

## Chapter 9 Summary . . .

# Stability and Payments

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## Overview

- The Reserve Bank of Australia (RBA) should retain responsibility for the stability of the financial system and for regulation of the payments system. This chapter considers the role of the central bank in promoting system stability and the scope for increased competition and efficiency in the payments system.

## Key Findings

- Instability in the financial system can arise from a number of sources. At least in the medium term, systemic risk will remain of concern in the high-value payments system. While real-time gross settlement and other initiatives should mitigate domestic sources of systemic risk, further efforts are needed to control risks arising from abroad.
- There is considerable potential for increased efficiency in the payments system, especially from substituting electronic forms of clearing and settlement for cheques.
- Increased contestability in the payments system is possible without jeopardising systemic stability.

## Key Recommendations

- As Australia's monetary authority, the RBA should continue to have responsibility for system stability.

- The RBA should give priority to promoting cost-effective means of controlling domestic and international settlement risks.
- The RBA should retain responsibility for the regulation of the payments system. A new subsidiary board, the Payments System Board (PSB), should be established within the RBA to promote the efficiency of the payments system.
- The RBA's commercial activities should be conducted independently of its regulatory responsibilities.
- Access to the payments clearing streams should be liberalised and made subject to rules which are transparent and, where appropriate, approved by the ACCC. However, only licensed deposit taking institutions (DTIs) should be able to issue cheques in their own name. APCA's role in clearing arrangements should continue with disputes over technical standards arbitrated by the PSB.
- Interchange arrangements should be reviewed by the PSB and the ACCC. The ACCC should also monitor the rules of international credit card associations.
- The right to hold an exchange settlement account (ESA) should be determined by the RBA on the basis of clear and open guidelines, including that the holder has extensive payments business with third parties. Appropriate prudential (capital, liquidity, collateral, separation) and operational arrangements should apply, with participation open to institutions other than banks. Participants offering high-value settlements services should be regulated to the international standard for banks.
- Holders of the store of value for open system payment instruments such as traveller's cheques, smart cards and electronic cash should be regulated, either by the APRC or the PSB, taking into account ownership and capital or other backing and regulatory arrangements which already apply.
- The PSB and the APRC should establish close coordination arrangements. For institutions under its jurisdiction, the APRC should administer prudential requirements set by the PSB for payments purposes.

# Stability and Payments

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## 9.1 Introduction

This chapter considers two related public policy objectives of intervention in financial markets. The first is maintaining the stability of the financial system, as major disturbances in financial markets or the failure of financial institutions can involve considerable costs to economic growth, the safety of investments and the public purse. The second involves balancing the scope for increased competition in the payments system against the need to maintain stability in the financial system.

Both these objectives sit best within the ambit of the central bank. The two areas are linked because the payments system may be the transmission mechanism for systemic instability. As noted in Chapter 5, payments represent the most intense of financial promises, given implicit expectations of low risk and potentially serious systemic consequences in the event of their breach. Systemic risk in the financial sector is greater than elsewhere in the economy because of the potential for financial distress in one institution to be communicated to others.

This contagion may result from a loss of customer confidence or because the failure of one institution to settle its obligations directly may cause the failure of other fundamentally sound institutions. The financial system is seen as vulnerable to contagion effects because of the mismatch between the liquidity and maturity profile of the assets and liabilities of financial institutions, particularly banks, and the interconnections of the financial system through payments mechanisms.

The payments system is also important to the overall efficiency of the financial system. Chapter 6 provided some estimates on the cost of the

payments system, drawing attention to its high overall cost and the scope for substantial efficiency gains. The balance between increasing the efficiency of the payments system through promoting contestability against the overriding public policy objective of maintaining financial stability is a key issue for the Inquiry.

This chapter has two sections. The first section sets out the rationale for central bank involvement in managing system stability and possible sources of, and responses to, threatened or actual instability in the system. The second section considers the scope for increased competition in the payments system. This involves consideration of the public policy responsibilities of the central bank and what arrangements might be necessary to ensure the integrity of the core of the payments system if access to payments clearing and settlement arrangements were liberalised.

## **9.2 Stability of the Financial System**

Systemic instability can arise from a variety of sources. Unforeseen events occur every day in the world economy and, in general, their effects are absorbed without any major or systemic implications. However, large shocks in virtually any sector have the potential to transmit instability to other parts of the economy, particularly if they trigger business failures.

There has been considerable debate around the world about the extent, and possibly changing nature, of systemic risk. Some see greater risks through the dramatic growth of wholesale markets and the use of financial derivatives. Others see the growing dominance of markets over intermediaries and the introduction of sophisticated risk management techniques as reducing the overall level of systemic risk.

This section discusses the Inquiry's recommendations on systemic risk under four broad headings:

- the rationale for allocating responsibility for systemic stability to the central bank;

- the high-value settlement system, encompassing securities, foreign exchange and derivatives transactions, as a source of potential instability;
- other possible sources of systemic risk — financial exchanges, securities firms and financial markets themselves; and
- measures being pursued to contain risks to the system, including control of counterparty exposures and reactive policies to instability should it emerge.

### 9.2.1 Responsibility for Managing Systemic Risk

There are two main approaches to managing systemic risk.

The first is to pursue preventative policies. Important among these are the policies discussed in the previous chapter for ensuring the safety of the financial system through prudential regulation. Of at least equal importance is the maintenance of sustainable macroeconomic policies and, in particular, their contribution to price stability in both product and asset markets. Few financial systems can withstand persistently unsound macroeconomic policies, as instability in prices distorts business and lending decisions and invariably leads to failures and other shocks. Central banks play a critical role in securing price stability and maintaining sound macroeconomic policies.

The second approach is to provide for reactive strategies if instability occurs. Here, the main task is to respond to systemic crises with liquidity support and, where appropriate, statements of support to assuage uncertain markets. While in extreme cases this support may need to come from a commitment of public funds, the central bank has the capacity to play this initial, and usually sufficient, role.

Thus, despite differences in structure and role, central banks have many advantages for assuming the prime responsibility for the stability of the financial system. The central bank's involvement in monetary policy, management of system liquidity and provision of the settlement system means it has the powers, tools and knowledge to fulfil this role.

***Recommendation 56: The RBA should remain responsible for system stability.***

The central bank is best placed to ensure the stability of the financial system and to manage systemic risks. The RBA should retain overall responsibility for the stability of the financial system, in consultation as necessary with the Treasurer and other financial sector regulatory authorities.

## **9.2.2 Settlement of High-value Payments**

Where an entity provides payments services which extend to final settlement, its failure could disrupt the integrity of the payments system and precipitate a wider economic crisis. The core of the payments system, where obligations are settled between financial institutions, has traditionally been regarded as one of the greatest sources of systemic risk.

For high-value payments, the risks to systemic stability are much higher, especially where settlement is deferred. The value of transactions to be settled is large and receipts and payments may not be synchronised. Consequently, at certain times, credit and liquidity exposures can also be large, including in relation to participants' capital.

Financial markets are the source of the bulk of transactions settled through high-value settlement systems in Australia. Like their overseas counterparts, these markets cover foreign exchange, debt and equities and their respective derivatives. Table 9.1 shows available data on Australian wholesale market turnover which, in recent years, has varied around \$25 trillion to \$28 trillion per annum, or roughly 55 to 65 times gross domestic product (GDP). While the corporate bond market remains underdeveloped, some other markets (eg foreign exchange and exchange-traded interest rate futures and options) are large relative to the size of the economy. Most trading is in over-the-counter (OTC) markets, which in turn are dominated by foreign exchange trading. Futures markets are dominated by interest rate products.

## Australian Financial Markets are Dominated by OTC Trading . . .

Table 9.1: Annual Australian Financial Market Turnover (\$billion)

	1993-94	1994-95	1995-96
<b>Over-the-Counter Markets</b>	<b>19,072</b>	<b>20,736</b>	<b>20,269</b>
foreign exchange(a)	14,893	15,093	15,207
foreign currency options	175	199	222
short dated instruments	1,024	980	1,113
long term securities	1,092	1,557	1,172
repurchase agreements	870	1,505	1,484
forward rate agreements	676	1,025	664
interest rate and currency swaps	273	317	349
interest rate options	69	60	58
<b>Sydney Futures Exchange(b)</b>	<b>6,209</b>	<b>7,151</b>	<b>6,623</b>
bank bills/options	4,388	5,361	4,963
3 year bonds/options	919	961	881
10 year bonds/options	696	678	598
share price index/options and individual share futures/options	205	151	181
<b>Australian Stock Exchange</b>	<b>128</b>	<b>118</b>	<b>159</b>
<b>TOTAL</b>	<b>25,409</b>	<b>28,005</b>	<b>27,051</b>
Market Turnover/ GDP	59	62	56

(a) Annual data supplied by RBA.

(b) Totals may not add due to omission of some small contract categories.

Source: Australian Financial Markets Association 1996 and Securities Industry Research Centre of Asia-Pacific 1996.

The three main areas of focus for systemic risk in wholesale markets are the settlement arrangements for securities, foreign exchange and derivatives.

### Securities Settlement

In securities markets, introduction of delivery versus payment systems has greatly assisted risk management. However, market developments, such as the use of repurchase agreements as a financing technique, have continued to fuel demand for electronic registry systems that can cope with receipt and

redelivery of securities on the same day and for linked electronic transfer systems where cross-border dealing is involved.

One conclusion from work on such arrangements by the Group of Ten Central Banks (G10) is that participants and regulators need to understand the risks involved with the range of intermediaries in these settlement processes, especially where cross-border transactions are involved.<sup>1</sup> Intermediaries include custodians, clearing corporations (that compare and net trades), and brokers and dealers, whose performance is critical in the timely completion of settlement and access to proceeds and securities. Credit extended in these arrangements can be high where there is a lack of intra-day payments finality. The complexity of arrangements gives rise to a lack of transparency to participants, potential coordination difficulties between a range of central bank and other regulatory agencies in case of problems, and possible difficulties in the need to deal with multiple legal jurisdictions.

## Foreign Exchange Settlements

The global foreign exchange market is a source of increasing unease to central banks and market participants because of its size and potential to cause counterparty losses and broader systemic effects if key players have settlement problems.<sup>2</sup> The global market is highly concentrated, with intra-day credit extended to participants often exceeding their capital resources.

In addition, a recent report by the Bank for International Settlements (BIS) points out that foreign exchange exposures tend to remain outstanding for longer than had previously been appreciated.<sup>3</sup> Exposures can result from deliveries of counterpart funds in different currencies on the same day but in different time zones. In addition, payment instructions are often sent to

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<sup>1</sup> BIS 1995.

<sup>2</sup> BIS 1996, *Central Bank Survey of Foreign Exchange and Derivatives Market Activity 1995*. This survey disclosed a daily net turnover of \$US1.2 trillion in foreign exchange markets.

<sup>3</sup> BIS 1996, *Settlement Risks in Foreign Exchange Transactions*. This report drew on the 1994 work of the New York Foreign Exchange Committee, *Reducing Foreign Exchange Settlement Risk*.



correspondent banks one or two days before settlement and procedures (of institutions or their correspondents) may not allow stopping of payments even if a counterparty has failed. In addition, reconciliation of payments receipts may be delayed for some time after value date. Operational mishaps, with a consequent need for funding, are also common. The report concluded that, while development of better and more timely practices can greatly reduce exposures, additional arrangements will be necessary to address risks that arise from timing differences.

In Australia, the bulk of trading in foreign exchange markets is by institutions or their affiliates regulated by prudential authorities in Australia or overseas. Consequently, the Inquiry believes that there is no longer a case for the continuation of the licensing regime for foreign exchange dealers on prudential or systemic grounds. As recommended in Chapter 7 (Recommendation 13), foreign exchange dealers should continue to be licensed but as part of a generic licensing regime for market conduct regulation purposes. Consumer protection requirements should also apply to retail foreign exchange markets (see Recommendation 20).

### **Settlement of Derivatives Transactions**

Derivatives transactions involve commitments to transfer cash or other assets at future dates. Growth in both trading and nominal amounts outstanding in derivatives markets has been dramatic.<sup>4</sup> These exposures are often longer term, and involve credit risks (to the extent of the replacement cost) until settlement. In other cases, settlement flows are small compared with notional outstandings; some are settled in net terms, others by reversing the transaction before maturity. While small compared with notional outstandings, settlement amounts may still be large in absolute terms. They can also be highly variable and unpredictable, and consequently more difficult to manage.

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<sup>4</sup> For example, the BIS 1996, *66<sup>th</sup> Annual Report* indicates (p. 153) that the notional value of exchange-traded derivatives outstanding increased by more than four times between 1990 and 1995 to US\$9.2 trillion. At 31 March 1995, the BIS 1996, *Central Bank Survey of Foreign Exchange and Derivatives Market Activity 1995*, (p. 1) showed outstanding OTC contracts (in this case, net of double counting) of US\$47.5 trillion with a gross market value of US\$2.2 trillion.

There have been a number of serious problems for financial institutions and their customers as a result of dealing in derivatives. Such problems have resulted from lapses in control, fraud and lack of understanding of the risks involved in using derivatives, rather than from failings in the instruments themselves. However, the complexity of many derivatives transactions heightens the risk of misjudgments, as does the speed with which positions can be built up, often with minimal outlays. In OTC markets, the aggregate exposures to individual firms and the market as a whole, are unknown.

### **9.2.3 Exchanges, Securities Firms and Financial Markets**

#### **Exchanges**

Financial exchanges link to the payments system at the point of settlement of trades in stocks and securities, including derivatives and futures.

Systemic concerns about futures and options exchanges arise from their role as the counterparty and often guarantor of the transactions of their members. A variety of methods are used by exchanges to ensure performance by their members, including guarantee funds and similar arrangements, margining requirements, netting, member exposure caps, back-up credit lines and loss sharing agreements, but all such arrangements may be subject to stress if market disturbances and member defaults or delays are sufficiently large.

The October 1987 stock market crash saw the near failure of the US Options Clearing Corporation due to problems with its largest clearing member as a result of large defaults of its members. There were also late payments of large margin transfers by the Chicago Mercantile Exchange. The Hong Kong Futures Guarantee Corporation required rescue and recapitalisation.

More recently, the failure of Barings Futures (Singapore) re-emphasised the counterparty risks faced by futures and options exchanges. One subsequent assessment of such credit risks by Moody's Investor Services noted that there are wide differences in risk management practices, resources, and legal and regulatory environments in the clearing houses of the various exchanges

as they strike the balance between prudent membership standards and attracting members in competition with other exchanges.<sup>5</sup> These risk factors extend the rationale for the regulation of exchanges. In the interests of avoiding regulatory overlap, risk control and other aspects of exchanges' activities should be the responsibility of the Corporations and Financial Services Commission (CFSC).

The Moody's study also noted the difficulties for exchange clearing houses in keeping informed of member activities on other exchanges, in OTC markets and on-balance sheet positions. It also noted the need for information sharing between exchanges themselves and other relevant agencies. There have been a number of initiatives along these lines at the international level. Legal impediments to voluntary information sharing should be removed.

***Recommendation 57: The CFSC should be responsible for regulation of financial exchanges.***

The CFSC should be responsible for regulation of financial exchanges and keep the adequacy of exchanges' risk controls under review.

Financial exchanges should be included among those institutions and regulatory agencies for which there should be legislative change to remove any impediments to voluntary information sharing.

Futures and options exchanges are important to financial markets. They contribute to risk diversification for market participants but also increase risks by concentrating exposures. This suggests that prudential and systemic regulatory agencies should also keep themselves informed of their operations. In Australia, participants in such exchanges are predominantly regulated institutions, especially banks, or affiliates of domestic or foreign banks. Consequently, the Australian Prudential Regulation Commission (APRC) and RBA will have access to prudential and other information on

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<sup>5</sup> Moody's Investor Services 1995.

many major participants and their involvement in exchange-traded instruments.

The Inquiry notes the recommendation of the Sydney Futures Exchange that the RBA should have responsibility for prudential oversight of its clearing and settlement activities.<sup>6</sup> On balance, the Inquiry believes that adequate coordination arrangements can be put in place (see Chapter 12) to cover information needs and possible problem situations without the need for formal dual regulatory arrangements and the implied liquidity support which would arise from direct central bank involvement. However, the RBA should have discretion to act in any circumstances where it considers there is a problem threatening system stability.

## **Securities Firms**

There is a perception in many overseas markets that large securities firms carry a high level of systemic risk. This is because they are increasingly engaging in the same wholesale market activities as banks, including creating highly leveraged operations and trading in complex OTC derivatives. Some of their assets and exposures may be illiquid. Their activities involve large funding and trading interrelationships between securities firms themselves and their bankers, across a range of instruments, currencies and time zones. They are large borrowers of short-term wholesale funds and their positions can change rapidly from minute to minute.

Consequently, like other institutions involved in wholesale markets, securities firms are vulnerable to a loss of confidence, contraction of trading limits and credit lines, and withdrawal of liquidity. If any of these should occur in unstable markets, it could lead them to liquidate assets, possibly putting pressure on prices and adding to concerns about realising losses and deteriorating underlying solvency.

In Australia, a largely self-regulatory regime applies to securities dealers based on capital adequacy requirements administered by the Australian Stock Exchange (ASX). The bulk of the business in wholesale markets is undertaken by institutions regulated by prudential authorities here or

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<sup>6</sup> Sydney Futures Exchange, Submission No. 156, pp. 18-20.

overseas, or by affiliates of such institutions. Consequently, there are no grounds for concern at this time about securities firms (or their affiliates) operating in Australia being a major source of systemic risk.

However, wholesale markets should be monitored to ensure that regulation is able to respond to any change in this situation. The Inquiry notes that the ASX has released for discussion proposals to redefine capital adequacy requirements for securities dealers along the lines of risk based approaches in use in overseas markets.<sup>7</sup>

***Recommendation 58: Regulatory agencies should monitor wholesale markets.***

The regulatory agencies should monitor the evolution of wholesale markets for the emergence of large institutions not subject to regulation domestically or overseas by a prudential regulator. In case of an identified need, the APRC should recommend an increase in its regulatory coverage.

## **Market Instability**

Instability in asset markets (property, equities, securities etc) from any cause may also disrupt the financial system. If large enough, price movements can raise questions about the viability of finance sector participants and their customers and counterparties, and threaten various settlement systems. This may cause participants to be unwilling to meet their wholesale obligations without confirmation that others' obligations to them are being met at the same time. Where financial institutions have at-call obligations to depositors or other investors, withdrawals as a result of uncertainty about solvency or liquidity can add to stress in wholesale activities.

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<sup>7</sup> The proposals involve fixed minimum capital requirements based on activities undertaken and associated operational risks, with 'add ons' for risks from principal positions, counterparties, large exposures and underwriting. The requirements for principal positions would recognise the risk reduction benefits of hedging and portfolio diversification. Offsets between physical and derivative positions would be permitted (see ASX 1996).

As well as instability in domestic asset markets, the size, complexity and increasing integration of global financial markets raise the question of the extent to which they might be a source of systemic risk to Australia.

In particular, if offshore markets become volatile, stressed and illiquid, similar conditions may be transmitted to Australian markets, resulting in losses for some participants, interruption to the settlement and intermediation process and adverse effects on the real economy. These pressures have increased as Australia's financial markets have become more integrated with international markets.<sup>8</sup>

### ***Bond Markets Appear Increasingly Integrated with US Markets . . .***

Table 9.2: Correlation of Changes in Bond Yields — Selected Countries Compared with the US

Country	Quarterly Movement		
	1970s	1980s	1990s
Australia	0.05	0.39	0.72
Japan	0.10	0.60	0.66
Germany	0.32	0.68	0.65
UK	n/a	0.41	0.56
France	0.20	0.53	0.56
Canada	0.75	0.91	0.79
Italy	0.17	0.23	0.10

Note: Observations are based on movements of each series relative to its own variance. Strong correlation does not indicate yields vary by the same number of basis points but rather roughly the same number of standard deviations. Calculations lagged one day because of time zone differences. Source: RBA 1996, *Reserve Bank of Australia Bulletin*. Updated data from an article in the April 1994 edition.

Table 9.2 shows correlations of quarterly movements in bond yields in selected countries and those in the US. For a number of countries, including Australia, correlations have been increasing over time. The relationship seems independent of the phase of the business cycle. Convergence of

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<sup>8</sup> Increasing international linkages between asset markets are discussed further in Chapter 17.

inflation rates, removal of most restrictions on capital movements and improved communications technology are all likely contributors to this outcome. The OECD, in its 1996 *Economic Outlook*, reached similar conclusions about the degree of association between long-term interest rates in the US and those in a number of other OECD countries.<sup>9</sup>

Since the 1970s, there has also been a correlation between variations in world stock market prices (especially those based on quarterly data) and those in the US (see Table 9.3). In contrast to bond markets, however, no marked increase in the degree of association is apparent, although the correlation has been noted for some time. This association between stock markets is probably related to the degree of linkage among the business cycles of the countries concerned.

### ***US Stock Markets also have some Influence . . .***

Table 9.3: Correlation of Changes in Share Prices — Selected Countries Compared to the US

Country	Quarterly Movements		
	1970s	1980s	1990s
Australia	0.55	0.67	0.49
Japan	0.49	0.63	0.41
Germany	0.49	0.51	0.56
UK	0.60	0.76	0.76
France	0.43	0.54	0.72
Canada	0.75	0.86	0.70
Italy	0.27	0.37	0.35
Hong Kong	0.51	0.35	0.57

Note: See footnote Table 9.2.

Source: RBA 1996, Reserve Bank of Australia Bulletin. Updated data from an article in the April 1994 edition.

<sup>9</sup> OECD 1996, *Economic Outlook* reports the average correlation coefficient between the US and other major countries (Italy excluded) has increased from 0.3 in the 1970s to more than 0.8 at present. For Germany and France, the correlation with the US was reported to be above 0.9 (a correlation coefficient of 1.0 would indicate that price movements were perfectly synchronised).

The collapse of share prices in 1987 is a good example of how the institutional structure of a market can be incapable of coping with extreme pressure for price adjustment. The chaotic market conditions at the time were compounded by the inability of the stock market trading framework to handle the volume of selling orders. While regulators did not support the stock market directly, they provided the liquidity needed by institutions exposed to that market. This avoided large scale institutional failure, thereby reducing transmission of problems in the stock market to other markets.

These events also reinforce the view that authorities worldwide responsible for managing systemic risk should have an interest in, and understanding of, all arrangements involving material settlement risks. Such arrangements include domestic stock and futures exchanges and cross-border high-value settlement systems where applicable. More generally, the Inquiry notes that the RBA will need to have regard to all factors which might contribute materially to systemic risk, wherever they may emerge. Similarly, coordination arrangements with other domestic and international regulatory agencies should include regular exchange of information and discussion of systemic issues.

## **9.2.4 Measures to Decrease Systemic Risk**

Beyond the broad strategies for containing systemic risk noted in Chapter 8, there are two additional policy responses to the increasing complexity and scale of activity in wholesale markets and the resulting increase in systemic risk that warrant consideration.

The first is to introduce preventative measures aimed at controlling the risks of disruption to the system. These include requirements to limit risks through the application of better technology, for example to increase the speed of payments settlement or to increase transparency so that market participants can better assess risks.

The second is to plan and provide reactive responses to particular examples of market or institutional instability which, by their nature, are difficult to predict and likely to involve different actions, depending on circumstances.



## Reduction of Counterparty Exposures

While systemic concerns have been heightened by the increasing complexity and opacity of settlement arrangements, they have been decreasing in other areas as institutional and other arrangements have been put in place to control exposures. Examples include:

- the widespread move taking place to real-time gross settlement (RTGS) systems for payments risk;
- shortening of other settlement cycles such as for the Clearing House Electronic Sub-register System (CHES) for equities in Australia;
- growth in legally certain netting systems;
- extended intra-day settlement to reduce Herstatt risk;<sup>10</sup>
- technological developments in risk management and control systems used by market participants; and
- the move by regulatory agencies to more risk based approaches to regulation.

Good progress worldwide is being made in reducing settlement risk in domestic high-value payments by development of RTGS systems. These arrangements aim to reduce exposures between participants by settling each high-value transaction as it occurs. Such arrangements may, in time, link national systems; this is, for example, the objective of the TARGET project for settlements of euro-denominated obligations in the European Union.<sup>11</sup>

In the RTGS system under development for full implementation in Australia in 1998, all high-value interbank payments to settle transactions for government securities, most other fixed-interest securities and foreign exchange will be included. Securities transactions and cash transfers made through Austraclear (an industry owned high-value clearing and securities registry) which involve settlement between banks will also be covered. All

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<sup>10</sup> Herstatt risk refers to delivery risks in different time zones. It derives its name from the 1974 failure of Herstatt Bank, when some of Herstatt's counterparties incurred losses as a result of irrevocable delivery of deutschmarks to Herstatt in Frankfurt ahead of receiving counterpart US dollars in New York later the same day.

<sup>11</sup> See for example George 1996.

transactions involving securities will be completed on a delivery versus payment basis during the day.

Payments will be made from credit funds in accounts held at the RBA. Additional intra-day liquidity will be provided by repurchase agreements using banks' holdings of government securities. The Australian system, which integrates high-value payments and securities settlement, will represent world best practice.

Progress is also being made on a number of other fronts to shorten settlement cycles and achieve delivery against payment. One example of the latter is the second phase of CHESSE, which commenced operation in 1996, for electronically registered shares traded on the ASX. The system enables transfer of legal title under new provisions of the *Corporations Law* against payment of cleared funds provided electronically by participants' banks. The ASX has also developed arrangements for foreign issuers to participate in CHESSE by issue of CHESSE Units of Foreign Securities. An ASX nominee company acts as a depository for the foreign issuer, avoiding problems of transfer of title to securities subject to legal regimes that do not recognise electronic securities.

While CHESSE enables delivery against payment, final settlement remains five days after trade. Members are subject to market risk for that period. The ASX aims to reduce this to international best practice (three days after trade) by end 1997, although this will depend on progress in bank cheque clearing systems and improved communication (eg electronic trade confirmation) between brokers and institutional counterparties. The ASX has also released for discussion proposals to align its business rule covering capital requirements for securities dealers with international risk based approaches.

Other changes under development in Australia include legislation to give a secure legal basis to multilateral netting for low-value retail payment clearing systems, bilateral close-out netting and market netting. The first involves netting arrangements between all participants in retail clearings (eg for cheques and direct entry) as part of arrangements for managing failure to settle and sharing of any resulting losses. Bilateral close-out netting permits a party to a financial contract to terminate that contract if the counterparty becomes insolvent, and calculate termination values and the

net amount payable between the parties (particularly important in financial markets such as those for foreign exchange and derivatives). Market netting involves set-off of obligations, for example, between an exchange and its members according to the rules of the exchange if a member defaults.

It is essential that all these arrangements be effective in the event of insolvency of financial market participants. Close-out and market netting are particularly important for wholesale market participants which commonly have large numbers of unsettled high-value obligations to both receive and pay.<sup>12</sup>

Counterparty risk may prove more resistant to control in cross-border transactions, including those in securities and especially those in foreign exchange. In respect of the latter, much can be achieved by internal efforts by the major players and their counterparties, as discussed in the Allsopp Report.<sup>13</sup>

Large settlement risks will remain, however, even under world best practice in foreign exchange. This raises the question of other risk reduction measures. Bilateral netting schemes such as FX NET and International Clearing Systems allow netting between participants both within and between certain trading centres. Multilateral netting arrangements have been operated by the Exchange Clearing House in London since 1995. Another scheme, Multinet, is being set up in North America. Australian banks are constrained in their participation in such netting arrangements because of the lack of legal certainty that they would have priority in a wind-up.

The Group of Twenty (G20), which is a consortium of large international banks, is also considering a number of proposals, including a single global system providing payments matching, multilateral netting and settlement

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<sup>12</sup> Recommendations for a close-out and market netting law and amendments to the Corporations Law are discussed in Companies and Securities Advisory Committee 1996. The main concerns are to clarify that netting will not be affected by the depositor and policy holder protection provisions of the Banking Act, Reserve Bank Act and the Life Insurance Act respectively, and to remove concerns that insolvency law will be applied before completion of the netting process.

<sup>13</sup> BIS 1996, *Settlement Risks in Foreign Exchange Transactions*.

services. A second proposal is for a global clearing house bank to settle simultaneously both legs of participating members' foreign exchange transactions in a range of currencies where there are overlapping hours of operation and RTGS arrangements.<sup>14</sup> The G20 is also promoting standardisation of procedures and identification of single points of contact within various jurisdictions for dealing with bankruptcy of internationally active firms.

International initiatives are focusing also on improving transparency of securities clearing and settlement arrangements to assist participants to appraise and monitor the risks to which they are exposed. In particular, in 1996 the G10 (through its Committee on Payments and Settlement Systems) and the International Organisation of Securities Commissions formed a working group to develop disclosure arrangements (based on a questionnaire) for securities settlement systems. The disclosure will include:

- comparative information on the rights, obligations and exposures associated with securities settlement systems;
- organisational arrangements (eg ownership and relationships with participants); and
- rules, procedures and risk control measures, including those for transferring securities and funds, and those to operate in the event of default.

The intention is that settlement systems will disseminate the information to markets and update it regularly.

Other moves to increase transparency in international transactions include efforts to harmonise international accounting standards for financial institutions. Such standards are important for assessing counterparty risks in different jurisdictions. There has been a trend towards market based accounting over book value based approaches and some signs of compromise between the Generally Accepted Accounting Principles used in the US and the International Accounting Standards drawn up by the International Accounting Standards Committee.

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<sup>14</sup> Extended intra-day settlement will be examined in Australia once RTGS is operational (see Board 1996).

At least in the medium term, systemic risk will remain of concern in the high-value payments system. While RTGS and other initiatives should mitigate systemic risks domestically, further efforts will be necessary to control risks involving cross-border payments and securities settlements, and other risks sourced internationally.

***Recommendation 59: The RBA should promote control of domestic and international settlement risks.***

The RBA should give high priority to promoting cost-effective control of domestic and international settlement risks, including by benchmarking exercises to improve systems within institutions involved in wholesale international payments, encouraging payments netting arrangements, shortening settlement times for clearing systems and extending settlement hours to allow coordinated delivery versus payment and payment versus payment arrangements.

The legislative program should expedite preparation and consideration of:

- legislative amendments for information sharing between domestic and relevant overseas regulatory agencies;
- netting legislation to cover failure to settle by participants in the payments system; and
- legislation to give legal certainty to bilateral netting of financial transactions as proposed by the Companies and Securities Advisory Committee Netting Sub-Committee — these amendments are to put beyond doubt the legal enforceability of netting contracts under the *Banking Act 1959*, the *Life Insurance Act 1995* and other legislation in the event of insolvency, liquidation, bankruptcy, receivership and voluntary administration.

## **Market and Other Shocks**

Apart from settlement risk, financial system instability may also have its origins in generalised disruption in financial or other markets such as those for securities, equities or real estate. By their nature, such problems are

difficult to predict and are likely to vary in their origins and effects according to circumstances. The transmission mechanism for such shocks could, for example, be adverse price movements leading to increased concern about losses impairing the ability of participants to meet their obligations. Consequently, there can be a lack of willingness to trade, illiquid markets and gridlock in counterparty dealing.

The different origins of stability problems mean that the appropriate policy response is likely to vary with the circumstances. In general, however, the response will be reactive. The common thread is that disruption can lead to illiquidity in a particular market, requiring the monetary authority to restore confidence by injecting funds and reassuring the markets that liquidity as needed will be made available. In a crisis, when time is of the essence, central banks have the means to inject liquidity quickly into the market by open market operations or, if necessary, lender of last resort loans to particular institutions or groups. If institutions other than banks are involved, liquidity may be arranged through the banking system which is commonly the point of first contact for all markets.

***Recommendation 60: Liquidity management responses should remain the responsibility of the RBA.***

Instability in financial and/or asset markets may be a source of risk to the financial system and its participants. The policy responses to such developments will vary with the particular circumstances and are not amenable to pre-emptive actions. Responses may include provision of liquidity to markets generally or to particular sectors. These should remain the responsibility of the RBA (in consultation with the Treasurer), in its roles as both monetary authority and authority responsible for managing systemic risk.

## 9.3 Efficiency and Access to the Payments System

The preceding discussion suggested that while risks may be increasing in some areas, technology and netting arrangements also allow for reductions in system risk. The management of this risk is the key reason for regulatory intervention. Instability is prevented by ensuring that institutions which offer third party settlement for payment instruments are able to meet their obligations. This has been achieved largely by restricting entry to the payments system to deposit taking institutions or their industry bodies.

A key question for the Inquiry has been whether the lack of contestability in the core of the payments system impedes innovation and sustains high cost structures. In addition, potential benefits from more competitive markets have to be assessed against potential increases in system risk.

This section reviews current regulatory arrangements and discusses the Inquiry's recommendations under four broad headings:

- review of existing regulatory arrangements, in particular, whether they are likely to provide appropriate incentives for innovation and cost reduction;
- review of existing requirements for the issue, clearing and settlement of payment instructions;
- potential for additional competition in the issue and clearing of payment instructions; and
- potential for additional competition in final settlement of payment instruments without compromising systemic stability.

### 9.3.1 Review of Existing Regulatory Structure

The key regulators in the payments system are the RBA, the Australian Payments Clearing Association (APCA) and the Australian Payments System Council (APSC).

## **Role of RBA**

The RBA has primary responsibility for management of the payments system. It ensures that banks meet prudential standards, conducts the exchange settlement accounts of banks and provides settlement accounts to special services providers (SSPs) for the building society and credit union industries.

In addition to this prudential role, the RBA participates in a number of other regulatory and commercial activities. The RBA provides the Secretariat to the APSC and is the main banker to the Commonwealth Government, some State governments and some government instrumentalities.<sup>15</sup> As a participant in, and regulator of, the payments system, the RBA therefore has a number of potentially conflicting roles.

The commercial activities of the RBA are being reviewed by the Competitive Neutrality Taskforce established by the Commonwealth Government to fulfil its obligations under the Competition Principles Agreement of April 1995. That agreement requires the application of competitive neutrality principles to all government business enterprises. Competitive neutrality requires that government business activities should not enjoy net competitive advantages over their private sector competitors simply by virtue of public sector ownership. The taskforce is due to report by the end of March 1997.

One of the key services currently provided by the RBA is facilitating large value interbank funds transfers through the Reserve Bank Information and Transfer System. It will also provide the settlement infrastructure for the new RTGS system. Given its role in managing the liquidity and stability of the financial system, the Inquiry considers that there is a clear public policy rationale for RBA ownership and management of the RTGS system and involvement in other high-value clearing streams. However, the case for other commercial activities, particularly commercial banking, is weaker since the RBA's mandate needs to address the overall efficiency of the market for

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<sup>15</sup> The RBA issues 5 per cent of all cheques and processes 35 per cent of all direct entry payments.



payments services. This includes consideration of the needs of both users and suppliers of payments services.

## **Role of APSC and APCA**

The APSC is a non-statutory body, chaired by the RBA, which advises the Treasurer on the development of the payments system, including consideration of consumer interests. In this latter context, the APSC has monitoring responsibilities for the codes of conduct of banks, building societies, credit unions and electronic funds transfer (EFT). The APSC's charter includes acting in the public interest to improve overall payments system stability, efficiency and competitive equity. However, this charter has not given the APSC sufficient authority to set performance benchmarks for the payments system.

APCA was formed to oversee new entry to the payments system and to manage and coordinate the operation of effective payments clearing and settlement systems. APCA does not process payments but provides the regulatory and procedural frameworks for clearing and, in cooperation with the RBA, settlement. Individual institutions which are 'providers of payment services' must operate according to APCA's rules as set out for each system. APCA's memorandum and articles of association, as well as the rules for the paper and bulk electronic clearing streams, have been authorised by the Australian Competition and Consumer Commission (ACCC). An application for authorisation of the consumer electronic clearing stream is currently being considered by the ACCC.

Under APCA's rules, only 'providers of payment services' are allowed to participate fully in clearing. In theory, this definition covers any organisations which provide their customers with the means of transferring value to third parties, rather than only to customers of the same organisation. The practical effect of the rule so far has been to restrict full membership to all clearing streams to banks only.

Within APCA, the four major banks — ANZ, the Commonwealth Bank of Australia, the National Australia Bank (NAB) and Westpac — dominate

decision making.<sup>16</sup> Some smaller institutions indicated concern to the Inquiry that the dominance of the major banks in APCA acted as a constraint on policies for improved payments system efficiency. The Inquiry also received representations from several non-deposit taking institutions that the effective monopoly that DTIs (or their industry bodies) enjoyed in the formulation of the procedures and regulations mean that APCA does not adequately consider the needs of major users of payments services.

### **Assessment of the Regulatory Structure**

As a competitor to commercial banks in two clearing streams, the RBA is not in an independent position as a regulator charged with improving the efficiency of the payments system.

APCA has been effective in facilitating new entry into the payments system and has been the forum in which improvements in the technical efficiency of the payments system have been negotiated and agreed. However, continued reliance on cooperative arrangements in the absence of specific performance benchmarks and clear public policy objectives, may impede the overall efficiency of the payments system.

The APSC has fulfilled a useful role in providing consumers with a wide range of information about payment instruments and delivery channels but enforcing performance benchmarks has been outside its charter.

A clear and transparent framework is required for the resolution of these issues with greater emphasis on the efficiency of the payments system. This would be facilitated by the creation within the RBA of a separate and stronger structure charged with this function. This structure, which would replace the existing APSC, should include external representation.

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<sup>16</sup> Each of the majors has one vote while the State, regional and foreign banks and SSPs collectively have four votes. The RBA has one vote.

***Recommendation 61: A Payments System Board should be formed within the RBA.***

The payments system should be regulated by the RBA under a Payments System Board (PSB). The PSB should have responsibility for implementing policies to improve payments system efficiency, including the adoption of the most efficient technology platforms, and enhancing the competitive framework, consistent with overall systemic stability. The PSB should also have general oversight of the clearing streams.

***Recommendation 62: Membership of the PSB should reflect payments system efficiency objectives.***

The PSB should be chaired by the Governor of the RBA and should also include one deputy governor of the RBA. Other members should be appointed by the Treasurer and drawn from payments system users and industry representatives who are knowledgeable and experienced in the operations of the payments system.

The PSB should make its decisions independently of the main RBA Board, which would concentrate on monetary policy and financial stability. In the event of a conflict between the main RBA Board and the PSB, the Governor should be given statutory authority to implement the decision of the main RBA Board.

***Recommendation 63: The PSB should set performance benchmarks.***

The PSB, in consultation with market participants and payments clearing houses, should establish targets for the implementation of efficiency benchmarks for each part of the payments system and report annually against these benchmarks and other aspects of payments system costs.

The PSB should also ensure that new technologies are implemented to advance the efficiency and soundness of the financial system. The PSB

should have the necessary resources, focus and powers to influence, or if necessary mandate, standards.

***Recommendation 64: The RBA’s commercial activities should be clearly separated from regulatory responsibilities.***

RBA ownership and operation of the real-time gross settlement (RTGS) system is justified on public benefit grounds. As a general principle, other commercial activities are inconsistent with its regulatory responsibilities. Where any special considerations warrant RBA participation in such activities, these should be clearly separated from regulatory responsibilities and subject to transparent reporting arrangements.

***Recommendation 65: The Australian Payments System Council should be disbanded.***

The Australian Payments System Council (APSC) should be disbanded, with its functions in relation to the payments system assumed by the PSB. The consumer protection responsibilities of the APSC should be transferred to the CFSC.

### **9.3.2 Review of Existing Regulations Governing Payment Instructions**

This section provides an overview of existing regulations governing the storage and transfer of value, and the clearing and settlement of payment instructions. The focus of this section is primarily open payments systems

because this is where regulation most circumscribes the operations of participants and it is where additional competition will have most impact.<sup>17</sup>

## Existing Regulations Governing Stores of Value

Payments can be made from cash, from deposits in transaction accounts or by using credit. The Government has a statutory monopoly over the issue of currency and has given the RBA responsibilities for the printing of notes and the issue to the public of notes and coin. Where payments are made from transaction accounts with DTIs, the institutions are prudentially regulated.

Cash management trusts, pastoral finance companies and life companies offer deposit-like products. Institutions offering such products are subject to the provisions of the Corporations Law or other legislation such as the *Life Insurance Act 1995*. Currently, these institutions are unable to offer payments services directly but may do so via an agency arrangement with a bank.

Where payments are made using consumer credit, the credit provider is subject to the provisions of the *Uniform Consumer Credit Code*, the consumer protection provisions of the *Trade Practices Act 1974* and, where relevant, voluntary industry codes of conduct.

## Existing Regulations Governing Payments Instruments

The *Cheques and Payment Orders Act 1986* requires that a cheque be drawn on a bank. However, most non-bank DTIs have agency arrangements with banks which allow their clients to draw on the institution's account at a bank. In July 1995, the Commonwealth Government announced that it would amend the Act to allow building societies, credit unions and their industry SSPs to issue cheques in their own right.

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<sup>17</sup> Open payments systems are those which allow customers to transfer value to third parties. Payment instruments are exchanged between financial institutions rather than one institution acting for both the payee and payer. In open systems, the transaction does not reach finality until the value in the payment instrument has been settled between those institutions through accounts held at the central bank.

International credit card scheme operators such as VISA and MasterCard impose entry requirements on institutions joining their proprietary schemes and issuing instruments carrying their logos.

Issuers of traveller's cheques such as American Express and Thomas Cook are exempt from the requirements of the *Banking Act 1959* on condition that they do not carry out any banking business in Australia other than the issuance and servicing of charge cards and lines of credit, and traveller's cheques sales and service. American Express advised the Inquiry that American Express Stored Value Group, which issues American Express traveller's cheques, is regulated in the United States by various State authorities. In addition to reporting requirements, State licensees are subject to operational requirements, including requirements to maintain 'permissible' investments equal to the value of outstanding payment instruments. In effect, this is a 100 per cent reserving requirement.<sup>18</sup>

## Existing Regulations Governing Clearing

Payments clearing refers to the processes involved in the transportation and processing of payment instruments as well as the account reconciliation once value has been debited or credited to an account. Issuers may clear in their own right (direct clearers) or have an agent to clear for them (indirect clearers). Under the APCA framework, Australia's payments system is organised into four clearing streams — paper, bulk electronic (direct entry credit and debit), consumer electronic (debit card transactions) and high-value. The rules of the various clearing streams vary and each stream stipulates a minimum volume for issuers to be direct clearers. The SSPs participate in only the bulk electronic and consumer electronic systems.

Restrictions on participation in the clearing of payment instructions include provisions of the Cheques and Payment Orders Act which impose procedural requirements but do not restrict which organisations can provide the physical processes for clearing cheques. In addition, APCA's regulations and procedures set a range of requirements for the clearing of payment instruments (including entry fees).

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<sup>18</sup> American Express, Supplementary Submission No. 72, p. 3.

Outside the APCA framework, the international card associations clear credit card obligations arising between institutions. Austraclear, a central securities depository and clearing system for the wholesale financial markets also operates outside the APCA framework. Its rules include types of participants and securities settled, confirmation and settlement cycles and the interface to the banking system.

Under the Trade Practices Act, some clearing arrangements may require ACCC authorisation.

### **9.3.3 Scope for Additional Competition in Issuance and Clearing of Payment Instructions**

Technology provides scope for a range of new non-traditional players to enter the payments system. The key issue is whether increased contestability combined with appropriate regulation could deliver efficiency gains without significantly increasing risk. In this context, the Inquiry believes there are four areas in the payments system which warrant detailed discussion:

- cheques and paper instruments;
- consumer electronic payments and networks;
- access to clearing; and
- new payment instruments.

The Inquiry's recommendations for stimulating competition in the payments system relate principally to the paper and consumer electronic payment streams, where costs and the potential for efficiency improvements are greatest.

#### **Competition in Cheques and Paper Instruments**

As in other English speaking countries, cheque usage in Australia is high by international comparison. As noted in Chapter 6, this has implications for the overall cost of the payments system. The high level of cheque usage can be explained by a combination of factors:

- the lack of suitable alternatives for some transactions;

- inappropriate pricing; and
- the value of the 'float' to business and consumers.

Conversely, other factors have constrained the efficiency of cheque clearing. These include:

- industry arrangements for processing and clearing which fail to capture the scale economies available through more centralised processing; and
- the protected position of banks as issuers of cheques, which has not been conducive to rapid adoption of efficiency enhancing technology.

Since 1994, APCA has pursued a project to accelerate the cheque clearing process. The objective of the project is to improve the efficiency of paper clearings by replacing the physical presentment and dishonour of cheques with electronic messaging.<sup>19</sup> Under current arrangements, cheques can take up to eight days to clear, with an average of four to five days. APCA expects that electronic transmission of details of cheques will reduce the clearing cycle to an average of three days.<sup>20</sup> Most DTIs have arbitrary rules preventing retail and small business customers from accessing funds credited by cheque for a number of days (usually four or five) regardless of whether the funds have actually been cleared. The Inquiry considered that customers should have immediate access to funds which have been actually cleared.

By itself, the APCA project will not address the current inefficient duplication of infrastructure and pricing issues. It also falls short of truncation, which amendments to the Cheques and Payment Orders Act in 1994 sought to promote.<sup>21</sup> Efforts being made within the industry to address

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<sup>19</sup> While institutions will act on the electronic advice, cheques will still be moved between institutions.

<sup>20</sup> Australian Payments Clearing Association, Supplementary Submission No. 28, p. 3.

<sup>21</sup> Truncation means the process of cutting short the physical movement previously necessary for the effective presentation of a cheque, usually through electronic means. The responsibilities of the drawer and drawee bank remain as if the cheque had been physically presented but the potential now exists for payment or dishonour to be effected faster. This offers potential cost savings to customers and banks.



cross-subsidies may accelerate the adoption of more efficient cheque processing technologies. However, cheques remain a very expensive means of making payments—at least 10 times the cost of electronic credits or debits.<sup>22</sup> The Inquiry considers that, as cheques could represent as much as 70 per cent of the total non-cash cost of the payments system, an objective of public policy should be to ensure that the pricing and regulation of cheques and their alternatives do not impede a shift to lower cost payments instruments.

On the grounds of competitive neutrality, the Inquiry supports the proposed amendments to the Cheques and Payment Orders Act. However, given the cost of paper instruments and the settlement risk under current delayed settlement arrangements, the benefits of new entry must be weighed against efficiency criteria. One means of meeting the dual objectives of competitive neutrality between DTIs and payments system efficiency would be to require those institutions which issue cheques in their own name to meet a number of performance benchmarks. Such arrangements would not preclude non-deposit taking institutions from issuing cheques in an agency arrangement with banks, building societies and credit unions, or their SSPs.

***Recommendation 66: Rights to issue cheques should be extended.***

The foreshadowed amendments to the *Cheques and Payment Orders Act 1986* should be enacted to allow building societies, credit unions and their SSPs to issue cheques in their own name. Issuers of cheques should meet objective performance benchmarks. Other financial institutions should be allowed to issue cheques in agency arrangements with DTIs or their SSPs, subject to the approval of the APRC.

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<sup>22</sup> Chapter 6 identified that potential savings in the order of \$700 million to \$1.4 billion were achievable by banks if cheque usage were reduced by 50 per cent.

## Competition in Consumer Electronic Payments

### *Background*

The consumer electronic payments system covers automated teller machine (ATM) networks, electronic funds transfer at point of sale (EFTPOS) networks and credit card arrangements which utilise both networks.

The key participants in the ATM networks are the financial institutions which issues the card (the card issuers); the consumers (the card holders); and the transaction acquirers, who earn a fee when the card holders execute transactions at ATMs outside the card issuer's network.

For EFTPOS and credit transactions, there are two parties in addition to card issuers and card holders:

- the financial institutions which provide the EFTPOS network (the merchant acquirers); and
- retailers and service providers which provide in-store credit and debit facilities (the merchants).

Each major bank has developed its own proprietary ATM network. Regional banks, building societies and credit unions have also developed separate proprietary networks. Various agreements are in place to allow limited interoperability between these networks. The effect of current industry arrangements is that there are two major national networks: the Commonwealth-Westpac network and the NAB-ANZ-Cashcard-Rediteller network. However, it has been agreed that consumers will be able to use all ATMs interchangeably from the middle of 1997, subject to a fee.<sup>23</sup>

The EFTPOS network is dominated by the four major banks, each of which has established electronic links between retailers and service providers. This has allowed full interoperability — a key factor in consumer acceptance of this payment medium.

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<sup>23</sup> Advice provided to the Inquiry by MasterCard International.

DTIs issue three brands of credit cards: Bankcard, MasterCard and VISA.<sup>24</sup> Unlike debit transactions undertaken at ATMs and EFTPOS terminals, credit transactions are cleared and settled outside the APCA framework.

The pricing or 'interchange' arrangements for debit and credit transactions differ. For debit card transactions on the EFTPOS network, fees are usually levied at a flat rate per transaction, payable to the merchant acquirer. Fees are negotiated bilaterally between the merchant acquirer and card issuer. Some large retailers also demand a fee from the merchant acquirer. In contrast, credit card transaction fees are based on the value of transactions and are payable to the card issuer. The merchant service fee paid by the retailer incorporates the interchange fee.

### ***Efficiency of Consumer Electronic Payments***

Table 9.4 shows that there has been very strong growth in the number of ATM and EFTPOS terminals since 1994. However, the number of transactions so far has failed to keep pace with the rate of investment.

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<sup>24</sup> Membership of the Bankcard Association is restricted to banks.

**Access to Electronic Delivery Systems is Growing Rapidly . . .**

Table 9.4: Number of ATM and EFTPOS Terminals (end June)

	1994	1995	1996	Growth in Terminals 1994-96 (%)	Growth in Number of Trans. (%)
<b>ATM Terminals</b>					
Banks	5,148	5,583	6,526	26.8	n/a
Building Societies	323	282	289	(10.5)(a)	n/a
Credit Unions	253	310	425	68.0	n/a
Total ATMs	5,724	6,175	7,240	26.5	3.0(b)
EFTPOS Terminals(c)	44,001	68,034	116,704	165.2	91.8(d)

- (a) Fall reflects conversion of building societies to banks.
- (b) Estimate for ATM cash withdrawals only based on RBA bank data for 1995 and 1996.
- (c) Includes EFTPOS terminals both of institutions and retailers.
- (d) Growth for period 1994-96.

Source: APSC 1996 and RBA 1996, *Reserve Bank of Australia Bulletin*.

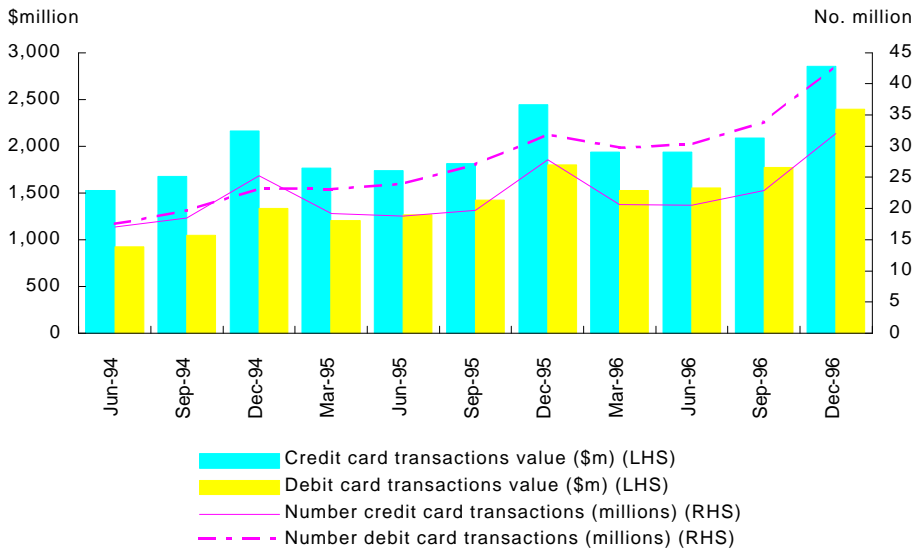
The growth in the number of EFTPOS transactions has been reflected in the growth of purchases made with transaction cards (see Figure 9.1). Purchases with transaction cards issued by financial institutions in 1995-96 represented more than 35 per cent of retail trade, up from 31 per cent a year earlier.<sup>25</sup> RBA data show that the number of electronic funds transfer purchases by credit cards grew by 30 per cent over the 12 months to June 1996.<sup>26</sup> This reflects in part the introduction of interactive voice response systems for telephone bill payments and the proliferation of loyalty and incentive programs.

<sup>25</sup> ABS 1996, Cat. no. 8501.0 and RBA 1996, *Reserve Bank of Australia Bulletin*, December edition.

<sup>26</sup> RBA 1996, *Reserve Bank of Australia Bulletin*.

## **Debit Card Transactions at Point of Sale are Growing Faster than Credit Card Transactions . . .**

Figure 9.1: Comparison of Credit and Debit Card Transactions at Point of Sale



Source: RBA 1997.

While consumer electronic payments are cheaper than in-branch and teller transactions, current industry arrangements have the potential to affect payments system efficiency adversely.

First, ad valorem interchange fees on credit cards mean that the cost of providing this payment mechanism to consumers can be very high.<sup>27</sup> Also, the cost to consumers is not transparent but is ultimately borne by consumers in the form of higher prices. Discounts for cash are generally not available.

In the past, interchange fees determined by ad valorem charges have been justified on the grounds that:

<sup>27</sup> The term 'ad valorem' fee refers to a fee calculated as a proportion of the value of the transaction.

- the consumer had access to an interest free credit period, creating a credit exposure and corresponding funding requirement;
- paper based transactions carried a fraud risk;
- the magnitude of the fraud and credit risks were related to the value of transactions; and
- merchants benefited from credit cards through increased turnover.

However, as EFT transactions now constitute around 70 per cent of the value of credit card purchases and there is a convergence in consumer use of debit and credit cards, concerns have been raised about the size of the interchange fee on credit cards and whether the pricing of debit interchange is appropriate.<sup>28</sup>

Secondly, confidential information provided to the Inquiry demonstrates that the relative negotiating strength of major merchant acquirers and card issuers over interchange fees is uneven and that regional banks have been frustrated in their efforts to gain access to the EFTPOS network as acquirers.<sup>29</sup> In addition, some participants have found that equipment certification by the four major banks (necessary for the security of the system) has been protracted, inconsistent and at the convenience of incumbents. Given the proprietary networks and current interchange arrangements, it appears that card issuers bear a disproportionate share of the cost of the EFTPOS network.

Thirdly, ATMs are primarily used for cash withdrawals rather than deposits or other transactions. While reliable estimates are unavailable, a range of data suggests that around 60 per cent of total ATM transactions are cash withdrawals with the balance principally account balance queries. Although ATMs are a cheaper delivery channel than branches, the capital cost of an ATM terminal is 30 to 100 times more expensive than an EFTPOS terminal. Moreover, unlike EFTPOS, the financial institution continues to carry the costs of ATM cash replenishment and security with ATM transactions.

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<sup>28</sup> For discussion of these issues, see APSC 1996, *Annual Report 1995-96*.

<sup>29</sup> Some submissions to the ACCC on APCA's application for Authorisation of the Consumer Electronic Clearing System raised similar issues to those raised in confidence with the Inquiry. See for example, submissions by Adelaide Bank and Cashcard Australia to the ACCC.

Given these relative cost considerations, the duplication of the two national ATM networks may have resulted in some over-investment.

If Australia is to capture fully the benefits of electronic commerce, open electronic architectures providing access on commercial terms to all financial participants will be important. Under existing arrangements, transactions are switched through proprietary systems. This means that each DTI may have up to 19 bilateral arrangements to support consumer electronic payments.<sup>30</sup> In addition to duplicating investment, existing proprietary systems may not encourage efficient utilisation of the network infrastructure and could also increase risks.

Prospective developments in the market for bill payment facilities and the foreshadowed interoperability of the two ATM networks hold some promise of a migration to more open electronic systems in Australia. While interchange fees should continue to be a matter of bilateral negotiation, free and open competition for switching revenues will be the most appropriate means of ensuring efficient pricing. However, the evolution of the market must be monitored to ensure that access to electronic networks on appropriate commercial terms remains available to all industry participants. This should include appropriate oversight of technical standards by the PSB.

***Recommendation 67: Interchange arrangements should be reviewed by the PSB and the ACCC.***

The PSB should consider whether interchange pricing arrangements are appropriate for credit and debit cards. A review of arrangements by the ACCC is warranted where such arrangements are priced contrary to efficiency principles.

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<sup>30</sup> Advice provided to the Inquiry by MasterCard International.

### **Competition in Credit Cards**

Competition has been most evident in the retail consumer market, where a wide range of non-bank institutions issue credit and charge cards. Table 9.5 shows that, despite extensive non-bank competition, banks continue to dominate the credit card market. The cards of two international associations, VISA and MasterCard, are the principal cards issued by banks. A recent development has been the emergence of co-branded cards where non-financial institutions issue cards in conjunction with one of the two international associations and an Australian bank.

### **Banks Control the Credit Card Market . . .**

Table 9.5: Market Share of Credit Cards (per cent)

	1994	1996
Major banks	53.4	56.2
Regional banks	12.0	11.2
Foreign banks	1.7	2.7
Building societies	0.8	0.3
Credit unions	3.4	3.1
American Express	5.4	4.5
Diners Club	1.8	2.1
Retailers	17.9	16.2
Others	3.6	3.7
Total	100.0	100.0

Source: Data provided to the Inquiry by Roy Morgan Research.

As noted in the previous section, transactions using credit cards continue to grow strongly. The international card associations have also been at the forefront of new consumer payment instruments such as smart cards. For example, MasterCard has a majority interest in Mondex—a chip based smart card which will allow consumers to download electronic value over the telephone, personal computer or portable terminal. VISA and MasterCard have also agreed on the secure electronic transaction (SET)



standard for credit card payments over the Internet.<sup>31</sup> As the rules of the card associations are not transparent, it is unclear whether non-deposit taking institutions would be eligible to join as members in Australia — even though non-bank participation appears to be possible in other jurisdictions. In the event that membership was restricted to the existing range of institutions (predominantly banks), the ability of non-bank financial institutions to participate in new payment technologies may be compromised. The Inquiry therefore sees a need for ACCC oversight of the rules and membership rights of the card associations.

***Recommendation 68: The ACCC should maintain a watching brief over the rules of international credit card associations.***

Given the likely importance of the credit card companies in the emerging smart card business, the ACCC should maintain a watching brief over the membership arrangements and rules of the international credit card associations.

### **Competition in Clearing**

Clearing is becoming increasingly contestable as generic third-party processors enter the market.

Existing APCA rules preclude providers of payments processing services from acting as direct clearers in the paper, bulk electronic and consumer electronic systems. The Inquiry accepts that existing members of APCA have concerns about risks to the system should access be widened to allow broader membership. However, this risk is manageable if appropriate and transparent operational standards are set. Given that the rules of any clearing association are likely to be exclusionary for prudential reasons, the market conduct provisions of the Trade Practices Act should continue to apply.

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<sup>31</sup> The SET standard is a standard for conducting secure electronic transactions. Chapter 2 discusses this issue further.

There are a number of commercial proposals under consideration for development of centralised processing centres for cheques and electronic bill payment functions. If a monopoly were to develop in processing financial transactions, the question of access to the electronic network should be considered under the access provisions of the Trade Practices Act.

***Recommendation 69: Access to clearing systems should be liberalised.***

Access to clearing systems should be widened to include all institutions fulfilling objective criteria set by the regulator, the PSB.

Disputes over technical standards in clearing should be referred to the PSB for final arbitration and determination.

***Recommendation 70: The APCA should continue its role in clearing arrangements with wider membership.***

The Australian Payments Clearing Association (APCA) should continue to be the core regulatory body responsible for the operational and technical efficiency of the various clearing streams. However, membership of APCA should be open to any organisation approved as a payment service provider by the PSB. The existing authorisations from the ACCC for APCA's memorandum and articles of association and the rules relating to the paper and bulk electronic clearing streams may require reassessment.

***Recommendation 71: The Trade Practices Act should continue to apply to payments clearing arrangements.***

Payments clearing arrangements should remain subject to the provisions of the *Trade Practices Act 1974*. The rules of any industry organisation operating a clearing system should be made subject to approval by the ACCC. If any part of the industry were to develop a monopoly in processing financial

transactions, the question of third-party access to the electronic network should be considered under the access provisions of the *Trade Practices Act 1974*.

## **New Payment Instruments**

Chapter 2 discussed the implications of technology for payment instruments and delivery channels. Two new payment instruments currently under trial in Australia are smart cards and electronic cash. Other instruments may emerge in the future and policies in this area should be designed to ensure that any regulation applies generally.

Smart cards combine a stored value function with reloadable capability from a range of sources. It is expected that, in addition to a payments function, smart cards will provide consumers and merchants with a wide range of other functions. The multifunctionality of smart cards means that they will be issued by a wide range of institutions and that the issuer of the 'electronic purse' may be different from the issuer of the card.<sup>32</sup>

Electronic cash is an electronic version of a stored value card and allows value to be passed from one entity to another in the form of an electronic message which has been encrypted or formatted in a way which ensures security.

For consumers and retailers, smart cards offer the promise of substantial time efficiencies for high-volume, low-value payments. For existing EFTPOS transactions, debit card transactions are authorised by a personal identification number whereas credit card transactions are authorised with a signature. Smart card transactions will not necessarily require additional authorisation because the technology incorporates a computer chip which allows authorisation of off-line transactions. This feature offers increased

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<sup>32</sup> Card Technologies Australia forecasts that by 2010 there will be more than 30 billion transactions being conducted on smart cards and as little as 10-20 per cent of total transactions may be payment functions. See Card Technologies Australia Limited, Supplementary Submission No. 86, pp. 4-7. Chapter 2 contains forecasts by Gemplus for global growth in smart cards over the next five years.

transaction speed. In addition to reduced cash handling costs, the time savings for retailers will have a direct cost equivalent. Time savings for consumers will be less obvious but arguably more important.<sup>33</sup>

Internationally, the approach to the regulation of smart cards and electronic cash is not uniform. Stored value cards operating in closed systems for the purposes of a single merchant or small group of merchants (such as telephone cards) pose no systemic risk and require no special prudential regulation. However, smart cards operating in open systems or intended for widespread use as a means of payment at many merchants pose different risks because they may become part of the general payments system.<sup>34</sup> The best known international firms for the new technologies are Mondex, DigiCash and CyberCash. These firms are not banks and do not plan to be issuers in Australia. Currently, the four major banks have acquired the Mondex franchise, while Advance Bank has acquired the DigiCash franchise. All major proposed smart card schemes with a significant payments function will therefore be issued by DTIs.

The Quicklink and Transcard smart card schemes are targeted at routine cash transactions.<sup>35</sup> Although these cards have reloadable stored value functions, banks still retain the store of value through which customers 'reload' the card and settlement with service providers is handled by the banks through existing clearing and settlement arrangements.

The principal advantage of these new payments media is the scope they provide to deliver substantial efficiency gains for consumers and industry. It has been suggested that adult Australians make an average of 30 cash transactions per week.<sup>36</sup> Survey evidence from recent smart card trials suggests that cash transactions have an average value of \$7.50.<sup>37</sup> As the volume of cash transactions dwarfs any other payments medium, the

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<sup>33</sup> See for example, Mair 1996. Drawing on a 1990 study, the paper suggests that the value for consumers of the time savings made possible by smart cards could be substantial.

<sup>34</sup> An open system is one in which payments can be made to third parties. See footnote 17.

<sup>35</sup> Card Technologies Australia advised that the value outstanding on its cards averaged between \$18 and \$45. The Quicklink scheme is targeted at routine cash transactions under \$20.

<sup>36</sup> Mair 1995.

<sup>37</sup> Advice provided to the Inquiry by MasterCard International.

potential efficiency gains offered by smart cards are tangible. However, even allowing for a rapid build-up of smart cards, one card for every Australian loaded with an average of \$100 would represent less than 10 per cent of currency in circulation.<sup>38</sup> Similarly, even if the value of Internet transactions were substantial, the stocks of value held in Internet money tokens are transferable once only under available technology and are redeemed as credits to a conventional bank account.

Where the ‘electronic purse’ provides access to a credit facility or is reloadable with cash and is intended for use as a means of payment to a wide range of merchants, the smart card would be equivalent to ordinary credit cards, money orders or traveller’s cheques. To provide a level of consumer protection for the value of the float outstanding on the cards or other instruments, the Inquiry considers that collateral or other security arrangements are appropriate in such systems. This would be consistent with existing practice in the United States for traveller’s cheques.

Where a foreign issuer is subject to such arrangements in respect of all of its international outstanding liabilities, or where the arrangements ensure the security of float, Australian regulatory authorities could adopt a flexible approach to regulation. Similar arrangements should also apply to the holding of stores of value for issuers of electronic cash over the Internet, although it is recognised that regulation in this area will only be possible for domestic issuers. Industry efforts already being made to develop a code of conduct for the smart card industry are supported by the Inquiry.<sup>39</sup>

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<sup>38</sup> Calculated on the basis that there are 18.3 million Australians and currency in circulation of around \$20.5 billion.

<sup>39</sup> Australian Industry is participating in the Asia-Pacific Smart Card Forum, which is an organisation representing the interests of smart card technology providers and other interested industry participants. The Forum’s Code of Conduct is designed to establish general standards of behaviour for participants in the smart card industry. The Code is intended to be an umbrella Code for the industry, allowing for individual industry sectors to develop specific codes for their particular interests.

**Recommendation 72: Stores of value for payment instruments should be subject to regulation.**

Holders of the store of value for traveller's cheques, stored value or other smart cards, electronic cash and other payment instruments which are intended as a means of making payments to a wide range of merchants or other persons should be subject to regulation to ensure the safety and integrity of the payments system.

- For licensed DTIs and life companies, adequate regulation generally would be provided by the APRC.
- If the store of value is not held by such licensed institutions, holders should be required to hold collateral against unsettled claims or meet such other requirements as may be determined by the PSB, taking into account regulatory arrangements offshore and the issuer's ownership and capital or other backing. The PSB should facilitate the interoperability of open systems.

Where payment instruments operate only in closed systems for the purposes of a single merchant or small group of merchants, safety regulation is not required as such systems pose little systemic risk and can be adequately regulated under existing *Corporations Law* and consumer protection legislation. However, an industry code of conduct, overseen by the CFSC, should be developed for these systems.

### **9.3.4 Access to Settlements**

This section considers the scope for widening access to settlement for high-value and other payments. As noted at the beginning of this chapter (see Section 9.2.2.), the payments system can act as the transmission mechanism for instability in the financial system. Accordingly, liberalisation of the conditions relating to access to the core of payments system must be assessed against the likely threat to systemic stability.

## Existing Regulations Governing Settlements

Under the Banking Act, banks are required to hold ESAs at the RBA to extinguish net settlement obligations between them arising from the previous day's clearings. Reflecting the volume of customer payments business and the improved prudential supervision arrangements under the Australian Financial Institutions Commission, the RBA opened settlement accounts for SSPs to operate on behalf of the building society and credit union industries in 1994.

The RBA has initiated the development of a RTGS system which will allow some high-value payments to be settled across ESAs as they occur. This will greatly reduce the settlement risk associated with these large value payments.

## Scope for Liberalising Access

The approach of the Inquiry has been to examine each of the clearing systems currently in place or foreshadowed under the APCA framework to determine whether final settlement services could be offered by a wider range of institutions than currently.

The Inquiry's view is that access to settlement arrangements should be transparent and based on objective tests with the following features.

- Participants should be regulated to control the risks they pose to the central bank and other participants in clearing and settlement arrangements. This would be expected to differ according to the particular clearing stream for which settlement is desired.
- To ensure regulation is effective and problems can be resolved promptly, the RBA and APRC should cooperate closely in the conduct of regulation of participants. Prudential and operational conditions of access would be expected to be reflected in applications received from participants which are not subject to regulation by the APRC.
- Participation should be limited to those with extensive transactions to settle on behalf of non-associated third parties.

- Subject to operational integrity considerations, the value of payments in the clearing stream, and consequently the risk to the system, should also be a factor in liberalising entry.

## **Cheques and Paper Instruments**

Cheques constitute around 35 per cent of non-cash payments by value and will continue to be settled on a deferred basis.<sup>40</sup> The length of the cheque clearing cycle, the deferred settlement risk, liquidity management requirements due to the uncapped nature of cheques as a payment instrument, and the sensitivity of cheques to issues of confidence, suggest that institutions issuing cheques in their own name should be subject to intensive prudential regulation. As noted in Section 9.3.3, the Inquiry supports amendments to allow building societies, credit unions and their SSPs to issue cheques in their own name.

## **Consumer Electronic and Bulk Electronic Systems**

Retail consumer payments are high-volume, low-value payments which access a store of value in the form of a deposit, credit or cash. Convergence between the products and services offered by DTIs, life companies and other funds managers — together with technological innovation which may allow real time, on-line transactions — provides a source of additional competition in the retail payments system.

Access by consumers to their transaction accounts through electronic means is commonly subject to daily caps or limits on the dollar amount which can be withdrawn. These measures reflect risk control and fraud prevention measures put in place by financial institutions to limit the credit and other exposures arising from deferred settlement of consumer electronic transactions. The value of payment instruments in the consumer electronic system and bulk electronic system constitute less than 2 per cent of total value exchanged daily. Taken together, these factors have led the Inquiry to the view that liberalising access to final settlement of consumer and bulk electronic payments, subject to appropriate operational and prudential

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<sup>40</sup> APCA 1996.



guidelines, would not pose unacceptable risks to the system. Such guidelines could include capital, liquidity and collateral requirements as well as inspection programs to verify operational capability. Multilateral netting of payments may also assist in management of liquidity risk. For non-deposit taking institutions, structural separation of the payments entity from other aspects of the business would also be required. Access would only be available for participants who could demonstrate the need to settle extensive third-party business.

Given the pace of technological innovation and the likelihood of new entrants, a cost benefit analysis is warranted on using some modified form of real-time settlement systems for consumer electronic and bulk electronic payments.

### **High-value Payments**

As currently envisaged, RTGS will apply to securities and foreign exchange transactions and certain cash transfers. This will mean that some large interbank institutional payments will continue to have deferred settlement.

As noted earlier, the bulk of transactions in financial markets in Australia are dominated by institutions which are licensed in Australia as banks or foreign bank branches, or are Australian affiliates of foreign owned banking groups regulated on a consolidated basis to the international standard for banks. Consequently, their risk management systems and risk profiles are subject to prudential oversight and clearing and settlement systems to which they are exposed are subject to risk reduction programs.

Given the intensity of the risks in the high-value area, the regulatory arrangements should include the following features:

- participants in high-value settlement should be intensely regulated;
- to ensure regulation is effective and problems can be resolved promptly, the RBA and APRC should cooperate closely in the conduct of regulation of these participants; and
- to retain the integrity of the system, the high-value stream should be limited to those entities conducting extensive settlements business on behalf of third parties.

***Recommendation 73: Access to ESAs should be liberalised subject to appropriate conditions.***

The RBA should continue to determine the right to hold an ESA on the basis of clear and open guidelines determined by the PSB. There should be no presumption that banks and SSPs would be the only holders of settlement accounts.

***Recommendation 74: High-value payments settlement providers should be regulated to the international standard for banks.***

When the RTGS system becomes operational, application for high-value settlement facilities at the RBA should be limited to financial institutions with an appropriate business case and extensive settlement business for high-value transactions on behalf of non-associated third parties.

Given the importance of high-value payments systems to the efficiency and stability of the financial system, participants offering settlement services in the high-value payments system should be prudentially regulated to the intensity of the international standard for banks.

Successful applicants should be subject to appropriate prudential (eg capital, liquidity, collateral, separation) and operational requirements to ensure the stability and integrity of the high-value payments system.

***Recommendation 75: Non-deposit takers should be able to settle directly consumer electronic and bulk electronic payments.***

To be eligible for an ESA, non-deposit taking participants in the consumer electronic and bulk electronic systems should demonstrate that extensive business is undertaken on behalf of non-associated third parties. They should also meet appropriate prudential (eg capital, liquidity, collateral, separation) and operational requirements.

***Recommendation 76: RTGS system benchmarks should be established.***

The introduction of the RTGS system will decrease settlement and systemic risk if all high-value payments are required to be settled on a real-time basis. For these reasons, all large financial cross-institutional payments should be settled with RTGS as soon as possible. In addition, a cost-benefit analysis should be undertaken for introducing to other payments, such as the bulk electronic and consumer electronic systems, some form of real-time settlement.

***Recommendation 77: The PSB should issue payments system approvals.***

The PSB should provide and regulate two types of approval in the payments system. For payments clearing and final settlement, a clearing and settlement approval would be provided to all DTIs with a banking authorisation and would be available to other institutions or entities subject to their meeting appropriate prudential guidelines. A clearing approval would be available to other institutions involved in the clearing of payments instruments but not involved in final payments settlement.

Disputes over technical standards in clearing should be referred to the PSB for arbitration and determination.

***Recommendation 78: The PSB and the APRC should establish close coordination arrangements.***

Where entry requirements of the PSB specify that payments providers should meet prudential standards, the requirement should be administered by the APRC although consideration could also be given to collateral arrangements with the RBA in appropriate circumstances. The consultative arrangements to be developed between the RBA and the APRC should

provide an appropriate forum to address a number of operational issues, including reporting arrangements between the RBA and APRC.

### **Concluding Comments on Potential for Additional Competition**

Increased competition in the payments system is possible without jeopardising systemic stability. The framework recommended by the Inquiry would require any institution seeking access to the payments system to meet appropriate prudential and technical standards. In the case of high-value settlement, where failure to settle carries most risk for systemic stability, participants would be regulated to the same international standard as banks.

Open architectures will be critical for effective competition. Substantial cost savings in the payments system should be achievable through giving the PSB a clear mandate to improve payments system efficiency.

Table 9.6 provides a summary of existing arrangements in the payments system and the implications of the Inquiry's recommendations.

Table 9.6: Existing and Proposed Changes to Payments System

	Now	Proposed
Issuers of non-cash payments instruments.	<p>Only banks are allowed to issue cheques.</p> <p>Institutions other than banks, building societies and credit unions can accept funds and offer cheques through agency agreements.</p> <p>No statutory prohibition on which type of institutions can issue non-cash payments instruments other than cheques.</p> <p>Institutions can offer transaction facilities in conjunction with a bank eg cash management trusts with linkages to DTI accounts.</p> <p>Credit and charge cards subject to credit laws, the <i>Corporations Law</i> and usually EFT Code but no restriction on which institution can issue instrument.</p> <p>AMEX and Thomas Cook issue traveller's cheques subject to fair trading but no prudential requirements.</p>	<p>Banks, building societies, credit unions and their SSPs should be able to issue cheques in their own name.</p> <p>Agency arrangements should continue allowing seamless provision of cheque facilities on deposits or deposit-like instruments.</p> <p>No change.</p> <p>No change.</p> <p>No change.</p> <p> Holders of the store of value for payments instruments intended for widespread use should be regulated.</p> <p> Holders not regulated by the APRC, should hold collateral against unsettled claims or meet other requirements determined by the PSB taking into account factors such as regulatory arrangements offshore and the issuer's ownership and capital or other backing. The PSB should facilitate the interoperability of open systems.</p>

Table 9.6: Existing and Proposed Changes to Payments System (continued)

	Now	Proposed
<p>Clearing. (The process of delivery and exchange of payments instruments.)</p>	<p>Only institutions which provide final settlement services able to participate as direct clearers in each of the clearing streams.</p> <p>Cross-institutional clearing organised by APCA for all clearing streams (cheques, direct credit/debit entry, consumer electronic and high value). APCA sets and administers rules.</p> <ul style="list-style-type: none"> <li>➤ Technical standards de facto set by four major banks. No appeal opportunities.</li> <li>➤ Because rules of clearing streams could be deemed to be anti-competitive, they are authorised by ACCC.</li> </ul> <p>International credit cards and Bankcard cleared outside APCA arrangements.</p> <p>Charge cards and closed credit card systems such as AMEX, Diners and GE Capital cleared under own arrangements.</p> <p>Australia Post's money orders issued and cleared internally.</p>	<p>Institutions should be allowed to have a payments clearing licence even if they are not providers of final settlement. Prudential requirements for clearers differ from the requirements for entities involved in clearing and settlement.</p> <p>Cross-institutional clearing continues under auspices of APCA but any institution licensed by PSB should gain membership rights to APCA.</p> <ul style="list-style-type: none"> <li>➤ Technical standards should be set by APCA, PSB arbitrating in case of disputes.</li> <li>➤ Rules of clearing streams should remain subject to the provisions of the Trade Practices Act.</li> </ul> <p>No change.</p> <p>No change. New open stored value systems may require new clearing arrangements depending on the identity of issuers.</p> <p>No change.</p>

Table 9.6: Existing and Proposed Changes to Payments System (continued)

	Now	Proposed
<p>Access to Exchange Settlement Accounts at RBA.</p> <p>(Under the Banking Act, banks must hold ESAs. These accounts provide a means of final exchange of value.)</p>	<p>Banks and SSPs only</p>	<p>Open access subject to:</p> <ul style="list-style-type: none"> <li>➤ applicants conducting extensive settlement business on behalf of third parties; and</li> <li>➤ meeting appropriate prudential requirements.</li> </ul> <p>Requirements and access may differ depending on type of payment activity.</p> <ul style="list-style-type: none"> <li>➤ <b>High-value settlements:</b> only institutions supervised to the international standard for banks allowed to participate.</li> <li>➤ <b>Cheques and other paper settlements:</b> only DTIs or their SSPs able to participate.</li> <li>➤ <b>Other payments settlement:</b> prudential requirements commensurate with the settlement risk are likely to be appropriate. These may include capital, collateral, liquidity and separation requirements to ensure the integrity and efficiency of the system.</li> </ul> <p>Operational requirements would apply in all cases.</p>