REFORM OF CREDIT CARD SCHEMES IN AUSTRALIA
I

A Consultation Document

December 2001

RESERVE BANK OF AUSTRALIA

ISBN 0-642-50172-6

CONTENTS

EXECUTIVE SUMMARY

Introduction

1. The credit card network in Australia is extremely well developed and credit cards are used for a wide variety of transactions. Over the past decade, the number of credit card transactions has risen four-fold; credit cards overtook debit cards (EFTPOS) in 1999 as the main non-cash means of payment. Credit cards are now widely used purely as a payment instrument by cardholders who settle their credit card account in full each time and do not use the "revolving" line of credit.
2. For cardholders, credit cards provide a range of services. They are convenient and widely accepted, both in Australia and abroad. Most provide an interest-free period that allows cardholders a month or more in which to arrange settlement of their credit card purchases. They also provide a guaranteed refund to cardholders when goods or services purchased with credit cards are not delivered. Cardholders who make use of the revolving line of credit are able to buy goods and services earlier than their incomes would otherwise permit.
3. For individual merchants, credit card acceptance forms part of their competitive strategy of attracting sales from, or not losing sales to, rival merchants. Indeed, credit card use has become so widespread that most merchants believe they have no choice but to accept credit cards. Credit cards, like cash and debit cards (EFTPOS), provide merchants a guarantee of payment, unlike a cheque which might be subsequently dishonoured.
4. Credit card services are more costly to provide than most other payment instruments. Credit card issuers incur processing costs for each transaction, funding costs in providing credit – whether the interest-free period or the revolving line of credit – and costs of fraud and credit delinquencies. Credit card acquirers – the financial institutions that provide services to merchants – also incur processing and fraud costs and must meet refund obligations if goods and services purchased with credit cards are not delivered.
5. Someone must ultimately meet these costs. Two groups do so in Australia, at least in the first instance. One group are those cardholders who use the revolving line of credit, who pay interest rates significantly above rates on other forms of unsecured lending. The other group are merchants, which pay an average of 1.8 per cent of the value of each credit card transaction – and as much as four per cent in the case of small merchants – in merchant

service fees to their acquirers. Like other business inputs, these costs have to be covered by merchants, so they are passed onto all their customers, not just those who use credit cards, in the form of higher prices for goods and services. In this way, the costs of providing credit card services are ultimately borne by the community as a whole. Prices paid by users of lower-cost payment instruments are higher than would otherwise be the case, while prices paid by credit cardholders are lower than they would be if cardholders faced the costs of the credit card services they used. Within the latter group, there is a third group which directly contributes very little to the costs of credit card schemes – these are the cardholders (known as "transactors") who settle their credit card account in full each month. Although they normally pay an annual fee, they pay no transactions fees, enjoy the benefit of an interest-free period and in many cases earn loyalty points for each transaction.

6. It is not surprising that credit card usage in Australia has increased strongly in recent years in view of the price incentives facing consumers. Consumers using a debit card (EFTPOS) pay a fee to their financial institution (beyond a fee-free threshold) for accessing their own funds; "transactors" using a credit card pay nothing, and may be paid in the form of loyalty points, for using the funds of their financial institution. Nor is it surprising that banks and other deposit-taking institutions are promoting most actively the credit card because it is the payment instrument for which they receive the highest return, and yet it is one of the most expensive for merchants to accept.

7. This unusual structure of incentives is not the result of normal competitive processes. It is the consequence of the regulatory framework established by the credit card schemes and the fact that it is the same group of banks and other deposit-taking institutions that sets the fee structures for credit cards and the other main payment instruments in Australia.

The regulations of credit card schemes

8. The major credit card schemes in Australia have a set of regulations, which their Australian members collectively determine or agree to enforce, that:

   (i) set the wholesale fees (known as "interchange fees") that are paid to the issuer by the acquirer whenever a merchant accepts a credit card for payment;

   (ii) in the case of MasterCard and Visa, prevent merchants recovering from cardholders the cost of accepting credit cards; and

(iii) restrict membership of the schemes, broadly speaking, to authorised deposit-taking institutions supervised by the Australian Prudential Regulation Authority (APRA).

This regulatory structure is unique in Australia; a comparable set of restrictions has not been permitted in any other market without authorisation under the *Trade Practices Act 1974*.

9. These credit card scheme regulations have become the focus of closer public scrutiny in recent years, in Australia and elsewhere. The Financial System Inquiry (the Wallis Committee) highlighted interchange fee arrangements and restrictions on access to credit card schemes as areas of policy concern. In response, the Payments System Board of the Reserve Bank and the Australian Competition and Consumer Commission (ACCC) undertook and published (in October 2000) a detailed study of debit and credit card schemes in Australia, which concluded that Australia has a higher cost retail payments system than necessary, and that much of this cost is borne by consumers who do not use credit cards. The legal status of interchange fee arrangements under the *Trade Practices Act 1974* has also been separately reviewed by the ACCC.

10. Against the background set out in Chapter 1 of the consultation document, the Reserve Bank formally brought the Bankcard, MasterCard and Visa credit card schemes in Australia under its regulatory ambit in April 2001. Since then, it has consulted with a broad range of interested parties about whether the regulations established by the credit card schemes are in the public interest. The Reserve Bank's involvement is in fulfilment of the Payments System Board's mandate to promote efficiency and competition in the Australian payments system, consistent with overall financial stability.

The rationale for credit card scheme regulations

11. The normal competitive processes that drive markets ensure that consumers respond to efficient price signals and that resources are free to move to exploit profit opportunities. The community's welfare is enhanced as a consequence. Credit card scheme regulations have the effect of suppressing some of these processes. Nonetheless, the credit card schemes and their members have argued that the regulations are essential for the growth of credit card networks and, thereby, for community welfare.

Collective setting of interchange fees

12. Interchange fees in credit card schemes play a pivotal role in determining the incentives for consumers to use, and merchants to accept, credit cards.

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 through the merchant service fee. 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 even offering rebates in the form of loyalty points. The burden of this subsidy falls initially on merchants, which are charged more than the costs incurred by their acquirers, but it ultimately falls on the community as a whole through higher prices for goods and services in general.

13. In the consultation process, the Reserve Bank has addressed two particular questions about interchange fee arrangements in Australia:
    (i) what is the need for interchange fees in credit card networks; and
    (ii) will card scheme members acting in their own self-interest collectively set the "right" interchange fees from the community's perspective.

14. The subsidy to credit cardholders through the interchange fee has been defended on the basis that cardholders would not use their credit cards if they faced issuers' full costs; merchants would therefore be denied the full benefits of participating in credit card schemes. The subsidy, it is claimed, is needed to ensure that credit card networks reach their optimum size and deliver maximum benefits to cardholders and merchants. These arguments are carefully examined in Chapter 2 of the consultation document. It concludes that, while there may be a case for issuers to pass some of their costs onto merchants through interchange fees, there is presently no "science" in determining the level of such fees.

15. Credit card schemes and their members have also argued that interchange fees set collectively are efficient for the community as well as for the schemes. Their claim is that competition between credit card schemes, and between credit cards and other payment instruments, prevents interchange fees going too high or too low. There is no strong support for this argument in the emerging economic literature in this area, while the practical counter is the reality of interchange fee setting in Australia. Interchange fees have been rigid – rates have not changed at all in 27 years in the Bankcard scheme and only once in the past decade in the MasterCard and Visa schemes (when, in the latter case, they rose) – and the fee-setting process itself has lacked transparency and any objective benchmarks. The "checks and balances" that would be provided if there were robust competition in the payments system do not seem to have operated. Overlapping governance arrangements mean that the

four major banks dominate the credit card schemes in Australia and are also the main providers of competing payment instruments; because there are no other large credit card acquirers, merchants have not had a strong and independent voice in interchange fee setting. This environment provides no assurance that the current level of interchange fees passed onto merchants, and ultimately onto the community, is in the community's interest. When merchants have limited ability to resist credit cards, the risk is that interchange fees can be pushed above the efficient level, allowing issuers to further subsidise credit cardholders and resulting in the overprovision of credit card services and underprovision of alternative payments instruments.

Restrictions on merchant pricing

16. Restrictions on merchant pricing imposed by MasterCard and Visa prevent merchants recovering from cardholders the costs of accepting these credit cards. Merchants therefore have an "all or nothing" choice in accepting credit cards and no alternative but to recover their credit card costs by passing them through to all their customers in the form of higher prices of goods and services. These restrictions are defended as the means of preserving the subsidy to credit cardholders made possible by interchange fee revenues. The claim is that merchants as a whole would be denied the full benefits of participating in credit card schemes if the subsidy to credit cardholders were unwound at the till. Although this claim is made by the card schemes on behalf of merchants, merchants themselves have argued strongly against the restrictions.
17. Arguments for restrictions on merchant pricing are weighed, in Chapter 3 of the consultation document, against the adverse consequences of these restrictions. Restrictions on merchant pricing are a restraint on trade. Card scheme members are free to provide incentives to their customers with a view to maximising their profits, but collectively deny merchants the same opportunity. For consumers who do not use credit cards, the restrictions are harmful because such consumers pay higher prices for goods and services than they would otherwise; in this way, they contribute indirectly to the costs of the credit card schemes. Because credit cardholders are using what appears to them to be a free payments service, the price signals that normally guide markets to an efficient use of resources are suppressed.

Restrictions on entry

18. Credit card schemes impose minimum entry standards that are intended to ensure the safety of the schemes. Broadly speaking, only authorised

deposit-taking institutions supervised by APRA are eligible for membership. The card schemes also prevent their members specialising in credit card acquiring, or impose financial penalties on members whose main activity is acquiring, in the interests of "balanced development" of the schemes. The arguments for restrictions on entry to credit card schemes are analysed in Chapter 4 of the consultation document.

19. The Reserve Bank acknowledges that some minimum entry standards can be justified because credit card issuing and acquiring does generate risks. Issuers need to assess the creditworthiness of cardholders and settle transactions with acquirers. Acquirers need to assess the creditworthiness of merchants and, under card scheme rules, finance refunds to cardholders if goods or services purchased with a credit card are not delivered. The failure of any one card scheme member to manage its risks becomes an exposure for all other members because of loss-sharing arrangements in each scheme.

20. Reliance on prudential supervision by APRA may provide a cost-effective and objective screening device to determine eligibility for membership. In seeking to promote safety, however, scheme restrictions deny access to non-financial institutions that may have the skills, financial substance and distribution networks to become effective competitors in the credit card market. The exclusion of such institutions was a particular concern to the Financial System Inquiry. Experience suggests that long-term incumbents in a market may not provide the spark for more intense competition – new entry was the key, for example, to more competitive pricing in the residential mortgage market in Australia. The additional scheme restrictions on credit card acquiring in the interests of "balanced development" are particularly difficult to defend in a market that, on a number of indicators, needs a spur to competition.

Reform of the credit card schemes

21. Having weighed a range of arguments from interested parties, the Reserve Bank is of the opinion that the main regulations established by the credit card schemes in Australia do not meet the public interest test. The regulations suppress or distort the normal market mechanisms in ways that work against, rather than contribute to, the community's welfare. The pricing of credit card services 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 the competitive pressures that non-financial institutions of substance could bring to bear. Overall, the community is paying a higher cost for its retail payments system than is necessary.

22. The Reserve Bank is therefore proposing a reform of credit card schemes that will promote efficiency and competition in the Australian payments system. Although it is using its payments system powers for this purpose, the Reserve 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, they will now be better able to do so. The reform measures involve:

   (i) an objective, transparent and cost-based methodology for determining interchange fees;

   (ii) freedom for merchants to recover from cardholders the costs of accepting credit cards; and

   (iii) a more liberal access regime that allows for the entry of specialist credit card service providers, both issuers and acquirers, to be supervised by APRA.

   These reform measures, which have been endorsed by the Payments System Board of the Reserve Bank, are in line with changes that have been introduced or are contemplated in other countries in which credit card scheme regulations have come under scrutiny.

23. The Reserve Bank's reform measures deal only with the regulations of the credit card schemes governing the collective setting of wholesale fees, entry to the schemes and restrictions on merchant pricing. The measures do not deal with the relationships between individual scheme members and their customers which are not covered by scheme regulations. Hence, they do not cover the setting of credit card fees and charges to cardholders and merchants, or interest rates on credit card borrowings.

A standard for interchange fees

24. The Reserve Bank acknowledges that interchange fees can have a role in credit card schemes, as a means of enabling issuers to recover the costs of providing specific credit card payment services that are of benefit to merchants. The Reserve Bank's draft standard provides an objective and transparent method for determining interchange fees. The credit card schemes and Australian banks have proposed a much wider range of costs for inclusion in interchange fees, but without convincing explanations of why these costs should be passed to merchants. Some of these other costs are proprietary matters between individual card issuers and their cardholders and are not intrinsic to credit card schemes, while the inclusion of costs such as credit losses would involve

an element of double-counting since these costs are already being recovered in credit card interest rates.

25. The draft standard requires that credit card schemes publish their interchange fees and the aggregate costs that have been included. This will ensure that the calculation of interchange fees is entirely transparent and can be readily understood by card scheme members, the merchants to which the interchange fees are passed, and the community. Identifying the specific costs involved will also give card scheme members and merchants an incentive to address these costs.

A standard for merchant pricing

26. In the Reserve Bank's opinion, scheme restrictions on merchant pricing are a source of serious inefficiencies in the pricing of payment instruments. In no other market can a small number of institutions dominating the provision of a widely-used product seek to promote that product over others by preventing merchants charging its costs to their customers. The Reserve Bank's draft standard, which follows a decade of official concerns about these particular restrictions, is straightforward. It prevents credit card schemes and their members from preventing merchants recovering from cardholders the costs of accepting credit cards. Whether merchants avail themselves of the freedom to recover these costs will be for their commercial judgment.

An access regime for credit card schemes

27. Though some minimum entry standards are appropriate, the Reserve Bank believes that the current barriers to entry to the credit card schemes unduly restrict competition. The Reserve Bank's draft access regime liberalises access to the credit card schemes by allowing non-financial institutions of substance to enter the credit card market in their own right. Such institutions will need to be authorised and supervised by APRA. They will need to demonstrate to APRA that they have the skills, staffing and operational capacity for the scale of credit card activity proposed, and will have 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, without undermining the comfort from having credit card scheme members prudentially supervised or the benefits to the credit card schemes of "outsourcing" membership eligibility to APRA.

28. The draft access regime specifically prohibits any card scheme restrictions or financial penalties on members that wish to specialise in credit card acquiring. These restrictions have no basis in risk management and, whatever their original rationale, have the effect of handicapping potential competitors.

Impact of the Reserve Bank's reform measures

29. The Reserve Bank's proposed standards and access regime will apply to the three designated credit card schemes, Bankcard, MasterCard and Visa. The "three party" card schemes – American Express and Diners Club – do not have collectively set interchange fees nor restrictions on entry enforced by existing members, and the Reserve Bank saw no case on public interest grounds to designate these schemes to deal with these issues. However, American Express and Diners Club do impose restrictions on the freedom of merchants to recover credit and charge card costs from their cardholders. The Reserve Bank will be consulting these schemes as to why they should not also be required to meet the standard on merchant pricing.

30. The proposed reform measures will promote greater efficiency, transparency and competition in the Australian payments system, to the benefit of the community as a whole, while leaving the basic structure of credit card schemes intact. The draft standard on interchange fees is likely to result in a significant reduction in bank fees; in this instance the initial beneficiaries will be merchants that accept credit cards, but the reduction will pass through to all consumers in the form of prices of final goods and services that will be lower than they otherwise would be. Over time, the freedom of merchants to recover their credit card costs from cardholders and the possible entry of new types of credit card service providers will strengthen the workings of competition. Of course, reform will have a direct impact on credit cardholders and the current subsidy they receive, although it will be a matter for individual card issuers, in competition with other issuers, to determine how they will price their credit card services to customers. That is the market mechanism at work. Objections to reform of the designated credit card schemes – that it would give a "free kick" to the relatively small, higher cost three party schemes or that gains to merchants would not be passed onto consumers – are, at their heart, a vote of no confidence in the competitive process in Australia. This is a view that the Reserve Bank does not share.

CHAPTER 1: BACKGROUND TO REFORM

1.1 Introduction

Australia has world-class debit card (EFTPOS) and credit card payment networks which, over recent years, have become the main means, other than cash, by which Australians make their payments. Debit and credit card transactions currently account for around 45 per cent of the number of non-cash payments, almost trebling their share over the past decade and displacing traditional payment instruments, particularly cheques, in the process (Table 1.1).

Table 1.1: Number of non-cash payment transactions
per cent, May 2001

Cheques	21
Credit cards	24
Debit cards	21
Direct entry credits	25
Direct entry debits	9
	100

Source: Australian Payments Clearing Association.

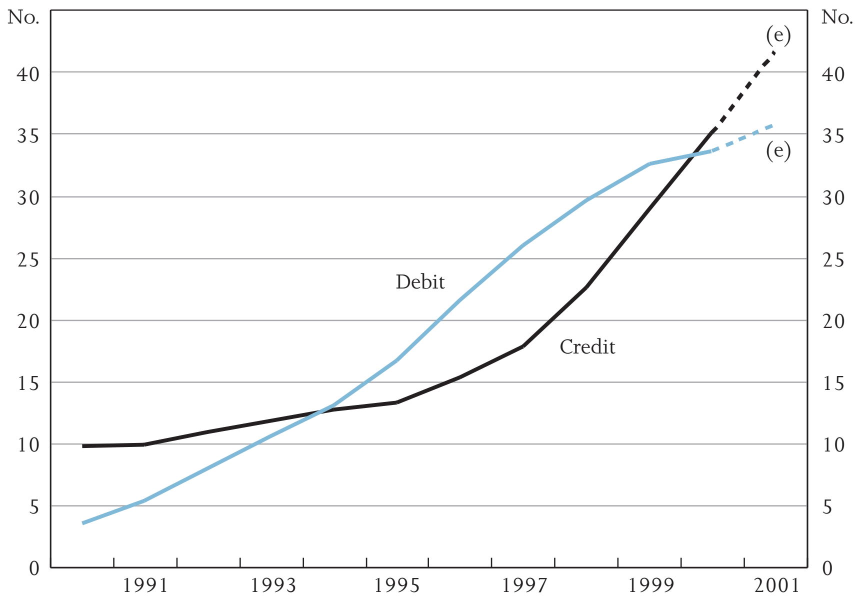
Card-based instruments enable payments to be made by transferring funds between the cardholder and the recipient across the books of financial institutions. A debit card (commonly known as EFTPOS) is a method of accessing a transaction account held with a financial institution; the cardholder has funds taken from that account at the time the card is used to make a transaction. Such accounts may include an overdraft limit, but that is a separate decision for the financial institution and use of the overdraft is paid for separately by the cardholder. A debit card as such provides a pure payment service.

By comparison, a credit card provides a payment service and a credit facility. The latter usually involves an interest-free period before the account needs to be settled and a pre-approved line of credit, also known as a "revolving" line of credit, on which users pay a rate of interest. The cardholder pays their credit card account some time after the card is used to make a transaction, according to an established billing cycle.

The strong growth in popularity of card-based instruments nonetheless masks some divergent trends in the usage of debit and credit cards. After the debit card system was established over a decade ago, debit card usage rose sharply for a number of years but growth has tapered off more recently. In contrast, credit card usage, which grew only moderately in the first half of the 1990s, has accelerated as cardholders have switched to credit cards for routine payments such as supermarket purchases and utility bills, and "remote" payments such as theatre tickets and purchases over the Internet. Many cardholders use their credit cards as a pure payment instrument: preliminary data from the Reserve Bank's new payments statistics collection suggest that around 25 per cent of credit card balances do not incur interest because cardholders have not made use of the revolving line of credit. This changing pattern in how payments are made has coincided with the widespread introduction of loyalty programs by credit card issuers, and has seen credit card usage reach annual growth rates of around 26 per cent over the past three years. The number of credit card payments per capita has risen to 42 a year, overtaking debit card payments per capita of 36 a year (Figure 1.1).

Figure 1.1: Number of debit and credit card payments per capita

per year



(e) estimate

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

The debit card payment network in Australia had its origins in proprietary systems set up by each of the major banks, and subsequently linked through bilateral arrangements to enable cardholders to use their debit cards at any terminal. The three major credit card schemes established in Australia were, however, collective endeavours. Bankcard, a collaboration between Australian banks, was the first credit card to be issued in Australia. Introduced in 1974, it was accepted nationally by 1977. MasterCard and Visa, the two international schemes in which Australian financial institutions participate as members, followed in the 1980s. There are now around 15 million credit cards on issue in Australia. Estimates of the market share of the main credit and charge card schemes, in terms of cards on issue, are provided by a survey of cards held by respondents (Table 1.2). Around 60 per cent of the survey respondents who are over 18 have a credit card.

Table 1.2: Market shares of major personal credit and charge card brands
per cent of cards on issue, 2000/01

Visa	53.4
MasterCard	22.7
Bankcard	15.4
American Express charge card	3.6
American Express credit card	2.9
Diners Club	1.9
	100.0

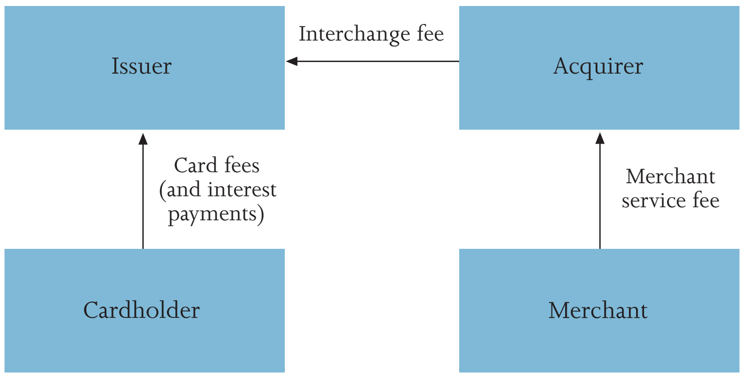
Source: Roy Morgan Research.

Bankcard, MasterCard and Visa are known as "four party" card schemes because four parties are typically involved in the payment process. These parties are:

- the *cardholder*;
- the *issuer*, the financial institution that issues the credit card to its customer;
- the *acquirer*, the financial institution that serves the merchant accepting the credit card for payment; and
- the *merchant*.

The flow of fees (and interest payments) in a four party scheme is shown in Figure 1.2.

Figure 1.2: Fee flows in a four party card scheme



This structure contrasts with that of American Express and Diners Club, which are "three party" card schemes. In these proprietary schemes, American Express and Diners Club generally act as sole issuers and acquirers, and the participation of financial institutions is limited to marketing and distribution roles.[1] Three party card schemes have traditionally issued charge cards, which provide the cardholder with an interest-free period but no revolving line of credit; more recently, American Express has also issued a credit card (the "Blue card") which provides a revolving line of credit similar to those of the four party schemes.

1.2 Regulations in credit card schemes

Payment instruments that involve the transfer of funds across the books of financial institutions require co-operation between these institutions to ensure that payments can be effected. Co-operation normally takes the form of various rules and regulations agreed by participating institutions, either bilaterally or on an industry-wide basis, covering such matters as procedures for funds transfers, technical and operational procedures and criteria for participation.

The Bankcard, MasterCard and Visa credit card schemes have extensive rules and regulations that govern their operations. The main characteristic of these schemes, which distinguishes them from the three party schemes, is that the rules and regulations are determined collectively by the financial institutions (issuers and acquirers) that are members of each scheme, but that are otherwise competitors

1 The one exception in Australia is the American Express card issued by AMP Bank Limited.

in providing credit card services to cardholders and merchants. In particular, members of each card scheme collectively:

- set the wholesale fees (known as "interchange fees") that are paid to the issuer by the acquirer whenever a merchant accepts a credit card for payment;
- determine the criteria for membership of the schemes and the membership fee (ie the price for access); and
- in the case of the MasterCard and Visa schemes, impose restrictions that prevent merchants passing on the cost of accepting credit cards to cardholders – the so-called "no surcharge" rule. (These restrictions are also imposed on merchants by the three party card schemes.)

Although some minimum set of private-sector regulations is likely to be necessary for the safe and orderly operation of a payment system, co-operative behaviour between competitors which involves the collective setting of prices is rarely permitted in market economies. *Prima facie,* such behaviour is anti-competitive and, where it is allowed, it typically requires some form of dispensation by competition authorities on the basis that there are offsetting benefits to the public. In Australia, the *Trade Practices Act 1974* prohibits co-operative behaviour between competitors if it has the effect of substantially lessening competition, fixing or maintaining prices, or restricting or limiting dealings with particular persons such as new entrants to a market. However, such conduct may be authorised by the Australian Competition and Consumer Commission (ACCC) if it judges it to result in a net public benefit.

Several payment systems in Australia have sought authorisation to ensure that their regulations can satisfy a public interest test. For instance, the regulations and procedures for four clearing streams operated by the Australian Payments Clearing Association (APCA) – which govern the transfer of funds involved in ATM and debit card (EFTPOS) transactions, cheques, bulk electronic and high-value transactions – have been authorised under the *Trade Practices Act 1974,* and participants are thus free from the risk of prosecution for engaging in the behaviour authorised.

However, none of the credit card schemes in Australia are authorised under the *Trade Practices Act 1974*. The Bankcard scheme was granted authorisation in 1980 by the Trade Practices Commission, the predecessor of the ACCC, on condition that scheme members not impose restrictions on the freedom of merchants to determine the prices they were prepared to charge customers paying either with cash or Bankcard. The authorisation was revoked in 1990, one reason being the Commission's concerns about Bankcard's restrictive membership criteria. Neither the MasterCard nor Visa credit card schemes has applied for authorisation.

1.3 Public policy interest in credit card schemes

Over the past couple of years, credit card schemes have come under closer public policy scrutiny in Australia, and in some other industrial countries.

Some earlier official studies in Australia had raised questions about the structure and efficiency of credit card interchange fee arrangements but, aside from recommending further review, made no call for the regulations of the credit card schemes to be subject to a public interest test.[2] However, the inquiries had unanimously concluded that scheme restrictions on merchant pricing are anti-competitive and that merchants accepting credit cards should be free to make their own decisions as to the prices they charge.[3]

In its 1997 *Final Report*, the Financial System Inquiry (the Wallis Committee) highlighted interchange fee arrangements and restrictions on access to credit card schemes as areas of policy concern. The Inquiry recommended that a new Payments System Board within the Reserve Bank should consider whether interchange fee arrangements were appropriate for credit (and debit) cards; it noted that, if such arrangements were priced contrary to efficiency principles, a review by the ACCC would be warranted. The Inquiry was also concerned that the membership rules of the two international credit card schemes might be used to restrict the ability of non-deposit-taking institutions to compete in new payment technologies, and recommended that the ACCC maintain a watching brief over these rules.

Since the Inquiry, two particular developments have sharpened the public policy focus on credit card schemes in Australia. First, in response to the Inquiry, the Payments System Board of the Reserve Bank and the ACCC undertook a detailed study of debit and credit card schemes, drawing on information and data provided by Bankcard, MasterCard and Visa and by a range of financial institutions that are members of these card schemes. The findings were set out in *Debit and Credit Card Schemes in Australia: A Study of Interchange Fees and Access* (the "Joint Study"), which was published in October 2000 as a basis for community discussion.

The Joint Study concluded that in card networks, competition is not working as it should. In the case of the credit card schemes, the Joint Study found that:

- interchange fees are not reviewed regularly by scheme members on the basis of any formal methodologies;
- interchange fees are higher than can be justified by costs, and scheme members lack clear incentives to bring these fees into line with costs;

2 These studies are summarised in Reserve Bank of Australia and Australian Competition and Consumer Commission (2000), pp 2-3.

3 *ibid*, pp 53-54.

- the "no surcharge" rule suppresses price signals that guide the efficient allocation of resources; and
- restrictions by credit card schemes on which institutions can enter the acquiring business were unjustified and restrictions on access to card issuing needed to be reviewed.

When the incentives in an economy reflect demand and relative cost conditions, consumers can make well-informed choices and it would be expected that lower cost and more efficient payment instruments would thrive at the expense of the more expensive or less efficient ones. The Joint Study concluded that this was not the case in Australia. Instead, it concluded that Australia's card payment arrangements are encouraging consumers to use credit cards at the expense of other payment instruments, particularly debit cards and direct debits, that consume fewer resources. As a result, Australia has a higher cost retail payments system than necessary, and much of this cost is borne by those consumers who do not use credit cards.

The second development, independent of the Joint Study, was a two-year investigation of interchange fees in credit card schemes by the ACCC, in response to a complaint by a merchant. The ACCC reached the conclusion that the collective setting of these interchange fees was a breach of the price-fixing prohibitions of the *Trade Practices Act 1974*. It advised Bankcard, MasterCard and Visa and their members, in March 2000, that they should seek authorisation of the interchange fee agreements if they could demonstrate that those agreements were in the public interest; otherwise, the conduct had to cease.

From that point, the ACCC began discussions with a group of banks (the "review banks") about a possible application for authorisation. The banks initially proposed to conduct a review of the arrangements for setting interchange fees but not of restrictions on membership, notwithstanding the ACCC's preliminary view that these restrictions may significantly exacerbate the anti-competitive effect associated with the collective setting of interchange fees. In September 2000, the ACCC instituted legal proceedings against one major bank. Soon after, the banks agreed to widen their review of credit card regulations to include membership issues. The review was submitted to the ACCC in January 2001. After a series of further discussions and a revised proposal, the ACCC concluded that the authorisation process was unlikely to meet the competition and efficiency concerns raised in the Joint Study, within an appropriate time-frame.

Accordingly, the Chairman of the ACCC wrote to the Governor of the Reserve Bank in March 2001 recommending that the Payments System Board consider using the powers available to it, under the *Payment Systems (Regulation) Act 1998*, to achieve reform of the credit card schemes in Australia in the public interest. After consultation with a range of interested parties, the Board took the decision to bring credit card schemes in Australia under the Reserve Bank's regulatory oversight. In April 2001, the Reserve Bank formally "designated" the credit card systems operated in Australia by Bankcard, MasterCard and Visa as payment systems subject to its regulation under the *Payment Systems (Regulation) Act 1998*. Following that action, the ACCC discontinued its legal proceedings.

The Reserve Bank did not designate the three party card schemes in Australia, American Express and Diners Club. These schemes do not have collectively determined interchange fees, nor access rules which discriminate on the grounds of institutional status. They do, however, impose restrictions on merchant pricing. For this reason, the Reserve Bank confirmed that any decisions it took about restrictions on merchant pricing in the public interest with respect to the designated credit card systems would also apply to the three party card schemes.

Credit card schemes are also currently under official or judicial review in some other industrial countries. In Europe, the European Commission has been investigating Visa's interchange fee arrangements for intra-regional operations and its "no surcharge" rule. In the United Kingdom, the Office of Fair Trading has been assessing an application by MasterCard/Europay for authorisation, under UK competition laws, of its interchange fee arrangements for domestic transactions. In the United States, following action by the Department of Justice, a US District Court recently ruled in favour of MasterCard and Visa on their overlapping ownership structure but against their "exclusionary" rules preventing their member banks from issuing "rival" cards. In a separate and pending legal action, a group of US merchants has sued MasterCard and Visa over their so-called "honour all cards" rules, which require merchants to accept debit cards issued by the schemes as a condition of accepting their credit cards.

1.4 The Reserve Bank's payments system powers

The designation of the Bankcard, MasterCard and Visa credit card schemes is the first step the Reserve Bank must take to exercise its powers under the *Payment Systems (Regulation) Act 1998*. These powers were granted to support the mandate of the Payments System Board, which was established on 1 July 1998 as part of a major reform of Australia's financial regulatory structure. The mandate charges the Board with responsibility 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.

Under the *Payment Systems (Regulation) Act 1998*, the Reserve Bank may:

- designate a particular payment system as being subject to its regulation;
- determine rules on access to a designated system for new participants;
- set standards for safety and efficiency for that system;
- arbitrate on disputes in that system over matters relating to access, financial safety, competitiveness and systemic risk, if the parties concerned wish; and
- gather information from a payment system, whether designated or not, or from its participants.

Section 12 empowers the Reserve Bank to *impose an access regime* on the participants in a designated payment system. The access regime must be one that the Reserve Bank considers appropriate having regard to the public interest, the interests of current participants in the system, the interests of people who may in the future want access to the system, and any other matters the Reserve Bank considers relevant. Access is defined as:

> "… the entitlement or eligibility of a person to become a participant in the system, as a user of the system, on a commercial basis on terms that are fair and reasonable." (Section 7)

An access regime deals specifically with the terms and conditions on which a "person" (ie a constitutional corporation) can participate in a payment system, and covers matters such as eligibility for participation, restrictions on the activities new participants may undertake and the price of access (ie participation or membership fees).

Under Section 18, the Reserve Bank has a general power to *determine standards* to be complied with by participants in a designated payment system, if it considers that this is in the public interest. The legislation does not define or limit the matters on which the Reserve Bank may determine standards. Standards deal with terms and conditions that apply to *all* participants in a payment system, whatever the arrangements for entry might be.

Before imposing an access regime or determining a standard, the Reserve Bank is required under Section 28 to consult widely. It has, in fact, given high priority to the consultation process. It has received submissions from and met with (often several times) a range of interested parties – including the designated credit card schemes, the three party card schemes, financial institutions, retailers, billers and consumer representatives – in the preparation of and in response to the Joint Study and, specifically, to discuss designation of credit card schemes ahead of the Payments System Board's deliberations. Since designation, the Reserve Bank has received additional submissions and has had a further series of meetings with interested parties. The submissions have addressed the public policy concerns about efficiency and competition in credit card schemes raised in the Joint Study and summarised in the Reserve Bank's media release on designation. Interested parties seeking further guidance on submissions were provided with a detailed set of questions on the operation of credit card schemes.

In total, 30 separate organisations have formally provided their views on the operation of credit card schemes in Australia. A list of these parties is provided in the Appendix. Submissions that these parties were prepared to put on the public record are published in two companion volumes to this consultation document.

Throughout this process, the Reserve Bank has also continued to consult closely with the ACCC.

1.5 The public interest test

The Reserve Bank may use its powers to impose an access regime or determine a standard if it is in the public interest to do so. The public interest test is the critical test for any intervention in the normal competitive processes of the market, whether it be proposed action by regulatory authorities or potentially anti-competitive conduct by market participants (which must be authorised under the *Trade Practices Act 1974*). The designated major credit card schemes have already established their own regulatory framework, in the form of rules and procedures agreed collectively by the respective scheme members that are otherwise competitors in the provision of credit card services. This regulatory framework is unique: in no other market in Australia are competitors permitted, without authorisation under the *Trade Practices Act 1974*, to act collectively to set wholesale prices, prohibit merchants from passing on these prices and restrict entry to the market in a way that substantially lessens competition. The regulatory framework of the credit card schemes benefits the schemes and their members, as well as credit cardholders; however, the Joint Study raised serious doubts about whether the community as a whole also benefits. For this reason, the Reserve Bank's starting point has been to assess whether the regulations of the credit card schemes themselves can meet the public interest test.

The *Payment Systems (Regulation) Act 1998* provides the relevant definition of the public interest. The Reserve Bank is to have regard to the desirability of payment systems:

"(a) being (in its opinion):

(i) financially safe for use by participants; and

(ii) efficient; and

(iii) competitive; and

(b) not (in its opinion) materially causing or contributing to increased risk to the financial system.

The Reserve Bank may have regard to other matters that it considers are relevant, but is not required to do so."

In applying this public interest test, the Reserve Bank's approach is consistent with the broad objectives of competition policy in Australia. The blueprint for this policy was set out in the report of the National Competition Policy Review (the Hilmer Report) in 1993 and endorsed by Federal and State Governments at Council of Australian Governments (COAG) meetings in 1994. Broadly speaking, competition policy seeks to promote efficiency and enhance community welfare through the encouragement of effective competition and the protection of the competitive process. The Hilmer Report identified three dimensions of economic efficiency, which are as relevant to markets for payment services as they are to other markets for goods and services:[4]

- **allocative efficiency**, which is achieved where resources are allocated to their highest valued uses (ie those that produce the greatest benefit relative to costs);
- **productive efficiency**, which is achieved where firms produce goods and services at minimum costs; and
- **dynamic efficiency**, which reflects the need for industries to make timely changes to technology and products in response to changes in consumer tastes and in productive opportunities.

If it is to meet the broad objectives of competition policy, the payments system in Australia needs to give maximum rein to the workings of the price mechanism and the free movement of resources, provided the safety of the system is not compromised. For this reason, the Reserve Bank sees the following competition "benchmarks" as underpinning the public interest test in the payments system:

- relative prices charged by financial institutions to consumers who use payment instruments should reflect the relative costs of providing these instruments as well as demand conditions;
- merchants should be free to set prices for customers that promote the competitiveness of their business;
- prices of payment instruments should be transparent;
- any restrictions on the entry of institutions to a payment system should be the minimum necessary for the safe operation of that system; and

4 Independent Committee of Inquiry (1993), p 4.

- competition within the market for a payment instrument, and between different payment instruments, should be open and effective.

If markets for payment services meet these benchmarks, the community can be confident that the price mechanism will allocate resources efficiently to meet the demand for different payment instruments, while the "contestability" of the markets – that is, the threat of entry by new competitors – would ensure that payment service providers earned no more than a competitive return on their investments over time.

Even within a competitive environment, there is likely to be a role for private-sector regulations to ensure the safe and orderly operation of a payment system. However, if such regulations suppress or distort the normal market mechanisms, the onus must be on those institutions imposing the regulations to demonstrate that community welfare is not harmed.

1.6 Outline of the consultation document

This consultation document reviews the main regulations in the Bankcard, MasterCard and Visa credit card schemes against the competition benchmarks outlined above. It also sets out the Reserve Bank's proposed reform of credit card arrangements in the public interest.

Chapter 2 discusses **collective wholesale fee setting** in credit card schemes. It reviews the various justifications for interchange fees in credit card networks and the processes by which these fees have been set by card scheme members in Australia. The Chapter then provides a set of principles for interchange fee setting, against which proposals by the credit card schemes and their members to improve the efficiency and transparency of interchange fees are assessed. A draft standard on wholesale fee setting is provided. **Restrictions on merchant pricing** in Australia, imposed by MasterCard and Visa and by the three party card schemes, are discussed in Chapter 3. The potential impact of these restrictions on community welfare and arguments for and against their abolition are analysed. A draft standard on merchant pricing for credit card purchases is set out. Chapter 4 discusses the **restrictions on entry** imposed by the MasterCard and Visa schemes, and the membership requirements of the Bankcard scheme which have recently been liberalised. The Chapter analyses the risks which credit card issuers and acquirers bring to card schemes, and assesses how the schemes' membership restrictions address these risks. A draft access regime is provided.

Chapter 5 draws the analysis together by reviewing the main regulations of the credit card schemes against the competition benchmarks that underpin the public interest test. In the Reserve Bank's opinion, there is a need for greater efficiency and competition in Australia's card payment arrangements. It is therefore proposing to use its payments system powers to promote reform of credit card schemes in Australia. The reform measures involve:

- an objective, transparent and cost-based methodology for determining maximum interchange fees;
- freedom for merchants to recover from cardholders the cost of accepting credit cards; and
- a more liberal access regime that allows for the entry of specialist credit card service providers, both issuers and acquirers, to be supervised by the Australian Prudential Regulation Authority (APRA).

The Chapter discusses the likely impact of these reform measures and analyses some of the objections that have been raised to credit card reform. It also sets out the next steps in the consultation process before the Reserve Bank's proposed standards and access regime are finalised.

Although Bankcard, MasterCard and Visa are well-established schemes, the economic analysis of credit card networks is complex and relatively undeveloped. Much of the recent theoretical literature has been sponsored by Visa itself. To help it evaluate the arguments in the various submissions, the Reserve Bank commissioned a report on the operations of credit card schemes from an international expert in network economics – Professor Michael Katz, Arnold Professor of Business Administration, Haas School of Business at the University of California. Professor Katz's report, *Network Effects, Interchange Fees and No-Surcharge Rules in the Australian Credit and Charge Card Industry* (August 2001) is published in a separate volume to this consultation document.

CHAPTER 2: COLLECTIVE SETTING OF WHOLESALE FEES

2.1 Introduction

The Bankcard, MasterCard and Visa credit card schemes in Australia have wholesale fees, known as "interchange fees", that are paid to the issuer of the card by the acquirer whenever a merchant accepts that credit card for payment. In each of the schemes, the fees for domestic transactions (ie transactions between two Australian members) are set collectively by their Australian members. Interchange fees are a feature of four party credit card schemes in all countries.

Current credit card interchange fees for domestic transactions, the dates from which they were applicable and the previous fees, where known, are shown in Table 2.1. The international card schemes have a two-tier fee structure: an "electronic" rate applies when a transaction is undertaken at an EFT terminal, the card is present and the cardholder signs for the transaction, while a higher "standard" rate applies for all other transactions. These two-tier fee structures are the same for both schemes. Bankcard, in contrast, applies the same interchange fee for all transactions.[5]

Table 2.1: Credit card interchange fees (excluding GST)
per cent of transaction value

	Current standard rate	Current electronic rate	Previous rate	
Bankcard	1.2 (1974)	1.2	not applicable	
MasterCard	1.2 (1993)	0.8 (1993)	not available[6]	
Visa	1.2 (1993)	0.8 (1993)	1.0 (standard)	0.6 (electronic)

Source: Bankcard, MasterCard and Visa.

5 Bankcard's members agreed in 1996 to introduce an electronic rate of 0.8 per cent. This rate is scheduled for implementation on 1 December 2001.

6 MasterCard and its Australian members have been unable to provide records of the rates charged prior to 1993.

Acquirers pass on interchange fees to their merchants through the merchant service fee, which also includes a margin, almost always calculated as a percentage of the value of the transaction, to cover the costs of providing acquiring services. Under the "no surcharge" rule imposed by the international card schemes, which is discussed in the next Chapter, merchants are not free to pass on the merchant service fee to credit cardholders. Instead the fees, like other input costs, are passed onto all customers through the prices of goods and services. Hence, although acquirers pay interchange fees, the *economic* incidence of the fees does not fall on acquirers but on the community as a whole through the general level of prices.

Interchange fees are a significant component of revenues from credit card issuing. The Joint Study found that the average interchange fee received by issuers in 1999 was 0.95 per cent (and interchange fees currently generate revenues of around $775 million a year to issuing banks). Revenue from this source accounted for about one-third of total issuing revenues (Table 2.2). The other two-thirds of total issuing revenues is generated by cardholders who make use of the revolving line of credit ("revolvers"), that is, who do not pay off their accounts by the end of the interest-free period. Preliminary data from the Reserve Bank's new payments system collection indicate that about three-quarters of credit card outstandings are interest-bearing. Credit cardholders who use the credit card purely as a payment instrument ("transactors"), that is, who pay off their balance by the end of the interest-free period, make only a very small contribution to total issuing revenues, mainly through annual fees.

Table 2.2: Direct contributions to issuing revenues
per $100 transaction, 1999

	$	**%**
Revolvers[a]	1.64	61.2
Transactors[b]	0.10	3.5
Merchants[c]	0.95	35.3
Total revenues	**2.69**	**100.0**

a Interest payments plus 75 per cent of revenue from annual fees and other sources.

b 25 per cent of revenue from annual fees and other sources.

c Interchange fee revenue.

The Joint Study found that interchange fees in Australia are not reviewed regularly by credit card scheme members on the basis of any formal methodologies. It also found that the fees are higher than the costs incurred by issuers in providing credit card payment services to merchants and that – because of barriers to entry to the schemes – competition does not seem to be bringing these fees into line with costs. The Joint Study concluded that credit card interchange fee arrangements in Australia are contributing to a structure of incentives that has encouraged the growth of the credit card network at the expense of more economical payment instruments. In its separate enforcement action, the ACCC reached the conclusion that the arrangements for collective setting of interchange fees were in breach of the price-fixing provisions of the *Trade Practices Act 1974*, because they had the effect of controlling or maintaining another price (the merchant service fee).

This Chapter considers whether the arrangements for collective wholesale fee setting in the designated credit card schemes are in the public interest. As background, it introduces some basic concepts in the economics of networks. Next, it reviews the justifications for interchange fees in credit card networks and the argument that card scheme members, acting in their own self-interest, will set interchange fees that maximise the community's welfare. The Chapter then provides a set of principles that, in the Reserve Bank's opinion, need to be met if interchange fee arrangements in credit card schemes are to be accepted as being in the public interest. Various proposals by the card schemes and their members to improve interchange fee-setting practices are assessed against these principles and are judged to fall short in important respects. Accordingly, the Reserve Bank has decided to determine a standard for the setting of credit card interchange fees in Australia to enhance the efficiency and transparency of the price mechanism. The draft standard is discussed in the concluding section.

2.2 The economics of networks

The designated credit card schemes are examples of networks. A network is simply a collection of participants that are connected to each other; well-known examples are telephone systems, the Internet and payment systems.[7] A defining characteristic of a network is that it involves a number of participants that all benefit from the participation of others. In a four party credit card scheme, for example, the issuer and the acquirer are both needed to produce the credit card transaction, and the cardholder and the merchant jointly consume it. If any one participant is absent, the transaction will not occur.

7 Payment networks are discussed in detail in Reserve Bank of Australia and Australian Competition and Consumer Commission (2000), pp 23-31.

Network effects arise when an individual user values the system more highly as the number of users of the system increases. Since individual merchants and cardholders can benefit from an expanding network, credit card schemes generate network effects for these users. An individual merchant can benefit from the take-up and use of credit cards if it enjoys more sales and higher value sales, and if its customers switch from payment instruments that are more costly to the merchant. An individual consumer can benefit as more merchants accept cards because cards can be used at more places, reducing the need to carry cash and increasing access to purchases that can be made on credit. On this basis, a larger network is preferable for participants to a smaller network. For equivalent services at equivalent prices, consumers and merchants would be expected to prefer participation in a larger credit card network than a smaller one. Product differentiation, however, means that credit card networks of varying sizes can exist at the same time.

Beyond a critical mass, it is possible that network effects diminish as a network gets larger. Katz, for example, notes that once a network has become established, its viability may become less sensitive to small changes in its size, and hence it may need to do less to promote growth in membership.[8] Leibowitz and Margolis similarly conclude that some network effects are exhausted at the margin. They provide the example of the marginal benefits to other households of increasing the number of households that own a particular type of video recorder, and argue that they "are likely exhausted now that businesses that rent videotapes are about as prevalent as ones that sell milk."[9]

2.3 The justification for credit card interchange fees

The cost sharing argument

Most submissions to the Reserve Bank have noted that the theoretical rationalisation for interchange fees has its origins in an article by Baxter, written more than ten years after interchange fees were introduced in four party credit card schemes in the United States.[10] The basis of Baxter's analysis is that a transaction will not occur unless it provides a net benefit to each of the parties involved. In payment systems involving the participation of four parties, this may require "side payments" (such as interchange fees) between the merchant's bank and the cardholder's bank if either of these banks is unable to recover its costs directly from its client. Provided

8 Katz (2001), p 14.

9 Leibowitz and Margolis (1994), p 140.

10 Baxter (1983). Baxter's rationale was accepted by the US courts in the Nabanco case in 1983 as supporting the argument that interchange fees are not necessarily anti-competitive.

the "pooled" willingness of merchants and consumers to pay meets the total costs of the system, the transaction can be facilitated with side payments structured to ensure that there is a net benefit (or at least, no net cost) to all the participants in the transaction.

Though providing a theoretical justification, Baxter's analysis was silent on the direction in which an interchange fee would flow. That would depend on the relative willingness of cardholders and merchants to pay for credit card transactions, and the relative costs of issuers and acquirers. If credit card issuing would not be profitable at prices cardholders would be willing to pay, but credit card acquiring would be profitable at prices merchants would be willing to pay, it may be possible to make both activities profitable through an interchange fee paid by acquirers to issuers. However, Baxter's analysis does not establish that the interchange fee would be set collectively by a scheme at the economically efficient level.[11]

The role of the interchange fee as a balancing device is central to the arguments of the credit card schemes and their members.[12] However, as discussed below, the credit card schemes have not provided any empirical estimates of the demand curves of merchants and cardholders for credit card services, or of the supply curves of credit card issuers and acquirers, that would provide the basis for determining an interchange fee consistent with the Baxter analysis.

Network externalities argument

Another justification for an interchange fee, which has appeared only recently, emphasises its role in internalising *network externalities*.[13] Network externalities are a class of network effects that arise when market prices do not fully capture the consequences of the actions of one economic agent on another economic agent. In these circumstances, economic agents may not take into account the effects of their actions on others, resulting in a level of community welfare lower than it might otherwise be.[14] The network externalities argument builds on the Baxter analysis.

11 Katz (2001), p 25.

12 MasterCard, for example, argues that "the interchange fee is ... an efficient arrangement to balance the costs and benefits of credit card transactions in the open system between issuers and acquirers, and thereby the cardholders and merchants". MasterCard International (2001), p 38. See also Bankcard (2001b), p 1.

13 MasterCard International (2001), Visa International (2001a) and Australian Bankers' Association (2001b).

14 See Leibowitz and Margolis (1994) and Varian (1984), p 259, for some definitions of externalities.

Submissions to the Reserve Bank have argued that, in the absence of interchange fees in a credit card scheme, the prices which card issuers would need to charge cardholders to cover their costs would not reflect the net social benefits of participation in the scheme. Potential cardholders facing these prices would not take into account the benefits to others if they were to join and have no reason to do so, even though it would be beneficial to all the scheme's participants if they did. Interchange fees paid by acquirers to issuers could ensure that these unrealised benefits or externalities are captured ("internalised") by allowing issuers to reduce the prices they charge cardholders – that is, the interchange fees allow issuers to "subsidise" cardholders. In this way, cardholders would face not the private cost of using a credit card, but the social cost (that is, the cost to the issuer when the card is used less the benefits both to cardholders and merchants when cardholders join the scheme and use the card). The subsidy would therefore encourage consumers to take up cards and use them, expanding the scheme to the benefit of merchants and existing cardholders. Merchants would pay a price for credit card services above the costs incurred by acquirers but would do so willingly, it is argued, to ensure that they can enjoy the benefits of a larger credit card network.

The existence of network effects in credit card schemes is clear. However, whether these effects are externalities, which would not be realised without the unusual device of an interchange fee, remains controversial.[15] The existence of network externalities would require that there are net social benefits to the growth of credit card schemes that would not be captured in competitive market prices. Proponents of the externalities argument focus on what they claim to be two main benefits which credit card networks provide to merchants:

- lower transaction costs with credit cards; and
- increased sales.

Transaction costs of credit cards

A number of submissions have asserted that credit cards lead to lower transaction costs for merchants compared to cash and other payment instruments.[16] However, no supporting evidence is provided for this assertion; the available evidence is to the contrary.

A priori, if credit cards were more attractive for merchants than other payment instruments (taking into account both costs incurred and benefits provided),

15 Leibowitz and Margolis argue that "[w]hile network effects are common and important, network externalities as market failures … are theoretically fragile and empirically undocumented." Leibowitz and Margolis (1994), p 135.

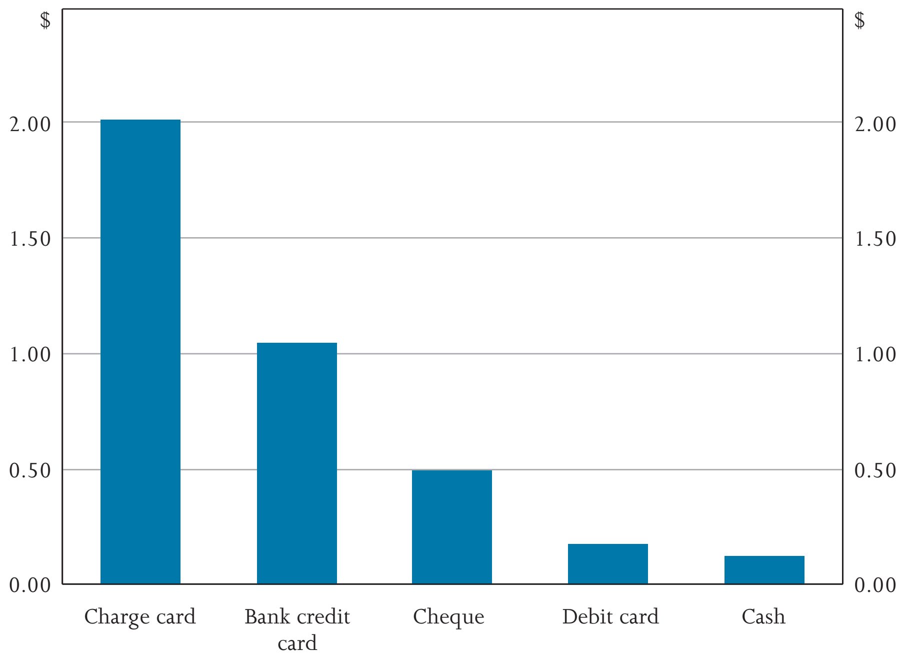
16 Australian Bankers' Association (2001b), Australia and New Zealand Banking Group (2001c), Westpac Banking Corporation (2000).

merchants would be expected to encourage the use of credit cards by offering a discount to credit cardholders. What is observed, if anything, is the opposite – ie discounts for cash – undermining the claims of substantial net benefits for merchants at current merchant service fees.

There are no data on net benefits to merchants but the Australian Retailers Association (ARA) has argued that credit cards are one of the most expensive payment instruments for merchants to accept. It surveyed a number of its members, representing a mix of retail spending and store size, about various payment instruments and their costs.[17] Costs included staff time at check-out, cash handling, other staff processing time, collection, security and bank fees (including cash deposit costs); charge cards issued by American Express and Diners Club are separated from bank-issued credit cards.[18]

The results of this survey are shown in Figure 2.1, which gives the absolute costs of different payment instruments. A credit card transaction costs the merchants

Figure 2.1: Payment costs to Australian retailers



Source: Australian Retailers Association.

17 Australian Retailers Association (2001b).

18 The data on charge cards also include the cost of store cards.

surveyed an average of $1.04 per transaction, over six times as much as a debit card transaction. The lowest cost payment instrument is cash, at around $0.12 per transaction. Charge cards cost about twice as much as credit cards. However, these comparisons do not take into account the differences in the average value of transactions undertaken with the different payment instruments, which are shown in Table 2.3.

Table 2.3: Average transaction values
$

Cash	17
Cheque	35
Bank credit card	55
Debit card	57
Charge card*	69

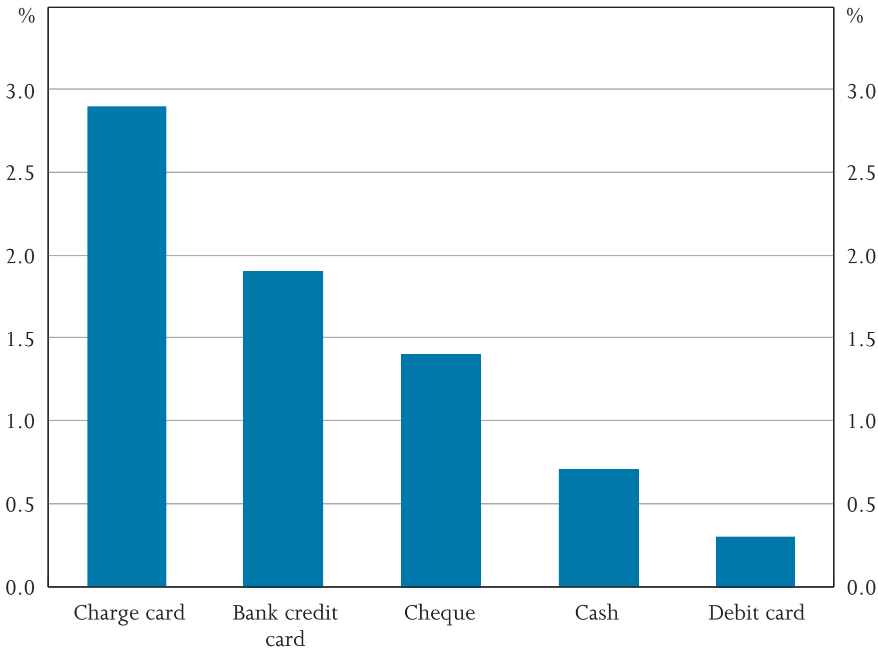
* American Express, Diners Club and some store cards.
Source: Australian Retailers Association.

The costs of the different payment instruments, taking into account the average value of transactions undertaken with each instrument, are shown in Figure 2.2. On this measure, credit card transactions cost over twice as much as cash and still around six times as much as debit cards.[19] Even the labour-intensive cheque costs the retailer less to accept than a credit card transaction.

The difference in the costs of the various payment instruments is most pronounced when high-value purchases are considered. Merchant service fees for credit and charge cards are *ad valorem* fees, so merchants' costs of accepting these cards rise in

19 Debit card costs include any rebates that large retailers may receive, and hence understate the processing costs to retailers of a debit card transaction. According to information from the ARA, the processing cost of debit cards for the sample of merchants in Figures 2.1 and 2.2, abstracting from any rebate, is around $0.20 or 0.4 per cent of the average transaction value. For small merchants that might pay a merchant service fee of as much as $0.80 per debit card transaction, the cost of accepting debit cards is higher than indicated in these figures. The costs of accepting credit and charge cards are also typically higher for small merchants.

Figure 2.2: Payment costs to Australian retailers
percentage of average transaction value

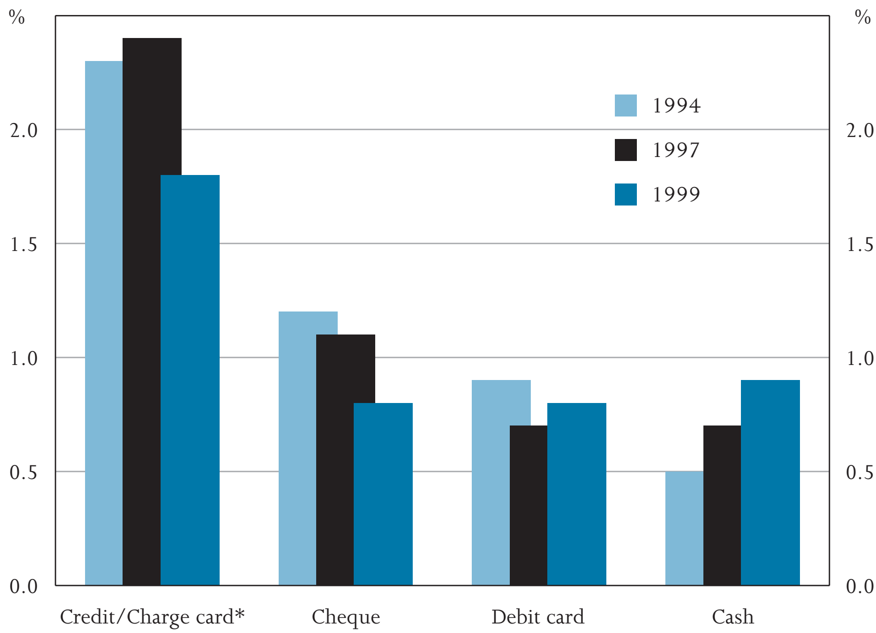


Source: Australian Retailers Association.

absolute terms with the value of the transaction. For debit cards and cash purchases, on the other hand, merchants' costs are largely unaffected by the size of the transaction. On the basis of the ARA data, for example, the purchase of a $1 000 item would cost a merchant $29 if paid with a charge card and $19 with a credit card. If paid by debit card, however, the transaction would cost up to $1 for a small retailer and as little as $0.17 for a large retailer. The transaction would cost only $0.12 if paid by cash.

The evidence for Australia is supported by data from studies of food stores in the United States, undertaken by the Food Marketing Institute (FMI). Figure 2.3 shows the cost of various payment instruments, as a proportion of average transaction value, for the three FMI studies using data for 1994, 1997 and 1999. On this evidence, a credit/charge card transaction in the United States costs around twice as much as a cash or a debit card transaction.

Figure 2.3: Payment costs to US retailers
percentage of average transaction value



* The FMI studies do not provide a breakdown between credit and charge cards.
Source: Food Marketing Institute (1994, 1998 and 2000).

Merchant sales and credit cards

A number of submissions have also asserted that merchants benefit from credit cards because credit cardholders make "… more purchases, larger purchases and in some cases, new types of purchases."[20]

It is essential that the assertion of network externalities associated with higher merchant sales be stated correctly. Higher sales on credit cards for individual merchants do not, of themselves, give rise to overall merchant benefits if:

- those sales would have taken place anyway using other payment instruments; or
- the sales have merely diverted business from one merchant to another.

20 Visa International (2001a), p 21. See also Australian Bankers' Association (2001b) and (2001c), Australia and New Zealand Banking Group (2001c) and American Express (2001).

If a customer who would otherwise have used a debit card when visiting their normal merchant undertakes a transaction on a credit card to gain loyalty points, the merchant gains no additional sales, but incurs higher transaction costs. If the customer switches to a different merchant because it accepts credit cards while rivals do not, that merchant will gain additional sales but merchants as a group will not. The network externalities argument requires that credit card usage leads to a *permanent* increase in sales in the economy *as a whole*. Assuming that what applies to an individual merchant also applies to merchants as a whole would be a simple but fundamental "fallacy of composition".

None of the submissions asserting network externalities has provided any evidence of a permanent economy-wide increase in sales from credit card usage. The Australian Bankers' Association (ABA), for example, has stated that studies of the effects of credit cards on sales no longer exist or are not in the public domain.[21] Visa has asserted that credit cards lead to new and higher merchant sales, although the new uses it cites – grocery, utility, telephone and Internet payments – may simply represent substitution from other payment instruments or different sales distribution channels. Consumers, for example, are unlikely to purchase more groceries or use more electricity because they are paying by credit card. Visa has also claimed that data on the average value of a credit card transaction show that people spend more on credit cards.[22] This claim is not supported by data provided to the Reserve Bank by the ARA, and separately by some major retailers. As shown in Table 2.3 above, the average value of a credit card transaction is much higher than the average cash transaction, but little different from a debit card transaction.[23]

21 "The impact of accepting credit cards on a merchant's revenue and profits was studied and validated in the 1970's and 1980's; those studies no longer exist. Current efforts have been focussed on assessing the merchant benefits of accepting credit cards for new and evolving markets – hypermarkets; utilities; government payments. This work is not in the public domain." Australian Bankers' Association (2001c), p 8.

22 Visa International (2001b), p 28. Elsewhere, Visa has claimed that credit card use under a no surcharge rule leads to an increase in merchant sales and, because of economies of scale, to lower retail prices for the benefit of all consumers, not just credit cardholders. Visa International (2001a). Katz has dismissed this assertion as "… a seriously flawed argument which fails to recognize that, to the extent card use merely diverts sales among merchants, it has no effect on aggregate sales and the realization of economies of scale." Katz (2001), pp 41-42.

23 These data differ from the average transaction values derived from the Reserve Bank's Transaction Cards Statistics Collection, which give the average value of a credit card transaction at around $110 and that of a debit card around $60. The difference is most likely due to sampling. The ARA survey covered a group of retailers for which big ticket credit card sales are a relatively small share of sales. The Reserve Bank's data averages all credit card transactions, including big ticket purchases such as home furnishings and travel, that cannot be made on debit cards because of transaction limits imposed by issuers. The data also include cards used for business purposes which have a higher average transaction value.

The difference in average transaction values may reflect a number of factors. First, it is consistent with the fact that consumers use different payment instruments for different types of purchases; small items such as milk and bread will tend to be purchased with cash while more expensive items, such as white goods, tend to be purchased using a credit card or other non-cash instrument. Using a credit card rather than cash is unlikely to result in more milk and bread being consumed. Secondly, if credit card users are more likely to come from higher income groups,[24] the higher average expenditure on credit cards may simply reflect the higher income of their users, who would be expected to spend more no matter what payment instrument they use.

The argument that credit card usage leads to higher merchant sales is, equivalently, an argument that credit card usage leads to higher consumption. Proponents of the externalities case have claimed that credit cards, by offering cardholders a "buy now, pay later" facility, enable them to enjoy a higher level of consumption.[25] Again, however, it is essential that the network externalities argument be correctly stated: credit card usage must result in a *permanent* increase in consumption for society *as a whole*. A consumer going into debt – credit card or otherwise – to purchase an item now must pay interest and repay the principal in the future; in so doing, the consumer's future disposable income and consumption expenditure will be reduced.

There is a considerable body of economic literature on the determinants of aggregate consumption. This literature acknowledges that the availability of credit may alter consumption patterns by enabling consumers to smooth their consumption expenditure over time; this in itself can be of benefit to the economy but it is a characteristic of credit generally, not just credit cards. Fundamentally, however, consumption is determined by expected income and "wealth", which is determined by the economy's productive capacity. Consumption now at the expense of savings reduces the level of wealth and future income flowing from that wealth; this, in turn, constrains consumption in the future. The notion of "mortgaging the future" is a real world recognition of this point. The economic literature is summarised by Katz, who concludes that the claim that credit card use leads to a permanent and significant increase in aggregate consumption "is ill founded."[26]

24 There is some evidence for this. See Reserve Bank of Australia and Australian Competition and Consumer Commission (2000), p 16.

25 Visa International (2001a), Australian Bankers' Association (2001b) and (2001c), Westpac Banking Corporation (2000).

26 Katz (2001), p 11.

None of the submissions has provided any evidence supporting the assertion of network externalities in consumption. The ABA cites three academic references but these do not demonstrate that the provision of credit leads to a permanent increase in consumption. In a research report commissioned by Visa for another purpose, KPMG offers the observation that "[t]he period over which credit card debt has expanded most significantly in Australia (ie the last ten years) has also been a period of sustained growth in household consumption and Gross Domestic Product."[27] This says nothing more than that a number of economic variables have been on a strong upward trend; it says nothing about causality. Elsewhere, however, the KPMG report concluded that credit card debt could have an impact on the economy's savings only if used as a source of long-term finance and that this impact would be marginal.[28]

A comprehensive study of the impact of credit cards on consumption was undertaken by the Board of Governors of the US Federal Reserve System in 1983, as input to Congressional consideration of a law that encouraged price discounts for cash.[29] The Board examined whether credit cards cause overall spending to be larger than would otherwise be the case, or primarily affect the timing or composition of consumer spending. Though the study itself is dated, the issues remain relevant. It noted that "if card use has no appreciable impact on total spending, then retailers as a group would realize no net sales gain to offset the industry-wide costs of honoring credit cards. Of course, merchants who do honor credit cards might gain sales from those who do not accept them, but that situation becomes less likely as credit cards reach a mature stage of development and retailer acceptance of credit cards becomes widespread."[30] The Board looked at microeconomic evidence, in the form of a household survey of unplanned purchases, and macroeconomic evidence on the relationship between credit card use and savings rates. It concluded that "[o]n the whole, the household survey… as well as existing macroeconomic research provide little grounds for believing that credit cards generate incremental sales in sufficient volumes to offset credit card costs to any measurable degree."[31]

In the Reserve Bank's opinion, arguments that credit card schemes generate network externalities are unconvincing. In the first place, although credit cards clearly provide benefits to individual cardholders and merchants, the benefits to cardholders and

27 KPMG Consulting (2001), p 40.

28 *ibid*, p 42.

29 Board of Governors of the Federal Reserve System (1983).

30 *ibid*, pp 22-23.

31 *ibid*, p 31.

merchants as a whole are overstated. No evidence has been provided that credit card usage reduces transaction costs for merchants as a whole. Nor has evidence been provided that credit card usage leads to a permanent increase in sales for merchants as a whole, or, equivalently, a permanent increase in aggregate consumption. The evidence that is available contradicts this assertion. The claim that credit cards allow consumers to spend more than they would otherwise has merit, but only at the level of the individual consumer and only over the short run. And, of course, that claim loses force to the extent that credit cardholders do not make use of the revolving credit facility but settle their account in full each month, or on a reasonably regular timetable.[32]

Secondly, even if there are potential network externalities in credit card schemes, an interchange fee may not be the only way to internalise them. For some of these effects, the price mechanism itself may achieve the same outcome, through differential pricing by merchants. If merchants did indeed benefit from credit card use through lower transaction costs, they would encourage customers to use credit cards rather than other payment instruments by offering a price discount to credit cardholders. In responding to the differential prices, consumers would take into account not just their own costs and benefits but also those of merchants; the price mechanism would ensure that the benefits received by merchants were passed through to consumers (ie were internalised).[33] Likewise, if merchants faced higher transaction costs from credit card use (after allowing for any merchant benefits), they would have an incentive to reduce credit card use relative to other payment instruments through charging a higher price to credit cardholders; consumers would again confront the social costs of using different payment instruments. Differential pricing may therefore allow the market to internalise effects that would otherwise be externalities.[34] The issue of merchant pricing is taken up in the next Chapter.

Thirdly, it is necessary to consider how any externalities would be affected as a network increases in size. Visa has argued that:

> "there is nothing in the theory of interchange that suggests that just because a market is mature it will no longer be subject to network

32 The KPMG report estimates that 68 per cent of credit card users pay off their credit card debt in full at least once a year. It also notes that the turnover rate of debt has increased since the mid 1990s, indicating that "[c]redit card debt is becoming shorter in nature." KPMG Consulting (2001), p 19.

33 Frankel (1998), Gans and King (2001a) and Katz (2001) all recognise this as an alternative way of "internalising" externalities.

34 Katz (2001), p 21.

> externalities. Adding a cardholder to the network provides benefits to merchants, whether it is the first cardholder or the last cardholder to join the system. Similarly, when an additional merchant decides to accept credit cards this provides additional benefits to cardholders, even if there are already a large proportion of merchants in the network."[35]

Economic analysis casts doubt on whether these effects are significant. For example, two earlier articles sponsored by Visa concluded that network externalities can decline to zero as a network expands. Chang, Evans and Schmalensee note that "… just as economies of scale do not generally persist at all levels of output, in many networks the importance of network externalities falls with network size. At some point, we would expect that additional network efficiencies from new members would fall to zero. It is hard to imagine that the Visa and MasterCard systems would gain anything at all from having one more New York bank join their systems, for instance, even though the addition of the first such bank might well have had profound network externalities."[36] Evans and Schmalensee make the same point, adding that "[t]he natural limits on network externalities together with product differentiation explain why multiple networks can survive in the same industry. Payment cards illustrate this …".[37] In the specific case of credit card networks, Katz has noted that "[i]t is possible that, at a sufficiently high level of membership on either the merchant side or the cardholder side, marginal changes in membership generate smaller or no benefits to other parties. For instance, to the extent that the incremental merchants on a network are substitutes for merchants already on the network, the value to a cardholder from having additional merchants accept cards very likely diminishes as the number of merchants increases."[38]

Finally, the pricing behaviour of credit card schemes does not appear consistent with their stated objective of maximising benefits to cardholders and merchants by maximising network size. In Australia, credit cardholders face a positive price to *access* the network, in the form of annual fees, but many cardholders face a negative price for *use* of the network, in the form of loyalty points and interest-free credit, even though the marginal cost of a credit card transaction is positive. A pricing strategy that would encourage credit card holding as well as use would be similar to that used by mobile phone companies. It would involve credit card schemes

35 Visa International (2001a), p 15. See also Australian Bankers' Association (2001b) and Frontier Economics (2001).

36 Chang, Evans and Schmalensee (1998), p 314.

37 Evans and Schmalensee (1999), p 153.

38 Katz (2001), p 14.

heavily subsidising consumers to join, just as mobile phone companies have subsidised the sale of handsets; by lowering the fixed cost of joining, credit card schemes could expand their membership and raise revenue by charging transaction fees on the basis of usage. Under this pricing structure, cardholders who use the system most would contribute most to the cost of running it.

The pricing structure of the credit card schemes is the reverse of this. Katz notes that:

> "… economic analysis indicates that, when there are significant network effects, charging below-cost annual fees is a more effective means of encouraging cardholding than is paying rebates or charging below-cost transactions fees. This finding suggests that either the associations and their members have been unable to implement strategies to pursue their objective of encouraging membership, or below-cost pricing is driven by considerations other than internalizing network effects to promote cardholding (*e.g.*, the pricing might be used to promote excessive card use and thus increase issuer profits)."[39]

2.4 Interchange fees and economic welfare

The previous section analysed the theoretical justifications for interchange fees in credit card schemes. From the public interest viewpoint, a related and equally important issue is whether profit-maximising credit card scheme members, acting collectively, will have an incentive to set an interchange fee at approximately the level that maximises economic welfare (ie is "socially optimal").

In standard economic models of markets with perfect competition, the pursuit of profit maximisation by individual firms generates a set of market prices that enable consumers to make efficient decisions; in this way, economic welfare is maximised. In recent years, formal economic models have been developed to assess the conditions under which the collective setting of interchange fees, by credit card scheme members pursuing their own self-interest, will produce outcomes that also maximise economic welfare. This work, which has been sponsored by Visa, is best represented by the models of Schmalensee and of Rochet and Tirole.[40] The models are cited as providing a theoretical underpinning for claims that credit card interchange fees are as close to optimal as could be expected.

Schmalensee's model shows that an interchange fee determined by scheme members will not only maximise usage of the credit card system (and system

39 Katz (2001), pp 48-49.

40 See Schmalensee (2001) and Rochet and Tirole (2000).

profits) but also economic welfare. Schmalensee compares the interchange fee that maximises total issuer and acquirer profits with the fee that would maximise a measure of economic welfare. Under certain specific conditions – a monopoly issuer, a monopoly acquirer and linear demand functions for consumers and merchants – profit maximisation is shown to maximise card use and Schmalensee's measure of economic welfare.

In reviewing Schmalensee's model, Katz has drawn attention to the measure of economic welfare on which his results are based. Schmalensee adopts the assumption that merchant willingness to accept cards can be taken as a measure of the social benefits of credit cards. But, as has already been established, this may be a very misleading measure of economic welfare because summing up individual merchants' willingness to accept credit cards, without accounting for the impact on rival merchants, overestimates the benefits of card use to merchants as a group. Katz shows that the mismeasurement of welfare in Schmalensee's model overstates the benefits of card use by 100 per cent and therefore errs toward supporting interchange fees that encourage excessive card use. Katz's conclusion on the Schmalensee model is that it "… does not provide a rigorous basis for concluding that privately set interchange rates will be efficient."[41]

In the Rochet and Tirole model, the optimal interchange fee is zero if issuing and acquiring are perfectly competitive. However, when issuers are less than perfectly competitive, the model shows that an interchange fee can promote efficiency. It does this not by internalising network externalities but by inducing issuers to reduce their fee to cardholders and encourage the take-up of credit cards, thereby compensating for the natural tendency of issuers with market power to restrict output (ie the number of credit cards). With market power, issuers' profits rise with the interchange fee and issuers have an incentive to push the fee up as high as possible without forcing merchants out of the system. The relationship between the fee determined by an issuer-controlled credit card scheme and the socially optimal fee in this model therefore depends on the degree of merchant "resistance" to card acceptance. Where merchants have a strong degree of resistance, both the privately and socially optimal interchange fees are equal to the highest level consistent with merchant acceptance of cards.

Rochet and Tirole also find, however, that if merchants have limited resistance to accepting cards, issuers will push the interchange fee above the socially optimal level, allowing them to reduce cardholder fees below the optimal level and resulting in the overprovision of credit card services: "a low merchant resistance is the worst

41 Katz (2001), p 27.

case scenario for the social optimality of an issuer-determined interchange fee."[42] Rochet and Tirole note that merchants may accept credit cards even though the merchant service fee exceeds the technological and payment guarantee benefits they derive from card acceptance because "[p]ayment card systems can exploit each merchant's eagerness to obtain a competitive edge over other merchants."[43] They also note that the use of cash rebates and other inducements also weaken merchant resistance, increasing the ability of issuer-controlled schemes to set interchange fees higher than is socially optimal.

An alternative approach to analysing the impact of interchange fees on economic welfare is the *neutrality argument*.[44] It states that the interchange fee has no impact on the size of the credit card system and no harmful effects on cash customers, no matter at what rate it is set; ie the interchange fee is "neutral". If the interchange fee were to change, merchant service fees and rebates to credit cardholders would both change by the same amount and in the same direction. This could happen if merchants are able to recover the costs of different payment instruments from their customers; it could also happen even if merchants are not able to do so. According to this view, if credit card transactions are more costly for merchants than cash transactions, some merchants will specialise in cash sales and will be able to undercut merchants selling to both cash and credit card customers. Cash customers will therefore not shop at stores that also serve credit card customers. The market will ultimately segment into two groups: those stores selling at lower prices to cash customers only, and those stores selling only to credit card customers at higher prices incorporating merchants' costs of accepting credit cards. It should be noted, however, that credit card schemes and their members do not accept this neutrality argument; on the contrary, they argue that any interchange fee lower than the current level would have a very deleterious impact on the card schemes.[45]

Whatever its theoretical support, the neutrality argument would seem to have little practical weight. Though there can be a significant difference in costs to merchants between accepting cash and credit card transactions, that difference in most cases would not be enough to make it attractive for merchants to set up as cash-only

42 Rochet and Tirole (2000), p 18.

43 *ibid*, p 33.

44 The notion that interchange fees might be neutral under certain conditions was discussed by Carlton and Frankel (1995) and Frankel (1998) and more recently by Gans and King (2001a).

45 Visa International (2001a) and MasterCard International (2001). MasterCard characterises the "self reinforcing cycle" set in train by lowering the interchange fee as a "death spiral", p 11.

merchants simply to avoid merchant service fees on credit cards. Submissions can give only one example of a cash-only merchant in a sector that now usually accepts credit cards – the supermarket chain, Aldi. However, Aldi's low prices are the result of its general "no frills" approach to grocery retailing, of which its unwillingness to accept credit cards is only one part.[46] For high-value transactions, however, the ready availability of cash discounts for items such as white goods demonstrates that there may well be an incentive for a merchant to adjust prices where the resulting dollar difference is sufficiently large. Drawing on the ARA survey quoted earlier, the average cost to a merchant of accepting a credit card for payment on a $1 000 refrigerator, for example, would be $19 but the same cost on a $200 basket of groceries would be $4 and on a tank full of petrol not much more than $1. It is quite unrealistic to expect that retailers will set up separate stores to compete on one aspect of their business – the payment method – when other means by which they differentiate themselves are at least as, and usually more, important.

In summing up, the economic literature on credit card networks is undeveloped compared to other branches of economics.[47] Model results are highly sensitive to the assumptions made and, by focusing only on the choice between cash and credit cards, the models do not deal with the more general situation of competition between different payment networks. In the Reserve Bank's opinion, the economic literature gives grounds for concluding that the collective setting of interchange fees has the potential to generate a fee structure that promotes overuse of credit cards. After reviewing recent contributions, Katz states that:

> "The findings on the relationship between the interchange rate chosen by a rationally self-interested association and the socially optimal interchange fee can be summarized as follows. In general, they can be expected to differ from one another. One source of the divergence is that private parties will respond to merchants' willingness to accept cards, which may be a poor measure of the overall effects of card acceptance on merchant welfare. Because of this distortion in acceptance incentives, privately optimal interchange fees may promote socially excessive card use."[48]

46 For example, Aldi only stocks its own brands which it sources in bulk from its own suppliers; it only stocks 600 items rather than 20 000 or more in a typical supermarket. It also charges for shopping trolleys and bags, and reduces handling costs by selling goods from cartons rather than unpacking onto shelves.

47 "The payment card industry has received scant theoretical attention, and it won't come as a surprise to the reader that more research is warranted." Rochet and Tirole (2000), p 34.

48 Katz (2001), p 29.

2.5 The setting of interchange fees in Australia

Notwithstanding the lack of strong theoretical support, MasterCard and Visa have claimed that the processes by which interchange fees are set in Australia produce efficient outcomes for the schemes and the community generally.

Visa has argued that, under competitive pressures, the interchange fee is set at or close to the optimal level by scheme members using their commercial judgment. Visa claims that this judgment "… is then tested in the negotiating process over interchange between members, which elicits information about the likely outcomes associated with alternative possible fee levels."[49] The ABA has claimed that "… the competitive process by which interchange fees have been determined is as follows. The division of revenues from cardholders and merchants is determined by the interaction of (i) the relative price elasticity of demand of cardholders and merchants (ii) the positive externality arising from cardholder membership and use and (iii) competition between open and closed schemes."[50]

Despite these descriptions of a competitive negotiating process for determining interchange fees, the actual interchange fee structure in Australia has been highly rigid. Australian members of MasterCard have not changed interchange fees for domestic transactions since 1993; no records have been made available on interchange fees charged prior to that date.[51] Australian members of Visa increased interchange fees for domestic transactions in 1993, when they set domestic fees to over-ride those set by the relevant Asia/Pacific boards/executive committees, but have left the fees unchanged since then. Australian members of the MasterCard and Visa schemes reviewed domestic interchange fees in the mid 1990s using the international methodologies of the respective schemes, but fees were not adjusted.[52] Nonetheless, none of the Australian members of either scheme could provide any information to the Reserve Bank on how the current level of interchange fees had been determined. Bankcard has not changed its interchange fee since the scheme was established in 1974. Bankcard and its members were unable to offer any justification for the original fee – they claimed to have "no records that deal with the setting of this fee at that time"[53] – or provide any evidence of any reviews of that fee.

49 Visa International (2001a), p 25.

50 Australian Bankers' Association (2001d), p 10.

51 As noted above, MasterCard and its members have claimed to have no record of the interchange fee charged prior to 1993.

52 MasterCard and Visa supplied this work to the Reserve Bank during preparation of the Joint Study.

53 Bankcard (1999).

In short, as the Joint Study found, there is no evidence that credit card interchange fees in Australia have been regularly reviewed by scheme members. In contrast to the practices of the international schemes in other countries, no formal methodologies for determining these fees have been applied.

This rigidity in interchange fee setting in Australia has had a number of consequences:

- Australia has not enjoyed reductions in interchange fees as the credit card networks have grown in scale and per unit costs declined, as happened in the United States in the earlier years of the networks;[54]
- interchange fees were not lowered when annual fees to cardholders were introduced from 1993, and cardholders began to bear more of the card scheme costs directly. Visa members actually increased interchange fees at that time; and
- Australia does not have the range of interchange fees for different types of merchants or transactions that other countries have. In the United States, for example, there is a range of different interchange fees including fees for electronic, paper and "card not present" transactions (for example, Internet) and supermarkets.[55]

None of the Australian members of the designated credit card schemes has sought to defend the *status quo*. However, the ABA has provided evidence suggesting that interchange fees in Australia are low by international standards.[56] The figures shown – which are normally secret – differ in some cases from those quoted by other sources and, in one case (the United Kingdom), give numbers that the international card schemes were not prepared to have published in the recent official review of competition in UK banking (the Cruickshank Report).[57] The ARA, on the other hand, has claimed that a number of other countries in Europe have interchange fees lower than the 0.8 per cent electronic rate which applies in Australia.[58] The

54 Evans and Schmalensee note that both interchange fees and merchant discounts declined in the 1980s in the United States, citing this as evidence that Visa's interchange fee did not have anti-competitive consequences. Evans and Schmalensee (1995), p 892. Since then, the pressures on interchange fees in the United States have been upwards as the schemes, with their large merchant bases, compete for issuers. See Balto (2000).

55 See www.chase.com for some US interchange fees and a brief description of the reasons for differential fees. Chakravorti and Shah (2001) report a large number of different interchange fees for MasterCard and Visa in the United States. Also see Evans and Schmalensee (1999), p 132.

56 Australian Bankers' Association (2001b), p 39.

57 See Cruickshank (2000).

58 Australian Retailers Association (2001b), p 17.

Reserve Bank asked both MasterCard and Visa if they would verify the data on interchange fees in other countries, but neither scheme has responded to this request. In any event, interchange fees in Europe can be expected to fall over time as a result of intervention by competition authorities, which is discussed below. Visa, for example, has proposed a reduction in its weighted average interchange fees for intra-regional European transactions to a maximum of 0.7 per cent over a five-year period.

On the other hand, the international card schemes have argued that strong competition ensures that current arrangements for the collective setting of interchange fees produce outcomes that are in the public interest.[59] They claim that competition between credit card schemes and between credit cards and other payment instruments ensures that interchange fees in their schemes cannot go too high or too low. If the interchange fee (and hence the merchant service fee) is too high, merchants will stop accepting credit cards in favour of cheaper payment instruments. If the interchange fee is too low, issuers will be unwilling to issue cards and the system will be underdeveloped. [60] MasterCard claims that "… given the healthy growth of the open systems, the absence of market fragmentation, and the proliferation of interchanged transactions in Australia, the interchange fees of the open systems in Australia would appear to be set at appropriate levels." [61]

Since the claim of strong competition between different brands and types of payment instruments in Australia is critical to judgments about whether collective interchange fee setting is in the public interest, this claim needs to be explored in some detail.

The analysis of interchange fees and their impact on economic welfare suggests that a collectively set interchange fee is more likely to be consistent with maximising economic welfare under conditions of:

- strong competition between the credit card schemes;
- strong competition between credit cards and other payment instruments; and
- a balance of issuing and acquiring interests in the fee-setting process.

59 Visa International (2001a) and MasterCard International (2001). Wright (2000), based on Rochet and Tirole (2000), also makes some claims about the optimality of Visa's collective fee setting on p 117 of Visa (2001a).

60 MasterCard argues that the low merchant acceptance of credit cards in Korea and Japan, where interchange fees are around 3 per cent and up to 5 per cent, respectively, is evidence of the competitive effect. MasterCard International (2001), pp 6-9.

61 MasterCard International (2001), p 9.

Competition between credit card schemes

Although the card schemes assert otherwise, there appears very limited competition between the designated credit card schemes in Australia. A major factor is scheme governance. Overlapping governance means that the same banks control all three schemes in Australia; in particular, the four major banks are on the governing boards and executive committees of all three schemes (Table 2.4). Given these arrangements, there appears little incentive for members to promote one scheme over another:

- members typically issue all three brands and some of the major banks and other members provide customers with a single application form for all three card

Table 2.4: Membership of Australian boards/ executive committees of credit card schemes

	Bankcard	MasterCard	Visa
ANZ	✓	✓	✓
Commonwealth	✓	✓	✓
National Australia	✓	✓	✓
Westpac	✓	✓	✓
St George		✓	✓
Bank of Western Australia		✓	✓
Bank of Queensland		✓	
Citibank		✓	✓
CUSCAL		✓	✓
CreditLink		✓	
GE Capital		✓	
IMB Ltd			✓

Source: Bankcard, MasterCard and Visa.

schemes.[62] Each of the major banks offers a choice of credit cards from the three schemes with almost identical payment services and fees;

- acquirers do not promote any particular card scheme to merchants but offer to acquire transactions from all three schemes, generally for the same fee for each scheme; and
- in loyalty programs offered by some of the major banks, loyalty points accrue to a customer irrespective of the credit card used. As discussed later, loyalty programs of this type are designed to promote allegiance to the card issuer, not competition between credit card schemes.[63]

In brief, competition between the credit card schemes appears limited to advertising that is funded by the schemes themselves to promote the brand to cardholders.

Competition with other payment instruments

Competition between payment instruments is critical to the claim that interchange fees cannot rise above "efficient" levels because such competition will keep them in check. If a particular scheme dominates credit card payments or has a sufficiently strong card base, merchants would find it difficult to opt out of that scheme and scheme members would be able to set the interchange fee above the efficient level. Though supportive of the collective setting of interchange fees, Baxter himself concluded that "antitrust and banking authorities should be alert to ensure that the number of payment systems is as large as the attainment of scale economies permits. Though unbridled autonomy within a system cannot be attained, unbridled rivalry between a multiplicity of systems should be encouraged."[64]

In Australia, the designated credit card schemes appear to have a dominant market position. Visa alone accounts for around 53 per cent of all credit and charge cards on issue in Australia. If MasterCard and Bankcard are included, cards issued by members of the three designated credit card schemes account for around 92 per cent of credit and charge cards on issue.[65] American Express and Diners

62 "Net issuer" rules in the credit card schemes, discussed in Chapter 4, encourage members to issue all three cards. An acquiring institution needs to be able to acquire all brands in order to attract merchants but, to avoid financial penalties imposed by the schemes, also needs to issue some volume of cards. Hence, any member that wants to acquire will typically issue all three brands.

63 For example, the Commonwealth Bank's True Awards program is the same for cards issued in all three card schemes and National Australia Bank's Gold Rewards program is the same for cards issued by both Visa and MasterCard.

64 Baxter (1983), p 587.

65 Roy Morgan Research, quoted in Table 1.2 above.

Club have a higher share of transaction values than of cards on issue, although preliminary data collected by the Reserve Bank suggest that the three designated credit card schemes still account for around 85 per cent of the value of credit and charge card transactions.[66]

Nonetheless, the designated credit card schemes claim that the three party schemes, American Express and Diners Club, remain their closest competitors. However, according to the ARA, merchant service fees for the three party schemes are around 100 basis points above those charged by the designated credit card schemes. The three party schemes also have much smaller cardholder and merchant bases, raising the question about the degree of competitive pressure that these schemes can apply. Visa itself has claimed that "… the fact that there are more VISA cardholders makes accepting VISA cards more attractive to merchants than accepting AMEX cards, even if the terms and conditions of accepting these cards were identical."[67] Competition between the three and four party card schemes is discussed more fully in Chapter 5.

Debit cards are also a potentially strong competitor for credit cards. From the viewpoint of the merchant, a debit card also provides a guaranteed, pre-authorised payment; for cardholders who do not face a cash constraint, a debit card is a close substitute for a credit card.[68] Until recently, debit cards accounted for a larger number of transactions than credit cards. However, debit cards are not actively promoted – through loyalty programs, other forms of inducements or advertising – by financial institutions that are also members of the designated credit card schemes.[69] Moreover, the pricing structure for debit cards, which is determined by the four major banks, discourages consumers from using these cards in preference to credit cards. Debit cardholders face a per transaction fee for using their debit card (beyond a fee-free threshold) while credit cardholders do not face a per transaction fee and earn a rebate (ie a negative cost) if they participate in a credit card loyalty program. Competition between payment instruments has also been undermined by the limited promotion in Australia of the debit cards of the

66 The ACCC has ruled that, in its competitive analysis of the Commonwealth/Colonial merger, credit cards are a relevant market distinct from other personal lending on the credit side and from transaction accounts on the payments side. See Goddard and Walker (2001).

67 Visa International (2001a), p 3.

68 Proprietary debit cards do not provide a refund for goods and services paid for but not delivered. The right to a refund can be important for purchases where goods and services are normally delivered after payment, but is largely irrelevant for purchases such as in service stations, supermarkets or restaurants.

69 The exception appears to be the Commonwealth Bank's "Ezy banking" debit card, which provides loyalty points if the card is used for transactions at Woolworths' stores.

international card schemes which, unlike proprietary debit cards, have world-wide acceptance.[70]

The preference of card issuers to promote the use of credit cards over debit cards is not difficult to understand. At the simplest level, card issuers receive interchange fees each time a credit cardholder makes a purchase (averaging around $0.95 for a $100 transaction) but they pay interchange fees (averaging around $0.20-$0.25 a transaction) whenever a debit card is used. Credit cardholders who do not pay off their accounts in full each month also generate interest revenue to issuers. The Joint Study showed that issuers incur higher costs in providing credit card services compared with debit cards (largely because of the costs of the interest-free period, credit losses and fraud), but nonetheless earn more net revenue when their customers use credit cards rather than debit cards.

In the face of well-established credit card schemes with wide customer popularity, merchants claim they have little option but to accept credit cards; once they do, however, they are locked in. The Reserve Bank is not aware of any evidence, in Australia or elsewhere, of merchants quitting credit card schemes on any significant scale after they had signed up. Shell has stated that "[i]n the case of Shell (as in the case of most other retailers) the non-acceptance of credit cards is simply not an option. Card acceptance is necessary simply to gain entry to consumer consideration."[71] The lack of effective merchant resistance gives credit card schemes the potential to set interchange fees above the socially optimal level and promote inefficiently high levels of credit card usage, with little risk of losing merchant acceptance. This danger has already been illustrated by experience in the United States, where MasterCard and Visa have competed for issuers by *increasing* interchange fees, both in the credit card market and in the off-line debit card market (which in the United States has an interchange fee structure similar to that of credit cards).[72]

Balancing of issuing and acquiring interests

The interests of merchants and cardholders both need to be taken into account in assessing the effects on economic efficiency of the negotiating process on interchange fees which the international card schemes have described. If issuing

70 The Joint Study expressed concerns about the interchange fees applying to Visa debit cards, which the Reserve Bank has taken up with Visa and domestic issuers, but not about the product itself.

71 Shell (2001), p 13. The Restaurant and Catering Association of Australia noted that the business of its members "… relies on credit card transactions for the majority of its settlement activity", Restaurant and Catering Association of Australia (2001), p 2.

72 Balto (2000).

is more strongly represented in this process than acquiring, there is likely to be insufficient account taken of merchants' interests; the opposite would apply if acquiring is more strongly represented.

The fact that, in Australia, the large issuers are also large acquirers might suggest that the voice of acquirers will be strong. The ARA has argued, however, that the interchange fee "… is not subject to independent assessment and negotiation from acquirers as they are all issuers under current card scheme rules".[73] In practice, there is every indication that the issuing side of the business takes precedence. Submissions from card schemes and their members have consistently put the issuers' viewpoint – that any lowering of interchange fees will have a deleterious impact on issuers and cardholders. The Reserve Bank has not received a single submission from credit card scheme members that emphasised the positive impact of lower interchange fees on acquirers' and merchants' business. The obligation on merchants under the "no surcharge" rule to pass on higher merchant service fees in prices charged to all customers also weakens the balancing forces needed for efficient interchange fee setting. The Joint Study reached the conclusion that: "… card scheme members are under little pressure to lower interchange fees – as issuers they receive revenue from these fees and as acquirers they can pass the fees on to merchants. Merchants, in turn, have little scope to resist since they do not have the option of shopping around for an acquirer seeking to recover a lower interchange fee; their only option is the extreme one of refusing to accept credit cards."[74]

More generally, there is no evidence of any competitive negotiations on interchange fees in any of the three designated credit card schemes, and the processes that do occur lack transparency. Interchange fees have been rigid and, since 1993, have been the same for all three schemes for transactions incurring the "standard" rate. Despite the Reserve Bank's request, none of the three designated credit card schemes or their members was able to produce any evidence that this rigidity in fees is the result of ongoing negotiation, taking into account changing market and cost conditions.

To sum up, the competitive conditions necessary to ensure that the collective setting of interchange fees is in the public interest are not present in Australia. Competition between the three designated credit card schemes, and between credit cards and other payment instruments, lacks vigour in the face of overlapping governance arrangements and the dominant position of the four major banks, which are the

73 Australian Retailers Association (2001b), p 7.

74 Reserve Bank of Australia and Australian Competition and Consumer Commission (2000), p 58.

main suppliers of credit card services and most other payment instruments in Australia. These banks have clearly preferred to promote credit cards at the expense of other payment instruments. The only competitors about which they have expressed concern – American Express and Diners Club – are the only payment instruments in which they have no direct involvement.[75]

The obvious manifestation of the absence of effective competition is the fee-setting process itself. The longstanding arrangements are characterised by secrecy, rigidity and lack of any objective and clearly articulated methodology. Such arrangements, in the pursuit of maximum credit card usage and scheme members' profits, run the serious risk of leading to overprovision of credit card services and inefficiently high merchant service fees. Under scheme restrictions on merchant pricing, discussed in the following Chapter, any overprovision of credit card services is paid for by the community as a whole through the general level of prices. In the Reserve Bank's opinion, the current arrangements for the collective setting of interchange fees, were they to persist, would not be in the public interest.

Community welfare would clearly be enhanced by greater competition between payment card networks. However, because of network effects, it is very difficult for small and/or new networks to compete with large, established ones; as the card schemes themselves acknowledge, individual cardholders and merchants prefer larger networks to smaller networks at the same price.[76]

2.6 Principles for setting interchange fees

As noted in Chapter 1, regulatory authorities in some other countries are currently reviewing credit card interchange fee arrangements from a public interest perspective. Although these reviews are not complete, the approaches being taken by these authorities eschew "black box" methodologies, which treat interchange fees as a balancing device to be left entirely to negotiations between card scheme members, in favour of transparent, cost-based rules or methodologies for determining interchange fees. These rules or methodologies focus on the credit card payment services, separately identified, which are provided to merchants.

In its response to the Cruickshank Report on competition in UK banking, the UK Government concluded that, while there were respectable economic arguments for a balancing approach, "… for established payment systems it would appear

75 See, for example, Australian Bankers' Association (2001b and 2001c) and Visa International (2001b).

76 Visa International (2001a), p 3.

that there were more damaging effects associated with a high, non-cost based interchange rate than with a lower, cost-based interchange rate."[77] The damaging effects of inflated interchange fees identified in the Cruickshank Report included:

- high costs for merchants which in turn lead to higher prices for consumers;
- weakened incentives for issuers to cut costs through greater efficiency; and
- distortion in competition between payment instruments in favour of instruments with artificially high interchange fees (when those interchange fees are used to fund loyalty schemes).

Accordingly, the UK Government has announced its intention to introduce a set of competition-oriented rules to govern participants in the UK payments system, with one rule aimed at ensuring efficient wholesale pricing (including interchange fees). In the latter case, the proposal is that wholesale prices be derived through a published methodology that is based on legitimate costs, and that anticipates achievable cost reductions.

Similarly, the European Commission has rejected the balancing approach to determining interchange fees in favour of a cost-based methodology in its investigations of Visa's interchange fee arrangements in its intra-European operations. This is discussed further below.

In the absence of a vigorous competitive environment, the Reserve Bank believes that the public interest requires a transparent and objective methodology for the setting of credit card interchange fees in Australia, and that the fee-setting process be open to public scrutiny. This would give cardholders, merchants and the community confidence in the integrity of arrangements by which a crucial wholesale price in credit card schemes is determined. In the Reserve Bank's view, any methodology for determining an interchange fee should be consistent with a set of principles that would promote more efficient and transparent pricing of credit card services to both merchants and cardholders. These principles would require any methodology to:

(i) provide a cost-based justification for the level of interchange fees that is transparent to merchants, cardholders and the community in general;

(ii) be based on the credit card payment services which are provided to merchants, and for which card issuers recover costs through interchange fees;

(iii) exclude from its calculations costs that are not related to payment network considerations, and are therefore not relevant to interchange fee calculations;

77 HM Treasury (2000), p 29.

(iv) provide for different interchange fees for different types of transactions and/ or differences in the credit card payment services provided to merchants;

(v) have the data independently verified; and

(vi) be subject to regular reviews.

The international card schemes have suggested to the Reserve Bank that the methodologies they have applied in other countries could form the basis for interchange fee setting in Australia. However, the Australian members of the schemes have, through the ABA, proposed a quite different approach. In contrast, retailers have argued for the abolition of credit card interchange fees and their replacement with a "fee for service". These different approaches need to be assessed against the principles set out above.

The MasterCard approach

The MasterCard methodology used in other countries sees the interchange fee as the means by which issuers recover costs for specific services provided to acquirers (and hence to merchants).[78] Under this approach, the three main components of issuers' costs included in the interchange fee are:

- the cost of providing a payment guarantee, including the cost of fraud and credit write-offs. The justification for including fraud costs is that a merchant still receives payment from the card issuer if it accepts a credit card transaction that turns out to be fraudulent.[79] The justification for including credit losses is that the merchant is guaranteed payment by the card issuer even if the cardholder does not repay the issuer. If the merchant itself had been extending credit, it would have lost money in the event of customer default;
- the cost of funding the interest-free period. The justification is that provision of interest-free credit to cardholders benefits the merchant by increasing its sales and saving it the direct costs of providing this service itself; and
- the costs of processing transactions from acquirers. These include costs of receiving and verifying the transaction and the cost of settlement. The justification for including these costs is that they benefit the merchant by enabling it to transact with customers of financial institutions other than its own acquirer.

78 MasterCard International (2001), p 40.

79 This guarantee, however, does not apply for all credit card transactions. For "card not present" transactions where there is no signature (for example, Internet or telephone transactions), the merchant does not have a guarantee of payment in the event of fraud.

MasterCard claims that "[t]he interchange fee is then established by taking these costs as a starting point and taking into consideration other factors, including the need to provide incentives for widespread issuance and for merchants to accept cards or deploy technology and the level of competitors' fees".[80] The MasterCard approach does not include other costs incurred by card issuers, such as loyalty programs and other marketing costs, a return on capital or sunk costs; these costs are left for issuers to recover directly from their customers.

The MasterCard methodology has been under review by competition authorities in the United Kingdom. In September 2001, the Office of Fair Trading (OFT) notified MasterCard/Europay that it proposed to make a decision that agreement among MasterCard/Europay members on the level of their multilateral interchange fee is in breach of UK competition law and does not qualify for exemption. The OFT considers that the agreement on this fee increases retail costs and the prices paid by consumers for goods and services. The OFT is now taking representations from MasterCard/Europay before making a final decision.[81]

The Visa approach

The Visa methodology is used in some other countries as a basis for determining interchange fees for domestic transactions, and in some regions for determining international interchange fees. Drawing on the original Baxter analysis, Visa sees the interchange fee as a financial adjustment which reduces the imbalance between the costs of credit card issuing and acquiring.[82] The appropriate interchange fee is that fee that equates the acquirer's share of total payment system costs with its share of revenues.

Visa's approach focuses on the costs of providing only the payment services of credit cards; it excludes costs that are related to the provision of the revolving credit facility. Visa states that it undertakes detailed data collection and calculations in determining interchange fees. The Reserve Bank understands that these calculations do not include estimates of the various demand and supply elasticities for credit card payment services; nor do they provide for a return on capital or for loyalty programs and marketing costs. The calculated fee is used by members as a benchmark in deciding actual fee levels; other considerations, such as competitors' interchange fees, different merchant sectors, innovation and incentives are also said to be taken into account. Visa claims that its international interchange fees have always been set below the amount calculated by its methodology.

80 MasterCard International (2001), p 40.

81 Office of Fair Trading (2001).

82 See Visa International (2001a), pp 21-22.

Visa has provided the Reserve Bank with summary worksheets from its review of domestic interchange fees in Australia in the mid 1990s, but not with detailed spreadsheets that would show how interchange fees are calculated in other regions. In the United Kingdom, similarly, Visa did not allow any information about the application of the Visa methodology to be published in the Cruickshank Report. This lack of transparency makes it very difficult to assess the methodology and whether, in particular, it can generate differential interchange fees in any systematic way.

The Australian members of Visa have not recommended that the Visa methodology be adopted for the determination of interchange fees in Australia. In any event, Visa has recently abandoned its balancing approach in the case of its intra-regional interchange fees in Europe, in response to concerns expressed by the European Commission.[83] In its original Statement of Objections, the Commission stated that Visa's interchange fee for intra-regional transactions amounted to a collective price agreement, which is restrictive of competition. Visa has subsequently proposed moving to a simple cost-based methodology that would be used as an objective benchmark against which its intra-regional interchange fees would be assessed. The three broad categories of costs for inclusion in this methodology are identical to the MasterCard approach – viz, the costs of providing the payment guarantee, the interest-free period and processing costs – but details of these costs and on the proportion that would be attributed to merchants are not available. The interchange fee would be the lower of the fee determined by this methodology and Visa's proposed reduction in its weighted average interchange fees to a maximum of 0.7 per cent over five years. The European Commission has invited submissions from interested third parties before finalising its decision on whether to respond favourably to Visa's revised methodology.

The ABA proposal

The ABA, on behalf of nine member banks, has proposed what it has called the "avoidable cost" methodology for determining interchange fees. This is the third attempt by Australian banks to propose a suitable methodology; two previous proposals which might have formed the basis for an authorisation of interchange fee arrangements under the *Trade Practices Act 1974* were provided to the ACCC in early 2001 but these proposals were not submitted to the Reserve Bank.

83 European Commission (2001b).

The ABA describes its methodology as being based on the question "[w]hat costs would be unavoidable if an issuer were to provide (on a sustainable basis) only credit card payment services?"[84] This leads to the proposition that efficient interchange fees should be no higher than the stand-alone cost of sustainably providing the "buy now pay later" functionality, and no lower than the incremental cost.[85] In the ABA's proposal, the fee calculated using the avoidable cost methodology would provide an "envelope" for interchange fees – the designated credit card schemes could use whatever approach they wished provided the resulting interchange fee is not higher than the envelope.

The avoidable cost methodology does not include issuers' costs associated with the provision of the revolving credit facility. However, it does include a wide range of other costs, such as fraud costs, credit losses associated with the use of the interest-free period, operating costs, marketing, promotion and retention costs, the cost of equity capital and sunk costs.[86] Any issuers' revenues from annual fees can be taken into account but, in principle, *all* issuers' costs incurred in providing the payment functionality of the credit card could be passed to merchants through the interchange fee under this methodology. The ABA argues that this avoids the need for an "arbitrary" allocation of costs between merchants and cardholders; in doing so, however, the avoidable cost methodology provides no incentives to issuers to recover *any* costs from cardholders.

Assessment of the methodologies

The costs that would be included under the different cost-based methodologies, including Visa's compromise proposal to the European Commission, are summarised in Table 2.5.

In the Reserve Bank's judgment, none of these methodologies fully meets the principles for interchange fee setting established earlier. Each includes costs which are not related to payment network considerations or to specific services provided to merchants. A number of cost categories do not meet the principles.

84 Australian Bankers' Association (2001b), p 51.

85 The stand-alone cost is defined as "the costs for an organisation to establish and operate a payment card with the buy now and pay later functionality." *ibid*, p 75. The incremental cost is the cost "that would be incurred if that functionality [buy now, pay later] was added to an existing card product." *ibid*, p 78. The ABA submission argues that "to be consistent with economic allocative efficiency, the ceiling for the interchange fee should be the *stand alone cost* of providing credit card payment services." *ibid*, p 47.

86 *ibid*, p 6.

Table 2.5: Summary of alternative interchange fee methodologies: categories included

	MasterCard	Visa	ABA
Issuing revenue			
Cardholder annual fees			✓
Issuing costs			
Payment guarantee:		a	
Credit losses	✓	?	b
Fraud	✓	?	✓
Authorisation	✓	?	✓
Other	✓	?	✓
Cost of funding:			
Interest free period	✓	✓	✓
Operational costs:			
Transaction processing	✓	✓	✓
Card production and delivery			✓
Loyalty/marketing			✓
Other operational costs			✓
Other costs:			
Equity capital and sunk costs			✓

a Details of the payment guarantee costs that would be included in the Visa methodology are not available.
b Credit losses associated only with the use of the interest-free period.

Credit losses

Costs associated with credit assessment, credit losses and recovery, which are included in the MasterCard methodology, are not related to payment network considerations.[87] The ARA has argued that these costs should not be included as they arise out of the provision of credit facilities to cardholders, based on credit risk assessments carried out by individual card issuers and on terms and conditions

87 At this stage, it has not been announced whether these costs would be included in payment guarantee costs under Visa's compromise methodology.

set by them. Neither the credit card schemes nor merchants have input into the terms and conditions. The Reserve Bank agrees with this argument. In principle, efficient pricing requires that the credit risks be incorporated into credit card lending rates paid by cardholders.[88] In practice, the Joint Study found that cardholders in Australia using revolving credit facilities are fully covering average credit losses by paying interest rates well above rates on other unsecured personal lending.[89] If card scheme members were to include credit losses in interchange fee calculations, card issuers would be recovering the costs of credit losses twice. Moreover, a pricing structure which passed average credit losses to merchants through interchange fees would create a "moral hazard", in that card schemes would have an incentive to promote inefficiently low credit standards.

Although it excludes issuers' costs associated with the provision of the revolving credit facility, the avoidable cost methodology does include some proportion of credit losses in the interchange fee. The ABA has argued that a proportion of these credit losses arises from cardholders who pay no interest (ie transactors) and likens these losses to credit losses in charge card schemes that do not have a revolving credit facility.[90] The ABA has provided no evidence on the size of such losses but they are likely to be very small: default on credit card debt, whether revolving or otherwise, accounts for only around one per cent of total credit card outstandings.[91] Furthermore, unlike charge cardholders, credit cardholders do not need to default immediately if they get into difficulties – they can choose to pay the minimum monthly amount. For these reasons, it seems highly unlikely that non-revolvers that suddenly default would constitute a significant group. In a different argument, the ABA has claimed that "[w]hen a cardholder defaults on payment, the outstanding balance may include both purchases and cash advances made in prior periods (and that have been revolved) and purchases and cash advances made during the current period. Therefore the costs associated with credit losses and collections relate partially to the payment functionality of the credit card and partially to the other functionalities."[92] This argument fails to recognise that once cardholders use the revolving credit facility, they usually receive no interest-free period; they pay interest on all purchases, even those in the current period. The issuer therefore receives

88 This point has been acknowledged by Visa International (2001a) and the Australian Retailers Association (2001b).

89 Reserve Bank of Australia and Australian Competition and Consumer Commission (2000), p 50.

90 Australian Bankers' Association (2001b), p 33.

91 KPMG Consulting (2001), p 22.

92 Australian Bankers' Association (2001b), p 77.

recompense for credit losses from these customers directly through the credit card interest rate.

Interest-free period

As with the revolving credit facility, provision of the interest-free period is a credit service provided to cardholders on terms and conditions set exclusively by individual card issuers; it is not related to payment network considerations. Neither the credit card schemes nor merchants have any input into the terms and conditions on which this service is provided. Although the interest-free period has been an integral feature of a credit card, some card issuers in Australia offer their customers a credit card without it, at a lower annual fee and interest rate on the revolving credit facility. The interest-free period is clearly a benefit to cardholders, enabling them to manage their liquidity by reducing their use of cash and their balances in low-yielding transaction accounts. Some submissions have claimed that the interest-free period encourages cash-constrained customers to make "impulse" purchases at individual merchants but, as discussed earlier in this Chapter, there is no evidence that merchants as a whole enjoy a permanent increase in sales from credit card usage.

The ARA has pointed out that although house builders benefit when financial institutions provide mortgages to their customers, no-one expects builders to pay "interchange fees" to these financial institutions.[93] Similarly, the Cruickshank Report argued that recovering the costs of the interest-free period from merchants through an interchange fee distorts consumers' choices between a credit card and alternative payment instruments. A customer making a purchase by debit card or cheque, and drawing on an attached overdraft facility, does not have the costs of this overdraft paid for by the merchants that supplied the goods. In the Reserve Bank's view, since the provision of the interest-free period is a matter exclusively between individual card issuers and their customers, passing the costs of the interest-free period to merchants through interchange fees would not meet the Reserve Bank's principles for interchange fee setting.

Loyalty programs

The avoidable cost methodology includes the cost of loyalty programs in the interchange fee, on the basis that these are resource costs incurred by issuers as a means of promoting credit card schemes.[94] The ABA and its members are alone in arguing for the inclusion of such costs in interchange fees; as far as the Reserve

93 Australian Retailers Association (2001b), p 7.

94 Australian Bankers' Association (2001b), p 31.

Bank is aware, neither MasterCard nor Visa treat them as eligible costs in their methodologies in any country (nor does Visa in its compromise proposal to the European Commission).

The Reserve Bank is unconvinced by the ABA's arguments. Loyalty programs do impose costs on credit card issuers that offer such programs, but these costs are not integral to the provision of payment services. The payment services of a credit card – in particular, its "buy now, pay later" feature and guaranteed refund – have not changed since the credit card was first introduced. Loyalty programs do not add to these services – a cardholder receiving loyalty points cannot effect a credit card transaction more efficiently, more speedily or more securely than a cardholder who does not receive loyalty points. The costs of loyalty programs are a discretionary cost for card issuers, and a number of issuers have chosen not to offer such programs.[95] Nor are these costs related to payment network considerations. Many successful payment networks exist without loyalty schemes and, until the last few years, so did the credit card network in Australia. Loyalty schemes are a relatively recent 'add on' (they were introduced from around 1995) to an existing credit card system in Australia that had operated successfully since its establishment. Loyalty schemes may encourage consumers to use credit cards in preference to other payment instruments; however, no evidence has been presented that this results in a permanent increase in sales for merchants as a whole. Indeed, merchants themselves are strongly critical of the use of credit card loyalty programs to encourage credit card usage because they believe they bear the cost of these programs in their merchant service fees.[96]

Credit card loyalty programs in Australia are used by individual financial institutions mainly as a means of retaining their customers. The programs are not provided by the credit card schemes themselves and are not integral to them. For some of the major banks, the same loyalty points are provided to customers irrespective of which card is used, and scheme points cannot usually be transferred if a customer wishes to remain in the same card scheme but switches to another card issuer. One of the major banks has advised that its loyalty programs are promoted in the bank's interest. According to this bank, the two main objectives of its loyalty

95 Although Visa does not include the cost of loyalty programs in its interchange fee calculations in other countries, it has recently offered the view that provision of a loyalty scheme has now become a function of a payment system. Visa International (2001b), p 48. Elsewhere, Visa has claimed that loyalty points are part of the payment service of a credit card in the same way that air conditioning in a motor vehicle is a resource cost associated with the provision of motoring services. This analogy is incorrect; loyalty points are analogous to a rebate on running costs for the use of a motor vehicle. See Visa International (2001a), pp 23-24.

96 Australian Retailers Association (2001b) and Shell (2001), p 13.

programs are the retention of existing customers and maintenance of its competitive position in the market. Neither of these objectives relates to the provision of payment services or to payment network effects.

In the Reserve Bank's view, loyalty points are price discounts or rebates. They are transfers to credit cardholders rather than costs associated with the provision of payment card services, and hence are not eligible for inclusion in the determination of interchange fees. This view is supported by Gans and King, consultants to National Australia Bank, and is consistent with the treatment of rebates in recent theoretical models of optimal interchange fees.[97] In reviewing this issue, Katz also drew attention to the consequences that would arise if the costs of loyalty programs were included in interchange fees.[98] He concluded that this would place little effective limit on the ability of issuers to impose inefficiently high interchange fees to fund loyalty programs, since the cost of the programs would be incorporated in the calculation of allowable interchange fees.

Cardholder services

The avoidable cost methodology includes in the interchange fee the costs of providing cardholder services, such as the printing and distribution of statements and the acceptance of repayments. These costs are unrelated to the payment services of a credit card or to payment network considerations. They are pure account services to cardholders, just as they are when provided in conjunction with other payment instruments.

Cost of capital and sunk costs

The avoidable cost methodology includes in the interchange fee a return on the capital committed by card issuers and an allowance for the sunk costs of issuers, in the form of past losses on credit card issuing. Although these two concepts are different in principle, the argument for their inclusion amounts to the same thing – the interchange fee should have built into it a rate of return on credit card issuing.[99]

97 See Gans and King (2001d), p 32 and Katz (2001), p 35. In his critical analysis of interchange fees, Frankel has observed that banks "… pass some of the additional profits [generated by interchange fees] on to credit card customers in the form of rebates". Frankel (1998), p 344.

98 Katz (2001), p 35.

99 "From a practical perspective, sunk costs are typically reflected in the return on equity capital that is earned to recognize the risk of the business and the life cycle return on capital requirements." Australian Bankers' Association (2001b), p 77.

All firms need to commit capital to support their activities and require a sufficient return on that capital if they are to remain in the business. If the return on capital is too low, the capital would be better employed elsewhere. The concept of an allowance for past losses is slightly different. It recognises that firms may incur losses in the early years of an investment in the expectation of building the business and realising profits in the future that would offset the earlier losses.

The Reserve Bank acknowledges that credit card issuers have undertaken a substantial investment in the development of credit card networks and that they are entitled to earn a return, both on the capital currently committed and on past investments. It does not agree, however, that these returns should be earned entirely through the interchange fee, as the avoidable cost methodology requires. There would be logic in individual issuers seeking from merchants a return on the capital committed to providing payment services to merchants (eg that part of the capital costs of chip technology aimed at fraud prevention), although it is not clear how different "hurdle" rates of return for different issuers could be credibly averaged for inclusion in an interchange fee.

However, there is no obvious logic in the argument that card issuers should seek to earn a return on the *total* capital committed to the card issuing business exclusively through an interchange fee passed onto merchants. Such a process would amount to card scheme members collectively underwriting an industry average rate of return for credit card issuing. To include it in any standard on interchange fees would imply an official endorsement of that average. Issuers have revenue sources other than interchange fees and are able to earn returns through the pricing of their card services to cardholders, just as they do for other financial products. In this way, the rate of return for an individual issuer is largely subject to competitive forces.

The Reserve Bank's views on the treatment of the costs of capital and sunk costs is consistent with the approach taken by MasterCard and Visa and is supported by Gans and King. The latter note that:

> "If interchange fees for issuers are reduced because their sunk investment costs are not taken into account, issuers will be able to recover those costs from other revenue sources. This is precisely because all issuers receive a common interchange fee and so changes in that fee would, for the most part, not impact on their profits in competition with one another.
>
> In effect, issuers and acquirers will earn their sunk entry costs in the marketplace … As in all markets, firms will enter or exit issuing and acquiring only if they can earn a return on sunk expenditures and

hence, there is no further need for regulatory underwriting of such returns."[100]

The retailers' proposal

In contrast to the different methodologies discussed above, the ARA has argued for the abolition of interchange fees in the credit card system in Australia and their replacement with a "fee for service".[101] This fee would vary depending on the infrastructure investment and actual costs incurred by those parties, including merchants, involved in the processing of credit card transactions.

Under the ARA proposal, which has been explained to the Reserve Bank in consultations, the cardholder would pay for those costs that the issuer incurs on its behalf, including the cost of the interest-free period, credit losses and account maintenance costs. The issuer would negotiate to pay the acquirer a fee for access to merchants and, where the merchant provides the infrastructure, this fee would pass to the merchant. The merchant would pay the acquirer for settlement services and any other costs relating to its access to the network.

The underlying logic of this proposal is that the providers of the network infrastructure (acquirers and sometimes merchants) ensure cardholders and merchants have access to a payment system and that providers should be recompensed for this. That same logic implies that card issuers do not provide payment services for which merchants are the main beneficiary, hence eschewing the need for an interchange fee. It also implies that negotiations between issuers and acquirers would be bilateral, as they are in Australia's debit card system.

The ARA proposal has strong similarities with the justifications for the flow of interchange fees from issuers to acquirers (and some merchants) in Australia's debit card system. The proposal would represent a major departure from long-established credit card arrangements, for which there is no precedent in any country. It could also pose substantial practical difficulties. Many of the difficulties the Reserve Bank has identified with interchange fee setting for credit cards – the rigidity of fees and the lack of transparency in fee setting – are present, if not worse, in systems with bilateral negotiations, as the ATM and debit card systems in Australia have illustrated. Furthermore, fee setting based on a web of bilateral agreements could make access difficult for small participants. Under current credit card scheme arrangements, membership criteria are at least objective.

100 Gans and King (2001d), pp 33-34.

101 Australian Retailers Association (2001b).

2.7 A draft standard for wholesale fee setting

In the Reserve Bank's opinion, current arrangements for the collective setting of interchange fees in the designated credit card schemes are not in the public interest. As noted earlier, these arrangements are characterised by their rigidity, lack of transparency and absence of any clearly articulated methodology, and they have been able to persist because of the absence of strong competitive conditions. Given the major changes that have taken place in technology, credit card volumes and costs over the period, it would be purely fortuitous that a particular interchange fee set by Bankcard in 1974, and that was also adopted by the international card schemes in 1993, results in efficient pricing of credit card services to cardholders and merchants, and maximises community welfare, in 2001. The card schemes and their members have proposed alternative methodologies for setting interchange fees, but these do not meet the principles which the Reserve Bank believes are needed to promote efficiency and transparency in fee setting. The methodologies would charge to merchants, and to the community as a whole, credit card costs that arise out of the provision of specific credit card services to cardholders.

For these reasons, the Reserve Bank has concluded that a standard is needed, in the public interest, that would enshrine its principles for interchange fee setting. The standard would apply to participants in the three designated credit card schemes, under the *Payment Systems (Regulation) Act 1998*.[102]

The Reserve Bank's draft standard seeks to ensure that interchange fees in designated credit card schemes are calculated on the basis of an objective, transparent and cost-based methodology and are regularly reviewed. The methodology is based on the credit card payment services which are provided to merchants, and for which card issuers recover costs through interchange fees. In the Reserve Bank's opinion, only two categories of issuers' costs are eligible for inclusion in the calculation. These are:

(i) costs incurred for processing transactions received from other scheme members that would not be incurred if the issuer were also the acquirer. These are costs associated with operating the credit card payment network and include the costs of receiving, verifying, reconciling and settlement of transactions from other scheme members. The costs would be separately calculated for electronic and paper-based transactions; and

102 The ABA has submitted that, if the Reserve Bank is to use its payments system powers, interchange fee setting should be regulated via an access regime rather than a standard. Australian Bankers' Association (2001b), Chapter 2. The Reserve Bank, drawing on advice from senior counsel, does not accept this interpretation of its powers.

(ii) costs for fraud and fraud prevention and authorisation incurred in providing any payment guarantees. The payment guarantee is a payment service provided by a credit card of which merchants are the main beneficiary. Again, costs will be separately calculated for electronic and paper-based transactions. However, where issuers can charge fraud costs back to the merchant, such as in "card not present" transactions, these costs would not be included in the interchange fee (nor presumably in a merchant service fee); to do so would be double counting.

In principle, the payment guarantee could be "unbundled" from other credit card payment services and provided to merchants by third parties, such as insurance companies. At this point, there are no signs of alternative suppliers of this product emerging in Australia. However, if such a market were to develop, arguments for inclusion of the costs of the payment guarantee in the interchange fee would need to be revisited.

The draft standard provides for differential interchange fees for different types of transactions (paper vs electronic) and differences in the credit card payment services provided to merchants (payment guarantee vs no payment guarantee).

The draft standard requires that interchange fees in a designated credit card scheme be based on the eligible costs of participants accounting for at least 90 per cent of the value of transactions in that scheme. Costs would be provided to an independent expert agreed to by the Reserve Bank, who would calculate interchange fees for that scheme on a weighted average basis. Interchange fees so calculated would be the *maximum* interchange fees for that scheme, but individual issuers would be free to "post" lower interchange fees. The data and the interchange fee calculations of the independent expert must be provided to the Reserve Bank, which would satisfy itself that the data were consistent with the standard. In the interests of transparency, each designated credit card scheme must also publish the data (in aggregate form) and its interchange fees. Interchange fees must be reviewed by the designated credit card schemes if the Reserve Bank considered that changes in costs warranted a review or, in any event, on a three-year cycle.

The draft standard also aims to provide legal certainty to the designated credit card schemes and their members. As noted earlier, the ACCC has advised that the collective setting of interchange fees is a breach of the price-fixing prohibitions of the *Trade Practices Act 1974*. At the time the credit card schemes were designated, the Reserve Bank and the ACCC stated that it was their intention to ensure that credit card schemes and their members would not be at risk under the *Trade Practices Act 1974* as a result of complying with the Reserve Bank's requirements. The draft standard does not require the credit card schemes or their members to act in a way that would put them in breach of the *Trade Practices Act 1974*.

The draft standard on wholesale fee setting is set out below.

Standard No. 1

Draft Standard for Designated Credit Card Schemes

The Setting of Wholesale ("Interchange") Fees

Objective

The objective of this Standard is to promote:

(i) *efficiency; and*

(ii) *competition*

in the payments system by ensuring that any wholesale ("interchange") fees in designated credit card schemes are determined on the basis of an objective, transparent and cost-based methodology and are regularly reviewed.

Application

1. This Standard is determined under Section 18 of the *Payment Systems (Regulation) Act 1998*.

2. This Standard applies to the three credit card systems designated on 12 April 2001 by the Reserve Bank of Australia under Section 11 of the *Payment Systems (Regulation) Act 1998*, being:

   (i) the credit card system operated within Australia known as the Bankcard Scheme;

   (ii) the credit card system operated within Australia known as the MasterCard System or MasterCard Network Card System; and

   (iii) the credit card system operated within Australia known as the Visa System or the Visa Network Card System,

   each referred to as follows as a Scheme.

3. In this Standard:

   an "acquirer" provides services to merchants to allow the merchant to accept a Scheme's credit cards;

   "credit card transaction" or "transaction" means a transaction between a credit card holder and a merchant involving the purchase of goods or services on credit by that credit card holder using a credit card;

"electronic transaction" means a credit card transaction for which authorisation is obtained by the merchant electronically;

"financial year" is the 12 month period ending 30 June;

an "issuer" issues a Scheme's credit cards to its customers;

"nominated Scheme participants" are those issuers in a Scheme that issued, in aggregate, credit cards which were used in at least 90 per cent of credit card transactions by value in that Scheme in the financial year prior to the year in which interchange fees must be calculated;

"payment guarantee" means a guarantee provided to a merchant in respect of a credit card transaction;

"rules of a Scheme" or "rules" include the constitution of a Scheme, rules, by-laws, procedures or any arrangement in relation to a Scheme by which participants in the Scheme in Australia may consider themselves bound;

"Scheme Administrator" is the administrator of the Scheme, if any;

a "Scheme's credit card" is a credit card issued in accordance with the rules of that Scheme;

use of a credit card includes use of a credit card number.

4. This Standard refers to wholesale fees, known as "interchange" fees, which are paid to an issuer in Australia in a Scheme by an acquirer in Australia in that Scheme in relation to a credit card transaction.

5. This Standard is to be interpreted:
   - in accordance with its objective; and
   - by looking beyond form to substance.

6. This Standard comes into force on [ ].

Methodology

7. Interchange fees must be based on credit card payment services which are provided to merchants. The only amounts that can be included in the calculation of an interchange fee in a Scheme are the following costs in respect of that scheme:

   (i) issuers' costs incurred in processing credit card transactions received from an acquirer that would not be incurred if the issuer was also the acquirer in those transactions. This category includes the costs of receiving, verifying, reconciling and settling such transactions;

(ii) issuers' costs incurred in respect of fraud and fraud prevention; and

(iii) issuers' costs incurred in providing authorisation of credit card transactions,

(collectively the "**eligible costs**").

8. In a Scheme separate interchange fees must apply to:

(i) electronic transactions that are the subject of a payment guarantee;

(ii) transactions (other than electronic transactions) that are the subject of a payment guarantee;

(iii) transactions (other than electronic transactions) that are not the subject of a payment guarantee; and

(iv) electronic transactions that are not the subject of a payment guarantee,

(collectively the "**specified transactions**")

to take into account the difference in eligible costs incurred by the issuer.

Determination of fees

9. Data on eligible costs of each nominated Scheme participant for each type of specified transaction must be provided by that participant to an independent expert agreed to by the Reserve Bank of Australia. The data must be drawn from accounting records of the nominated Scheme participant for the previous financial year prepared in accordance with generally accepted accounting standards.

10. The expert must review the data to determine if the costs included are eligible costs and use the data on eligible costs to calculate an interchange fee for each type of specified transaction. The interchange fee for each type of specified transaction must be calculated as a weighted average of the nominated Scheme participants' eligible costs for that specified transaction. The weights to be used are the shares of each nominated Scheme participant in the total value of the transactions undertaken on credit cards issued by all the nominated Scheme participants in the financial year to which the data relates.

11. The Scheme Administrator or, if none, the nominated Scheme participants, must provide the Reserve Bank of Australia with the data on eligible costs used by the independent expert and the interchange fees calculated by that expert.

12. The Scheme Administrator or, if none, participants in the Scheme must publish in a national newspaper and permanently publish on the Scheme Administrator's website, or, if none, on another relevant website:

    (i) the aggregate data used by the expert to calculate interchange fees; and

    (ii) the interchange fees calculated by the expert in accordance with paragraph 10 of this Standard.

13. Any interchange fees charged or paid by a participant in respect of a specified transaction in a Scheme must not exceed the interchange fee calculated by the expert for that specified transaction in accordance with this Standard.

14. The interchange fees of a Scheme must be calculated and published in accordance with this Standard within [3] months after this Standard comes into force.

Review of fees

15. The interchange fees must be recalculated and published in accordance with this Standard every three years from the date this Standard comes into force. If the Reserve Bank of Australia considers that changes in costs warrant an earlier recalculation of interchange fees, it can so advise the Administrator of a Scheme or, if none, each of the participants in the Scheme. A recalculation of interchange fees in accordance with this Standard must be carried out and completed and any new interchange fee published in accordance with this Standard within [3] months of that advice.

Reserve Bank of Australia
SYDNEY

CHAPTER 3: RESTRICTIONS ON MERCHANT PRICING

3.1 Introduction

The MasterCard and Visa credit card schemes have regulations, enforced by their respective Australian members, that prevent merchants in Australia charging customers who use these credit cards more than they charge customers that use less costly payment instruments. These restrictions are absent in the Bankcard scheme but they are also imposed by the three party card schemes, American Express and Diners Club. The restrictions are so well entrenched that some merchants mistakenly believe they have been imposed under legislation; this is not so.

The restrictions are commonly known as the "no surcharge" rule. This is a misleading description because the use of the term "surcharge" implies that the restriction is against imposing a second or additional transaction charge on a person using a credit card, whereas it prevents charging any transaction fee at all. Thus, it prevents merchants recovering from cardholders, on a "fee for service" basis, the costs they incur when they accept credit cards for payments rather than lower-cost payment instruments. As a consequence, the merchant service fees charged to merchants by credit card acquirers are passed onto all consumers – not just those using credit cards – in the form of higher prices of goods and services. Prices paid for goods and services by users of lower-cost payment instruments are higher, and those paid by credit cardholders lower, than would otherwise be the case.

Earlier official inquiries into scheme restrictions on merchant pricing in Australia have unanimously agreed that the restrictions are anti-competitive and against the public interest. In 1980, the Trade Practices Commission (TPC), the predecessor of the ACCC, disallowed the restrictions when it granted authorisation for the Bankcard scheme; the TPC found that the restrictions prevented merchants from adopting variable pricing techniques as a method of competing with other merchants, and were therefore anti-competitive.[103] The same conclusions were reached by the Martin Committee in its 1991 report into banking and deregulation[104] and by the Prices Surveillance Authority in its 1992 report into credit card interest rates and in its subsequent reports into credit card pricing.[105] The Prices Surveillance Authority concluded that "[w]hile many retailers may choose

103 Bankcard Scheme: Interbank Agreement (1980) ATPR (Com.), 50-100, at 52, 169. Bankcard's authorisation was revoked by the Trade Practices Commission in 1990.

104 House of Representatives Standing Committee on Finance and Public Administration (1991), pp 365-366.

105 Prices Surveillance Authority (1992), (1994) and (1995).

not to dual price given the freedom to do so, an in principle case, nonetheless, exists for ensuring efficient pricing by giving merchants the freedom to set prices reflecting the costs involved in effecting transactions, including methods of payment."[106] In 1993, Australia's credit laws were amended, *inter alia*, to allow merchants to charge different prices for accepting different payment instruments, but the credit laws do not prevent credit card schemes imposing restrictions, which are enforced by card scheme members, which prevent merchants from exercising this freedom.

The Joint Study also concluded that restrictions on merchant pricing suppress important signals to end-users about the costs of the credit card network and that such restrictions are not desirable. Merchants "… should not be prevented by the credit card schemes from passing on some or all of the merchant service fee through surcharges …".[107] The credit card schemes and their members, however, have responded that there are benefits to the community flowing from these restrictions and that the restrictions should be allowed to stand.

This Chapter considers whether the restrictions imposed by the credit card (and charge card) schemes are in the public interest. After detailing the restrictions, it explains their impact on community welfare and the public interest concerns that are raised. It then analyses the main arguments made by the card schemes and their members against abolishing the restrictions. In the Reserve Bank's judgment, restrictions on merchant pricing are not consistent with the promotion of efficiency and competition in the Australian payments system. Accordingly, it has decided to determine a standard for merchant pricing to ensure that merchants are free to recover from cardholders the costs of accepting credit cards. The draft standard is discussed in the concluding section.

3.2 Restrictions in card schemes rules

The restrictions on merchant pricing imposed by MasterCard and Visa are set out in their respective international rules and apply in that form to Australia.

The MasterCard rules state that:

> "The merchant shall not directly or indirectly require any MasterCard cardholder to pay a surcharge, to pay any part of any merchant discount, whether through any increase in price or otherwise, or to pay any contemporaneous finance charge in connection with the transaction in which a MasterCard card is used. A surcharge is any

106 Prices Surveillance Authority (1992), p 123.

107 Reserve Bank of Australia and Australian Competition and Consumer Commission (2000), p 55.

fee, charged directly or indirectly, deemed by this Corporation to be associated with the use of a MasterCard card that is not charged if another payment method is used … . The prohibitions of this subsection (14) do not prohibit discounts for payments in cash, or for charges … that are charged to the cardholder regardless of the form of payment."[108]

The Visa rules state that:

"A Merchant must **not**:

- Add any surcharges to Transactions, unless local law expressly requires that a Merchant be permitted to impose a surcharge. Any surcharge amount, if allowed, must be included in the Transaction amount and **not** collected separately."[109]

The rules of both schemes permit cash discounts in Australia, as they do in the United States. This is in contrast to many European countries where "no discrimination" rules imposed by the card schemes prevent cash discounts as well as surcharges for card use. Both schemes also acknowledge that their rules on merchant pricing are not valid if the laws of the relevant jurisdiction forbid it. Other countries have prohibited such rules on anti-competitive grounds. The rule has been prohibited in the United Kingdom since 1991, in the Netherlands since 1994 and in Sweden since 1995.

3.3 Merchant restrictions and community welfare

Scheme restrictions on merchants' ability to recover costs are *prima facie* a restraint on trade. They deny merchants the freedom to set prices that promote the competitiveness of their business. No other supplier of goods or services to merchants seeks – or is legally able – to restrain them from passing on the costs of these services to customers who use them. The anti-competitive nature of these restrictions was a major factor in the decisions of competition authorities to prohibit them in the three European countries noted above. In the Netherlands, for example, the authorities judged that merchant pricing freedom was essential for safeguarding effective price competition within and between payment systems.[110]

Scheme restrictions on merchant pricing inhibit the normal market mechanisms and have two important economic effects. The first is that the general level of prices is higher than it otherwise would be, and consumers who do not use credit cards

108 Under 9.04 b (14) of the MasterCard International Bylaws and Rules.

109 Under 5.2.C of the Visa International Operating Regulations, General Rules. Prohibitions.

110 Correspondence from NMa, the Netherlands' competition authority, 12 July 2001.

pay more than they would otherwise. The second is that by distorting the relative prices of payment services to consumers, the restrictions do not promote efficient resource allocation and maximum community welfare.

Consumers who do not use credit cards pay more, and credit cardholders less, than otherwise

Scheme restrictions on merchant pricing require merchants to charge the same price to consumers irrespective of the payment instrument used. Merchants therefore average their costs from different payment instruments to determine their prices. If customers switch from lower-cost alternatives to credit cards, which have been shown to be a higher-cost payment instrument for merchants to accept, merchants face an increase in total costs. As discussed in Chapter 2, there is no evidence to suggest that this increase in costs would be offset by higher sales for merchants as a whole. Merchants therefore pass the increase in their total costs into the prices of goods and services. As a consequence, scheme restrictions on merchant pricing mean that increases in credit card usage result in a higher general level of prices of goods and services. Consumers who use lower-cost payment instruments pay a higher price for goods and services than they would otherwise, and therefore contribute indirectly to the costs of credit card schemes.

The potential for consumers who do not use credit cards to be harmed by scheme restrictions on merchant pricing is recognised in the recent theoretical literature on credit card networks. The article by Rochet and Tirole demonstrates that the no surcharge rule gives the interchange fee its ability to affect the size of the credit card system: "[t]he no-surcharge rule leads, as one would expect, to a redistribution towards cardholders."[111] In Rochet and Tirole's model, if the privately and socially optimal interchange fees are equal – in a context of strong merchant resistance to credit cards – removing the no surcharge rule would lead to an underprovision of credit cards, reducing the community's welfare. However, if merchants have limited resistance to accepting credit cards – the more realistic assumption – the interchange fee set by an issuer-controlled credit card scheme will lead to the overprovision of credit card services; in this context, removing the no surcharge rule would reduce credit card usage and increase the community's welfare.

Gans and King also note the argument that "cash and cheque customers are implicitly cross-subsidising card customers" and conclude that "up to a point, by increasing the interchange fee a credit card association with market power is able to extract rents from cash customers."[112] However, Gans and King claim this effect

111 Rochet and Tirole (2000), p 18.

112 Gans and King (2001a), pp 106-107 and (2001d), p 18.

is overstated because merchants are able to offer cash discounts; to the extent they do so, rents extracted from cash customers and customers using other lower-cost payment methods, would be reduced. In their analysis of the welfare implications of the no surcharge rule, Schwartz and Vincent see the rule as the means by which a credit card scheme can indirectly "tax" purchases made by cash customers. The rule enables the card scheme to raise the merchant service fee which in turn increases prices to all consumers. However, when rebates (such as loyalty points) are offered to cardholders, the impact of the no surcharge rule on merchant pricing is magnified. Issuers can provide rebates to boost credit card use and raise fees to merchants through the interchange fee, knowing that any resulting increase in prices must apply equally to cash customers. "Rebates thus misallocate transactions towards cards, the opposite of what occurs absent an NSR [no surcharge rule]."[113] Schwartz and Vincent also note that it is not in the interest of credit card scheme members to set merchant service fees so high that cash customers, observing the high prices, choose not to shop at merchants that accept credit cards "since cross-subsidization of cash to card customers then disappears."[114]

As an empirical matter, the likely magnitude of the impact of the no surcharge rule on the general level of prices in Australia is not easy to determine. The impact is diffused over a wide range of markets, in which varying mixes of payment instruments may be used, and over millions of consumers undertaking a myriad of transactions. In total, however, the effect is likely to be significant. The Joint Study found that the average merchant service fee in Australia is around 1.8 per cent of the value of credit card transactions; it is this fee, generating revenue to card scheme members of around $1.5 billion a year, that is passed into price levels, depending on supply and demand conditions in each market.

In its study of the credit card system in the United States, the Board of Governors of the US Federal Reserve System found that US consumers did pay a higher price than would be paid in the absence of credit cards. "As a result it can be said that cash buyers, at least to some extent, subsidize credit card users by paying identical prices."[115] However, the Board concluded that the size of the price effect would be small – between $^1/_2$ per cent to perhaps $1^1/_2$ per cent of total sales – because of the relatively small share of sales transacted by credit cards at that time (1983). (The share of retail sales made using credit and charge cards in Australia, estimated at around 35 per cent,[116] is now substantially higher than the figure of 15 per

113 Schwartz and Vincent (2000), p 3.

114 *ibid*, p 21.

115 Board of Governors of the Federal Reserve System (1983), p 8.

116 Australian Retailers Association (2001b).

cent that was used by the Board in its study.) In its report on credit card services in the United Kingdom, the Monopolies and Mergers Commission also reached the conclusion that credit cardholders were subsidised by customers who do not use credit cards.[117]

A number of submissions have challenged the argument that restrictions on merchant pricing give rise to cross-subsidisation of credit cardholders by customers who do not use credit cards.[118] These submissions focus on a technical definition of cross-subsidy provided by Faulhaber.[119] On this definition, if the price paid by a group of consumers is greater than the incremental cost of selling to that group, there is no cross-subsidy from another group of consumers – prices are said to be subsidy-free.[120] Applied to credit card schemes, if the price paid by credit cardholders is greater than the incremental cost per unit associated with sales to these cardholders, there is no subsidy from customers who do not use credit cards. The conclusion follows that, since merchants are prepared to accept credit cards, the price must be above incremental cost per unit and there is no cross-subsidy.

In the Reserve Bank's opinion, the focus on this technical definition of cross-subsidy does not address the public interest concern that consumers who do not use credit cards are harmed by scheme restrictions on merchant pricing. That harm arises because those consumers pay higher retail prices because other consumers – facing distorted price signals – choose to use a relatively costly payment instrument. In reviewing this argument, Katz has concluded that:

> "… what matters for consumer welfare and efficiency is what actually happens, not what labels are attached to the effects … The cited economic test for cross-subsidies (*e.g.*, incremental cost floors) is neither a necessary nor sufficient test for economic efficiency. By distorting relative prices, the no-surcharge rule can harm economic efficiency even if all prices are above incremental costs. These effects

117 "We have considered whether the payment of MSCs [Merchant Service Charges] had caused price increases and whether there is a measure of subsidisation of credit card users by those shoppers who still do not use them. Clearly in principle this could be the case. But to the extent that traders give discounts to their customers who do not use credit cards (which could be a consequence of abolishing the No Discrimination rule) such subsidisation would be reduced." Monopolies and Mergers Commission (1989), p 161.

118 See, for example, Australian Bankers' Association (2001b), Commonwealth Bank (2000), Australia and New Zealand Banking Group (2001a) and Visa International (2001a).

119 Faulhaber (1975).

120 The incremental cost associated with a group of consumers is defined as the difference in total costs when the merchant serves that group and all other existing customers and total costs when the merchant serves only the other existing customers.

have two sources. One is from distortions in the use of alternative payment mechanisms. The other is from distortions in the retail purchases made by consumers not using the credit or charge card at issue."[121]

Price signals about the costs of different payment instruments are distorted

Scheme restrictions on merchant pricing suppress price signals to consumers about the costs of different types of payment instruments. Since they do not bear any of the costs imposed on merchants when they use their credit card, cardholders have no incentive to make an efficient choice between payment instruments. The price signals are further distorted for credit cardholders in loyalty programs, who are paid a rebate to use credit cards in preference to lower-cost payment instruments.

Table 3.1 compares the costs of various card-based payment instruments and the fees typically levied by Australian financial institutions, drawing on data from the Joint Study; in the case of credit cards, the costs refer only to the provision of payment services and not the revolving credit facility. Consumers using debit cards (EFTPOS) face a fee of around $0.50 for transactions beyond the fee-free threshold, broadly in line with the average costs of providing debit card services. The average

Table 3.1: ATM, debit card and credit card costs
$, per $100 transaction

	Acquirer	Issuer	Total cost	Costs passed 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.

121 Katz (2001), pp 41-42.

cost of providing a $100 credit card transaction, in contrast, is around $2.00. Credit cardholders do not incur a cost, but instead receive a *benefit*: for those not in a loyalty program the benefit is equivalent to around $0.42 from use of the interest-free period, while those in loyalty programs receive an incentive of up to $1.04 (measured as the cost to the card issuer) for using their credit cards for an average size transaction.

Current price signals are therefore encouraging the use of a relatively high-cost payment instrument over lower-cost alternatives. This structure of incentives is not, in the Reserve Bank's opinion, conducive to allocative efficiency in the Australian payments system. As noted in Chapter 1, allocative efficiency focuses on the relationship between inputs and outputs; allocative efficiency is increased if a given level of output can be produced with fewer resources. Payment instruments are used so that the consumption of goods and services can take place, but the payment instruments themselves cannot, for the reasons discussed in Chapter 2, generate a permanent increase in consumption. If price signals direct resources into producing relatively high-cost payment instruments rather than lower-cost alternatives, average costs in the payments system are higher and the resources that can be directed into other productive uses are reduced. As a consequence, output and community welfare are lower than they would be if price signals were more efficient.

Although the credit card is a higher cost payment instrument, some submissions have argued that the credit card generates greater benefits than other instruments and therefore community welfare will be higher with increased use of credit cards. The claim is that "… it is clear that consumers much prefer credit cards to debit cards when there is no material difference in the price of these services."[122] No empirical support is provided for this claim, and it is impossible to verify since there *is* a material difference in the price of the two services. Before financial institutions changed incentives through the introduction of loyalty programs for credit cards, use of debit cards had been expanding more strongly than credit cards; moreover, despite the current incentives, debit cards are still a widely used payment instrument.

3.4 The justifications for merchant restrictions

Submissions to the Reserve Bank have claimed that scheme restrictions on merchants' ability to recover costs can be justified as being in the public interest and should be allowed to remain. The justifications take three main forms:

122 Visa International (2001a), p 17.

- the restrictions are needed to ensure that network externalities in credit card schemes are realised;
- abolishing the restrictions would have limited impact in any event because merchants will not choose to charge differential prices; and
- consumers will be confused by differential prices or may be exploited by merchants.

The first two of these arguments, although sometimes quoted in the same submissions, are largely contradictory.

Network externalities

As discussed in Chapter 2, the network externalities argument states that credit card schemes provide benefits to consumers and merchants that would not be realised if cardholders faced the full costs incurred by card issuers. On this argument, an interchange fee paid to issuers by acquirers (and passed onto merchants) ensures that these unrealised benefits are captured by allowing issuers to subsidise cardholders; in this way, growth of the scheme is encouraged. If there are no restrictions on their pricing behaviour, however, merchants will pass the cost of accepting credit cards onto cardholders, who will therefore face the full costs of the scheme. Some cardholders may choose not to join the scheme while others may reduce their usage. As a consequence, the credit card scheme will not reach its optimal size and the community's welfare will be lower than it could be.[123]

The Reserve Bank considered the network externalities argument in detail in Chapter 2, and found it unconvincing. Two of the reasons for that judgment are equally relevant to assessing this particular justification for scheme restrictions on merchant pricing.

First, the benefits of credit card use have been overstated. The claim made is that merchants benefit from lower transactions costs and higher sales. However, the evidence discussed in Chapter 2 suggests that credit card usage actually increases transactions costs for merchants. Moreover, no evidence was provided that credit card usage leads to a permanent increase in sales for merchants as a whole that would offset their higher transactions costs.

Secondly, even if there are potential network externalities in credit card schemes, the price mechanism may be able to internalise some of them. Chapter 2 showed that if merchants do face higher transactions costs from credit card use (after allowing for any merchant benefits), charging a higher price to credit cardholders

123 Visa International (2001a).

than for other consumers would ensure that consumers faced the social costs of different payment instruments. Where merchants have the freedom to charge differential prices for accepting different payment instruments, the market will internalise effects that would otherwise be externalities.[124] Moreover, by focusing only on the potential impact on credit cardholders, the submissions have failed to acknowledge that removal of scheme restrictions on merchant pricing might encourage more merchants to accept credit cards. Merchants that had previously refused to accept credit cards because they perceived the costs to be too high might be prepared to accept them if they could charge customers for their use.[125] Rather than facing an "all or nothing" choice in accepting credit cards, merchants would have the freedom to negotiate the terms on which they were prepared to accept these cards. Some merchants might still refuse to accept credit cards if the fixed costs of doing so were very high; however, annual costs of around $300 per year for a credit card terminal are unlikely to be a serious deterrent, particularly since the same terminal is typically used to process debit card transactions.[126]

Visa has offered two other perspectives on network benefits to justify scheme restrictions on merchant pricing. First, it quotes a theoretical model that shows that, under particular parameter values, removal of the no surcharge rule would generate a loss of at least $4.5 billion to the Australian economy.[127] This conclusion depends on certain stylised assumptions about consumer demand – that consumers purchase a fixed number of goods each period and place the same value on each purchase, and that consumers as a whole make a greater volume of purchases when credit cards are accepted (for which no evidence is provided). As a consequence, the no surcharge rule in this model does not create any efficiency losses for consumers that do not use credit cards, and removal of that rule leads to the collapse of the credit card system.

Katz has demonstrated that this result "… is an artifact of an extreme assumption made in the model."[128] The model's lack of plausibility is also obvious from the experience of countries where differential pricing by merchants is permitted. The credit card system has continued to expand in the United Kingdom, despite

124 "… in some circumstances, rather than simply undermining the use of interchange fees, merchant surcharges are a substitute for interchange fees that ensure the internalization of what would otherwise be externalities." Katz (2001), p 46.

125 Rochet and Tirole note that "When merchants are allowed to apply card surcharges, their accepting the card is no longer an issue." Rochet and Tirole (2000), p 18.

126 Australian Retailers Association (2001a).

127 Wright (2000).

128 Katz (2001), p 21 and pp 55-57.

prohibition of the no discrimination rule in 1991, in Australia despite amendments to credit laws in 1993 that allow discounts for cash, and in the Netherlands and Sweden despite prohibition of the no discrimination rule in the mid 1990s.

Visa's second argument to demonstrate the desirability of scheme restrictions on merchant pricing uses a car park in a shopping centre as an analogy for the credit card system.[129] In this analogy, the provision of free parking benefits merchants since it attracts customers to the shopping centre; merchants in the centre gain from the patronage and customers who do not use the car park still benefit from the establishment and ongoing viability of the shopping centre. Nonetheless, the provision of parking is costly, and this will be reflected in the rents charged to merchants by the shopping centre and passed onto all customers using the centre in higher retail prices. An individual merchant may not want to pay for the cost of the car park and, if it had the ability to do so, might attempt to recover this cost from customers that use the parking facility. Merchants in the centre as a group, however, would not want this to occur since it would deter shoppers from coming to the shopping centre and defeat the purpose of the free parking. "To solve this free rider problem, the centre owner will require that all the merchants contribute to the cost, and if the technology to surcharge customers for car parking existed, the centre owner would put in place a no-surcharge rule."[130] The conclusion is that such a rule ensures both shoppers and merchants at the centre are better off.

In the Reserve Bank's view, the car park analogy is unconvincing and is subject to the same fallacy of composition as the claims that higher credit card sales for individual merchants mean higher sales for merchants as a whole. Free parking does not increase shopping for the community as a whole; it is used by shopping centres as a strategic device for attracting shoppers from other centres. If all shopping centres reacted by providing free parking, there would simply be a new equilibrium in the economy at the same level of sales, but with higher costs. Consumers who do not use parking facilities at any centre would, as a group, face higher retail prices.

Another misleading parallel concerns the extent of competition between shopping centres and within the credit card market in Australia. There is competition among shopping centre owners and customers can choose to shop in centres with free parking, higher rents and perhaps higher prices or in centres with no free parking, lower rents and perhaps lower prices. This competitive market is not analogous to the designated credit card schemes in Australia, which are characterised by overlapping governance arrangements and lack of effective competition. Credit

129 Visa International (2001a), pp 26-29.

130 *ibid*, p 28.

card acceptance is so widespread that, in reality, consumers have limited choice of "cash only" merchants.

Finally, if the analogy were credible, it would suggest that even if individual merchants wanted to recover the costs of accepting credit cards, merchants as a whole would support a no surcharge rule binding on individual merchants because they would expect it to boost aggregate sales. Merchant groups in Australia, however, do not support this view. The ARA and the Restaurant and Catering Association of Australia, both bodies representing large groups of merchants, have argued that merchants should be able, if they wish, to recover the costs of accepting credit cards from customers using those cards.[131] They do not agree that restrictions on merchant pricing benefit them as a group.

A more appropriate analogy for the no surcharge rule would be one based on trucking companies that provide home delivery on behalf of stores. Traditionally, many stores provided their own delivery service, often free of charge, but increasingly this service has been outsourced to trucking companies and explicitly charged for by the store (ie the service has been "unbundled"). The no surcharge rule is analogous to a situation in which all trucking companies throughout Australia collectively agreed to prevent individual companies from providing services to stores that passed explicit delivery charges onto customers using the service. Stores would therefore have to include delivery costs in prices to all customers, whether or not they used the service. The trucking companies would benefit from this prohibition because more customers might use a delivery service which appeared "free"; the trucking companies might even argue that merchants as a whole would also benefit by being able to sell a larger number of bulky goods. However, the distortions from such arrangements are obvious. Customers who have no need for the delivery service still pay part of the cost through higher prices. In addition, since customers do not face the cost of delivery, they may use the service for items they would otherwise choose to pick up or carry home themselves, leading to an inefficiently high use of resources in delivery services. One could even imagine that the trucking companies would like to promote use of their services by providing rebates or reward points to the final customers.

Differential pricing in practice

The justification for scheme restrictions on merchant pricing presented above argues that they are essential for the viability and expansion of credit card networks. The second justification is that abolishing the restrictions would have no effect in any

131 Australian Retailers Association (2001b) and Restaurant and Catering Association of Australia (2001).

event because merchants will not choose to charge differential prices to customers.[132] A variant on this view is that, since discounts for cash are already possible in Australia, there is no need to allow merchants to recover their credit card costs on a "fee for service" basis because such fees are economically equivalent to cash discounts.[133]

Set side by side, the two justifications are contradictory. If removal of scheme restrictions on merchant pricing would have little effect on credit card usage and network size, it follows that the restrictions are redundant and, like unnecessary regulation in any form, can safely be abolished.

No surcharge rules (or their equivalent) have been prohibited by competition authorities in at least three overseas countries: the United Kingdom, the Netherlands and Sweden. Studies for the European Commission have shown that a limited number of merchants in both the Netherlands and Sweden charge for credit card use. In the Netherlands, nine per cent of a sample of 310 merchants charged a higher price to credit cardholders and another 10 per cent offered discounts for cash. In some industries, price differentiation was more prevalent than in others: 25 per cent of petrol stations surveyed and 22 per cent of travel agencies surveyed indicated that they charged credit cardholders a fee to recover their costs. The level of that fee was around the level of merchant service fees and often lower.[134] In Sweden, only five per cent of a sample of 300 merchants charged credit cardholders a fee for using their credit card and around 1.5 per cent offered discounts for cash. Merchants that charged a higher price to credit cardholders cited cost recovery as the main reason; those that did not cited concerns about negative reactions from cardholders or claimed it was a matter of service or principle.[135]

On the basis of these studies, the European Commission has recently decided not to disallow Visa's no discrimination rule at the European level, though it had originally objected to it.[136] While submissions to the Reserve Bank have made much of this decision, arguing that it vindicates the *status quo* as far as Australia is concerned, the following points are significant:

- the Commission considered that the no discrimination rule did restrict the freedom of merchants to pass on a component of their costs to cardholders and may be restrictive of competition;

132 See, for example, Australian Bankers' Association (2001b) and Visa International (2001a).

133 Gans and King (2001b).

134 ITM Research (2000).

135 IMA Market Development AB (2000).

136 European Commission (2001a).

- however, the Commission is required under its powers to find that the restriction on competition is "appreciable" before it may disallow the rule; and
- the Commission's decision at the European level does not override the decisions of domestic competition authorities. Hence, prohibitions on the no discrimination rule in the United Kingdom, the Netherlands and Sweden stand.

The Reserve Bank's payments system powers do not contain any materiality tests comparable to the trigger of an "appreciable" restraint on competition applying to the Commission. More importantly, the Reserve Bank is required to act in the public interest to promote efficiency as well as competition.

A closer reading of the overseas evidence also suggests that merchant willingness to charge differential prices might not have been accurately captured in the surveys. Visa has claimed that, although the no discrimination rule has been prohibited in credit card schemes in Sweden, bilateral agreements between acquirers and merchants forbidding merchants from recovering credit card costs from cardholders are now commonplace.[137] If so, it is not surprising that the survey data revealed that price discrimination by merchants was uncommon, since the rule remains in place *de facto* despite the intent of the competition authorities that it be prohibited. In the Netherlands, the study showed that almost three-quarters of merchants surveyed were not aware that the no discrimination rule had been abolished, raising the question of whether merchants thought they were still bound by that rule. Looking at the two surveys together, a higher proportion of merchants impose a fee for credit card use in the Netherlands, which has the higher average merchant service fee, than in Sweden (Table 3.2). This illustrates a common-sense point that, for many merchants, the cost and trouble of recovering credit card costs from

Table 3.2: Merchant service fees and merchant price discrimination
per cent

	Merchant service fee	Merchants who price discriminate
Sweden	2.0	6.5
Netherlands	4.5	19.0

Source: Based on a presentation by Alan Frankel to the Econometric Society of Australia, July 2001. ITM Research (2000) and IMA Market Development AB (2000).

137 Visa International (2001a), p 36.

cardholders may not be worthwhile when merchant service fees are low but becomes worthwhile when merchant service fees are higher.

In the Reserve Bank's opinion, the argument that removal of scheme restrictions on merchant pricing will have little impact on merchants is an argument, in principle, against retaining these restrictions. In the absence of other public interest considerations, the starting point for an assessment of private-sector regulations imposed on merchants is that merchants should have the right – whether they use it or not – to follow pricing strategies that promote the competitiveness of their business. It may well be that supermarkets or other retailers with relatively small transaction sizes will find the costs of systems changes and checkout queues too high to justify a "fee for service" for credit cardholders. However, the fact that discounting for cash is not uncommon for higher value items suggests that other merchants – for example, those selling furniture, electrical equipment or other high-value items – may want to recover their credit card costs. Utility companies, schools or clubs that accept credit cards but clearly gain no additional revenues might also choose to follow that pricing strategy.

Finally, some submissions have questioned whether permitting merchants to recover their credit card costs would achieve anything that discounts for cash currently do not. If that is the case, it is hard to understand why card schemes would object to the removal of the restrictions. In principle, it should not matter whether merchants recover their costs by charging above the cash price for credit cardholders or charging below the credit card price for cash users. However, the two pricing practices appear to be perceived quite differently. The "framing hypothesis" argues that a consumer's decision can be affected by the way the issue is framed.[138] The labels "discount" and "surcharge" that are used by the credit card industry would appear to be framed to suggest that the former is good and the latter is bad. It is possible that discounts for cash have less impact on cardholders' decisions to use credit cards than facing a specific "fee for service" from merchants. In the United States, the staunch defence of the no surcharge rule by American Express, while allowing its merchants to offer cash discounts, would suggest that credit and charge card schemes think that consumers might react differently to the different labels and can be convinced that surcharges are unfair.

Merchant pricing and consumer issues

The third justification for scheme restrictions on merchant pricing relates to the possible effects on consumers if these restrictions were removed. There are two parts to the justification: consumers will be confused by facing differential pricing

138 Kitch (1990).

and/or merchants may exploit them. If the price a cardholder sees on the shelf differs from that charged at the till, the cardholder may be confused and may lose confidence in the credit card scheme. If individual merchants set different fees for different cards, and the fees vary from one merchant to another, the argument is that confusion will multiply.[139]

In the Reserve Bank's opinion, the argument about consumer confusion, which has not been raised by consumer representatives, is easy to overstate. Consumers have become increasingly accustomed to the unbundling and separate pricing of goods and services, whether it be packaging or delivery charges, options on a new motor vehicle or account services provided by financial institutions. Price variation according to the type of payment instrument used is not unusual; consumers understand that their choice of payment instrument can often provide leverage to bargain on prices, as in the case of cash discounts for high-value goods. Consumers also face other, albeit relatively inefficient, signals about the costs of payment instruments in the form of minimum purchase obligations which some merchants impose on customers who wish to use their credit cards; these minimum obligations often differ between merchants and between cards issued by members of the four party credit card schemes and by the three party schemes.

Over a decade ago, in reviewing the no discrimination rule in the United Kingdom, the Monopolies and Mergers Commission reviewed concerns about consumer confusion and concluded that such concerns were "… exaggerated because they underestimate the ability of consumers, particularly of domestic consumers, who make the great majority of credit card purchases, to look effectively after their own interests."[140]

Two pieces of evidence are cited in support of the argument about potential merchant exploitation of consumers. The first is theatre bookings in the United Kingdom, where credit card users are charged a fee on top of the ticket price for bookings over the phone. The second is taxis in Australia, where customers paying by credit card are charged a fee on top of the metered fare. Visa asserts that these are examples of "hold up" of credit card users.[141]

The Reserve Bank believes this evidence is unconvincing. Claims about theatre bookings in the United Kingdom fail to distinguish between credit card bookings and other bookings. Since credit cards are the only means of paying for tickets over the phone, the fee could be either a charge for credit card use or for a phone

139 Australian Bankers' Association (2001b), p 69.

140 Monopolies and Mergers Commission (1989), p 161.

141 Visa International (2001a), p 30, p 33 and pp 36-37.

booking. There is no evidence of a fee imposed on credit card use at the booking office, suggesting the latter interpretation is correct.[142] In the case of taxis in Australia, a "surcharge" is applied for *any* payment instrument aside from cash. Use of a credit card, charge card or debit card incurs a 10 per cent fee (plus GST) over the metered fare; use of the taxi industry's own payment system, Cabcharge, which was the first non-cash payment method to be offered in taxis in Australia, incurs a 10 per cent fee (including GST). The evidence does not indicate that credit card users are being exploited but that the taxi industry is protecting its own Cabcharge system from all other non-cash payment instruments.

A variant on the exploitation argument is that merchants will discriminate against wealthier customers by charging them more to use a credit card. The notion is that credit cardholders are typically wealthier than non-cardholders; if so, merchants might interpret a customer's desire to use a card as evidence of willingness to pay more and they will systematically charge cardholders higher prices to exploit this.[143]

This argument also does not stand up to scrutiny. In principle, it seems unlikely that such behaviour could be anything but a once-off effect – cardholders would not frequent such a merchant once its pricing behaviour became known. Customers could also easily avoid the merchant's attempt to discriminate by paying by other means. More importantly, however, such pricing behaviour would likely be in breach of the *Trade Practices Act* 1974. This legislation prohibits merchants from making false and misleading statements about the prices of goods and services. The ACCC has advised the Reserve Bank that charging a "fee for service" for credit card use is not a breach of the *Trade Practices Act* 1974, provided consumers are made aware of the existence and amount of the fee prior to a transaction being entered into. If a merchant were to add a fee for accepting a credit card, it would need to post that fee for all customers to see. The ACCC notes that this situation is not analogous to GST pricing where the GST component must be included in the price. Unlike the GST component, any fee charged by a merchant for accepting a credit card is not an integral part of the total price of a good; a consumer could choose to avoid paying that fee by using an alternative payment instrument.[144]

142 In a subsequent submission, Visa has conceded that it cannot demonstrate that the booking fee is a fee for credit card usage. Visa International (2001e).

143 Gans and King (2001d), p 49.

144 The ABA has argued that the ACCC stance on GST pricing – that the GST component must be included in the price - implies that a "fee for service" for credit card use would need to follow the same principle. See Australian Bankers' Association (2001b), p 69.

3.5 A draft standard on merchant pricing

In the Reserve Bank's opinion, restrictions imposed by credit card schemes on the freedom of merchants to set their own prices are not in the public interest. These restrictions harm consumers who do not use credit cards because they pay higher prices for goods and services than they would otherwise. By distorting the relative prices of payment instruments, the restrictions are not conducive to efficiency in the payments system. In addition, the restrictions undermine the competitive pressure which merchants might impose on interchange fees and merchant service fees by limiting them to an "all or nothing" choice about taking cards.[145]

The justifications for the restrictions do not, in the Reserve Bank's opinion, outweigh these consequences. Overseas evidence provides no support for assertions that credit card networks suffer a significant loss of network benefits where such restrictions are removed. If overseas experience is a guide, the removal of scheme restrictions may not have a large impact on the pricing strategies of merchants; many merchants may judge that it is not worth their while to charge a fee for accepting credit cards. However, that is not an argument for denying merchants the *right* to charge differential prices for different payment instruments, particularly given that credit card issuers themselves are able to achieve that outcome through the use of loyalty programs (which reduce the net price of goods and services for credit cardholders).

For these reasons, the Reserve Bank has concluded that a standard on merchant pricing is needed, in the public interest, to promote efficiency and competition in the payments system. The standard would apply to participants in the three designated credit card schemes, under the *Payment Systems (Regulation) Act 1998*.

The Reserve Bank's draft standard will ensure that a merchant accepting a credit card of a designated credit card scheme is free to recover from the cardholder the cost of accepting that card. The draft standard has two key provisions. First, it prohibits designated credit card schemes from having any rules in Australia that restrict merchants, if they so wish, from charging a "fee for service" for accepting credit cards. Secondly, to ensure that existing restrictions cannot continue in a *de facto* way, the draft standard requires that designated credit card schemes introduce a rule in Australia requiring that credit card acquirers, in their contractual agreements with merchants, must allow merchants the freedom to recover their credit card costs. The draft standard also requires that merchants be advised by

145 Gans and King note that "[t]he ability to cross-subsidise makes merchants more willing to bear higher merchant service charges as they derive an indirect benefit from this cross-subsidy." Gans and King (2001a), p 107.

their acquirers, or by the credit card schemes, that they have the freedom to recover their credit card costs.

The draft standard would not preclude contractual agreements between a credit card acquirer and a merchant that would limit the size of the "fee for service" for accepting credit cards to the cost of a merchant of accepting a credit card. Such agreements are permitted in the United Kingdom notwithstanding the prohibition of no discrimination rules in that country.[146]

The Reserve Bank will consult the three party card schemes, American Express and Diners Club, on why the standard on merchant pricing should not apply to them. Access Economics, consultants to American Express, has argued that American Express should be free to continue to impose restrictions on merchant pricing. Its argument is that the no surcharge rule in four party schemes allows their members to "exploit" the market power of these schemes through interchange fees, but that American Express has neither market power nor interchange fees. However, restrictions on merchants recovering from their customers the costs of accepting American Express cards have, in principle, the same types of effects on the prices of goods and services and on price signals to users of payment instruments as do those imposed by MasterCard and Visa.

146 *The Credit Cards (Price Discrimination) Order 1990*, Statutory Instrument 1990 No. 2159.

Standard No. 2

Draft Standard for Designated Credit Card Schemes

Merchant Pricing for Credit Card Purchases

Objective

The objective of this Standard is to promote:

(i) efficiency; and

(ii) competition

in the payments system by ensuring that a merchant accepting a credit card of a designated credit card scheme for the purchase of goods or services is free to recover from the credit cardholder the cost of accepting that card.

Application

1. This Standard is determined under Section 18 of the *Payment Systems (Regulation) Act 1998*.
2. This Standard applies to the three credit card systems designated on 12 April 2001 by the Reserve Bank of Australia under Section 11 of the *Payment Systems (Regulation) Act 1998*, being:
   (i) the credit card system operated within Australia known as the Bankcard Scheme;
   (ii) the credit card system operated within Australia known as the MasterCard System or MasterCard Network Card System; and
   (iii) the credit card system operated within Australia known as the Visa System or the Visa Network Card System,

   each referred to as follows as a Scheme.
3. This Standard applies to any rules of a Scheme that affect the rights and entitlements of a merchant to recover from a credit cardholder the cost of accepting a credit card issued by any of the participants in a Scheme.
4. In this Standard:

   an "acquirer" provides services to merchants to allow the merchant to accept a Scheme's credit cards;

"rules of a Scheme" or "rules" include the constitution of a Scheme, rules, by-laws, procedures or any arrangement in relation to a Scheme by which participants in the Scheme in Australia may consider themselves bound;

a "Scheme Administrator" is the administrator of the Scheme, if any;

a "Scheme's credit card" is a credit card issued in accordance with the rules of that Scheme.

5. This Standard is to be interpreted:
   - in accordance with its objective; and
   - by looking beyond form to substance.
6. This Standard comes into force on [ ].

Merchant pricing

7. The rules of a Scheme must not include any rule that requires a participant in the Scheme to prohibit, or that has the effect of prohibiting, a merchant in Australia from recovering from a credit cardholder the cost to the merchant of accepting a credit card issued by a participant in the Scheme.
8. The rules of a Scheme must include a rule that prohibits acquirers in the Scheme from imposing any term or condition in a contract, arrangement or understanding with a merchant in Australia which prevents, or has the effect of preventing, a merchant from recovering from a credit cardholder the cost to the merchant of accepting a credit card issued by a participant in the Scheme.
9. A participant in a Scheme must not prevent a merchant in Australia from recovering from a credit cardholder the cost to the merchant of accepting a credit card issued by a participant in the Scheme.

Transparency

10. The Scheme Administrator or, if none, each acquirer in the Scheme must ensure that each merchant in Australia that accepts a credit card issued by a participant in the Scheme is advised in writing of the provisions of this Standard.

Notification of Reserve Bank of Australia

11. The Scheme Administrator or, if none, each of the participants in the Scheme must notify the Reserve Bank of Australia of the changes made to the rules of the Scheme to give effect to this Standard.

Reserve Bank of Australia
SYDNEY

CHAPTER 4: RESTRICTIONS ON ENTRY

4.1 Introduction

The Bankcard, MasterCard and Visa credit card schemes have regulations and policies, agreed to by their respective Australian members, that restrict entry to the schemes. Broadly speaking, the regulations:

- limit the types of institutions eligible to become members of the schemes as credit card issuers and acquirers; and
- restrict the range and scale of activities that card scheme members may undertake.

As noted in Chapter 1, the Financial System Inquiry identified restrictions on participation in credit card schemes as an area of policy concern. Specifically, card scheme rules might be used to restrict the ability of non-deposit-taking institutions to compete in new payment technologies. The Inquiry therefore recommended that the ACCC maintain a watching brief over credit card rules and membership arrangements.

Prima facie, restrictions imposed by existing participants on entry to a market are anti-competitive, and against the public interest. Such restrictions inhibit normal market processes, under which resources are free to enter a market in response to profit opportunities; in doing so, or threatening to do so, new entrants drive profits down to "normal" rates. The Joint Study acknowledged that there are good reasons why credit card issuers and acquirers need to have the relevant skills and financial standing. However, it was not convinced that the card scheme restrictions on entry had struck a balance between competition and the control of risks that was in the public interest. The credit card schemes and their members, nonetheless, defend these restrictions as being essential to the safety of the schemes or, in the case of restrictions on members' activities, to the "balanced development" of the schemes.

This Chapter considers whether the restrictions imposed by the designated credit card schemes on eligibility for membership, and on members' activities, are in the public interest. Firstly, it reviews the extent of competition within the credit card market in Australia. It then analyses the nature of the risks which credit card issuers and acquirers bring to card schemes, and assesses how the regulations and policies of each of the schemes address these risks. On the basis of this review, the Reserve Bank judges that there is scope for a more liberal regime of access to the credit card schemes that will promote competition and efficiency without compromising their safety. A draft access regime with that objective, which allows for the entry of specialist credit card service providers supervised by APRA, is discussed in the concluding section.

4.2 Competition in credit card issuing and acquiring

Credit card issuing and acquiring are currently very profitable activities in Australia.

Information provided to the Joint Study by card scheme members showed that the provision of credit card services generates revenues well above average costs, especially for financial institutions which are both significant card issuers and acquirers. The margins are particularly wide in credit card acquiring (Table 4.1). Although card scheme members were generally unable to supply suitable capital data, indicative figuring by the Reserve Bank – based on the main risks against which capital would be held – suggested that the margins in credit card issuing and acquiring were well above what would be required to provide a competitive rate of return on capital.

Table 4.1: Credit card issuing and acquiring
costs and revenues per transaction
$, 1999

Issuing		Acquiring		
Revenues	2.69	Revenues		1.78
		Direct costs	0.43	
		Interchange paid	1.06	
Direct costs	1.93	Costs		1.49
Margin	0.76	Margin		0.29
(mark-up over direct costs)	(39.4%)	(mark-up over direct costs)		(67.4%)
Costs of loyalty programs	0.46			

Source: Reserve Bank of Australia and Australian Competition and Consumer Commission (2000), p 45.

The strong profitability of credit card activities can be seen against the highly concentrated nature of the credit card market in Australia. The four major banks dominate both credit card issuing and acquiring. As issuers, they account for around 87 per cent of transactions undertaken on bank-issued cards, a higher level of concentration than in banking operations as a whole (Table 4.2).[147] A number of

147 This degree of concentration also contrasts sharply with the United States, where in 1997 the four largest credit and charge card issuers accounted for between 31 and 42 per cent of the market, depending on the measure used. See Evans and Schmalensee (1999), p 226.

other deposit-taking institutions, including building societies and credit unions, issue credit cards, but have only a very small market share. The acquiring market is even more concentrated, with the four major banks accounting for 91 per cent of credit card transactions acquired by banks and the next four banks for the remainder. Though open to new entry by financial institutions, the credit card market is, broadly speaking, closed to the participation of non-financial institutions in their own right. As the Joint Study noted, a concentrated market can still be competitive if entry barriers are low but where these barriers are high, the market power of incumbents is likely to be entrenched.

Table 4.2: Share of credit card issuing and acquiring
per cent of number of transactions, 2000

	Issuing	Acquiring
Four major banks	87	91
Next four banks	10	9

Source: Reserve Bank Transaction Cards Statistical Collection.

Although not challenging the data used, the ABA has submitted that margins for credit card issuing and acquiring in Australia are "not unreasonable".[148] It has suggested, first, that these margins should not be considered separately but jointly, because of the network character of credit card businesses. While a joint measure might be relevant for three party card schemes, which generally have a sole issuer and acquirer, it is not an appropriate suggestion in the case of four party card schemes, the main strength of which – according to proponents of existing arrangements – is the separate and competing interests of credit card issuers and acquirers. The suggestion is also out of line with the business models under which card scheme members in Australia manage and seek to allocate capital to issuing and acquiring as separate activities, and with the assessment of credit card profitability in previous official studies in Australia.[149]

Secondly, the ABA has argued that the Joint Study's findings used only one year of data (1999) and did not take into account losses incurred in the early years of operation of the credit card schemes. Elsewhere, however, the ABA has conceded

148 Australian Bankers' Association (2001b), pp 30-33.

149 Prices Surveillance Authority (1992) and (1994), p 27.

that such losses have not been recorded in the formal financial records of banks and that evidence of these losses is only anecdotal.[150] Nonetheless, the four major banks did provide detailed data on credit card profitability to earlier reviews conducted by the Prices Surveillance Authority, which showed that credit card activities for these banks moved into profit in 1991/92.[151] The Reserve Bank acknowledges that losses were incurred in establishing credit card schemes in Australia, but believes it is quite valid to get a reading on current levels of profitability, given that the credit card is now a well-established product and familiar to consumers.

Thirdly, the ABA has argued that the Joint Study erred in not including loyalty programs in the costs of credit card issuing. The Reserve Bank acknowledges that expenditure on loyalty programs affects issuers' accounting profits. In an economic sense, however, loyalty programs represent a rebate to certain groups of credit cardholders at the discretion of some, though not all, card issuers; they affect the price at which credit card services are provided to cardholders but are not a cost that is integral to the provision of these services. This matter was discussed in Chapter 2. Against the background of continuing high gross margins in credit card issuing, competition in this area over recent years has taken the particular form of a proliferation of loyalty schemes rather than a decline in lending margins.[152]

Concerns that competition is not working as it should in Australia are particularly strong in the case of credit card acquiring. The ARA has provided data on the merchant service fees paid by merchants, according to annual turnover (Table 4.3). Smaller merchants can pay merchant service fees as high as four per cent per transaction. After paying interchange fees to issuers, the amount retained by acquirers for providing services to merchants averages around one per cent per transaction, and can be as high as three per cent in the case of smaller merchants.

Evidence on the degree of competition in credit card acquiring – apart from the wide margins being earned – comes from a cross-country comparison of the share of merchant service fees which is retained by acquirers, after payment of interchange fees to card issuers. Credit card acquiring is essentially a volume-based processing business which is subject to significant economies of scale; in major countries, strong competition and improvements in technology have driven the fees retained by acquirers down towards the floor set by interchange fees. In the United States, acquirers retain about 20 per cent of the merchant service fee and

150 Australian Bankers' Association (2001e), p 11.

151 See, for example, Prices Surveillance Authority (1994), p 28.

152 Gizycki and Lowe (2000), p 195.

Table 4.3: Merchant service fees
per cent, 2000

Annual turnover ($m)	Average	Minimum	Maximum
0.10	2.53	1.36	4.00
0.25	2.30	1.25	4.00
0.50	2.10	0.90	4.00
1.00	1.75	1.00	4.00
2.50	1.68	1.00	3.00
5.00	1.53	1.19	3.25
10.00	1.51	0.90	3.00
25.00	1.47	1.00	3.00
50.00	1.38	1.25	1.50
100.00	1.35	1.25	3.00
500.00	1.30	1.00	3.00

Source: Australian Retailers Association (2001a), p 14.

the figure is much the same, on average, in Europe.[153] In contrast, acquirers in Australia, on average, retain almost 50 per cent of the merchant service fee.

Other evidence about the degree of competition in acquiring comes from the structure of merchant service fees in Australia. With only one exception of which the Reserve Bank is aware, these fees – which cover the interchange fee and acquiring costs – are charged on an *ad valorem* basis. Because credit card acquiring is essentially volume-based, a flat fee for acquiring services would be more in line with the costs incurred by acquirers. When charged on an *ad valorem* basis, however, the structure of merchant service fees ensures that revenues from credit card acquiring continue to rise with the total value of credit card transactions, without regard to acquiring costs. This fee structure might benefit merchants with a preponderance of small-value transactions, but merchants with high-value transactions can be paying much more in merchant service fees than the costs to acquirers of providing the service.

153 MasterCard International (2001) p 8, European Commission (2000) and British Retail Consortium (1999).

In its earlier reviews of credit card pricing, the Prices Surveillance Authority concluded that *ad valorem* merchant service fees may not represent an efficient form of pricing as they do not seem to be related to costs. The Joint Study noted that competitive pressures have not led to a more appropriate two-part charging structure for merchants. If the acquiring market were strongly competitive, merchants should expect to be offered fee structures that were more closely aligned with acquirers' costs.

One major utility has advised the Reserve Bank that, despite explicit requests for alternative fee arrangements, no bank tendering for its credit card business was prepared to structure its fees other than on an *ad valorem* basis. Reviewing the results of its survey, the Australian Retailers Association noted that:

> "… smaller retailers with lower turnover have a lesser ability to negotiate lower MSFs. However the results of the survey did indicate that a few retailers with high turnover still paid high MSFs. This may be the result of a lack of knowledge on the part of the retailer, or a belief by the retailer that the fee is non-negotiable."[154]

Both interpretations are consistent with less-than-vigorous competition for merchants' business by acquirers.

In a confidential submission, the ABA has provided data showing a trend decline in average merchant service fees in Australia from 1995 to 2000 to support its claim that acquiring is a highly competitive activity. An earlier submission published by the ABA showed a smaller fall in merchant service fees over much the same period, which matched the fall in average interchange fees as credit card transactions switched from paper-based to electronic.[155] The existence of declining merchant service fees is not *per se* evidence of vigorous competition. The test for a competitive market is that participants over time earn only normal *profits*, taking account of both revenues and costs. On the revenue side, the relevant variable is revenues per transaction, which depend not only on the merchant service fees but also on the average value of credit card transactions to which the fees are applied. Over the period 1995 to 2000, the average value of credit card transactions rose by almost 20 per cent, meaning that acquirers' revenue per transaction fell only slightly despite the claimed strong decline in merchant service fees. And over the same period, acquirers' costs per transaction would have benefited from substantial reductions in processing and telecommunications costs and from economies of scale through higher transaction volumes.

154 Australian Retailers Association (2001a), p 10.

155 Frontier Economics (2001), p 33.

In the Reserve Bank's view, claims that the credit card market in Australia is highly competitive are an echo of claims made in the early 1990s that the market for residential mortgages was competitive, even with spreads between the standard mortgage rate and the cash rate of over four percentage points. It took the entry of specialist mortgage originators to transform that market, driving spreads to below two percentage points within a few years. A recent review of competition and profitability in the Australian financial system concluded:

> "[a]n important lesson from the 1990s is that the competitive pressures needed to drive margins lower are more likely to come from new entrants, rather than from firms with large existing market shares. The lesson becomes even more relevant in the current environment in which there is strong pressure for further consolidation."[156]

A credible threat of entry by non-traditional participants is needed before it could be claimed that the credit card market in Australia is fully competitive and generates only normal profits. For this reason, the public interest requires that restrictions on entry imposed by the credit card schemes are the *minimum* necessary to protect the schemes from any risks introduced by their members.

4.3 Risks in credit card issuing and acquiring

Credit card issuers and acquirers perform a range of functions in credit card schemes, which expose them to financial risks. If not prudently managed, these risks can create exposures for other scheme members.

Credit card *issuers* in each scheme assess the creditworthiness of, and issue cards to, cardholders; authorise cardholders' transactions; settle with acquirers for transactions accepted by merchants; collect payments from cardholders; deal with disputed and fraudulent transactions; and contribute as necessary to the scheme's loss-sharing arrangements. As a consequence, issuers face both liquidity and credit risks.

Liquidity risks arise because issuers must settle with acquirers within a day or so of transactions taking place, while repayments by cardholders will be spread out over many days or months. Credit risks arise because cardholders may fail to pay their outstanding credit card accounts. Issuers must be able to manage both of these risks if they are to settle their obligations to acquirers; their ability to assess the creditworthiness of cardholders is critical. For this reason, the Joint Study

156 Gizycki and Lowe (2000), p 198.

acknowledged that card issuers should have financial standing.[157] This need is reinforced by the schemes' "honour all cards" rules, which require that all cards issued by members of a scheme are honoured by merchants regardless of the identity of the issuer. Under formal loss-sharing rules in credit card schemes, the failure of an issuer to manage its risks creates obligations on other scheme members.[158] Scheme members must shoulder the loss if an issuer:

- fails to settle its obligations to acquirers in full; or
- fails to meet loss-sharing obligations in the event that another member is unable to meet its settlement obligations. Hence, each scheme member, even if it only issues cards, has an interest in ensuring that all issuers can meet their settlement obligations.

Risks to issuers need to be kept in perspective. While their settlement obligations have to be met daily, their demand for liquidity should be reasonably predictable, given normal seasonal spending patterns and established billing cycles. For credit card issuers, there is no obvious counterpart to a run on liquidity where depositors have concerns about the soundness of a financial institution; cardholders are most unlikely to run up new debts suddenly if the solvency of their credit card issuer were in doubt.

Credit card *acquirers* in each scheme assess the ability of merchants to deliver goods and services paid for by credit cards, and sign them up to accept the scheme's credit cards; capture merchants' credit card transactions and seek their authorisation from issuers; guarantee payment to merchants for the value of credit card transactions acquired;[159] settle with issuers for transactions acquired as well as for disputed and "charged back" transactions (see below); and contribute as necessary to the scheme's loss-sharing arrangements. Acquirers also face both liquidity and credit risks, though of a different dimension to issuers.

In the normal course, acquirers are net receivers of funds from issuers at daily settlement. Because there is often a delay of a day or so between their payments to merchants and receipt of settlement funds from issuers, acquirers may face liquidity risks, although these should be readily manageable. Acquirers may also face liquidity and credit risks arising out of the rules of Bankcard, MasterCard and Visa providing for refunds to credit cardholders.

157 Reserve Bank of Australia and Australian Competition and Consumer Commission (2000), p 56.

158 See MasterCard International (2001), Allen Consulting Group (2001), p 3, p 12.

159 Provided required checks have been undertaken.

Most credit card transactions do not generate refund obligations for acquirers. Take for example a restaurant meal or groceries paid for by credit card. The meal has been consumed or the groceries purchased, the card is present and the merchant has a record of the cardholder's signature. The transaction has been completed on a "delivery-vs-payment" basis and the scope for the customer to initiate a refund to its credit card account (known as a "chargeback") is virtually nil. However, when goods and services are delivered after payment – such as airline tickets, package holidays, mail order, telephone or Internet purchases – there is a risk that delivery might not be carried out or that a cardholder might dispute the transaction. In such cases, the card scheme rules provide for a refund to the cardholder. The issuer credits the cardholder's account and seeks reimbursement from the acquirer; the acquirer, in turn, must recover the funds from the merchant. For an acquirer with a diversified base of sound merchants, this process would normally pose only minor liquidity risks. However, the acquirer does face a credit risk that a merchant cannot pay or is fraudulent; under the card scheme rules, the acquirer who has signed that merchant up to the scheme must bear the loss. Hence, acquirers also need to have financial substance commensurate with the particular risks they bear.

Under the formal loss-sharing rules, an acquirer can create exposures for other scheme members if it:

- fails to make up any shortfall in reimbursement to issuers for "chargeback" transactions; or
- fails to meet loss-sharing obligations in the event that another member cannot meet its settlement obligations. As with issuing, therefore, each scheme member has an interest in ensuring that acquirers can assess, price and bear the risks associated with credit card transactions at the merchants they sign up.

As a means of containing risks in credit card issuing and acquiring, each of the designated credit card schemes imposes restrictions which:

- limit the types of institutions that are eligible for membership; and
- in the two international schemes, prevent members of the schemes from acquiring their own transactions ("self acquiring").

4.4 Restrictions on eligibility for scheme membership

Scheme structures

The decision-making structures of the designated credit card schemes are important to the way in which restrictions on eligibility for membership operate, how they can be changed and where decision-making power lies.

MasterCard and Visa are international schemes with various levels of decision-making and responsibility. Although details and nomenclature vary, both schemes operate at three key levels. First, there is an international board for each scheme which has ultimate decision-making power. One Australian member is currently represented on the international board of MasterCard. Below that is a regional board; in both schemes Australia is included in groupings of countries in the Asia-Pacific region. Australian banks are currently represented by two members on the 23 member Asia-Pacific Board of MasterCard and by three members on the 27 member Asia-Pacific Board of Visa. Finally, each scheme has an Australian executive committee, the details of which were provided in Chapter 2. Each of the schemes' decision-making bodies has a range of delegated responsibilities and powers.

Bankcard's structure is less complex. Bankcard is an association directly controlled in all respects by its members, which are all Australian banks. Other than requirements imposed under Australian law, there are no constraints on the ability of the members to change scheme rules.

MasterCard

MasterCard has provided copies of its Bylaws to the Reserve Bank but does not wish to have them quoted publicly. However, its membership requirements have been described in its public submissions to the Reserve Bank:

> "The main rule concerning eligibility for membership of MasterCard provides that, in order for a corporation or organisation to be eligible to become a member of MasterCard, it must be 'a financial institution that is authorised to engage in financial transactions under the laws and/or government regulations of the country …'."[160]

MasterCard also requires that "… such a financial institution must be regulated and supervised by a governmental authority."[161]

160 MasterCard International (2001), p 27.

161 *ibid*, p 28.

MasterCard's rules build in a degree of flexibility. Its requirement that members conduct financial transactions rather than being authorised deposit-taking institutions means that "there are card companies in Asia which are members who are organisations which *only* issue cards and acquire transactions but do not accept deposits".[162]

Being a regulated or supervised financial institution in Australia is not, in itself, a sufficient condition to gain membership of MasterCard. An application for membership is decided by a majority vote of international directors or regional directors present, depending on which meeting considers the membership application. In Australia, new members pay an entry fee.

Visa

The Bylaws of Visa International require that applicants for membership be:

> "Organized under the commercial banking laws or their equivalent of any country or subdivision thereof, and authorized to accept demand deposits; or
>
> ...
>
> An organization (i) whose membership the Board of Directors deems necessary to penetrate a given country in which no Principal has jurisdiction, or (ii) that the Principals with jurisdiction in a given country unanimously agree should be made eligible in such country."[163]

Being an authorised deposit-taking institution (ADI) in Australia does not guarantee membership of the Visa scheme. Eligible applicants must also submit a business plan and satisfy Visa International that they have appropriate operational capacity and will "contribute to the overall operation and growth of the Visa payments system." Applicants must also meet the requirements of Visa International's Global Member Risk Policy; Visa has advised the Reserve Bank that "assessment often results in a requirement for an applicant to provide Visa International with collateral".[164] An application for membership must be endorsed by a majority vote of directors present at the Asia-Pacific board meeting, where the application would be considered. In Australia, new members pay an entry fee.

162 *ibid.*

163 Visa International By-laws, Membership Section 2.01.

164 Visa International (2001c), pp 10-12.

Bankcard

Prior to the Joint Study, membership requirements for Bankcard were characterised by their lack of transparency and objectivity. Membership applications were determined at the sole discretion of the four remaining founding banks.[165] Bankcard had refused membership to a number of banks, including Citibank, whose parent company was at the time the largest issuer of bank credit cards in the world; it also imposed a formula-based membership fee which in recent years amounted to around $1 million. The Joint Study concluded that Bankcard's membership procedures appeared to have operated to ensure that the field of competition for the issuing of Bankcard and the acquiring of Bankcard transactions remained tightly restricted to a small number of banks.

Bankcard has subsequently undertaken a major review of its membership requirements, which has resulted in a significant liberalisation of access to membership.[166] Under its new rules, an entity is eligible for membership of Bankcard if it is:

- "an authorised deposit-taking institution (ADI) in Australia supervised by the Australian Prudential Regulation Authority (APRA); or
- a financial institution supervised by an official prudential regulator in another country that is recognised by APRA; or
- an entity whose liabilities in respect of the Bankcard Scheme are guaranteed by an APRA supervised organization (or an organization supervised by a foreign prudential regulator recognised by APRA) under a guarantee that survive[s] the commercial failure of the entity."[167]

Bankcard considered allowing unsupervised entities seeking membership to lodge collateral as an alternative to having a guarantee, but concluded that it was "unworkable in key respects in relation to the objectives of safety and stability plus efficiency."[168]

Bankcard now has a single-tiered voting structure based on turnover. Applications for membership are decided by a two-thirds majority of directors and new members no longer need to submit a business plan. The entry fee has been reduced to a flat

165 Australia and New Zealand Banking Group, Commonwealth Bank, National Australia Bank, Westpac Banking Corporation.

166 Bankcard (2001a) and (2001b).

167 Australian Bankers' Association (2001b), p 63.

168 *ibid*.

fee of $66 000 (inclusive of GST), which is stated to be comparable with entry fees in the international credit card schemes.[169]

Assessment of membership restrictions

Summing up the common features of membership restrictions, the principal route to scheme membership in each of the designated credit card schemes is being a deposit-taking institution authorised and supervised by APRA (or under a similar regime overseas). Indeed, all members of the three schemes in Australia have joined through this route. Being an ADI, however, is only a condition for eligibility, not for membership as such. Although the detail varies, all three schemes require assessment and endorsement of any application for new membership by current members. At the same time, all three schemes provide some degree of flexibility. MasterCard allows institutions which "engage in financial transactions" to be members provided they are supervised; it also allows non-traditional members if this is necessary to conform with local laws, or for any reason. Visa allows non-ADIs to be members if local members unanimously agree. As discussed below, the international schemes have taken advantage of this flexibility to admit non-traditional members in other countries, but not Australia. Bankcard's new rules allow a non-ADI with a guarantee from an ADI to become a member.

Membership restrictions are defended by the credit card schemes and their members on the basis that they provide assurance about the financial substance of participants in the schemes. On the issuing side, submissions have emphasised that the "honour all cards" rule – under which the merchant is guaranteed payment even if the issuer fails to settle its obligations – places a burden on all members to ensure the creditworthiness of all other issuers.[170] On the acquiring side, the ABA has argued that acquiring involves more than the provision of network and processing facilities and is "at core" a banking function, focused on managing the risks of merchant default or fraud.[171] Several respondents have noted that ANZ Bank, as the acquirer for Compass Airlines, was required under the schemes' rules to make good losses incurred by cardholders when Compass could not honour tickets which had been paid for using credit cards.[172] MasterCard added that schemes as well as their members can face losses because of chargebacks and merchant failure, and that in the United States it has been required to set aside funds as a buffer against such losses.

169 Australian Bankers' Association (2001b), p 40.

170 See MasterCard International (2001), Allen Consulting Group (2001), p 3, p 11 and p 18.

171 Australian Bankers' Association (2001b), p 59.

172 More recently, banks which have acquired transactions for Ansett tickets have had to bear losses when tickets were not honoured.

At the same time, submissions have claimed that it is not in the interest of the card schemes to restrict membership, since growing membership will attract larger card bases and a wider range of merchants which, in turn, benefits existing members and their customers.[173]

The Joint Study acknowledged that "… the requirement of authorisation [as deposit takers] and ongoing prudential supervision has been a long-established and effective screening device."[174] From the public interest viewpoint, however, the issue is whether current membership restrictions limit competition more than is necessary to ensure the safety and stability of the credit card schemes.

The current membership restrictions have two separate elements – a restriction on the basis of institutional status (broadly speaking, members must be deposit-taking institutions) and a restriction on the basis of regulatory status (members must be authorised and prudentially supervised). In the Reserve Bank's view, any requirement that a credit card issuer or acquirer must be a deposit-taking institution is, on its own, very difficult to defend. Deposit-taking institutions undertake a wide range of financial activities, of which the provision of payment services may be only a small part, and have a commensurate range of skills and infrastructure. Their capital requirements are determined by the often complex risks that arise. They also pursue comprehensive risk management policies designed to ensure, fundamentally, that depositors can be confident of withdrawing their funds in full on demand. Credit card issuing and acquiring are more specialised activities and generate risks, as discussed above, that are much narrower and easier to monitor and control than those across the spectrum of activities of a deposit-taking institution. The risks of merchant default for an acquirer, for example, argue for a diversified merchant base and adequate capital for acquirers that sign up large merchants providing delayed delivery of goods and services; it does not argue that acquirers should be deposit-taking institutions.

Most submissions have focused not on the issue of institutional status but on the requirement that, in general, members must be prudentially supervised. The arguments are not that the full range of prudential standards for an ADI are required to address the specific risks in credit card activities; rather, the arguments are about convenience, cost and discretion. They take the form that:

- authorisation and ongoing prudential supervision by APRA is an efficient and non-discriminatory screening device; and

173 See Frontier Economics (2001), p 43 and Australia and New Zealand Banking Group (2001b), p 7.

174 Reserve Bank of Australia and Australian Competition and Consumer Commission (2000), p 56.

- in any event, the restrictions are not "economic" restrictions that lessen competition because non-ADIs can effectively participate in issuing and acquiring through co-branding and outsourcing.[175]

Prudential supervision is efficient and non discriminatory

The main thrust of this argument is that reliance on APRA's prudential assessment of ADIs avoids the need for card schemes to undertake their own assessments, duplicating APRA's efforts.[176] MasterCard has emphasised that the consistency of prudential standards for ADIs around the world, where its scheme has more than 20 000 members, reinforces these efficiencies.[177] If the schemes were to undertake the same detailed assessments, their costs would rise. Reliance on APRA's prudential assessment is also argued to be objective and reduces the risk that the schemes will in some way apply variable standards or that a scheme's existing members may use their position inappropriately.[178]

The Reserve Bank acknowledges that there is some merit in using APRA's prudential oversight as a screening device. In practice, however, it has not eliminated the involvement of scheme members in assessing membership applications. Being an ADI does not entitle an institution to scheme membership; it is only the first hurdle and prospective members must pass further tests where the discretion and judgments of existing members come into play. Visa, for instance, subjects all prospective members to its Global Member Risk Policy and, in some cases, requires members to lodge collateral with it.[179] At the same time, members of Visa and MasterCard have also been prepared to admit non-ADIs in a number of Asian countries. In Japan, Korea, Hong Kong, Indonesia and Malaysia, a special licence scheme allows entities which are not all prudentially regulated, such as consumer credit companies and retailers, to issue cards; in the case of Visa, members in those countries have accepted that this is the best way to penetrate new merchant sectors and the Asia-Pacific Board has agreed. Inevitably, then, the schemes and their members are involved in making credit assessments of prospective members.

175 Visa International (2001a), MasterCard International (2001), Australia and New Zealand Banking Group (2001b) and Allen Consulting Group (2001).

176 Australian Bankers' Association (2001b), p 8, Visa International (2001a), pp 44-45, MasterCard International (2001), pp 28-29 and Allen Consulting Group (2001), p 12.

177 MasterCard International (2001), p 28.

178 Visa International (2001a), p 44.

179 This contrasts with Bankcard's conclusion that it would be unworkable for its scheme to accept collateral as a way of guaranteeing members' obligations.

This involvement of scheme members highlights an underlying tension in credit card scheme arrangements that can reinforce any anti-competitive impact. While it may well be in the interests of a scheme to admit new members and expand the network, it may not be in the interests of some existing members whose own issuing or acquiring business may be threatened. Before its recent rule changes, Bankcard's restrictive approach to membership was a clear illustration of this tension.

Bankcard has now, however, accepted that ADI status need not be the minimum entry requirement for credit card schemes in Australia. Non-supervised institutions may become members of Bankcard, provided they have a guarantee of their credit card obligations from an ADI. These new arrangements, though yet to be tested, may go some way to liberalising access to membership of Bankcard, because there is a reasonably long list of ADIs which are not in this scheme and may be prepared to offer such guarantees. Nonetheless, the guarantee would add an explicit cost to the credit card operations of a non-ADI which would reduce its competitive impact. Moreover, the use of guarantees is unlikely to be a practical solution for liberalising access to the international card schemes in Australia. Non-ADIs may find it very difficult to secure a credible guarantor that was not already a member of MasterCard and Visa.

In any event, several submissions have questioned whether the Australian members of the international card schemes could achieve any changes to the membership restrictions of these schemes.[180] They note that Australian members constitute only a very small proportion of the Visa and MasterCard membership of more than 20 000 institutions, and argue that the international schemes would be reluctant to countenance changes that might be workable in Australia but would set "undesirable precedents" if they were to be applied elsewhere. On the other hand, the schemes' rules do contain flexibility which would allow Australian members, if they so wished, to admit or recommend the admission of non-ADIs to scheme membership in Australia.

"Economic participation" not "membership" is what matters

This argument has been put in a number of submissions.[181] On the issuing side, the argument is that co-branding provides organisations that are not scheme

180 See Australian Bankers' Association (2001b), Australia and New Zealand Banking Group (2001b), Allen Consulting Group (2001).

181 See Australian Bankers' Association (2001a) and (2001b), Allen Consulting Group (2001), Australia and New Zealand Banking Group (2001b) and MasterCard International (2001).

members with a form of "economic participation" in credit card issuing equivalent to that provided by actual membership. The ABA, for example, argues that:

> "In Australia, not only large corporates such as Telstra and Qantas, but also organisations of considerably smaller scale (such as sporting organisations) have been able to conclude apparently satisfactory agreements effectively (in economic terms), giving them participation in issuance – if not actual membership."[182]

On the acquiring side, it is argued that third-party processors, network operators or transactions switches can undertake operational roles which are outsourced to them by acquirers who are scheme members. The acquirers retain the financial obligations while reducing costs and providing business opportunities to their outsourcing partners.

The Reserve Bank accepts that co-branding may provide non-members with a degree of economic participation, but this is not equivalent to membership. Co-branders do not have the same rights to participate in scheme governance and strategy as members. They have no role in setting scheme rules or interchange fees. Importantly, they do not have the same relationship with cardholders as scheme members that issue cards and extend credit; in particular, they do not have access to data on customers' spending patterns. They have to share revenues with members, even if they provide the bulk of the distribution network. In short, scheme members can extract an "economic rent" from co-branders because they have access to a scarce commodity not available to the co-brander – viz, scheme membership.

The same arguments apply to the outsourcing of acquiring functions. The scheme members remain the formal acquirers and earn the merchant service fee, part of which is passed to outsourcing partners. These partners, however, have no input into scheme governance, rule-setting or strategy, even if they perform most of the work and have substantial investment in infrastructure. Again, this may result in an "economic rent" to the scheme member.

In the Reserve Bank's opinion, the submissions have not advanced a convincing reason why a number of the organisations cited as examples of successful co-branding – organisations with a good credit rating, an extensive distribution network and a long history in credit assessment, billing and debtor management – lack the financial substance to be credit card issuers in their own right. Similarly, the submissions have not explained why institutions that understand the acquiring business and have the substance to deal with the associated risks need to be ADIs.

182 Australian Bankers' Association (2001b), p 58.

To sum up, the Reserve Bank is not persuaded by the arguments that credit card issuers and acquirers must be deposit-taking institutions, authorised and supervised by APRA, to be able to manage the risks involved in credit card activities. It acknowledges that reliance on APRA's prudential assessments does lend some objectivity to membership procedures and defrays scheme costs but, under the schemes' rules, it provides no guarantee of membership. However, in the Reserve Bank's opinion, the requirement that members must be deposit-taking institutions makes the barriers to entry more restrictive than the minimum necessary for the type and scale of risks involved. As discussed below, alternative membership regulations can be devised that provide, in the public interest, a more appropriate balance between the promotion of competition and efficiency, on the one hand, and the control of card scheme risks on the other.

4.5 Restrictions on self-acquisition

Restrictions on eligibility for membership are the main means by which the designated credit card schemes seek to contain risks. As part of their risk control framework, the international schemes also have policies (rather than formal rules) that prohibit members of the schemes from acquiring their own transactions.

Policies against self-acquisition are largely redundant when card scheme membership, and the provision of acquiring services to merchants, are restricted to ADIs. However, these policies could take on importance if non-traditional participants were admitted to credit card schemes. An example would be a telephone company that issued a scheme's credit cards in its own right and had an acquiring capacity. A policy against self-acquisition would prohibit that company from acquiring the credit card transactions made by customers to settle their telephone accounts; those transactions would have to be acquired by another scheme member (presumably an ADI).

MasterCard

MasterCard has stated that its policy against self-acquisition is quite flexible:

> "If there were to be some minor amount of self-acquisition by an acquirer, this would not of itself cause MasterCard undue concern. For example, if some incidental goods or services offered by a member were paid for by credit card. There is more concern if an acquirer were proposing to self-acquire a substantial volume of transactions.
>
> The policy has not been the subject of application in Australia to date as there has not been any occasion when a member has sought to acquire a significant volume of its own transactions. The policy has

been applied in the U.S. where there are instances of merchants owning financial institutions which are members of MasterCard."[183]

Visa

The ABA says that:

> "Within the Visa system there are understood to be a number of rules which impact upon the issue of self acquisition, including some of the membership rules, but are not rules *per se* against self acquisition. It is understood that the impact of such rules can only be assessed in the context of specified factual situations and that with respect to Visa the issue of a self acquisition policy has not arisen for concrete consideration in the Australian context."[184]

Visa argues that the question simply does not arise under its rules:

> "A merchant as a merchant cannot acquire its own transactions. It would be feasible, however, for an acquirer to sign up only one merchant – that is, the merchant that is part of the same group of companies as the acquirer … however, Visa does not allow a member to be an acquirer only …
>
> Having satisfied those requirements, Visa has not to date encountered [in the Asia Pacific region] a situation where self-acquisition … has raised any particular policy issues."[185]

Assessment

The justification for policies against self-acquisition focus on the principal-agent relationship said to exist in the usual arms-length contract between an acquirer and a merchant. As principal, an acquirer has the dual role of ensuring that merchants conform with the scheme rules (though many merchants have complained to the Reserve Bank that, because of confidentiality clauses, they are prevented from actually seeing these rules), and standing in the settlement chain between the merchant and the issuer. This dual role could, it is claimed, generate two main risks if self-acquisition were permitted.

First, there would be no independent third party to enforce the scheme's rules on the merchant or to provide an independent check on merchant fraud, because the self-acquirer would be playing both roles. Secondly, because there would be no

183 MasterCard International (2001), p 49.

184 Australian Bankers' Association (2001b), p 64.

185 Visa International (2001d), p 2.

independent party standing between the merchant and issuers in the settlement chain, issuers would be at greater risk. As noted earlier, if a particular good or service is paid for using a credit card but is not delivered, the issuer would credit the cardholder's account and seek reimbursement from the acquirer under the scheme's chargeback arrangements; the acquirer, in turn, debits the merchant, which has ultimate responsibility for repayment. If the merchant cannot pay, the acquirer must do so. Both the merchant and the acquirer would have to fail before the scheme's loss-sharing arrangements needed to be invoked. However, in the above example of a telephone company joining a credit card scheme as issuer and acquirer, the merchant and the acquirer would be the same entity and the independent guarantee to the issuer would disappear.

Several submissions have emphasised these types of risks in explaining why, in the United States, a scheme refused to allow a retailer to use a bank which it owned, and which was a member of the scheme, to acquire the retailer's transactions. Another case quoted was that of an airline whose acquirer required it to lodge a bond to cover credit risks. The card scheme refused to let the airline avoid this requirement by buying a bank that would acquire its transactions.[186]

Others, however, have questioned the strength of the argument that acquirers ensure merchants conform with scheme rules – exactly which rules are of concern has not been spelled out. Merchants have commented that there is no policy prohibiting self-acquisition in the debit card system in Australia where one merchant already acquires its own transactions – though in limited circumstances – under the rules of the Australian Payments Clearing Association. In any case, an acquirer is contractually bound to conform to all rules in the respective card schemes, whether it has membership as an ADI or, potentially, as a non-traditional participant.

Bankcard has rejected the arguments against self-acquisition and decided that it will not prohibit this activity. It has done so on the basis that any institution that passes its new membership requirements will, in the normal course, be able to meet its obligations as acquirer. Bankcard's expectation is that APRA, as prudential supervisor, will ensure that a member is able to deal appropriately with any particular risks that might arise. Where a member is not itself supervised, a guarantee from an APRA-supervised institution is expected to ensure that other Bankcard members will not be exposed to risks from that member's acquiring activities (including self-acquisition), should it fail.

In the Reserve Bank's opinion, policies against self-acquisition are potentially anti-competitive. If a large merchant were to become eligible for card scheme membership, but was required to pass credit card transactions at its stores to another

186 Frontier Economics (2001), MasterCard International (2001).

acquirer, its competitive impact on the acquiring market would be constrained. For this reason, the Reserve Bank believes that any outright prohibition by the international card schemes on self-acquisition would not be in the public interest. Rather, scheme policies should provide some flexibility in balancing safety and competition concerns. The Reserve Bank acknowledges that acquirers can face significant credit risks if their merchant base is concentrated on merchants – such as airlines, theatres or Internet retailers – where payment is made before delivery (eg airline tickets) or credit card signatures cannot be verified (eg phone transactions). However, there is a wide range of credit card transactions that do not have these characteristics. Credit risks would be much lower in the case of service stations or supermarkets, for example – two areas where merchants could be well placed to undertake an acquiring role.

4.6 Restrictions on competition in acquiring

The designated credit card schemes have separate sets of regulations which restrict the range and scale of activities that card scheme members may undertake. These involve:

- a requirement in the international card schemes that acquirers must also be issuers and hence, broadly speaking, must be ADIs; and
- financial penalties or loadings in all three schemes on members that tend to specialise in acquiring, rather than issuing.

MasterCard

MasterCard's Bylaws require that once members are admitted to MasterCard, they must issue and continue to issue a "reasonable" number of cards. Issuers that fail to do so must pay an "Acceptance Development Fee" to MasterCard calculated on the basis of each member's ratio of acquiring volume to the total volume.

Visa

Visa's "Balanced Portfolio Rule" states that:

> "… the dollar value of acquired transactions by a member must be no more than twice the dollar value of transactions for which the same member is the issuer. Violations of this rule attract a financial penalty of 0.03% of the volume of those transactions which exceed the balanced portfolio restriction".[187]

This fee is paid by the acquirer to Visa.

187 Visa International (2001a), p 45.

Bankcard

Under its new rules, Bankcard allows members to specialise as issuers or acquirers. It does, however, impose an "Incentive Fee" on members whose total volume of transactions acquired is more than double the volume of transactions on cards it has issued. This fee, paid to Bankcard, is 0.03 per cent of the value of transactions acquired from the second year of Bankcard membership.

Assessment

Although the details vary between the schemes, the effect of "net issuer" or "balanced portfolio" rules is that members whose acquiring business is large relative to their issuing business in a particular scheme must pay a loading to that scheme. This raises their cost of providing acquiring services compared with other scheme members and constrains their ability to compete. In the Reserve Bank's opinion, these rules are anti-competitive.

The card schemes have not sought to defend "net issuer" rules as being necessary to protect the safety and integrity of the schemes. The rules and the loadings do not address any of the specific risks facing card issuers and acquirers. The justification, instead, is that such restrictions are necessary to foster the "balanced development" of the credit card schemes. A number of arguments have been put forward.

First, some submissions have argued that "net issuer" rules are needed because specialist acquirers will attempt to "free ride" on the efforts of issuers; a scheme's business interests will be better promoted if all members are "typically *substantial issuers and acquirers*."[188] (The argument is not symmetrical – there is no corresponding claim that incentives are needed to encourage acquiring). Issuing is said to generate relatively large externalities but also has relatively large costs; hence, it is argued, some rebalancing of issuers' and acquirers' costs is needed.[189] However, no evidence has been offered to support the claim that externalities associated with issuing are so much greater than for acquiring. In any event, the Reserve Bank has reached the view, for reasons set out in Chapter 2, that claims of extensive externalities in credit card networks are significantly overstated.

Allen Consulting Group has taken this argument further by claiming that present levels of interchange fees in Australia "do not provide to issuers rewards for issuing commensurate with the positive externalities to the respective schemes flowing

188 Australian Bankers' Association (2001b), p 66.

189 *ibid*, p 9, p 66.

from their efforts".[190] On this view, an additional penalty needs to be levied on acquirers that are not sufficiently large issuers; this penalty can be used by the card schemes for promotion and will encourage members paying it to issue more cards. There is, however, no evidence backing the assertion that card issuers have not been appropriately rewarded for their efforts, and the argument ignores the fact that card scheme members have always had the discretion to vary interchange fees to achieve appropriate incentives.

The argument that "net issuer" rules are necessary to ensure balanced development of credit card schemes was also put to the recent enquiry into competition in UK banking (the Cruickshank Report).[191] Cruickshank noted that the argument might have had some merit when the schemes were in their infancy and the primary need was to promote cardholding but concluded that it was not clear how restricting the supply of acquirers would serve to increase the number of cards in circulation.

A second argument is that specialist acquirers in Australia would have little interest in promoting a particular credit card scheme, since they will typically offer acquiring services for all three schemes as a package.[192] "Net issuer" rules are therefore required to ensure that such institutions contribute to the promotion of the respective schemes. This argument fails to acknowledge that acquirers have a clear interest in promoting any scheme for which they acquire, since without transactions they earn no revenue. It also fails to acknowledge the merchant perspective – competition amongst a larger number of acquirers, especially with low-cost bases, would put downward pressure on costs and merchant service fees. A more complex variation of the argument, put by Allen Consulting Group, is that members that acquire but do not issue in one scheme, but which issue in another, may benefit from undermining the scheme in which they are only an acquirer.[193] The Reserve Bank believes it is highly unlikely that a member of one scheme would deliberately set out to undermine another of which it was also a member, while trying to retain its merchant base.

Other submissions (though not from the international card schemes or their members) have claimed that manageability and good governance require that scheme members should issue as well as acquire; that is, governance will be more difficult if members have markedly different interests. However, no practical examples are given of governance issues that have been more efficiently resolved because of the existence of "net issuer" rules.

190 Allen Consulting Group (2001), p 15.

191 Cruickshank (2000), p 241-242.

192 Bankcard (2001b), p 5.

193 Allen Consulting Group (2001), p 3.

The conflict of interest argument was also considered, and rejected, in the Cruickshank Report. Cruickshank argued, to the contrary, that specialised acquirers would be committed to maintaining the card schemes of which they were members because their merchant customers are likely to continue to use those schemes and they will have invested in the necessary infrastructure. In Cruickshank's view, a conflict of interest is more likely to exist if the same institution is both an issuer and an acquirer.

A third justification for "net issuer" rules is that having members that are both substantial issuers and acquirers can improve bargaining over interchange fees and help ensure that the resulting fees are in the best interests of the schemes. Specialist acquirers, it is argued, would have particularly strong bargaining power because issuers have already invested heavily in the schemes; if so, interchange fees may be "too low".[194] A variation on this argument is that if all members are significant issuers and acquirers, getting the interchange fee "wrong" (at least from the members' viewpoint) will not matter too much. The Joint Study confirmed that the average cost per transaction is much higher for credit card issuing than for acquiring, but no evidence has been provided that card issuers also have higher sunk costs. Acquirers make substantial investments in terminals, networks and switching facilities, and these investments are commonly cited by card scheme members to justify Australia's debit card interchange fees, which flow from issuers to acquirers. The argument that members need to be both issuers and acquirers also sits uneasily with the notion that interchange fees are determined by competitive negotiations between parties with differing business interests.[195]

A final argument, which was put to the UK banking review but not to the Reserve Bank, is that it would not be "fair" to issuers that act as acquirers if non-issuers are also allowed to acquire transactions. Cruickshank dismissed this argument on the basis that card issuing "… is a profitable activity, not a social obligation"; the argument was another that might have had some merit when the schemes were in their infancy but not now they are well-established.[196]

Notwithstanding the justifications offered by the international card schemes, the ABA and others, confidential submissions by some scheme members have argued for the removal of "net issuer" rules, which they claim are "onerous". In their view, the rules discourage small issuers from actively competing in the acquiring market by markedly increasing their cost bases relative to large issuers. This leads to outcomes which, the submissions claim, cannot be considered efficient.

194 *ibid*, p 14.

195 Visa International (2001a), Executive Overview, p 2.

196 Cruickshank (2000), p 242.

In the Reserve Bank's opinion, the justifications for "net issuer" rules in credit card schemes do not outweigh their anti-competitive impact on the acquiring market. That market is extremely concentrated in Australia; barriers to the entry of non-financial institutions imposed by the card schemes are restrictive and every indicator suggests profitability is very strong. Whatever contribution "net issuer" rules might have made to their early development, the designated credit card schemes are well-established in Australia and the rules now mainly serve to increase acquiring costs for new scheme members and entrench the market power of incumbents. From the public interest viewpoint, the consequence is that merchant service fees are higher than they might otherwise be, the market is not contestable by specialist acquirers that might have new skills and efficiencies to offer and incentives for innovation and cost reduction are likely to be dampened; it is difficult to claim, therefore, that the acquiring market is efficient in an allocative or dynamic sense. The Reserve Bank has therefore concluded that "net issuer" rules are not in the public interest and should be abolished.

The Reserve Bank also understands that, in response to the conclusion of the Cruickshank Report that there is a lack of competition in the acquiring market in the United Kingdom, MasterCard/Europay (UK) has removed its "net issuer" rules in that country.[197]

4.7 Liberalising access to credit card schemes

In the Reserve Bank's opinion, the current restrictions on access to the designated credit card schemes in Australia, agreed to and applied by their Australian members, create barriers to entry that are more restrictive than needed for the safety of these systems, and hence unduly limit competition. The card schemes have not argued against admission of new members as such – their rules make specific provision for this – but that new members should, broadly speaking, be deposit-taking institutions authorised and supervised by APRA. These are broad-brush requirements, however, that do not directly address the particular risks generated to the schemes by credit card issuers and acquirers. The Reserve Bank has therefore concluded that a more liberal access regime, imposed under its payments system powers, is needed in the public interest to promote competition and efficiency in the provision of credit card services in Australia.

Under the *Payment Systems (Regulation) Act 1998*, the access regime imposed must be one that the Reserve Bank considers appropriate, having regard to the public interest, the interests of current participants, the interests of institutions who, in the future,

197 Lea (2001).

may want access to the system and any other matters the Reserve Bank considers relevant.

The Reserve Bank's proposed access regime seeks to promote competition and efficiency, without compromising the safety of the designated credit card schemes, by ensuring that membership restrictions:

- do not inhibit competition more than is necessary to protect the financial soundness of the schemes;
- are clearly targeted at the risks incurred by credit card issuers and acquirers; and
- do not discriminate between members whose business is focused on issuing or acquiring.

In so doing, the proposed access regime meets the intent of the Wallis reforms that non-traditional institutions participate in the payments system as a means of spurring competition.

Deposit-taking institutions authorised and supervised by APRA are eligible for membership of all three credit card schemes operating in Australia. The Reserve Bank has concluded that restrictions on the basis of institutional status – that members be deposit-taking institutions – are excessive; ADIs in Australia have traditionally undertaken a wide range of banking business of which participating in four party credit card schemes has usually been a small part. At the same time, the Reserve Bank acknowledges that reliance on APRA's prudential supervision of members has lent some objectivity to, and reduced the costs of, membership procedures in credit card schemes.

To preserve these benefits, and to assist in promoting competition in credit card schemes, the APRA Board has agreed in principle that APRA will authorise and supervise specialist credit card issuers and acquirers. To this end, a regulation will need to be enacted under the *Banking Act 1959* to deem credit card issuing and acquiring to be "banking business"; this matter is being progressed with the Treasury. Any specialist institutions wishing to undertake the "banking business" of issuing credit cards and/or acquiring credit card transactions in four party credit card schemes will need to obtain an authority from APRA and be subject to its on-going supervision. As an assurance to the credit card schemes and the community generally that such institutions have the necessary competence and financial standing, they will need to:

- be established as special purpose vehicles with a separate corporate identity;
- be separately capitalised. The adequacy of start-up capital will be assessed on a case-by-case basis having regard to the scale of operations proposed;

- demonstrate to APRA that they are of financial substance and able to meet their settlement obligations;
- have in place appropriate risk management policies, particularly controls for monitoring credit risk, IT risk and liquidity risk; and
- meet prudential standards, as determined by APRA, in relation to credit quality and liquidity management that are no less strict than would apply to an ADI's credit card business.

The proposed access regime is therefore consistent with the objectives of the credit card schemes that their members have sufficient financial substance to undertake credit card activities. It specifically targets the risks generated by credit card issuing and acquiring and so does not compromise safety and stability. Since all scheme members will continue to be authorised and prudentially supervised by APRA, there are no particular implications for the international card schemes. The access regime does not prevent continued co-branding or outsourcing arrangements but it does allow institutions participating in those arrangements to participate directly, if they are prepared and able to meet APRA's requirements. It also obviates the need for non-traditional participants to seek guarantees from ADIs which might otherwise be competitors in credit card acquiring and issuing.

The proposed access regime precludes any outright prohibition in the designated credit card schemes on participants acquiring their own transactions. The Reserve Bank believes the sensible way for credit card schemes to proceed on this issue is on a case-by-case basis. As a minimum, however, the schemes' regulations and policies must have sufficient flexibility to accommodate proposals by participants wishing to self-acquire that address the particular risks involved.

Finally, the proposed access regime precludes any "net issuer" rules, and associated financial penalties or loadings, in the designated credit card schemes. The Reserve Bank has concluded that these rules do not contribute to the control of risks in credit card acquiring but act to protect the dominant position of the four major banks in the acquiring market. These restrictions on competition are not in the public interest.

The proposed access regime is set out below.

Draft Access Regime for Designated Credit Card Schemes

Objective

The objective of this Access Regime is to ensure that, having regard to:

(i) the interests of current participants;

(ii) the interests of people who, in the future, may want access to the systems; and

(iii) the public interest,

any restrictions imposed on participation in the three designated credit card systems do not inhibit competition any more than is necessary to protect the financial safety of those systems.

Application

1. This Access Regime is imposed under Section 12 of the *Payment Systems (Regulation) Act 1998*.
2. This Access Regime applies to the three credit card systems designated on 12 April 2001 by the Reserve Bank of Australia under Section 11 of the *Payment Systems (Regulation) Act 1998*, being:
   (i) the credit card system operated within Australia known as the Bankcard Scheme;
   (ii) the credit card system operated within Australia known as the MasterCard System or MasterCard Network Card System; and
   (iii) the credit card system operated within Australia known as the Visa System or the Visa Network Card System,

   each referred to as follows as a Scheme.
3. In this Access Regime:

   an "acquirer" provides services to merchants to allow the merchant to accept a Scheme's credit cards;

   an acquirer is a "self acquirer" if it or a related body is the merchant in a transaction;

   "credit card transaction" or "transaction" means a transaction between a credit card holder and a merchant involving the purchase of goods or services on credit by that credit cardholder using a credit card;

   an "issuer" issues a Scheme's credit cards to its customers;

"rules of a Scheme" or "rules" include the constitution of a Scheme, rules, by-laws, procedures or any arrangement in relation to a Scheme by which participants in the Scheme in Australia may consider themselves bound;

a "Scheme's credit card" is a credit card issued in accordance with the rules of that Scheme;

a "Scheme Administrator" is the administrator of the Scheme, if any;

use of a credit card includes use of a credit card number.

4. This Access Regime is to be interpreted:
   - in accordance with its objective; and
   - by looking beyond form to substance.
5. This Access Regime comes into force on [ ].

Eligibility for participation

6. Any person supervised by the Australian Prudential Regulation Authority (APRA) as an authorised deposit-taking institution or as a specialist credit card service provider must be eligible to participate in a Scheme in Australia.
7. The rules of a Scheme must not discriminate between authorised deposit-taking institutions and specialist credit card service providers supervised by APRA in relation to the rights, obligations and entitlements of such participants in the Scheme.

Terms of participation

8. The rules of a Scheme must not prevent a participant from being:

   (i) an issuer; or

   (ii) an acquirer; or

   (iii) both an issuer and an acquirer.
9. The rules of a Scheme must not impose on a participant in a Scheme any fees, charges, loadings or any form of penalty as a consequence of, or which are related in any way to, a difference in the value or number of transactions in which that participant is the acquirer in comparison to the value or number of transactions that involve the use of credit cards issued by that participant.

10. The rules of a Scheme must not prohibit a participant from being a self acquirer if the participant can establish to the reasonable satisfaction of the Scheme Administrator or, if none, to a majority of the participants in the Scheme that it has the capacity to meet the obligations of an acquirer as a self acquirer. The rules of a Scheme may allow the decision on the capacity of a self acquirer to meet its obligations to be reviewed by the Scheme Administrator or, if none, by the participants in the Scheme upon the giving of reasonable notice to that self acquirer.

Transparency

11. The Scheme Administrator or, if none, participants in the Scheme must publish the rules of a Scheme which govern the eligibility for participation, and the terms of participation, in the Scheme in Australia on the Scheme Administrator's website or, if none, on another relevant website.
12. The Scheme Administrator or, if none, each of the participants in the Scheme must give a person that has applied to participate in the Scheme, and who is eligible to participate under paragraph 6 of this Access Regime, reasons in writing if the application is rejected.

Notification of Reserve Bank of Australia

13. The Scheme Administrator or, if none, each of the participants in the Scheme must give the Reserve Bank of Australia prior notice in writing of any proposed changes to its rules governing the eligibility for participation, and the terms of participation, in Australia.

Reserve Bank of Australia
SYDNEY

CHAPTER 5: PROMOTING EFFICIENCY AND COMPETITION

5.1 Introduction

The main regulations in the Bankcard, MasterCard and Visa credit card schemes in Australia – dealing with the collective setting of interchange fees, restrictions on merchant pricing and restrictions on entry – have been assessed in previous Chapters on public interest grounds. Each of these regulations represents significant departures from the normal workings of the market.

This final Chapter draws the previous analyses together by reviewing the regulations and their consequences against the benchmarks that underpin the public interest test, and summarising the public interest concerns. These concerns provide the background for the use of the Reserve Bank's payments system powers to promote reform of the designated credit card schemes, in the interests of promoting efficiency and competition in the Australian payments system. The Chapter outlines the reform measures and their likely impact. It then analyses the main objections to reform that have been raised and concludes that they are not a persuasive defence of the *status quo*.

The last section outlines the next steps in the Reserve Bank's consultation process before its proposed standards and access regime are finalised.

5.2 Scheme regulations and competition benchmarks

To meet the broad objectives of public policy, the payments system in Australia would be expected to be responsive to competitive pressures, including freedom of entry into the markets for different payment instruments, provided the safety of the system is not compromised. There is likely to be a role for private-sector regulations to ensure the safety, technical consistency and orderly operation of any payment system, but such regulations should not be so binding or widespread as to compromise the market process. For these reasons, the Reserve Bank specified a number of benchmarks as underpinning the public interest test in the payments system. The benchmarks, set out in Chapter 1, are that:

- relative prices charged by financial institutions to consumers who use payment instruments should take into account the relative costs of providing these instruments;
- merchants should be free to set prices for customers that promote the competitiveness of their business;
- prices of payment instruments should be transparent;

- any restrictions on the entry of institutions to a payment system should be the minimum necessary for the safe operation of that system; and
- competition between different payment systems should be open and effective.

Previous Chapters have discussed how the regulations of the designated credit card schemes depart from these benchmarks, and whether such departures can be defended in the public interest. Summarising, and taking the benchmarks in turn:

- in the designated credit card schemes, the cardholder faces no transaction fees, and may be paid for using the card by accumulating points in a loyalty program, even though this payment instrument is among the most expensive for financial institutions to provide and for merchants to accept. Credit card schemes and their members have argued that this pricing structure is essential for the growth of credit card networks and for maximising community welfare;
- because of card scheme restrictions, merchants in Australia are prevented from recovering their credit card costs from cardholders. These restrictions harm consumers who do not use credit cards and suppress price signals about the costs of alternative payment instruments. Again, credit card schemes and their members have argued that these restrictions are essential for the growth of credit card networks;
- merchants are at a disadvantage in negotiating with acquirers because merchant service fees are not posted by acquirers, but are negotiated bilaterally between a merchant and its acquirer and are closely held as commercial secrets. As a result, merchants cannot easily compare the range of fees on offer without incurring what could be significant search costs. This point is taken up below. Interchange fees, of course, are the key determinant of fees paid by merchants and credit cardholders, and the processes by which interchange fees have been set within the respective card schemes in Australia have lacked any transparency;
- card scheme requirements that new members should, broadly speaking, be deposit-taking institutions supervised by APRA are broad-brush requirements that do not directly address the risks to the schemes generated by credit card issuers and acquirers. The regulations may achieve their desired effect but, by excluding other potentially well-qualified institutions, they create barriers to entry that are higher than needed to preserve safety; and
- finally, the major banks that dominate the designated credit card schemes are also the dominant providers of competing payment instruments such as debit cards, cheques and direct debits. They have a strong influence on setting the fees and conditions in nearly all parts of the retail payments system. These are the circumstances in which the payment instrument which is among the most

costly for merchants to accept – ie the credit card – and for which there are ready substitutes is the one which is most actively promoted by financial institutions.

Reviewed against the competition benchmarks, the regulations established by the designated credit card schemes raise three particular concerns from a public interest viewpoint. The first is the current arrangements for the collective setting of interchange fees. These arrangements are characterised by their rigidity and lack of transparency – Bankcard's interchange fee, for example, has not changed in 27 years – and the absence of any formal methodology for determining these fees.

The second concern, in which interchange fees play a critical role, is the inefficiency of credit card pricing. Aside from annual fees, credit cardholders who do not use the revolving credit facility do not contribute to the costs of providing credit card payment services; instead, they receive a substantial subsidy in that they are provided with these payment services at a price below cost. Credit cardholders who use the revolving credit facility and merchants, through the interchange fee, cover the costs of credit card schemes. Merchants' costs of accepting credit cards are, in turn, passed onto the community as a whole in the form of higher prices of goods and services. As noted in Chapter 2, credit card schemes and their members have argued that the subsidy is needed to encourage consumers to join credit card schemes, and use their cards, so that network externalities are realised. This argument suggests that the network externalities are so large as to justify cardholders being charged negative fees (ie being paid by issuers) to use their credit card. The evidence, however, is that network externalities are small, if they exist at all. Furthermore, any claim that the interchange fee must continue to generate negative fees to cardholders if they are to use credit cards is difficult to reconcile with the card schemes' claim that cardholders derive significant benefits from credit card use.

This inefficiency in the pricing of credit card services is reinforced by card scheme restrictions on merchant pricing that shield credit cardholders from directly facing the costs of transactions that they undertake. Card scheme members are able to generate their own set of incentives for credit card use through the use of loyalty programs, while denying merchants the right to offer incentives to promote their competitive interests. The consequence is a misallocation of resources in the Australian payments system.

The third public interest concern is the lack of competition in the credit card market, and between payment networks more generally. The Reserve Bank acknowledges the need for minimum entry standards to ensure the safety of the designated credit card schemes. However, restrictions on entry in their current form serve mainly to entrench the market power of incumbents and do not contribute to the allocative or dynamic efficiency of the credit card market. In the acquiring market, in particular, the restrictions have kept merchant service fees higher than they might otherwise be and have helped to deny acquirers as a group an independent and effective voice in interchange fee setting.

Given these concerns, the Reserve Bank believes that the regulations of the designated credit card schemes suppress or distort the normal market mechanisms in ways that are not conducive to maximising community welfare. The community cannot be confident that the price mechanism is allocating resources efficiently to meet the demand for different payment instruments or that the credit card market is sufficiently contestable to ensure that card scheme members earn no more than a competitive return on their investments over time.

The Reserve Bank has therefore set out a reform of credit card schemes that involves:

- an objective, transparent and cost-based methodology for determining interchange fees;
- freedom for merchants to recover from cardholders the cost of accepting credit cards; and
- a more liberal access regime that allows for the entry of specialist credit card service providers, both issuers and acquirers, to be supervised by APRA.

In the Reserve Bank's opinion, this package of measures will promote a more efficient and lower-cost payments system in Australia, from which the community as a whole will benefit. The reform measures have been endorsed by the Payments System Board of the Reserve Bank.

The Reserve Bank's proposed standard on interchange fees is likely to result in a significant reduction in the level of interchange fees in Australia, although the specific outcomes must await the costings to be carried out by the designated credit card schemes. Since interchange fees effectively set a floor for merchant services fees, the reduction in interchange fees would be expected to result, *pari passu*, in lower merchant service fees. Competition should ensure that these lower fees are passed through to the final prices of goods and services. Merchants would also be free to recover their merchant service fees from cardholders on a "fee for service" basis; to the extent that this occurs, the costs of accepting credit and charge cards would no longer be reflected in the prices of all goods and services.

Reform of credit card schemes will also have a direct impact on credit cardholders and is likely to result in some re-pricing of credit card payment services. However, this is the means by which the price mechanism is to be given greater rein in the credit card market. A movement towards a "user pays" approach to credit card payment services would be consistent with the approach adopted by Australian financial institutions in pricing other payment instruments under their control. As the ABA itself has confirmed: "Pricing services efficiently provides consumers with choice to use lower cost distribution channels and, therefore, facilitates a more efficient financial system. It is also fairer and efficient, because consumers only pay for what they use."[198]

The principles that consumers should face prices that take into account the relative costs of producing goods and services, as well as demand conditions, and that resources should be free to enter a market in response to above-normal profit opportunities, have been the guiding principles for tariff reform and market deregulation in Australia. Such market reforms may impact unevenly on different groups – some gaining, some losing – but they are now the well-established route to more efficient use of resources in the Australian economy.

5.3 Objections to credit card reform

In submissions to the Reserve Bank, credit card schemes and their members have argued against any reform that would have the effect of reducing interchange fees and issuing revenues from this source. The arguments claim that reform will have three main "unintended consequences":

- it will give an unfair competitive advantage to the three party card schemes, American Express and Diners Club;
- small credit card issuers will be disadvantaged and overall competition in the credit card market may be reduced; and
- consumers will not benefit because merchants will not pass on lower merchant service fees resulting from lower interchange fees.

Competition between four party and three party schemes

The credit card schemes and their members have argued that, as a matter of principle, it is inappropriate for the Reserve Bank to set a standard for interchange fees in the designated credit card schemes without also "regulating" the three party card schemes.[199] One submission, for example, has characterised the setting of such a standard as asymmetric regulation which is "applied to a firm or group of firms due to some characteristic that distinguishes them from unregulated firms and for no other substantial reason."[200] This mis-states the reasons for the Reserve

198 Australian Bankers' Association (2000), p 8.

199 Visa International (2001b), MasterCard International (2001), Australian Bankers' Association (2001c) and Australia and New Zealand Banking Group (2001b).

200 Visa International (2001b), p 11.

Bank's proposed use of its payments system powers. There *is* a substantial difference between the designated credit card schemes and the three party card schemes with respect to interchange fee setting. In the Bankcard, MasterCard and Visa credit card schemes, interchange fees are set collectively by the financial institutions that are members of these schemes, but that are otherwise competitors in providing credit card services to cardholders and merchants. The ACCC has reached the view that this behaviour is a breach of the *Trade Practices Act 1974*.

American Express and Diners Club, on the other hand, do not have collectively determined interchange fees.[201] Whether they have an internal transfer mechanism or "implicit" interchange fee is not relevant; the three party card schemes do not have a process under which competitors collectively agree to set a price which then affects, in a uniform way, the prices each of the competitors charges to third parties. For this reason, the Reserve Bank saw no case on public interest grounds to designate the three party card schemes to deal with issues relating to collective fee setting (or restrictions on entry). However, the three party card schemes impose the same restrictions on merchant pricing as the designated credit card schemes. The Reserve Bank will therefore be consulting with the three party card schemes on why they should not meet the proposed standard on merchant pricing.

Submissions have also argued that a standard for interchange fees in the designated credit card schemes will prevent these schemes from being able to compete effectively with the three party card schemes. This raises the question of the nature of competition between four and three party card schemes in Australia

On the basis of network size, the four party credit card schemes would appear to have a dominant market position compared with the smaller three party card schemes. Visa has argued that there are significant network effects in credit card schemes and that the size of its network makes it particularly appealing to both cardholders and merchants: "… the fact that more merchants accept VISA than AMEX means that consumers facing the same terms and conditions of use for each card would prefer to carry a VISA card than an AMEX card. Similarly, the fact that there are more VISA cardholders makes accepting VISA cards more attractive to merchants than accepting AMEX cards, even if the terms and conditions of accepting these cards were identical."[202] There are a number of respects in which the four party card schemes have a position of network dominance in Australia. Firstly, Bankcard, MasterCard and Visa account for around 92 per cent of credit

201 Some submissions have pointed out that AMP Bank issues American Express cards and is paid a fee which appears similar to an interchange fee. However, this fee is one that is negotiated bilaterally between American Express and AMP Bank.

202 Visa International (2001a), p 3.

and charge cards on issue, and for around 85 per cent of the value of credit and charge card transactions. Secondly, around 85 per cent of American Express or Diners Club cardholders also have a Bankcard, MasterCard or Visa credit card but only around ten per cent of cardholders in these latter schemes also have an American Express or Diners Club card.[203] Thirdly, the number of merchants in Australia that accept cards issued by members of the four party credit card schemes appears to be about double the number of merchants that accept American Express cards; the merchant base of Diners Club appears to be smaller again.[204]

Network dominance in this form places the designated credit card schemes at the centre of the credit and charge card market in Australia. Their behaviour will have a significant impact on market outcomes, particularly compared to the behaviour of the three party card schemes that lack network size. If a standard for interchange fees resulted in lower merchant service fees in the designated credit card schemes, normal competitive processes would ensure that competitors would have to react. Merchants would have an even stronger preference than at present for cards of the four party card schemes. They would be likely to seek to renegotiate merchant service fees charged by American Express and Diners Club; alternatively, if fees did not adjust, some might stop accepting the latter cards altogether, a viable option because merchants may not fear losing many sales in view of the relatively small network size of American Express and Diners Club. These schemes would therefore be under strong competitive pressure to respond by lowering their merchant service fees to protect their merchant base.

This sequence of competition has already played out in the United States. In earlier work sponsored by Visa, Evans and Schmalensee describe the revolt of Boston restaurants to the relatively high merchant service fees of American Express – an incident dubbed the "Boston Fee Party" – following which American Express reduced its average merchant service fees from 3.22 per cent to 2.74 per cent between 1990 and 1996. Evans and Schmalensee argue that "American Express decreased its merchant discount as a result of competition from Visa and other systems."[205]

In a recent submission, however, Visa has suggested that the nature of competition between the four and three party card schemes is quite different. It has argued

203 Roy Morgan Research.

204 "There would seem to be two possible reasons for this low penetration rate. The first is that merchant service fees for American Express are too high, so merchants select lower cost methods, such as VISA. Alternatively, one might argue that merchants do not feel as much need to accept American Express because there are fewer cardholders for this card. Both of these reasons are likely to have some validity." Visa International (2001a), p 32.

205 Evans and Schmalensee (1999), pp 171-172.

that three party card schemes are likely to have more market power, not less, relative to four party schemes.[206] This submission argues that a standard for interchange fees that results in a fall in issuers' revenues would mean that issuers would no longer be able to offer loyalty programs with the previous levels of rewards. Competition between acquirers in the four party schemes would push merchant service fees in these schemes down in line with interchange fees, but Visa argues that the three party card schemes, even if subject to strong competitive pressures, would not be forced to match these reductions. The reasoning is that the three party schemes would have no incentive to change their prices to merchants and cardholders because they had already set them to maximise their profits; hence, the three party schemes would retain an income stream from merchants that would allow them to continue to offer loyalty programs with unchanged levels of rewards. The result would be a shift of cardholders to card schemes able to offer the most generous loyalty programs.

In the Reserve Bank's opinion, this analysis provides only a selective view of the competitive process and suffers from significant flaws:

- the analysis assumes that the three party card schemes can set their merchant service fees without any reference to the fees charged by the members of the designated credit card schemes. The proposition that three party card schemes have completely independent pricing power is difficult to reconcile with the standard observation that the price of close substitutes is a key determinant of the price of a good or service;[207]
- the analysis assumes a particular sequence in the competitive responses to lower merchant service fees, but no theoretical or empirical support is provided for this sequence. In particular, it assumes that the immediate response is that cardholders in the four party credit card schemes switch to the three party schemes and this, in turn, gives the latter schemes leverage over merchants. However, if merchants are equally prompt in renegotiating fees in the three party schemes, which would have become even more expensive to them, the latter schemes would have much less scope to attract cardholders. Normal competitive pressures would force the three party schemes to respond to the fall in merchant service fees by their competitors and they would therefore face the same need to review their loyalty programs; and

206 Visa International (2001b), p 12. This differs from an earlier claim by Visa that the three party card schemes very likely lack market power. Visa International (2001a), p 24.

207 This argument has also been rejected by Access Economics, consultants to American Express: "This proposition is unsustainable and it should be clear that, to the extent that the three-party schemes are close substitutes for four party cards, there will be a flow-on of any reductions in merchant service charges from regulation." Access Economics (2001), p 26.

- the analysis assumes that scheme restrictions on merchant pricing remain in force, denying merchants the freedom to recover from cardholders the cost of accepting credit and charge cards. The Reserve Bank's draft standard on merchant pricing – on which the Reserve Bank will be consulting with the three party card schemes as well – will give merchants that freedom. This has important implications for the degree of "merchant resistance" to accepting credit and charge cards. If merchants recover their costs from cardholders, the current gap in merchant service fees between the four and three party card schemes – and any widening in that gap – would be transparent to cardholders and, other things being equal, cardholders would continue to prefer the lower-cost option. Under these circumstances, it would be much more difficult for the three party schemes to maintain higher merchant service fees in the face of competition.

The ABA has identified other consequences that it claims would flow from any reduction in interchange fee revenues in the designated credit card schemes. First, it has argued that issuers will increase fees to cardholders, leading some cardholders to give up their credit cards because "by the reduction of interchange fees, the payment functionality had been priced beyond its value to them".[208] Since credit cardholders currently pay no price (and may earn rebates) for the payment services of a credit card, this argument would seem to confirm the inefficiency in current credit card pricing. The ABA claims that some credit cardholders will move to the three party schemes; however, it does not explain why such cardholders, who to date have chosen not to, would be prepared to pay the higher joining and annual fees of the three party schemes[209] or, in the case of charge cards, give up access to a revolving credit facility.[210] Nor does it explain why consumers, facing more efficient pricing signals, would not make greater use of other payment instruments such as debit cards or direct debits.

208 The ABA argues that this will result in "fewer cardholders, fewer purchase transactions, an advantage to three-party charge card networks and cardholders that no longer have access to credit". Australian Bankers' Association (2001c), pp 4-5.

209 The recent US district court judgment on the "exclusionary" rules of the international credit card schemes noted the advantages that a financial institution has in marketing credit cards to existing customers as part of a suite of financial services. "All else being equal … customers are significantly more likely to choose a card offered by their primary financial institution than any other institution." US District Court, Southern District of New York, 98 Civ. 7076 (BSJ), p 117.

210 The ABA estimates that credit card annual fees would move from an indicative level of $15 pa to $42 pa if interchange fees were to fall to 0.4 per cent. Australian Bankers Association (2001c), p 4. The American Express green card has a joining fee of $30 and an annual fee of $65; Diners Club has a joining fee of $30 and an annual fee of $95. This comparison assumes that the three party card schemes would not have to adjust their cardholder fees in the face of downward pressure on their merchant service fees.

Secondly, the ABA has argued that because issuers would need to recover a higher portion of issuing costs from cardholders, it would be unlikely that all current cardholders would qualify for a credit card. The implication of this argument, however, is that current interchange fee revenues could be allowing issuers to provide cards to cardholders who would not meet the normal requirements for unsecured credit. Thirdly, the ABA has claimed that "merchants with high fraud would be dropped and the universal payment guarantee would be curtailed to merchants or groups of merchants whose historical transactions had generated significant losses of any type."[211] The payment guarantee provided by issuers is not universal; merchants accepting "card not present" transactions, such as purchases over the phone or Internet, receive no such guarantee. In any event, the Reserve Bank's draft standard allows fraud costs incurred by issuers in providing payment guarantees to be included in interchange fees. By making these fraud costs transparent, moreover, card scheme members and merchants will have a stronger incentive to address these costs.

In the ABA's view, the outcome of a standard for interchange fees would be reduced credit card transactions and higher average transaction costs in credit card networks. It has argued that either one scheme member will dominate both issuing or acquiring (and thus the schemes would look like a three party scheme) or that a few financial institutions could come together to form their own credit card company. However, the ABA has offered no evidence as to why the first outcome might result, and why it has not done so already; nor has it explained how the second outcome would differ from the current four party credit card schemes, in which the four major banks are dominant.

In summary, the Reserve Bank is unpersuaded by the arguments that reform of the designated credit card schemes constitutes a regulatory bias that favours the three party card schemes, American Express and Diners Club. No convincing reasons have been provided why private-sector regulations in the dominant credit card networks are to be preferred, in the public interest, to publicly-determined standards that promote efficiency and lower costs in the payments system. The way in which competitive forces will play out between credit cards, charge cards and other payment instruments will depend on how cardholders and merchants react to more efficient price signals. Credit cardholders faced with fees more closely aligned to the costs of providing credit card services can be expected to make a more efficient choice between payment instruments; as well, lower merchant service fees offered by members of the designated credit card schemes will give merchants a stronger negotiating position in their dealings with the three party card schemes. Such

211 *ibid*, p 6.

responses will promote a more efficient allocation of resources and a reduction in overall costs in the Australian payments system.

Impact of reform on small credit card issuers

A number of submissions have argued that, because of economies of scale in issuing, many of the smaller credit cards issuers are only breaking even on this activity and any reform that results in a reduction in interchange fee revenues will make their credit card business uneconomic.[212] In these circumstances, the argument goes, liberalising access to the credit card schemes will result in an overall decline in competition because, with lower interchange fees, new institutions will not be attracted to card issuing.

The credit card market is similar to industries such as telecommunications and airlines, where there is scope to exploit economies of scale. Such industries are characterised by large fixed costs that, when spread over an increasing volume of output, result in declining per unit costs of production. Large firms in these industries can therefore run a profitable business at lower prices than a small firm. For competition authorities, the potential benefits to consumers of having a small number of larger firms, able to take advantage of economies of scale to reduce their prices, normally need to be weighed against possible exploitation of market power by these firms.

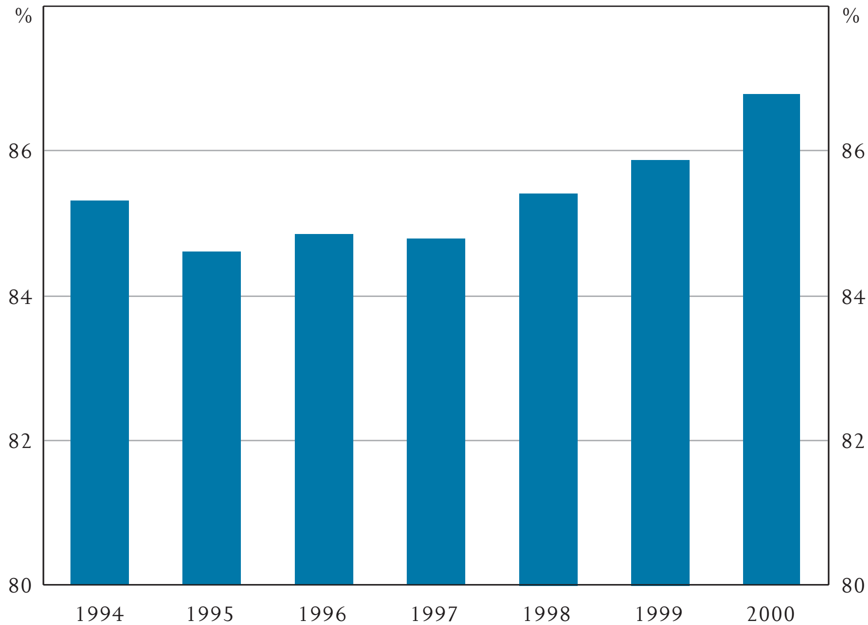
Evidence of economies of scale in credit card issuing comes from the highly concentrated structure of issuing in Australia. Figure 5.1 shows the market share of the four major banks in transactions with bank-issued cards since the mid 1990s. The entry of new issuers has made little inroads into market concentration. In a confidential submission, the ABA has presented data showing that a sample of small issuers incurs higher costs and enjoys lower margins per card than an industry average.[213] These data are also consistent with the existence of economies of scale in card issuing.

The key point, however, is that the existence of economies of scale is not an argument for keeping interchange fees high to enable smaller issuers to remain in the market. Such an argument confuses "competition" with the number of competitors. Turned around, it implies that community welfare would be enhanced if interchange fees were raised so as to make issuing profitable for institutions that

212 Australian Bankers' Association (2001b), Visa International (2001b) and Australia and New Zealand Banking Group (2001a).

213 These data are not directly comparable with those in the Joint Study, which showed costs and revenues per transaction rather than per card.

Figure 5.1: Share of four major banks in issuing
per cent of number of transactions



Source: Reserve Bank Transaction Cards Statistical Collection.

would otherwise not break even. This might result in more issuers, but probably at the highest cost end. It would be a perverse result of competition if entry into credit card issuing must be supported by *higher* interchange fees passed through into *higher* consumer prices. In any normal competitive market, a larger number of suppliers would be expected to be the source of *downward* pressure on costs and prices. The objective of the Reserve Bank's proposed access regime for the designated credit card schemes is to facilitate entry by non-traditional institutions that may have the scale, skills and infrastructure to compete with established participants. Entry or the threat of entry by such institutions is likely, over time, to provide the main spur to competition in the credit card market.

Impact of credit card reform on consumers

Concerns have also been raised that any reduction in interchange fees, and hence in merchant service fees, would simply increase merchants' profits and would not be passed onto consumers through the prices of goods and services. The basis for these concerns is a claim that the merchant sector is not competitive.

The pass-through of any reduction in interchange fees to the prices of goods and services has two stages:

- the pass-through of lower interchange fees to merchant service fees; and
- the pass-through of lower merchant service fees to final prices.

The extent of pass-through at each stage is determined by the degree of competition prevailing. The claim that there would be *no* pass-through of lower interchange fees to consumers is unlikely to be true. Even a monopolist will pass through to its customers some part of a fall in the cost of its inputs; the more competitive a market, however, the more a fall in costs will be passed through into final prices.

The pass-through of lower interchange fees to merchant service fees will depend on the degree of competition in the credit card acquiring market and the threat of new entry. Although there is no indication that interchange fees themselves have responded to changing cost conditions, acquirers argue that competition would force them to pass lower interchange fees *pari passu* into lower merchant service fees.[214] Acquirers that attempted to widen their margins could be expected to lose market share to acquirers offering lower merchant service fees. The more intense is competition, the more likely it is that acquirers will pass through fully any reduction in interchange fees.

For reasons discussed in Chapter 4, however, competition in the credit card acquiring market is not as vigorous as it could be in Australia. One factor which has important implications for pass-through is the lack of transparency in interchange fees and merchant service fees. In retail financial services, interest rates and transactions fees are transparent and readily comparable across financial institutions, and individual institutions do not usually price discriminate between their customers. For merchants, however, the provision of financial services – whether it be lending or acquiring services – is negotiated on a case-by-case basis and pricing is not transparent. Larger firms with higher transaction volumes can usually obtain lower merchant service fees than smaller merchants,[215] but merchants need to be active in seeking quotes from acquirers to ensure they have achieved a competitive merchant service fee. The recent publication by the ARA of the range of merchant services fees being charged,[216] and the greater transparency of

214 See Australian Retailers Association (2001b) for a discussion of how interchange fees affect merchant service fees.

215 Evidence for this is presented in Table 4.3 of this document.

216 Australian Retailers Association (2001a).

interchange fees under the Reserve Bank's draft standard, will help to ensure that merchants are better informed when they enter the negotiating process with acquirers. Nonetheless, the significant search and adjustment costs involved for merchants may limit the pressure on acquirers to reduce merchant service fees for all merchants, particularly small ones.

The pass-through of lower merchant service fees to the final prices of goods and services will depend on the degree of competition in the retailing sector. On a range of evidence, including market concentration and profit margins, the retail sector in Australia appears to be a vigorously competitive one.[217] Turning, first, to market concentration. In a confidential submission, the ABA has claimed that "[r]etailing in Australia is very concentrated – considerably more so than banking". There is no empirical evidence for this claim. While it is true that Coles Myer and Woolworths have a large share of the grocery market, grocery items account for only 34 per cent of retail trade in Australia.[218] Australian Bureau of Statistics (ABS) data on retail trade indicate that large businesses account for just 56 per cent of retail trade and, to get to this figure, the ABS includes 2 800 businesses.[219] In contrast, just three banks represent a market share well above 56 per cent of credit card issuing. On this evidence, retailing is much less concentrated than the credit card market.

As to profit margins, staff from the Productivity Commission have concluded that "[w]holesale and retail trade have the lowest profit margins of all Australian industries".[220] They quote ABS data for 1997/98 that shows that profit margins in retail trade, at around 3 per cent, are low compared with the average for all industries of around 9 per cent. The same ABS data show that profit margins for finance and insurance (which includes banking) are around 25 per cent.[221] These figures do not, of course, take into account the different risk profiles of the industries, but they do suggest a highly competitive retail sector.

217 MasterCard International (2001) has acknowledged that "competition at this [retail] level appears to be robust in Australia." p 19.

218 Excluding motor vehicles. ABS Catalogue 8624.0.

219 For the purposes of the *Retail Sales Survey*, the Australian Bureau of Statistics includes all large retailers but only a sample of small retailers. The definition of large businesses for this purpose varies depending on the state and the industry, but is based on the number of employees. It includes, among others, all department stores, 85 per cent of supermarkets and grocery stores, 65 per cent of clothes and soft goods retailing and 57 per cent of household goods retailing. All Coles Myer and Woolworths businesses are included in the "large businesses" category.

220 Johnston *et al* (2000), p 14.

221 ABS Catalogue 8140.0. The profit margin is calculated as the percentage of operating income available as operating profit.

On the available evidence, the Reserve Bank is confident that, where merchants do not pass reductions in merchant service fees onto credit cardholders on a "fee for service" basis, competitive pressures will ensure that merchants pass these reductions through to the prices of final goods and services. The pass-through may not, of course, be readily apparent. The cost of accepting credit cards is embedded in a myriad of retail prices and the impact of lower merchant service fees on individual prices may not be obvious; moreover, to the extent they offset cost increases from other sources, lower merchant service fees may have the effect of tempering price increases that would otherwise have taken place.

5.4 Next steps

The Reserve Bank is issuing its standards and access regime for the designated credit card schemes in draft form, as required by the *Payment Systems (Regulation) Act 1998*. Interested parties have the opportunity to comment, in writing and/or oral presentations, on the draft standards and access regime before they are finalised. Comments and details of contact persons should be submitted by 15 March 2002 to:

Head of Payments Policy
Reserve Bank of Australia
GPO Box 3947
SYDNEY NSW 2001

or to creditcards@rba.gov.au

The Reserve Bank acknowledges that measures to promote efficiency and competition in the credit card market in Australia will have important implications for the pricing of other payment instruments, particularly debit cards. The Joint Study concluded that interchange fees in Australia's debit card system, which are determined bilaterally and flow from card issuers to acquirers, do not have a convincing rationale. Several submissions to the Reserve Bank have 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 Reserve Bank agrees that this is a desirable objective, but it has not been prepared to slow the timetable for reform of the credit card market. In any event, the introduction of more efficient pricing arrangements for debit cards is, in the first instance, a matter for industry participants. The Reserve Bank remains willing to work with participants to this end.

The Reserve Bank has also been in discussion with Visa, and Visa members issuing the Visa-branded debit card, about the current practice under which these issuers earn credit card interchange fees for what are essentially debit card transactions.

The Reserve 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. Issuing members have begun work on an interchange regime to address the issues raised by the Reserve Bank; at the same time, they have expressed concern about the impact on their net revenues if changes to the current practice were to precede reform of the debit card market more generally.

APPENDIX

Organisations that provided submissions:

American Express International

AMP Bank Limited

Australia and New Zealand Banking Group Limited

Australia Post

Australian Association of Permanent Building Societies (AAPBS)

Australian Consumers' Association

Australian Bankers' Association

Australian Retailers Association

Bankcard Association of Australia

Bank of Western Australia Limited

Bendigo Bank Limited (combined views)

Citibank Limited

Coles Myer Limited

Commonwealth Bank of Australia

Credit Union Services Corporation (Australia) Limited (CUSCAL)

Diners Club Australia

Integral Energy

MasterCard International

Motor Trades Association of Australia

National Australia Bank

Newcastle Permanent Building Society

Restaurant and Catering Association of Australia

St George Bank Limited

Sydney Water

Telstra

The Shell Company of Australia Limited

TransAction Resources Pty Ltd

Visa International Service Association

Westpac Banking Corporation

Woolworths Limited

In addition, the Reserve Bank received submissions from a small number of individuals.

REFERENCES

Access Economics (2001), 'The Appropriate Scope of Credit Card Scheme Regulation', Submission to the Reserve Bank of Australia prepared for American Express International Inc, June.

Allen Consulting Group (2001), 'Economic Review of Credit Card Scheme Membership Rules, Report to The Review Banks', January.

American Express (2001), 'Competition in Payment Systems, Submission to the Reserve Bank of Australia', 8 June.

Australia and New Zealand Banking Group (2001a), 'Response to RBA/ACCC Study of Interchange Fees and Access', 29 January.

Australia and New Zealand Banking Group (2001b), 'Principles for Regulation of Credit Card Systems, Submission to the Reserve Bank of Australia', 18 June.

Australia and New Zealand Banking Group (2001c), 'Resource Costs of Alternative Payment Instruments, Submission to the Reserve Bank of Australia', 14 August.

Australian Bankers' Association (2000), 'Electronic Banking and Financial Services: Providing Convenience and Value', Australian Bankers' Association Submission to the Inquiry by Parliamentary Joint Statutory Committee on Corporations and Securities into Fees on Electronic and Telephone Banking, July.

Australian Bankers' Association (2001a), 'Submission to the Reserve Bank of Australia to Assist in its Considerations of Designation of Credit Card Schemes as a Payment System', 7 April.

Australian Bankers' Association (2001b), 'Credit Card Networks in Australia: An Appropriate Regulatory Framework', Submission to the Reserve Bank of Australia, 3 July.

Australian Bankers' Association (2001c), 'Assessment of the Impact of Inappropriate Interchange Fee Levels', 12 September.

Australian Bankers' Association (2001d), 'Network Effects and the Setting of Interchange Fees', 12 September.

Australian Bankers' Association (2001e), 'Cost of Capital and Interchange Fees', 12 September.

Australian Retailers Association (2001a), 'Submission to the Reserve Bank of Australia and Australian Competition and Consumer Commission', January.

Australian Retailers Association (2001b), 'Submission to the Reserve Bank of Australia, Credit Card Schemes in Australia', 26 July.

Balto D (2000), 'The Problem of Interchange Fees: Costs without Benefits?', *European Competition Law Review*, Vol 4, pp 215-224.

Bankcard Association of Australia (1999), 'Response to letter from the Reserve Bank of Australia', 4 November.

Bankcard Association of Australia (2001a), Letter to Governor of the Reserve Bank of Australia, 6 April.

Bankcard Association of Australia (2001b), 'Bankcard Association of Australia's Response to Questions Posed by RBA', 6 June.

Baxter WF (1983), 'Bank Interchange of Transactional Paper: Legal and Economic Perspectives', *Journal of Law and Economics*, Vol 23, No 3, pp 541-588.

Board of Governors of the Federal Reserve System (1983), *Credit Cards in the US Economy: Their Impact on Costs, Prices and Retail Sales*, Submission to the Committee of Banking, Housing, and Urban Affairs of the United States Senate and the Committee on Banking, Finance and Urban Affairs of the United States House of Representatives.

British Retail Consortium (1999), 'Submission to the Treasury Review of Banking Services', June.

Carlton D and A Frankel (1995), 'The Anti-trust Economics of Credit Card Networks', *Antitrust Law Journal*, Vol 63, No 2, pp 643-668.

Chakravorti S and A Shah (2001), 'A Study of Inter-related Bilateral Transactions in Credit Card Networks', Federal Reserve Bank of Chicago, July.

Chang HH, DS Evans and R Schmalensee (1998), 'Some Economic Principles for Guiding Antitrust Policy Towards Joint Ventures', *Columbia Business Law Review*, No 2, pp 223-329.

Commonwealth Bank of Australia (2000), 'Comments by Commonwealth Bank of Australia', 20 December.

Credit Cards (Price Discrimination) Order (1990), Statutory Instrument, No 2159.

Cruickshank D (2000), *Competition in UK Banking*, HMSO, Norwich, March.

European Commission (2000), 'Commission plans to clear certain Visa provisions, challenge others', Press Release, 16 October.

European Commission (2001a), 'Commission clears certain provisions of the Visa international payment card system', Press Release, 10 August.

European Commission (2001b), Notice pursuant to Article 19(3) of Council Regulation No 17, Case COMP/29.373 – Visa International (2001/C 226/10), *Official Journal of the European Communities*, Brussels, 11 August.

Evans DS and R Schmalensee (1995), 'Economic Aspects of Payment Card Systems and Antitrust Policy Toward Joint Ventures', *Antitrust Law Journal*, Vol 63, No 3, pp 861-901.

Evans DS and R Schmalensee (1999), *Paying with Plastic*, MIT Press, Cambridge.

Faulhaber G (1975), 'Cross-subsidization: Pricing in Public Enterprises', *American Economic Review*, Vol 71, No 5, pp 1083-1091.

Financial System Inquiry Committee (Wallis Committee) 1997, *Final Report*, AGPS, Canberra.

Food Marketing Institute (1994), *Benchmarking Comparative Payment Methods: Costs and Case Studies*, Washington.

Food Marketing Institute (1998), *A Retailer's Guide to Electronic Payment Systems Costs*, Washington.

Food Marketing Institute (2000), *It All Adds Up: An Activity Based Cost Study of Retail Payments*, Washington.

Frankel A (1998), 'Monopoly and Competition in the Supply and Exchange of Money', *Antitrust Law Journal*, Vol 66, No 2, pp 313-361.

Frontier Economics (2001), 'Report on Credit Card Interchange Fees to Review Banks', January.

Gans J and S King (2001a), 'The Role of Interchange Fees in Credit Card Associations: Competitive Analysis and Regulatory Issues', *Australian Business Law Review*, Vol 29, No 2, pp 94-123.

Gans J and S King (2001b), 'The Neutrality of Interchange Fees in Payment Systems', draft, 28 May.

Gans J and S King (2001c), 'Regulatory Interchange Fees in Payment Systems', draft, 14 June.

Gans J and S King (2001d), 'Some Answers to the Reserve Bank of Australia Questions Associated with the Designation of Credit Card Payment Systems in Australia', 30 June.

Gizycki M and P Lowe (2000), 'The Australian Financial System in the 1990s', *The Australian Economy in the 1990s*, Reserve Bank of Australia Conference Volume, July, pp 180-215.

Goddard G and G Walker (2001), 'Bank Mergers in Australia: Competition Assessment of the Commonwealth Bank of Australia's Acquisition of Colonial Limited', Faculty of Commerce Working Paper Series No 2/01, Charles Sturt University, Bathurst Campus, April.

HM Treasury (2000), *Competition in Payment Systems: A Consultation Document*, December.

HM Treasury (2001), *Competition in Payment Systems: A Response to Consultation,* August.

House of Representatives Standing Committee on Finance and Public Administration (1991), *A Pocket Full of Change: Banking and Deregulation* (The Martin Report), AGPS, Canberra.

IMA Market Development AB (2000), 'Study Regarding the Effects of the Abolition of the Non-discrimination Rule in Sweden, for European Commission Competition Directorate General', February.

Independent Committee of Inquiry (Hilmer Committee) (1993), *National Competition Policy,* AGPS, Canberra.

ITM Research (2000), 'The Abolition of the No-discrimination Rule', Amsterdam, March.

Johnston A, D Porter, T Cobbold and R Dolamore (2000), *Productivity in Australia's Wholesale and Retail Trade*, Productivity Commission Staff Research Paper, October.

Katz M (2001), *Network Effects, Interchange Fees and No-Surcharge Rules in the Australian Credit and Charge Card Industry*, Reserve Bank of Australia, Sydney, August.

Kitch EW (1990), 'The Framing Hypothesis: Is It Supported by Credit Card Issuer Opposition to a Surcharge on a Cash Price?', *Journal of Law, Economics and Organization*, Vol 6, No 1, pp 217-233.

KPMG Consulting (2001), *Credit Cards in Australia: A Research Report*, July.

Lea W (2001), 'Competition in the Retail Payments Industry', Presentation to the IBC UK Conference, International Payment Systems Week, London, 2-6 April.

Leibowitz SJ and SE Margolis (1994), 'Network Externality: An Uncommon Tragedy', *Journal of Economic Perspectives*, Vol 8, No 2, pp 133-150.

MasterCard International (2000), Bylaws and Rules, June.

MasterCard International (2001), 'Submission to the Reserve Bank of Australia', 20 July.

Monopolies and Mergers Commission (1989), *Credit Card Services: A Report on the Supply of Credit Card Services in the United Kingdom*, HMSO, London.

Office of Fair Trading (2001), 'OFT considers Mastercard/Europay rules may involve excessive fees', Press Release, 25 September.

Prices Surveillance Authority (1992), *Inquiry into Credit Card Interest Rates*, Canberra, October.

Prices Surveillance Authority (1994), *Monitoring of Credit Card Prices No. 1*, Canberra, April.

Prices Surveillance Authority (1995), *Monitoring of Credit Card Prices No. 2*, Canberra, May.

Reserve Bank of Australia (2000), *Payments System Board 2000 Annual Report*, Sydney, November.

Reserve Bank of Australia and Australian Competition and Consumer Commission (2000), *Debit and Credit Card Schemes in Australia – A Study of Interchange Fees and Access*, October.

Restaurant and Catering Association of Australia (2001), 'Credit Card Fees and Charges', August.

Rochet J and J Tirole (2000), 'Cooperation among Competitors: The Economics of Payment Card Associations', mimeo, 16 May.

Schmalensee R (2001), 'Payment Systems and Interchange Fees', NBER Working Paper No 8256.

Schwartz M and D Vincent (2000), 'Same Price, Cash or Credit: Vertical Control by Payments Networks', mimeo, November.

Shell Company of Australia Ltd (2001), 'Submission to the RBA on Credit & Debit Card Schemes', 15 September.

US District Court, Southern District of New York, 98 Civ. 7076 (BSJ).

Varian HR (1984), *Microeconomic Analysis*, Second Edition, WW Norton and Company, New York.

Visa International (1999a), International By-Laws and Regional Boards Delegations, 15 November.

Visa International (1999b), Operating Regulations, General Rules, Volume I, 15 November.

Visa International (2000), 'Response to Questions from the Reserve Bank of Australia', 22 May.

Visa International (2001a), 'Credit Card Schemes in Australia – A Response to the Joint Study', January.

Visa International (2001b), 'Delivering a Level Playing Field for Credit Card Payment Schemes, Submission to the Reserve Bank of Australia', 21 August.

Visa International (2001c), 'Access to Membership and Special Licensees, Submission to the Reserve Bank of Australia', 22 August.

Visa International (2001d), Letter to the Reserve Bank of Australia, Follow-Up to 12 September 2001 Meeting, 20 September.

Visa International (2001e), 'Response to the Reserve Bank of Australia's Questions', 16 October.

Westpac Banking Corporation (2000), 'Westpac's Initial Response to a Study by the Reserve Bank of Australia and the Australian Competition and Consumer Commission', November.

Wright J (2000), 'An Economic Analysis of a Card Payment Network', mimeo, December, in Visa International (2001a).

GLOSSARY OF ACRONYMS

AAPBS	Australian Association of Permanent Building Societies
ABA	Australian Bankers' Association
ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
ADI	authorised deposit-taking institution
AMEX	American Express
APCA	Australian Payments Clearing Association Limited
APRA	Australian Prudential Regulation Authority
ARA	Australian Retailers Association
ASIC	Australian Securities and Investments Commission
ATM	Automatic Teller Machine
COAG	Council of Australian Governments
CUSCAL	Credit Union Services Corporation (Australia) Limited
EFT	Electronic Funds Transfer
EFTPOS	Electronic Funds Transfer at Point of Sale
FMI	Food Marketing Institute (United States)
GST	Goods and Services Tax
NBER	National Bureau of Economic Research (United States)
OFT	Office of Fair Trading (United Kingdom)
RBA	Reserve Bank of Australia
TPC	Trade Practices Commission