and Visa Debit systems, there may be an incentive for issuers to issue scheme-based debit cards in preference to EFTPOS cards, despite scheme-based debit cards having higher overhead expenses and higher rates of fraud.

Given that the prices customers and issuers are responding to bear little resemblance to the underlying costs – partly as a result of the size and direction of the interchange fees – the

Board has been of the view that the efficiency of the overall payments system could be enhanced through further reform.

The Bank had asked Visa and institutions that issue Visa Debit cards (mostly credit unions, building societies and some regional banks) to address its concerns about the Visa Debit system. Although some progress was made, discussions were complicated by the fact that issuing institutions could not effectively discuss what would amount to the collective setting of interchange fees. Given this and its previous analysis, the Board determined that it would be in the public interest to designate the Visa Debit system.

In the case of EFTPOS, an industry working group was formed in 2002 to examine options for reform of interchange fees. The result was a proposal to set these fees to zero. The ACCC initially proposed to deny the application due to concerns about access arrangements. In response, the Australian Payments Clearing Association (APCA) committed to developing an access regime and the RBA indicated that, were these efforts to falter, it would consider designating the EFTPOS system to achieve access reform. These actions satisfied the ACCC that access reform would occur in the short to medium term. In light of this, the ACCC authorised the application in December 2003. This decision was then overturned by the ACT in May 2004 after an appeal by a number of merchants. Following that decision, the Board invited submissions from interested parties on whether it would be in the public interest for it to designate the EFTPOS debit card payment system under the *Payment Systems (Regulation) Act*. Following that process, the Board concluded that designation was in the public interest and on 9 September 2004 the Bank designated the EFTPOS system. Following a request from the Australian Merchant Payments Forum and its members, the Bank provided a document setting out the reasons for the decision. The document was published on the Bank's website on 14 October 2004.

The Board has asked for submissions from interested parties on standards it might apply to Visa Debit and the EFTPOS system. It will consider those submissions and undertake its own analysis with a view to developing possible standards. A draft of any such standards will be made available for comment prior to finalisation.

Access regime for EFTPOS

APCA has been working to develop an access regime for the EFTPOS system over the past year. Most responses to the Board's invitation to comment on whether designation of the EFTPOS system would be in the public interest argued that APCA was making acceptable progress and that there was no need for regulatory intervention. At this stage it is not the Board's intention to establish an access regime for the EFTPOS system under the *Payment Systems (Regulation) Act*, although it will monitor progress carefully and will keep the situation under review.

Automated Teller Machines

There are currently over 20 000 ATMs deployed throughout Australia. They processed over 741 million transactions worth over $124 billion in the year to June 2004 and around 48 per cent of these were withdrawals from ATMs not owned by the cardholder's financial institution, so called 'foreign' ATMs. The average amount of a withdrawal was $169, with withdrawals at foreign ATMs significantly smaller than own ATM withdrawals.

In its work on ATMs, the Joint Study noted that the price of withdrawing funds from a foreign ATM appeared to be much higher than the cost of providing the service. Part of the reason for this is the interchange fee arrangements in the ATM system. Like the EFTPOS system, the Australian ATM system is built on a series of links between card issuers and ATM owners, including the major banks and some industry groups. As part of these links, fees are paid from the card issuer to the owner of the ATM to reimburse the ATM owner for providing services to the issuer's customers. This interchange fee is negotiated bilaterally between the card issuer and ATM owner although there is considerable uniformity across agreements. The average interchange fee is a little over $1 and has changed little since the 1980s when many of the links were first established.

When a cardholder uses a foreign ATM, their bank pays around $1 to the ATM owner. The cardholder's bank typically charges the cardholder a 'foreign fee' which recovers not only the interchange fee but also adds a margin. Foreign fees are currently around $1.50.

The Joint Study found that the average cost of a withdrawal at an ATM was around $0.50 in 1999. Even allowing for cost increases, this suggests that cardholders using other institutions' ATMs are likely paying substantially more than the cost of the service. The Joint Study concluded that one reason for this was a lack of competitive pressure on interchange fees.

As for EFTPOS and Visa Debit, the industry has been working on reforms that would see increased competitive pressure on foreign ATM charges. Prior to the ACT decision on EFTPOS, the industry had found what it regarded as a suitable way forward. This proposal involved a combination of direct charging for foreign transactions by most ATM owners and the formation of 'no-charge' networks by some smaller institutions. ATM owners would either levy a direct charge or receive an interchange fee; they would not do both. However, following the ACT's EFTPOS decision, some participants indicated that they were reassessing their commitment to a process that they viewed as expensive and offering an uncertain outcome.

Responding to these concerns, in June 2004 the Board sought the views of interested parties on whether it would be in the public interest for the Bank to designate the ATM system. Although there were some differences of view, many industry participants argued that the industry-led reform process should be allowed to continue. After considering the range of views put to the Board, it was decided not to designate the ATM system at this stage and to allow this process more time.

Access

As with the EFTPOS and credit card systems, access is important to the competitive functioning of the ATM system. To date, however, there has been little industry work on formulating an access regime for the ATM system, although members of the ATM industry working group have recently requested that APCA begin work on such a regime. This work should be able to draw on the experience that APCA has gained through its development of the EFTPOS access regime. The Board supports this work and will be monitoring progress closely.

Fraud

Over the past year, the Board has monitored a range of developments aimed at combating fraud in the payments system. It is conscious of the need for better data on this important topic. It has followed with interest discussions within the industry about the possible introduction of chip-based cards to replace magnetic stripes and the use of PINs rather than signatures to authorise transactions. Changes of this magnitude require careful planning, including establishing incentives that encourage both card issuers and acquirers to make the necessary investments in an efficient manner. The Bank has held discussions with a range of participants on these questions over the past year with a view to assessing whether there is a role it can play in the industry's analysis of these issues.

Purchased Payment Facilities

When the *Payment Systems (Regulation) Act* was enacted in 1998, it included a section on regulation of purchased payment facilities. Purchased payment facilities are facilities in which consumers pay in advance for an instrument that can be used to make a variety of payments. The value paid up front by the consumer is known as the stored value. Electronic cash and smart cards are examples of purchased payment facilities as are some payment facilities for use over the Internet.

In its 1997 report, the Wallis Inquiry came to the view that, since firms offering these facilities are holding funds on behalf of consumers, some regulation was required. Part 4 of the *Payment Systems (Regulation) Act* therefore required holders of stored value to either be an ADI, and hence be supervised by APRA, or have an authority or exemption issued by the Bank. This was designed to give security to the value and therefore protect the interests of consumers and promote public confidence in the system.

It became apparent, however, that if such facilities allowed for the repayment of value, either in part or in full, to the cardholder, the facility was very similar to a deposit at an ADI. In 2000 the Government therefore endorsed an approach agreed by the Bank and APRA that deposit-like purchased payment facilities would be regulated by APRA. Such an approach would ensure that these facilities, whether issued by an ADI or otherwise, would be regulated under a consistent regime.

To be regulated by APRA, the facility must be similar to a deposit. There is a two-pronged test for this:

- the facility is available for purchase and use on a wide basis; and
- all or part of the facility's unused value is repayable on demand in Australian currency.

This arrangement nevertheless left some uncertainty about the regulatory framework for facilities not eligible to be supervised by APRA. The definition of a purchased payment facility in the *Payment Systems (Regulation) Act* is very broad. As a result, many limited-purpose systems and products that have never been subject to regulation are potentially captured, such as pre-paid transit cards and gift certificates. It was also uncertain how schemes in pilot or test phase were to be treated. Furthermore, the *Financial Services Reform Act 2001* required, as part of its new licensing regime, providers of purchased payment facilities to be licensed by the Australian Securities and Investments Commission (ASIC). This created the potential for facilities to go through two overlapping licensing processes with the Bank and ASIC.

To address these issues, the Bank announced in March 2004 some class exemptions for purchased payment facilities. The objective was to promote competition while ensuring public confidence in the systems and not imposing unnecessary regulatory burden on those facilities that are unlikely to pose material risk to users. In particular, a purchased payment facility will not be subject to the *Payment Systems (Regulation) Act* where:

- the total outstanding amount of the facility is limited to less than $ 1 000 000, or where a facility can be used to make payments to 50 or fewer persons; or
- its obligations are guaranteed by an ADI, or by a Commonwealth, state or local government authority.

These exemptions should allow small, relatively closed facilities and pilot schemes to operate without regulation. Facilities that do not meet these criteria and are not otherwise regulated by APRA will be considered for authorisation on a case-by-case basis. To date the RBA has not specifically authorised or exempted any purchased payment facilities.

Safety and Stability

Over the past decade the safety and stability of Australia's payments system has been enhanced by a number of developments. These include the introduction of real-time gross settlement (RTGS) in 1998, the launching of the Continuous Linked Settlement (CLS) Bank for settlement of foreign exchange transactions in 2002, and the provision of greater legal certainty to various netting arrangements. These developments have given Australia a safe and well-functioning high-value payments system that compares favourably with those around the world.

Over the past couple of years the Board's work in relation to the safety and stability of the payments system has focussed on the development of standards for central counterparties and securities settlement systems. It has also addressed settlement risks associated with retail payment systems and the resilience of the system as a whole to major operational disruptions.

Standards for Central Counterparties and Securities Settlement Systems

The *Corporations Act 2001* gives the Reserve Bank the power to set financial stability standards for central counterparties and securities settlement systems. As discussed in last year's Annual Report, standards were issued in May 2003, and came into force in March 2004. Under the *Financial Services Reform Act 2001* both central counterparties and securities settlement facilities must be licensed as clearing and settlement facilities (CS facilities). These licences were granted by the Minister with portfolio responsibility for the *Corporations Act* at the same time as the standards came into force.

The standards for central counterparties apply to the Sydney Futures Exchange Clearing (SFEC), which acts as the central counterparty for futures and options transactions on the Sydney Futures Exchange, and the Australian Clearing House (ACH) which acts as the central counterparty for transactions in equities, futures and options on the Australian Stock Exchange (ASX). When a central counterparty is used, the contract between a buyer and seller is replaced with two separate contracts – one between the buyer and the central counterparty and the other between the central counterparty and the seller. As a result, all settlement risk associated with the transactions is borne by the central counterparty.

The standard for securities settlement systems applies to Austraclear, which settles transactions in debt securities and is run by the Sydney Futures Exchange, and to the ASX Settlement and Transfer Corporation, in which trades in all ASX markets are settled. Securities settlement facilities provide a secure process for delivery of a security from one party against payment of funds by another.

Each standard requires that:

'a clearing and settlement facility licensee must conduct its affairs in a prudent manner, in accordance with the standards of a reasonable clearing and settlement facility licensee in

> contributing to the overall stability in the Australian financial system, to the extent that it is reasonably practicable to do so'.

The Bank has published with each standard a series of measures that it considers are relevant in determining whether a clearing and settlement facility licensee has met the standard. These are summarised in Box 1 and Box 2.

Compliance with Financial Stability Standards

The Reserve Bank is required to assess how well central counterparties and securities settlement systems are complying with these standards and to provide a written report to the Minister with portfolio responsibility for the *Corporations Act 2001*.

An interim report was provided in April 2004, and covered the short period from implementation of the standards on 11 March 2004. This report relied on material provided by the SFE and the ASX when applying for licences under the amended *Corporations Act*. The report noted that there were a number of measures with which the facilities did not initially comply, but that a transitional period had been granted to allow the facilities to make the necessary changes. These changes dealt with arrangements for industry testing of business continuity, clearing support, and the real-time processing of payments for derivatives transactions. Excepting these, and noting the limitations of the data available at the time, the Bank found that the facilities complied with the financial stability standards.

Over the following months, the facilities provided additional information to the Bank, including responses to a detailed questionnaire covering all aspects of the facilities' compliance with the standards. Based on this more detailed information, a full report on the compliance of both securities settlement facilities and central counterparties was completed and forwarded to the Minister.

This report noted that the outstanding issues relating to business continuity arrangements and real-time processing of payments for derivative transactions had been resolved; however, the matter of clearing support arrangements for the ACH remained outstanding. With this exception (discussed further below), the facilities were judged to have met the requirements of the financial stability standards. The report did, however, identify a number of areas where there is scope for further progress, including the stress testing of the exposures of the central counterparties and some aspects of business continuity procedures for all the facilities.

Split of the National Guarantee Fund

In order to meet the requirements for clearing support described in Measure 7 of the Standard for Central Counterparties, the ACH must ensure that it has sufficient liquid funds to settle its obligations in the event of a default of a participant. Currently, a potentially important source of these funds is the claim that the ACH has on the National Guarantee Fund (NGF).

The NGF is a compensation fund of around $165 million operated by the Securities Exchanges Guarantee Corporation. Currently, the NGF may pay out funds under two broad 'heads of claim'. The first is to investors who have suffered a loss from the default of a broker. The second, usually referred to as clearing support, is where the ACH draws on funds to allow it to settle a defaulting participant's obligations in the clearing house.

Box 1: Standard for Central Counterparties

The Standard

'A CS facility licensee must conduct its affairs in a prudent manner, in accordance with the standards of a reasonable CS facility licensee in contributing to the overall stability of the Australian financial system, to the extent that it is reasonably practicable to do so.'

The standard is implemented by a series of minimum measures, summarised below, that the Reserve Bank considers relevant in meeting the standard.

Measures

1. Legal framework

A central counterparty must have a well-founded legal basis, with rules that are clear and enforceable.

2. Participation requirements

The participation requirements of a central counterparty must ensure that participants have sufficient resources, both financial and otherwise, to meet obligations arising from participation in the facility.

3. Understanding risks

A central counterparty's rules and procedures must enable participants to understand the risks that they face through using the central counterparty. Rules and procedures should be clear, comprehensive and accompanied, if necessary, by appropriate explanatory material.

4. Novation

The rules and procedures of the central counterparty must clearly identify both the nature and scope of novation and the point in the clearing process at which trades are novated.

5. Settlement

A central counterparty's exposures must be clearly and irrevocably extinguished on settlement. This requires the delivery-versus-payment (DvP) settlement of obligations where the exchange of assets occurs, or real-time settlement of payment obligations arising from derivatives transactions.

6. Default arrangements

A central counterparty's rules and procedures must provide for timely settlement (typically by the end of the settlement day) notwithstanding a default.

7. Risk controls

A central counterparty must have comprehensive risk control arrangements. In particular, it must ensure that, in all but the most extreme circumstances, if the participant with the largest settlement cannot meet its obligations to the central counterparty, the central counterparty will still be able to settle all of its obligations, in a timely manner.

8. Governance

The central counterparty must have effective, accountable and transparent governance arrangements, with appropriate expertise and independence.

9. Operational risks

The central counterparty must identify sources of operational risk and minimise these through the development of appropriate systems, controls and procedures.

10. Reporting to the Bank

A central counterparty must report to the Bank such matters as participant defaults and breaches or likely breaches of the standard. It must also provide audited annual accounts and management accounts and results of stress testing at least quarterly.

Box 2: Standard for Securities Settlement Facilities

The Standard

'A CS facility licensee must conduct its affairs in a prudent manner, in accordance with the standards of a reasonable Securities settlement facility licensee in contributing to the overall stability of the Australian financial system, to the extent that it is reasonably practicable to do so.'

The standard is implemented by a series of minimum measures, summarised below, that the Reserve Bank considers relevant in meeting the standard.

Measures

1. Legal framework

A securities settlement facility must have a well-founded legal basis, with rules that are clear and enforceable.

2. Participation requirements

The participation requirements of a securities settlement facility must ensure that participants have sufficient resources, both financial and otherwise, to meet obligations arising from participation in the facility.

3. Understanding risks

A securities settlement facility's rules and procedures must enable participants to understand the risks that they face through participation in the facility. Rules and procedures should be clear, comprehensive and accompanied if necessary by appropriate explanatory material.

4. Certainty of title

To the extent that it is relevant in the context of a particular securities settlement facility, securities settlement facility licensees must ensure that the facility's participants have proper title to securities held in the facility.

5. Settlement

The facility must ensure that settlement occurs on a final and irrevocable basis, reducing the risk of systemic disturbance by eliminating principal risk. Primarily, this requires the delivery-versus-payment settlement of obligations arising from a trade.

6. External administration

A facility must be able to suspend or cancel the participation of the party subject to external administration. Any arrangements for dealing with unsettled trades of a participant in external administration must be clear to all participants and to be carried out in a timely manner.

7. Operational risks

A securities settlement facility must identify sources of operational risk and minimise these through the development of appropriate systems, controls and procedures.

8. Reporting to the Bank

A securities settlement facility must report to the Bank such matters as participant defaults and breaches or likely breaches of the standard. It must also provide audited annual accounts and management accounts and results of stress testing at least quarterly.

The Board's view is that to the extent the ACH needs to rely on funds from the NGF to settle its obligations in the event of a participant defaulting, it does not meet the requirements of Measure 7. The exact funding that would be available for clearing support purposes in a crisis is not certain, nor is it clear how quickly funds could be accessed.

Initially, a short-term exemption from Measure 7 was provided to the ACH on the expectation that these two functions of the NGF would be split, with separate funds being set aside for settlement support and for investor protection. Such a split would avoid the risk of a situation arising where there were competing and simultaneous claims on the Fund.

The ASX has made an application under s891A of the *Corporations Act,* for part of the NGF's assets to be paid to the ACH. Under the Act, the Minister must approve the application and the necessary changes to the Corporations Regulations to remove the claim for clearing support funds from the responsibilities of the NGF. The Government is yet to give these approvals. Given this, the Bank has extended the period of relief to 1 April 2005 on the condition that the ACH maintains additional liquidity support arrangements agreed in March 2004.

Other developments

On 31 July 2004, the SFE ceased operating its Bond and Repo Clear facility (BRC) under which the SFEC had acted as a central counterparty for settlement of trades in Commonwealth Government securities since 2001.

This decision was in response to a potential problem identified with BRC's operating procedures in April. This problem related to the small number of cases where the transactions in a line of stock formed a loop or 'circle' in the market. In the case of some 'circles' it has been a long-standing settlement practice to 'deem' the transfer of the securities and settle only the cash components of the trades. This form of deemed settlement, however, fails the delivery-versus-payment (DvP) requirements under Measure 5 of the Financial Stability Standard for Central Counterparties which applied to BRC. The difficultly was that it exposed the central counterparty – and any other organisation in the circle – to the risk of loss if a payment was made without receiving securities in return. Once identified, the SFE recognised that BRC, as the central counterparty, could not continue to participate in this form of settlement. As a result, most participants curtailed their use of BRC. With little prospect of a reversal, the SFE elected to suspend the BRC service.

The practice of deemed settlement has continued, although this form of settlement accounts for only a small share of securities settlements. After collecting data from industry, the Bank came to the view that, while the practice exposes the participants to settlement risk which needs to be recognised and managed, it does not materially contribute to systemic risk, particularly given that a central counterparty no longer participates in the process.

International Developments – CPSS/IOSCO Draft Recommendations for Central Counterparties

When developing its financial stability standards for central counterparties and settlement facilities during 2002 and 2003, the Bank was aware of similar work being conducted by a joint taskforce formed by the Bank for International Settlements' Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of

Securities Commissions (IOSCO). This taskforce published draft *Recommendations for central counterparties* for public comment in March 2004.

The recommendations provide guidance to the operator of a central counterparty, and deal with a range of issues:

1. Legal risks
2. Participation requirements
3. Collateral requirements
4. Financial resources
5. Default procedures
6. Custody and investment risks
7. Operational risk
8. Money settlements
9. Physical deliveries
10. Links between central counterparties
11. Efficiency
12. Governance
13. Transparency
14. Regulation and oversight

Many of the recommendations contained in the CPSS/IOSCO report are similar to measures included in the Bank's standard. However, CPSS/IOSCO has taken a somewhat more prescriptive approach. For example, CPSS/IOSCO stipulates that margining requirements should be set to cover, at a minimum, 95 per cent of potential price movements. In contrast, the Bank's standard does not make margining mandatory, instead requiring central counterparties to have adequate risk control measures, which may include the ability to levy margins.

There are some areas that are covered by the CPSS/IOSCO report that are not explicitly dealt with in the Bank's standard. These include prescriptive recommendations as to the assets in which a central counterparty invests and cross-border links between central counterparties, and a discussion on the desirability of a central counterparty operating efficiently and the factors that influence its ability to do so.

The Board believes that these differences do not require amendment of its standard for central counterparties.

Failure-to-settle Arrangements

As noted above, Australia's real-time gross settlement system was introduced in 1998. Currently, around 90 per cent of the value of interbank payments is settled through this system. This represents a substantial decrease in overall settlement risk from the days when high-value payments were settled through the deferred net settlement system.

Notwithstanding the success of RTGS, on an average day some $13 billion in gross interbank obligations is still settled on a deferred net multilateral basis. This amount represents the settlement of cheques, direct entry and card payments.

For some time there have been concerns about how the deferred net multilateral settlement process would work in the event of one of the parties not being able to meet its obligations. One issue was the possibility that a liquidator could successfully challenge the multilateral netting arrangements. If such a challenge were successful, a surviving institution could be at risk of needing to pay its gross obligations to the defaulting institution, yet receive nothing in return. There was also some doubt as to whether surviving institutions would be able to reverse provisional credits made to customers' accounts for cheques written against the defaulting institution.

Given these concerns, the Bank has for some time been working with APCA to develop failure-to-settle arrangements that are robust and that have legal certainty. Under new arrangements, if an institution cannot meet its obligations:

(i) the multilateral settlement calculations will be recast to exclude all transactions with the 'failed' institution;

(ii) the net settlement obligations of the 'survivors' will be processed as normal and the RTGS payments day would begin, without the participation of the 'failed' institution;

(iii) cheques drawn on the failed institution will be 'deemed dishonoured'; and

(iv) each surviving institution will deal with the 'failed' institution to settle its resulting bilateral net obligations.

These arrangements have been incorporated into APCA's revised regulations and procedures. To ensure that they are as legally robust as possible, the Reserve Bank approved the new arrangements under the *Payment Systems and Netting Act 1998*. The Bank also made a determination that the settlement system for cheques is a 'recognised settlement system' for the purposes of the relevant section of the *Cheques Act 1986*. This has the effect of allowing cheques drawn on a failed institution to be dishonoured.

Agency Arrangements in RTGS

As noted in last year's report, the Bank now allows banks (and other holders of Exchange Settlement Accounts) whose aggregate real-time gross settlement transactions are relatively small to make payments through an agent. Two banks now act as agents, providing services to a total of three small banks.

CLS Bank

The Continuous Linked Settlement Bank (CLS) has now been operating for two years. In September 2003, CLS Bank expanded the range of currencies accepted for settlement beyond the initial seven currencies (Australian dollar, Canadian dollar, euro, Japanese yen, pound sterling, Swiss franc and US dollar), to include the Danish krone, Norwegian krone, Swedish krona and the Singapore dollar. Inclusion of the Hong Kong dollar, New Zealand dollar, Korean won and South African rand have also been endorsed in principle. Settlements in these currencies are likely to commence by 2005, bringing the total number of currencies in CLS to 15.

Across all eligible currencies there are currently, on average, around 105 000 settlements each day in CLS with a total value around US$1 trillion. In the Australian dollar, there are around 2 900 settlements each day with a total value around A$45 billion. For each currency, CLS estimates that roughly 30 per cent of the value of foreign exchange trading is currently settled through CLS.

Resilience

Another key aspect of safety and stability is resilience to wide-scale operational disruptions. The Board has a strong interest in the ability of the Australian payments system to withstand major problems of natural or man-made origin. Extensive contingency planning work, for example, was done in preparation for the Year 2000 date rollover. More recently, international events have highlighted the importance of adequate business continuity planning by individual financial institutions, as well as the need for strong crisis management at the system level. A number of points of potential systemic vulnerability have been identified in international studies. One is geographic concentration of the financial industry's operations and back-up centres. Another is the dependency on key vendors and external infrastructure, such as telecommunications services. A third is the interdependencies within the clearing and settlement process. The Bank is working with various industry groups and regulators to assess these risks and identify ways in which, where appropriate, they can be addressed.

Glossary

ACCC	Australian Competition and Consumer Commission
ACH	Australian Clearing House
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
ASTC	ASX Settlement and Transfer Corporation
ASX	Australian Stock Exchange
ATM	Automated Teller Machine
Austraclear	a securities clearing and settlement system
BIS	Bank for International Settlements
BRC	Bond and Repo Clear
Card issuer	an institution that provides its customers with debit or credit cards
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
CLS Bank	Continuous Linked Settlement Bank
CPSS	Committee on Payment and Settlement Systems
Direct debit	a pre-authorised debit on the payer's bank account initiated by the recipient (payee)
DvP	Delivery-versus-Payment
EFTPOS	Electronic Funds Transfer at Point of Sale
HAC Rule	Honour All Cards Rule
Interchange fee	a fee paid between card issuers and acquirers when cardholders make transactions
IOSCO	International Organisation of Securities Commissions
NGF	National Guarantee Fund
OCH	Options Clearing House
PIN	Personal Identification Number
RBA	Reserve Bank of Australia

RTGS (real-time gross settlement)	a payment system in which processing and settlement take place in real time (continuously)
SCCI	Specialised Credit Card Institution
Settlement	the discharge of obligations arising from fund transfers between two or more parties
SFE	Sydney Futures Exchange
SFEC	Sydney Futures Exchange Clearing

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Payments System Board

Chairman: Ian Macfarlane AC

Chairman since 1 July 1998
Governor of Reserve Bank of Australia
Present term expires
17 September 2006

Deputy Chairman: Philip Lowe

Deputy Chairman since
8 March 2004
Assistant Governor (Financial System)
Reserve Bank of Australia

John Laker

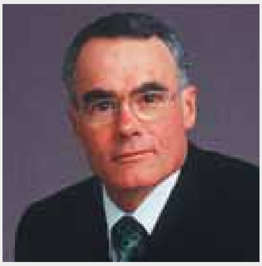
Chairman
Australian Prudential Regulation Authority
Member since 24 July 1998

Joe Gersh

Managing Director
Gersh Investment Partners Ltd
Member since 15 July 1998
Present term expires
14 July 2008

Sue McCarthy

Director
Member since 15 July 1998
Present term expires
14 July 2007



John Poynton

Executive Chairman
Azure Capital Pty Ltd
Member since 26 May 2000
Present term expires
25 May 2005

John Thom

Visiting Professor
Macquarie Graduate School of Management
Member since 15 July 1998
Present term expires
14 July 2006

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