

# Safety and Stability

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

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

## **Standards for Central Counterparties and Securities Settlement Systems**

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

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

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

Each standard requires that:

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

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

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

## **Compliance with Financial Stability Standards**

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

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

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

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

## **Split of the National Guarantee Fund**

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

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

# Box 1: Standard for Central Counterparties

## The Standard

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

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

## Measures

### 1. Legal framework

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

### 2. Participation requirements

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

### 3. Understanding risks

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

### 4. Novation

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

### 5. Settlement

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

### 6. Default arrangements

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

### 7. Risk controls

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

### 8. Governance

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

### 9. Operational risks

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

### 10. Reporting to the Bank

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

## Box 2: Standard for Securities Settlement Facilities

### The Standard

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

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

### Measures

#### 1. Legal framework

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

#### 2. Participation requirements

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

#### 3. Understanding risks

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

#### 4. Certainty of title

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

#### 5. Settlement

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

#### 6. External administration

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

#### 7. Operational risks

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

#### 8. Reporting to the Bank

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

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

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

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

## **Other developments**

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

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

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

## **International Developments – CPSS/IOSCO Draft Recommendations for Central Counterparties**

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

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

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

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

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

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

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

## Failure-to-settle Arrangements

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

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

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

able to reverse provisional credits made to customers' accounts for cheques written against the defaulting institution.

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

- (i) the multilateral settlement calculations will be recast to exclude all transactions with the 'failed' institution;
- (ii) the net settlement obligations of the 'survivors' will be processed as normal and the RTGS payments day would begin, without the participation of the 'failed' institution;
- (iii) cheques drawn on the failed institution will be 'deemed dishonoured'; and
- (iv) each surviving institution will deal with the 'failed' institution to settle its resulting bilateral net obligations.

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

## **Agency Arrangements in RTGS**

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

## **CLS Bank**

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

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

## Resilience

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