

Oversight of Clearing and Settlement Facilities

The *Corporations Act 2001* assigns to the Reserve Bank a number of powers and functions related 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 (FSSs) set by the Reserve Bank.³⁵ Four licensed CS facilities, all owned by the ASX Group, are currently required to meet the FSSs.³⁶

- ASX Clear Pty Limited (ASX Clear), which provides central counterparty (CCP) services for a range of financial products traded on the ASX market, including cash equities and equity options.
- ASX Clear (Futures) Pty Limited (ASX Clear (Futures)), which provides CCP services for derivatives traded on the ASX 24 market, including futures and options on interest rate, equities, energy and commodity products.
- ASX Settlement Pty Limited (ASX Settlement), which provides for the settlement of equities and other deliverable products traded on the ASX market.
- Austraclear Limited (Austraclear), which offers securities settlement services for trades in debt securities.

While oversight is ongoing throughout the year, the Board conducts a formal assessment of each facility's compliance with the FSSs once a year. The assessments covering the 2010/11 financial year were published in October 2011.

Developments in the Licensed Clearing and Settlement Facilities

In 2011/12, markets cleared and settled by ASX facilities exhibited periods of increased price volatility. Trends in daily average trading value varied, falling for cash equities while increasing slightly for debt securities settled by Austraclear. The level of risk faced by the ASX CCPs, as indicated by margin held, increased in 2011/12, although peak levels remained well below those of 2008. The ASX CCPs also handled their first ever default of an active clearing participant when the subsidiaries of MF Global Holdings Limited (MF Global) went into administration in November 2011. The ASX CCPs were well collateralised against MF Global exposures at all times, and these exposures were able to be closed out within two weeks.

The average volatility in equity prices, as measured by the average of absolute daily percentage changes in the S&P ASX All Ordinaries Index, increased from 0.6 per cent in 2010/11 to 0.9 per cent in 2011/12

³⁵ These FSSs, along with minimum measures relevant to meeting the FSSs and guidance regarding their interpretation, are available at <<http://www.rba.gov.au/payments-system/clearing-settlement/standards/index.html>>.

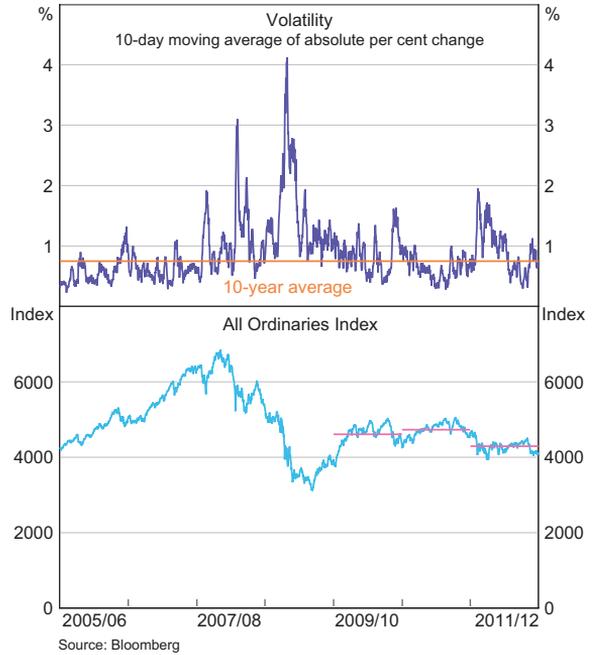
³⁶ An additional licensed facility, operated by IMB Limited, falls outside the scope of the Financial Stability Standard for Securities Settlement Facilities due to its small size and the limited nature of its operations.

(Graph 21, top panel). Although volatility increased significantly in August 2011, as a result of global market factors such as the legislative gridlock over the US debt ceiling and continuing European sovereign debt concerns, its peak at this time was around half that observed in 2008. Volatility returned to around the 10-year average in early 2012, before increasing again as markets reacted to renewed concerns over events in Europe.

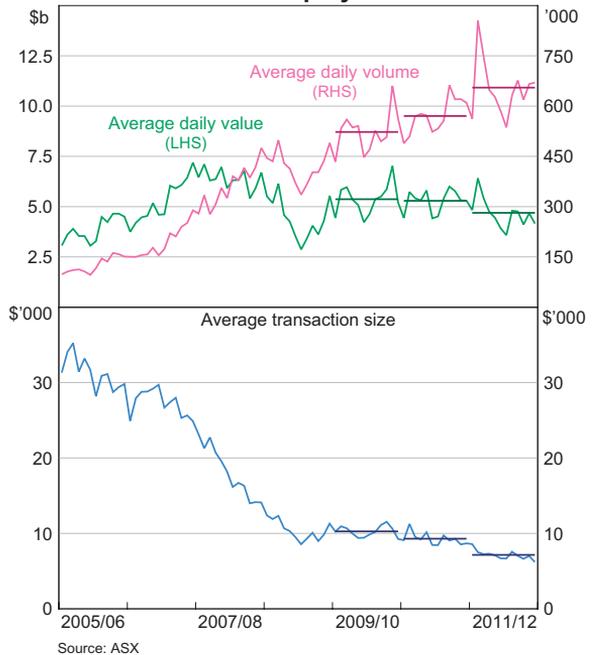
Trends in the growth of the number and value of cash-equity trades continued to diverge over 2011/12. The daily average number of these trades increased by 15 per cent in 2011/12, while the daily average value fell by 11 per cent (Graph 22). The average daily value of securities transactions settled by ASX Settlement decreased by 10 per cent in 2011/12, to \$7.3 billion; some difference between traded values and settlement values is to be expected owing to settlement of non-market transactions and multilateral netting of participants' obligations. The average size of trades declined by 23 per cent; in part this reflects falls in equity prices, with the All Ordinaries down 9 per cent on a financial year average basis (Graph 21, bottom panel). Other factors in the decline in the average size of trades since 2005 are the growth in algorithmic trading and the increasingly common practice of breaking up large orders for gradual release into the market.

The average daily number of equity derivatives contracts traded on the ASX market increased by 19 per cent in 2011/12.³⁷ This increase in volume, as well as increases in margin rates in the second half of 2011 as market volatility picked up, contributed to a lift in the average daily total margin (initial and variation) collected on these positions by ASX Clear – up 6 per cent in 2011/12 (Graph 23, top panel). By contrast, notional initial margins calculated by ASX Clear for the cash-equity market decreased by 30 per cent in 2011/12, reflecting a number of factors including lower share prices and smaller net end-of-day positions (on which margin is calculated).³⁸

Graph 21
All Ordinaries



Graph 22
ASX Cash-equity Trades



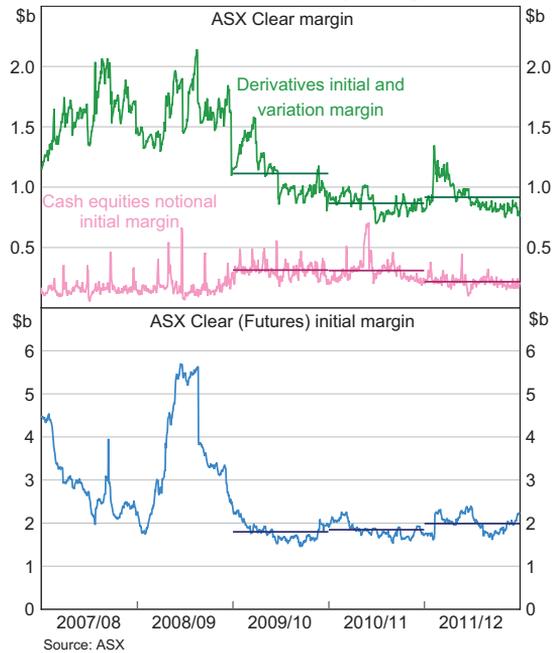
37 In May 2011, the standard equity-derivative contract size was changed from 1 000 shares to 100 shares. To calculate a consistent measure of equity derivatives growth, the data have been adjusted to reflect trading volumes based on the earlier contract size.

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

The daily average number of derivatives contracts traded on the ASX 24 market grew by 6 per cent in 2011/12. Although there were decreases in the daily average for many of the less heavily traded contracts, this was more than offset by significant increases for several major contracts, most notably the 10-year Treasury bond futures (up 13 per cent), ASX SPI 200 index futures (up 12 per cent), and 3-year Treasury bond futures (up 9 per cent). The overall rise in average number of contracts traded, as well as increases in margin rates in late 2011, contributed to an increase in average daily initial margin collected by ASX Clear (Futures) of 8 per cent (Graph 23, bottom panel), although the total initial margin held remained significantly below the levels at the height of the global financial crisis in 2008/09. Margin rates for derivatives traded on ASX 24 were lowered in early 2012, but generally remained at or above the levels of 2010/11 for the remainder of 2011/12.

In 2011/12, the average daily value of debt securities settled through Austraclear increased slightly, by around 1 per cent, to \$40 billion, which includes outright purchases and sales of securities, and securities transferred to effect repurchase agreements (other than intraday repurchase agreements with the Reserve Bank).

Graph 23
Central Counterparty Margins



2010/11 Assessment

In October 2011, the Reserve Bank published its Assessment of the four licensed CS facilities against the relevant FSSs, covering the year to end June 2011.³⁹ The Bank concluded that all four facilities met the relevant standards over this period.

The 2010/11 Assessment included a detailed evaluation of the CCPs' default management arrangements. The Reserve Bank concluded that the ASX CCPs have developed comprehensive and legally robust rules and procedures to deal with the default of a clearing participant. These rules and procedures satisfy the requirements of the relevant measure of the FSS for CCPs.

Other developments examined included:

- *Improvements to participant-monitoring arrangements.* ASX made a number of changes to its arrangements for monitoring the capital and liquidity of ASX Clear and ASX Clear (Futures) participants. This included a new system for the lodgement of participants' monthly financial reports. ASX also conducted spot checks on participants' business continuity arrangements.
- *System changes to implement intraday margin calls on equity derivatives positions.* From September 2010, enhancements to systems have enabled ASX Clear to make intraday margin calls that reflect changes in participants' positions.

³⁹ The 2010/11 Assessment of Clearing and Settlement Facilities in Australia is available at <<http://www.rba.gov.au/payments-system/clearing-settlement/compliance-reports/2010-2011/index.html>>.

- *Refinement of the treatment of promissory resources.* ASX Clear (Futures) has recognised that promissory resources may not be available on a sufficiently timely basis, if called upon in the manner contemplated by the ASX Clear (Futures) rules. So while they provide some level of additional comfort, ASX has agreed not to include those resources as default resources when determining stress-testing limits for participants.
- *Improvements to the liquidity requirements of ASX's treasury investment policy.* ASX has modified its liquidity stress tests to be better aligned with worst-case default scenarios, increased the robustness of the threshold it uses to assess whether it holds sufficient liquid assets to meet ordinary requirements, and changed its definition of liquid assets so that it is more focused on market liquidity than investment maturity.
- *Publication of standards and pricing options for the Trade Acceptance Service (TAS).* In June 2011, ASX published final legal terms together with operational and technical standards and pricing options for the TAS, ahead of Chi-X Australia Pty Ltd (Chi-X) commencing operations on 31 October 2011.⁴⁰

The 2010/11 Assessment also highlighted important ongoing work in several other areas, much of which was subsequently completed in 2011/12:

- *Business continuity planning.* In early 2012, ASX completed the migration of all key systems to its new operations centre, which is now its primary site for IT infrastructure. ASX's Bridge Street office in Sydney remains its primary site for staff and ASX has retained its original backup site. Each core system is replicated at both sites on multiple servers with spare capacity, delivering a high level of system redundancy. Additionally, should one level of redundancy be lost, ASX policy is to activate an additional tier of redundancy arrangements within 24 hours to meet the contingency of any further service interruption. ASX is able to fail over to its clearing and settlement backup systems within one hour in most circumstances. Operational staff are now located at both sites during business hours to support rapid recovery in the event of a disruption.
- *Derivatives margining.* ASX introduced the widely used CME SPAN margining system to ASX Clear (Futures) in early 2012, and also plans to introduce the system for derivatives cleared by ASX Clear in late 2012. This is expected to facilitate better calibration of exposures to ASX's risk tolerance, and places both CCPs' risk management for derivatives on a common platform.
- *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 into line with international best practice. This is a major project that has required considerable stakeholder consultation. ASX commenced calculating and reporting cash-equity margin requirements to participants in July 2012, and intends to start collecting margins before the end of June 2013.
- *An earlier deadline for the back out of settlement obligations in ASX Settlement.* In August 2012, ASX agreed an earlier deadline of 2.30 pm for Payment Providers (i.e. banks that settle funds obligations arising from batch settlement of cash equities) to authorise or reject payment obligations on behalf of settlement participants. The change was effective from 10 September 2012. In the event that the batch has to be recalculated, the earlier deadline accelerates this process, reducing the overall length of the settlement delay, and mitigating the uncertainty that could affect the market at large.
- *Participation requirements.* From 1 January 2012 the minimum 'core capital' requirement for ASX Clear participants that offer third-party clearing was increased from \$10 million to \$20 million. Subject to further review in late 2012, an increase in the minimum core capital requirement for all other participants, from \$5 million to \$10 million, is planned for January 2014.

⁴⁰ Details of ASX's TAS are available at <<http://www.asx.net.au/clearing/trade-acceptance-service.htm>>.