Oversight of Clearing and Settlement Facilities

The *Corporations Act 2001* assigns to the Reserve Bank a number of powers and functions relating to the oversight of clearing and settlement (CS) facilities. Under the *Reserve Bank Act 1959* it is the responsibility of the Payments System Board to ensure that these are exercised in a way that 'will best contribute to the overall stability of the financial system'.

Under the Corporations Act, CS facilities licensed to operate in Australia are required to comply with the Financial Stability Standards (FSS) set by the Reserve Bank.[18] Four licensed CS facilities, all owned by the Australian Securities Exchange (ASX), are currently required to meet the FSS[19]:

- ASX Clear – the central counterparty (CCP) for cash equities, pooled investment products, warrants, certain interest rate products and equity- and commodity-related derivatives traded on the ASX market;
- ASX Clear (Futures) – the CCP for derivatives traded on the ASX 24 market;
- ASX Settlement – the settlement facility for cash equities and warrants traded on the ASX market; and
- Austraclear – the settlement facility for debt securities traded in over-the-counter (OTC) markets.

While assessment is ongoing throughout the year, the Board conducts a formal assessment of each facility's compliance with the FSS once a year. The assessments covering the 2009/10 financial year were published in October 2010.

Developments in the Licensed Clearing and Settlement Facilities

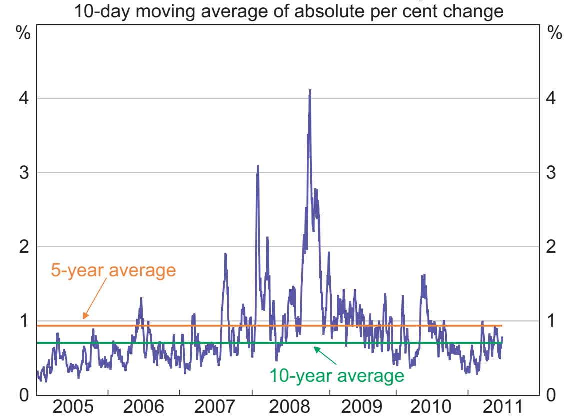
The backdrop for the operation of clearing and settlement facilities in 2010/11 was one of reduced volatility overall in market prices, despite some pick-up around the time of the Japanese earthquake and tsunami and as European sovereign debt concerns came into sharper focus in May 2011. Trading activity has varied from market to market, but reductions in the value of securities traded have resulted in reduced activity in the two ASX settlement systems, while increased derivatives trading has tended to be offset by reduced volatility in determining the overall level of risk faced by the CCPs. These differences across markets have been reflected in margins held.

The average volatility in equities prices, as measured by the absolute daily percentage change in the S&P ASX All Ordinaries index, declined from 0.8 per cent in 2009/10 to 0.6 per cent in 2010/11 (Graph 19). While volatility picked up briefly in March following the earthquake and tsunami in Japan, peak volatility over the year remained well below that of 2009/10 and less than a quarter of that observed in 2008/09.

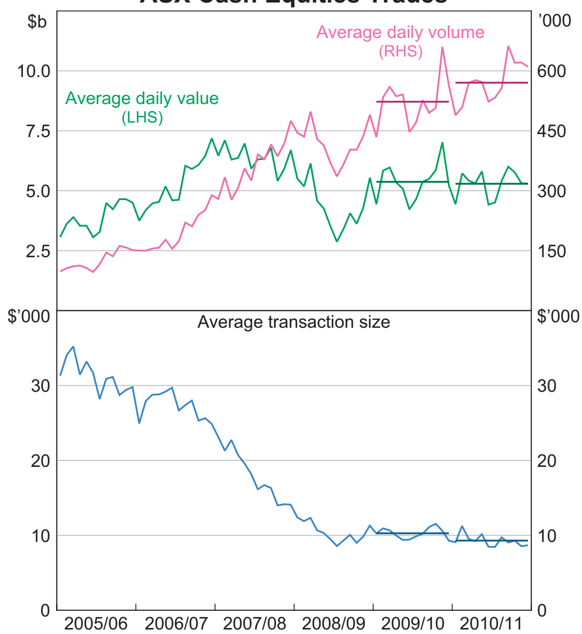
18 These standards, along with minimum measures relevant to meeting the standards and guidance regarding their interpretation, are available at <http://www.rba.gov.au/payments-system/clearing-settlement/standards/index.html>.

19 An additional licensed facility, operated by IMB Limited, falls outside the scope of the Financial Stability Standard for Securities Settlement Facilities due to its small size and the limited nature of its operations.

Graph 19
All Ordinaries Volatility
10-day moving average of absolute per cent change



Graph 20
ASX Cash Equities Trades



Source: ASX

The average daily value of cash equities trades fell by 1 per cent in 2010/11, but daily volumes increased by 9 per cent, reflecting a 10 per cent decline in the average size of a trade (Graph 20). Notwithstanding this fall, the average trade size has been relatively stable since the end of 2008 after falling substantially in earlier years, driven by growth in algorithmic trading and a trend among traders to break up large orders for gradual release into the market. The value of securities transactions settled by ASX Settlement decreased by 4 per cent, to an average daily value of $8.1 billion. This was larger than the 1 per cent fall in traded values, because transactions settled include settlement of non-market transactions and account for multilateral netting of clearing participants' obligations.

The average daily number of equities derivatives contracts traded on the ASX market increased by 7 per cent.[20] Despite this, the average daily total margin (initial and mark-to-market) collected on these positions by ASX Clear decreased by 22 per cent (top panel of Graph 21), reflecting the lower volatility in equities prices. Notional initial margins calculated by ASX Clear for the cash equities market also declined.[21]

The average daily number of derivatives contracts traded on the ASX 24 market grew by 29 per cent, mostly reflecting increased trading of interest rate futures. Despite the strong growth in trading activity, the average daily initial margin collected by ASX Clear (Futures) on these positions increased by merely 3 per cent (bottom panel of Graph 21). The relatively small increase in margins resulted from generally lower margin rates on the most commonly traded interest rate futures contracts, a reflection, once again, of lower volatility in the prices of those contracts.

20 In May 2011, the standard equity option contract size was changed from 1 000 shares to 100 shares. The calculation of the 7 per cent growth figure involves an adjusted measure of trading volume in 2010/11 that assumes that there was no change in contract size. See <http://www.asxgroup.com.au/media/PDFs/ma110706ASX_Group_Monthly_Activity_Report_-_June_2011_-_final.pdf>.

21 Notional initial margins are calculated by ASX Clear for risk management purposes, but are not assessed on participants.

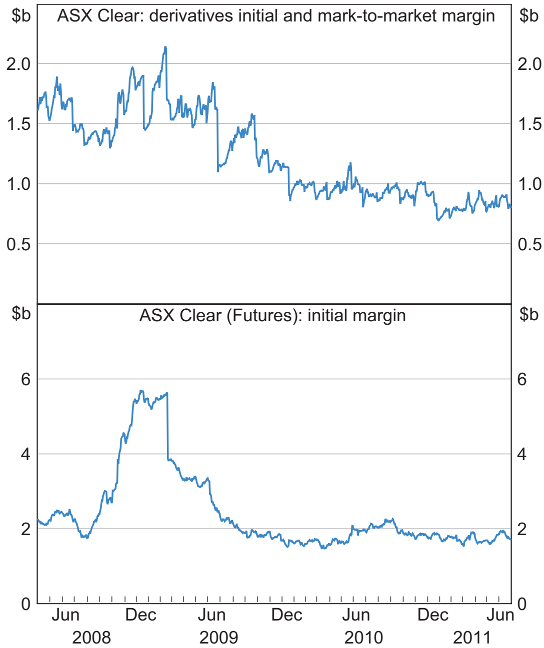
For debt securities, the average daily value settled through Austraclear decreased by 5 per cent to $39.5 billion. This value includes outright purchases and sales of securities, and securities transferred to effect repurchase agreements.

2009/10 Assessment

In October 2010, the Reserve Bank published its Assessment of the four licensed CS facilities against the relevant FSS, covering the year to end June 2010.[22] The Reserve Bank concluded that all four facilities met the relevant standards over this period.

The assessment period was characterised by a strong increase in equities and derivatives transactions alongside relatively low price volatility. The decline in the volatility of prices from the previous year resulted in generally lower exposures for the CCPs; nevertheless, the facilities continued to improve their risk and operating frameworks. All of the CS facilities had adequate capacity to handle the increased market activity without any difficulty.

Graph 21
Margins



Source: ASX

As in previous years, the 2009/10 Assessment included a more detailed evaluation of the facilities against one of the measures of the standards – in this case, the measure related to governance. The Reserve Bank concluded that ASX's governance arrangements around the management of financial risk are effective, accountable and transparent, consistent with the measure.

Other developments examined included:

- *Changes to the composition of pooled risk resources:* In the 2008/09 assessment period, ASX Clear replaced its default insurance arrangement with a commercial bank loan, following a ratings downgrade of the insurer it had been using. In late 2009, ASX Clear (Futures) also exited its default insurance arrangement; both CCPs now utilise a paid-up loan from ASX Clearing Corporation that is ultimately funded by a commercial bank.
- *Triggers for an increase in fixed risk resources:* ASX documented guidance on the circumstances in which it would consider increasing the CCPs' fixed risk resources (e.g. via a capital injection from ASX, additional default fund contributions from clearing participants and/or funds from a third party, such as debt). Higher fixed resources reduce reliance on additional collateral calls, which may be received only with a delay.
- *Improvements to default management arrangements:* During the assessment period ASX conducted default management 'fire drills' at both CCPs. The outcomes of these tests were used to refine the default management procedures and associated information flows. ASX also formalised arrangements with the broker it would use to conduct any necessary market transactions to close out a defaulting participant's positions (i.e. entering into offsetting positions on the exchange).[23]

22 The 2010 Assessment is available at <http://www.rba.gov.au/payments-system/clearing-settlement/pdf/report-2009-2010.pdf>.

23 Should this not be possible, ASX has a number of other means by which it can manage the exposures arising from a defaulting participant's positions.

- *Improvements to the equities settlement model:* ASX Settlement has now removed ASX Clear derivatives margins from the CHESS settlement batch, which ensures that ASX Clear's risk management arrangements are not dependent on successful completion of the settlement batch. ASX Settlement is also in the process of establishing an earlier deadline to back out settlement obligations in the event that a participant fails to meet its payment obligations. Setting an earlier deadline will reduce the potential for settlement delay and thus reduce the uncertainty that may affect the market at large in the event that a participant fails to meet its obligations.
- *Refinements to ASX Clear's risk framework:* ASX Clear replaced its uniform stress-test exposure limits with limits based on ASX's own credit ratings of participants. This allows ASX Clear to better manage its exposures according to the risk profile of different participants.

Progress has been made in several other areas, with work still under way:

- *Routine margining of cash equities:* In the 2008/09 Assessment, the Reserve Bank advised that introducing cash equity margining at ASX Clear would bring its risk management in line with international best practice. In October 2009, ASX released a consultation paper seeking views on proposed equity margining models and, with regard to industry feedback, continues to refine its proposed margining system.
- *Derivatives margining systems:* ASX has been working on upgrading both CCPs' derivatives margining systems to the Chicago Mercantile Exchange's Standard Portfolio Analysis of Risk methodology (CME SPAN). This will improve risk attribution and facilitate harmonisation across the two CCPs' systems.
- *Participant monitoring:* A number of enhancements have been or are in the process of being made to the arrangements for monitoring the liquidity and capital of ASX Clear and ASX Clear (Futures) participants.
- *Business continuity management policy:* ASX updated its business continuity management policy, to bring a number of areas into line with international best practice. Notably, ASX is working towards ensuring redundancy of all key systems at the backup and the main sites.

In addition, the prospect of competition in the trade execution industry has prompted ASX to establish a Trade Acceptance Service (TAS), to allow approved market operators access to ASX Clear and ASX Settlement's clearing and settlement systems.[24] ASX makes the TAS available under a published set of contractual terms of service, and each market operator is required to periodically certify that it complied with its requirements in the previous quarter. It is the Reserve Bank's opinion that the TAS does not affect the compliance of ASX's CS facilities with the FSS.

Prospective Changes to the Australian Clearing and Settlement Landscape

In Australia, as around the world, the competitive and regulatory environments in which CS facilities operate are likely to change significantly in the next few years. New market operators and CS facilities are entering the Australian market, the regulatory regime under which such financial market infrastructures operate is under review, and consideration is being given to regulation that will require the central clearing of OTC derivatives.

New financial market infrastructure

Chi-X Australia (Chi-X), which plans to offer an alternative platform for trading in ASX-listed equities, was granted a market licence by the Minister for Financial Services and Superannuation on 4 May 2011, following the finalisation by the Australian Securities and Investments Commission (ASIC) of the regulatory framework for competition

24 Details of ASX's TAS are available at <http://www.asx.net.au/clearing/trade-acceptance-service.htm>.

between markets trading equities.[25] Upon launching, Chi-X's trades will be cleared and settled by ASX Clear and ASX Settlement respectively under ASX's TAS.

A new derivatives exchange, the Financial and Energy Exchange (FEX), has also applied for a market licence. FEX plans to offer trading in commodity, energy and environmental derivatives, and has contracted LCH. Clearnet Limited (LCH) to provide clearing and settlement. LCH is a London-based CCP that clears equities and derivatives for a number of exchange-traded and OTC markets overseas. It is regulated and supervised by the UK's Financial Services Authority (FSA).

Before it may clear and settle trades for the FEX market, however, LCH must be licensed to operate in Australia. LCH has chosen to apply for a licence under the alternative criteria in the Corporations Act, whereby overseas-based CS facilities may be licensed in Australia if they are operating under a regulatory regime sufficiently equivalent to the Australian regime.[26] If LCH is granted a licence under these alternative licensing criteria, it will be exempt from the Reserve Bank's FSS for such time as the Reserve Bank receives from the FSA annual documentary evidence that LCH complies with the FSA's regulations. The effect of this is that the Reserve Bank's annual assessment of CS facilities would not necessarily assess in detail LCH against each of the measures of the FSS (as it does for the ASX CS facilities). However, the annual assessment must still contain an assessment of whether LCH has done all other things necessary to reduce systemic risk (as required of all CS facilities by the Corporations Act). The Reserve Bank will rely largely upon information provided by the FSA and will seek to assess LCH on an equivalent basis to domestic facilities undertaking equivalent activities.

Review of the regulatory framework for financial market infrastructures

In early April 2011, the Treasurer asked the Council of Financial Regulators (the Council) to provide advice on measures that could be introduced to ensure that Australia's regulatory framework for financial market infrastructures continues to protect Australia's interests. A working group, chaired by Treasury, comprising representatives of the Australian Prudential Regulation Authority (APRA), ASIC and the Reserve Bank has been established to consider the adequacy of oversight, powers of direction and crisis-management arrangements for market operators and clearing and settlement facilities. The Council working group anticipates issuing a consultation paper seeking stakeholder views in the spring of 2011.

Central clearing of OTC derivatives

The Reserve Bank, on behalf of the Council, issued the discussion paper *Central Clearing of OTC Derivatives in Australia* in June 2011.[27] The paper describes the evolving global landscape for OTC derivatives and central clearing, as well as the Australian market for OTC derivatives, and presents a range of considerations that need to be weighed if central clearing in the domestic market is to be established. This work is required in part because of the substantial reforms in this area under way in many offshore jurisdictions. Along with these international developments, the interests of the Australian agencies also reflect a commitment by the G-20 group of countries (of which Australia is a member) to undertake significant reforms to strengthen OTC derivatives markets. In particular, these countries committed to see all standardised OTC derivatives transactions centrally cleared by the end of 2012.

25 The market integrity rules for Competition in Exchange Markets and for the Chi-X Australia Market are available at <http://www.asic.gov.au/asic/ASIC.NSF/byHeadline/Market%20integrity%20rules>.

26 While 'sufficient equivalence' is not defined in the Corporations Act, the Reserve Bank has nominated the aspects of a foreign regulatory regime that it considers in making an assessment of equivalence. These are available at <http://www.rba.gov.au/payments-system/clearing-settlement/standards/overseas-equivalence.html>.

27 Available at <http://www.rba.gov.au/publications/consultations/201106-otc-derivatives/pdf/201106-otc-derivatives.pdf>.

Ahead of making recommendations to the Government on this matter, the Council is seeking feedback on the views and propositions set out in the paper. Written submissions were sought from interested parties in July and August, and the Council agencies will be hosting a number of roundtable discussions (and other meetings as appropriate) over the remainder of 2011.

CPSS–IOSCO Review of Standards

Since February 2010 the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) have been reviewing their existing published standards for payments, clearing and settlement systems:

- *Core Principles for Systemically Important Payment Systems (CPSS, 2001)*;
- *Recommendations for Securities Settlement Systems (CPSS and IOSCO, 2001)*; and
- *Recommendations for Central Counterparties (CPSS and IOSCO, 2004)*.

These standards set out principles for the design and operation of each type of system, with the aim of promoting stability and efficiency. They form the basis for oversight of these systems in many countries, including Australia. They also underpin elements of the Financial Sector Assessment Program of the International Monetary Fund and the World Bank.

The CPSS–IOSCO review aims to strengthen standards for financial market infrastructures in light of developments since the standards were originally introduced. These developments include the global financial crisis, increased competition between financial market infrastructures and increased regulation of OTC derivatives. The review also seeks to take advantage of regulators' experience in applying the existing standards.

As a member of the CPSS, the Reserve Bank has been involved in the review. The Head of the Reserve Bank's Payments Policy Department is a member of the steering group undertaking the review, and the Department also continues to contribute to specific work streams.

In March 2011, the CPSS and IOSCO released for public consultation *Principles for financial market infrastructures*,[28] a single set of standards for all financial market infrastructures that is intended to replace the three existing sets. The CPSS and IOSCO are reviewing the comments received during consultation, and aim to release a final set of principles in early 2012. Following the finalisation of the principles, the Reserve Bank will assess whether any changes are needed to the FSS.

28 Available at <http://www.bis.org/publ/cpss94.htm>.