



ASIC

Australian Securities & Investments Commission

REPORT 289

Market assessment report: ASX Group

ASX Limited, ACN 008 624 691

Australian Securities Exchange Limited, ACN 000 943 377

ASX Clear Pty Limited, ACN 001 314 503

ASX Clear (Futures) Pty Limited, ACN 050 615 864

ASX Settlement Pty Limited, ACN 008 504 532

Austraclear Limited, ACN 002 060 773

July 2012

About this report

This report relates to the period from 1 July 2010 to 1 November 2011 (assessment period) and captures the market outage in ASX's equities trading platform, ASX Trade, that occurred on 27 October 2011.

About ASIC regulatory documents

In administering legislation ASIC issues the following types of regulatory documents.

Consultation papers: seek feedback from stakeholders on matters ASIC is considering, such as proposed relief or proposed regulatory guidance.

Regulatory guides: give guidance to regulated entities by:

- explaining when and how ASIC will exercise specific powers under legislation (primarily the Corporations Act)
- explaining how ASIC interprets the law
- describing the principles underlying ASIC's approach
- giving practical guidance (e.g. describing the steps of a process such as applying for a licence or giving practical examples of how regulated entities may decide to meet their obligations).

Information sheets: provide concise guidance on a specific process or compliance issue or an overview of detailed guidance.

Reports: describe ASIC compliance or relief activity or the results of a research project.

Recent ASX Group assessment reports

| Entities | Report number | Date released |
|----------------------------------|---------------|----------------|
| ASX, ASX Clear, ASX Settlement, | REP 265 | November 2011 |
| Australian Securities Exchange, | REP 222 | November 2010 |
| ASX Clear (Futures), Austraclear | REP 168 | September 2009 |

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A Summary of observations and conclusions

Key points

ASIC conducts annual assessments of market licensees and clearing and settlement licensees, such as those within the ASX Group, because it is required to do so under s794C(2) and 823C(2) of the Corporations Act, respectively.

The scope of our assessment must always include the obligations found in s792A(c) and 821A(c), which require the licensee to have adequate arrangements for operating the facility, including adequate arrangements for handling conflicts of interest and for monitoring and enforcing the operating rules. We can also include other Ch 7 obligations.

We use the licensee's self-assessment reports, information from our previous assessments, our observation of the licensee's performance, market intelligence and other things to form a view of how well the licensee has operated its market and clearing and settlement facilities.

Overall, our assessment concluded that ASX Group licensees met their statutory obligations in the assessment period and in respect of the other specific matters reviewed that are noted in paragraph 9. However, there are nine agreed actions that focus on aspects of ASX Group's activities. While important, these agreed actions do not detract from our overall conclusion.

The assessment

ASIC's obligations

- 1 Under s794C(2) of the *Corporations Act 2001* (Corporations Act), ASIC is required to assess how well a market licensee is complying with its obligations under s792A(c) at least once a year. We are also required, under s823C(2), to assess how well a clearing and settlement facility licensee is complying with its obligations under s821A(c) at least once a year.

Licensee's obligations

- 2 In line with our statutory obligations, we reviewed ASX Group's arrangements for the operation and supervision of its markets and clearing and settlement facilities under s792A(c) and 821A(c). This includes its arrangements for handling conflicts of interest and its arrangements for monitoring and enforcing compliance with the relevant facilities' operating rules.
- 3 Under s794C(1), we are permitted to extend the scope of our assessment to review how well a licensee is complying with any or all of its obligations under Ch 7 of the Corporations Act. In keeping with our standard practice, we extended the scope of our assessment to include a review of whether ASX Group had sufficient financial, technological and human resources to properly operate its facilities: see s792A(d) and 821A(d).

Assessment period

- 4 Our assessment covers the period from 1 July 2010 to 1 November 2011, and includes the market outage in ASX's equities trading platform, ASX Trade, that occurred on 27 October 2011.

Our approach to assessments

ASIC's strategic priorities

- 5 ASIC's current strategic framework focuses on three key priorities. These are to ensure:
- fair and efficient financial markets;
 - confident and informed investors and financial consumers; and
 - efficient registration and licensing.
- 6 The first two of these are particularly important for licensed markets and clearing and settlement facilities. For example, appropriate resourcing is fundamental to ensuring that markets operate in an efficient manner. The adequate management and transparency of matters such as conflict handling arrangements are important to the fairness of the market. Similarly, the effective monitoring and enforcement by a market operator of its continuous disclosure requirements is critical in ensuring that investors and consumers are confident and make informed decisions. For these reasons, we regard the assessment process as an important tool by which we continue to strive to meet our strategic outcomes.

Guiding principles

- 7 Our assessments are guided by certain principles that draw on the International Organization of Securities Commissions (IOSCO) Objectives and Principles of Securities Regulation. The principles we use to guide assessments are:
- admission standards for issuers and participants are robust and administered in a fair and transparent way;
 - post-admission standards are robust and effectively monitored and enforced in a fair and transparent manner;
 - operating rules promote transparency to market users of material price and trading information;
 - the deterrence of unfair trading practices is supported by robust arrangements for detection and prompt referral to ASIC of significant contraventions of the operating rules, the Corporations Act and ASIC market integrity rules;
 - conflicts of interest are adequately managed;

- systemic risk and market disruption are reduced through the proper management of large exposures and default risk; and
- sufficient resources (including technological resources) are deployed to operate the market and clearing and settlement facility in a proper and reliable manner.

Methodology

8 In conducting our assessment, we:

- held discussions with senior ASX Group personnel;
- reviewed internal ASX Group documentation obtained under notices issued under s30 of the *Australian Securities and Investments Commission Act 2001*;
- reviewed the annual regulatory report given to ASIC covering all ASX Group licensees, dated 30 September 2011, as required under s792F and 821E;
- considered information received from and about ASX Group licensees in the ordinary course of ASIC's dealings with them as market or clearing and settlement facility licensees;
- considered information from external sources, including media and industry commentary; and
- reviewed the operation of the market throughout the assessment period.

Focus areas for this assessment

9 For this assessment, in considering ASX Group's compliance with its statutory obligations, we paid particular attention to how ASX Group dealt with a number of specific issues outlined below:

- the sufficiency of ASX Group's technological resources, with particular reference to the ASX Trade outage on 27 October 2011 and technical issues experienced with the Austraclear system, also in October 2011;
- the operation of ASX Group's conflict handling arrangements, in particular the arrangements it has in place to manage entities with which it has a real or perceived conflict of interest, and any potential considerations arising from ASX Group's new Managing Director and Chief Executive Officer's (CEO) board membership of another ASX-listed company;
- ASX Group's framework for admitting participants to its markets and clearing and settlement facilities;
- the operation of ASX Group's enforcement and disciplinary process since the transfer of supervision of certain trading rules to ASIC on 1 August 2010 (transfer of market supervision);

- ASX Group's process for considering waivers;
- ASX Group's approach to monitoring compliance with its licence obligations; and
- the sufficiency of ASX Group's human and financial resources devoted to operating its facilities.

Changes to ASX Group following transfer of market supervision

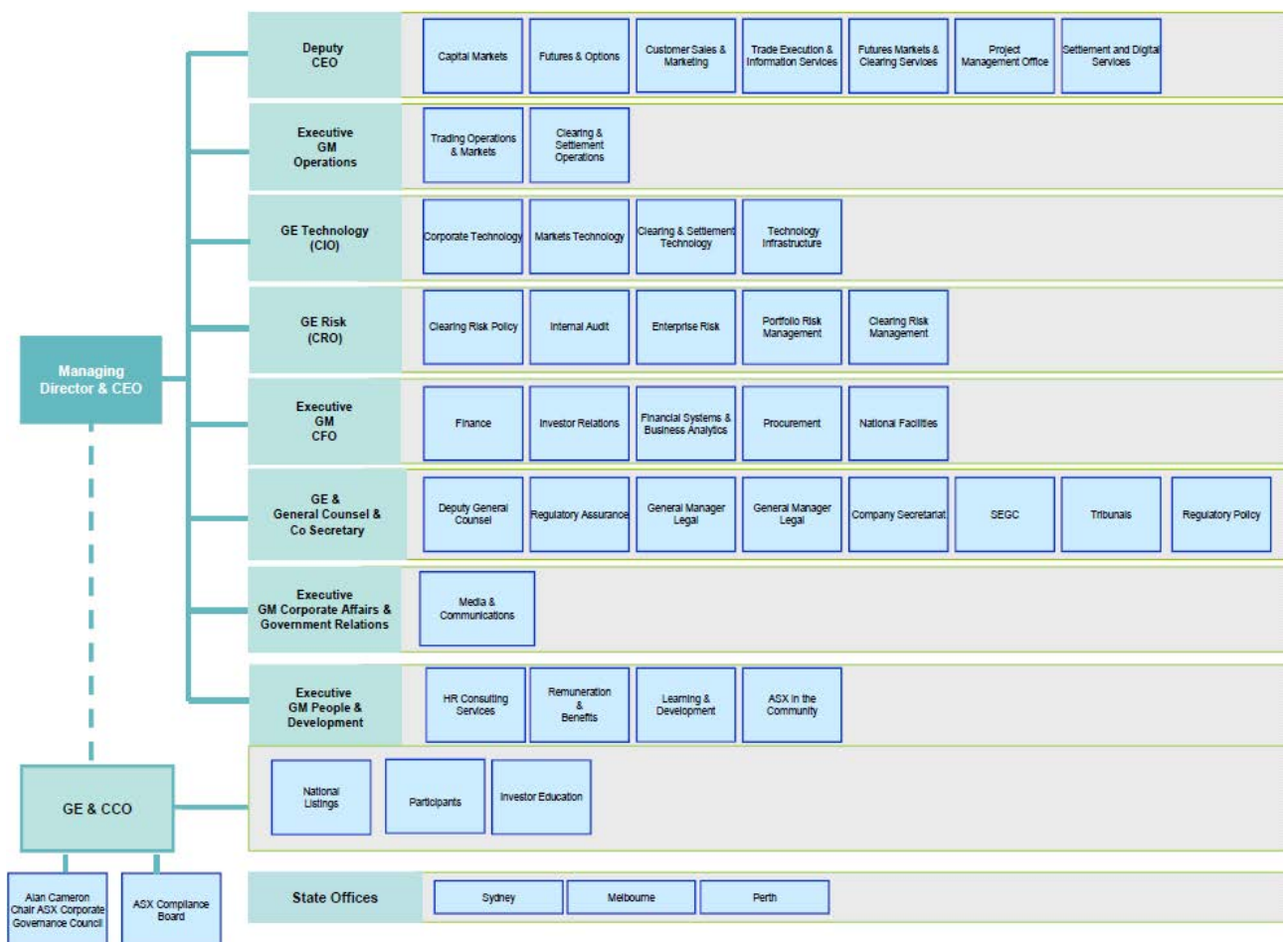
- 10 Our assessment also sought to review and understand more thoroughly the operational changes that ASX Group made following the transfer of market supervision. This was undertaken with the benefit of having ASX Group's annual regulatory report for the financial year ending 30 June 2011, which was the first regulatory report that covered the period after the transfer of market supervision.
- 11 Before the transfer of market supervision, the statutory obligations required ASX Group to be responsible for supervising and enforcing rules relating to market conduct and market integrity more broadly. This responsibility was performed by ASX Market Supervision, under agreements between it and the relevant ASX Group licence holders.
- 12 ASX Market Supervision was created on 1 July 2006 with the stated aims of improving the transparency and accountability of ASX Group's supervisory operations, strengthening market integrity and addressing the perception of conflict between ASX Group's regulatory and commercial functions.¹ As such, during our day-to-day interactions with ASX Group on matters relating to market integrity, as well as during our annual assessments, we focused on the operations of ASX Market Supervision. At the same time, we routinely assessed a number of other ASX Group business units which sat outside ASX Market Supervision, but which also contributed to the fair, orderly and transparent operation of ASX Group's markets.
- 13 From the date of the transfer of market supervision, ASX Market Supervision changed its name to ASX Compliance.² Since the transfer of market supervision, the bulk of the market-integrity-type rules that resided in the ASX and ASX 24 market operating rules, and which were supervised and enforced by ASX Market Supervision (now called ASX Compliance), are now supervised by ASIC under the ASIC market integrity rules. While ASX Compliance continues to play an important role in ensuring ASX Group meets its statutory obligations, its importance in maintaining market integrity has diminished to the extent that it is no longer responsible for frontline supervision of those respective rules.

¹ See ASX Group's annual regulatory report, 2005–06.

² ASX Group thought that the name change was necessary to more properly describe the subsidiary's role within the ASX Group and its ongoing obligations.

- 14 The transfer of market supervision has not, however, changed the important role played by other ASX Group business units in ensuring fair and efficient markets and confident and informed investors and in ensuring that ASX Group meets its overarching regulatory obligation to operate markets in a fair, orderly and transparent manner. For example, information technology issues and outages, the prompt resolution of which is critical to the fair, orderly and transparent operation of the market, are the responsibility of the ASX Technology unit, clearing risk management and enterprise-wide risks are the responsibility of the ASX Risk unit, and operational issues for markets and clearing and settlement are the responsibility of the ASX Operations unit.
- 15 These business areas have been the subject of a higher degree of ASIC’s focus during recent assessments. Given the importance of issues such as technology, risk and operations to the integrity of markets and clearing and settlement facilities, this focus is likely to be even higher in the foreseeable period.
- 16 Figure 1 reflects the structure of the ASX Group as at 1 July 2012 and the roles played by the range of business units in supporting markets that are fair, orderly and transparent.

Figure 1: ASX Group’s structure effective from 1 July 2012



Source: ASX Group

Nature of licence obligations

- 17 A licensee's obligations are ongoing and whether it is likely to comply with these obligations in the future cannot be judged merely by reference to its past compliance.
- 18 We therefore use the assessment process to:
- reach conclusions about the adequacy of the arrangements a licensee has in place in accordance with its obligations under s792A(c) and 821A(c) at the time of the assessment; and
 - identify issues, which in our view need, or may need, to be addressed to ensure ongoing compliance.
- 19 Before the transfer of market supervision, s792A(c) required a market licensee (such as ASX and Australian Securities Exchange) to have adequate arrangements for 'supervising' its market. This included arrangements for handling conflicts of interest, monitoring the conduct of market participants, and enforcing compliance with the market's operating rules.
- 20 Since the transfer of market supervision, responsibility for frontline supervision of certain ASX and ASX 24 market rules was transferred to ASIC. As a result, ASIC now supervises ASX and ASX 24 market participants' compliance with the ASIC Market Integrity Rules (ASX Market) 2010 and ASIC Market Integrity Rules (ASX 24 Market) 2010. These market integrity rules are based on the rules previously contained in the ASX and ASX 24 market operating rules that predominantly dealt with matters such as participant conduct and participant-client relations.
- 21 From 1 August 2010, s792A(c) was amended in recognition of these new arrangements. From this date, a market licensee (such as ASX or Australian Securities Exchange) is required to have adequate arrangements for 'operating' (rather than 'supervising') its market. This still includes the requirement that a market licensee must have adequate arrangements for monitoring and enforcing compliance with its remaining operating rules, and still includes the requirement to handle conflicts of interest.
- 22 More broadly, a market licensee continues to have:
- the overarching obligation to do all things necessary to ensure that its market operates, to the extent reasonably practicable to do so, in a manner that is fair, orderly and transparent; and
 - the same responsibilities in the critical area of its listing functions and in respect of its frontline supervision of compliance with the listing rules.
- 23 Relevant obligations in respect of clearing and settlement facilities also remain unchanged.

24 In this assessment report (which covers the period from 1 July 2010 to 1 November 2011), where we refer to ASX Group's compliance with its statutory obligations for matters that have occurred since 1 August 2010, we do so, noting that from that date:

- ASX Group no longer has frontline responsibility for monitoring and enforcing certain market rules that were transferred to ASIC as ASIC Market Integrity Rules (ASX Market) 2010 and ASIC Market Integrity Rules (ASX 24 Market) 2010;
- amendments to the wording of s792A(c) were made to recognise this new arrangement; and
- ASX Group's other obligations remain materially unchanged.

Adequate arrangements

25 In assessing how well a licensee is complying with its statutory obligations to have adequate arrangements in place to operate its clearing and settlement facilities and supervise (before 1 August 2010) or operate (from 1 August 2010) its markets, we consider whether a licensee has adequate arrangements to monitor and enforce its operating rules, and to handle conflicts of interest.

Arrangements for monitoring and enforcing operating rules

26 In determining whether a licensee is complying with its obligations to monitor and enforce its operating rules, we consider how the licensee:

- deals with listed entities and monitors disclosure to detect potential or actual non-compliance with the law or the market's operating rules;
- monitors trading and participant activity in respect of its operating rules to detect potential or actual non-compliance with the law or the market's operating rules;
- plans and documents procedures for ensuring frequent and comprehensive assessment of its ongoing compliance with its obligations, and ongoing compliance by listed entities and market participants with their obligations;
- deals with actual or suspected breaches of the law or the operating rules, including remedial, disciplinary and other deterrent measures;
- deals with complaints about the market or market participants; and
- shares information with ASIC and (where appropriate) operators of other markets and clearing and settlement facilities.

Arrangements for handling conflicts of interest

27 In assessing the adequacy of a market licensee's arrangements for managing conflicts of interest, it is relevant that the regulatory regime does not preclude the existence of conflicts. ASX Group must, however, manage any conflicts it does have so as not to allow its commercial interests to prevail over its obligation to operate a market that is fair, orderly and transparent.

- 28 Conflicts of interest may arise in any area where a market licensee makes decisions with respect to monitoring and enforcing its operating rules. For example, conflicts of interest may arise in connection with decisions about:
- admission of a person to the market as either a participant or a listed entity;
 - monitoring of a listed entity or market participant;
 - investigative or disciplinary action;
 - the exercise of discretions, such as granting waivers from the market's operating rules;
 - the determination of the fees schedule of a financial market, including any trading incentive programs and/or relevant shareholder rebates; or
 - participation in clearing and settlement facilities operated by the market licensee or a related entity.
- 29 In assessing a market licensee's arrangements for handling conflicts of interest, we consider a range of matters, including:
- whether, under current arrangements, actual or potential conflicts of interest are reliably anticipated, identified and appropriately responded to;
 - whether there is a sufficient level of disclosure to the market about the nature and existence of any actual or perceived conflict and the steps taken to adequately manage it; and
 - whether the licensee's organisational and reporting structures separate its commercial activities from its monitoring activities to a significant degree.
- 30 For example, a suitable organisational and reporting structure is one where employees who are responsible for assessing the market licensee's compliance with its monitoring obligations report to a person who is not responsible for making commercial decisions.

Sufficient resources

- 31 In assessing how well a licensee is complying with its obligation, under s792A(d) or 821A(d), to have sufficient resources to properly operate the facility, we consider:
- how the licensee makes available and uses resources for supporting its arrangements for operating the facility, taking into consideration:
 - the financial, technological and human resources made available compared with previous assessment periods; and
 - a general expectation that resourcing should increase in step with the licensees' operations and that any reduction is appropriate only where changed circumstances or specific efficiencies can be clearly demonstrated;

- the licensee's information technology system 'uptime' and instances of market disruption; and
- our own experiences and observations, as well as those of market users, that there can be confidence that the market will operate in a reliable manner.

Assessment findings

- 32 ASIC is satisfied that, in terms of the standards set out in the Corporations Act, during the period of 1 July 2010 to 1 November 2011 (assessment period), and in respect of the other specific matters reviewed that are noted in paragraph 9 of this report:
- the operators of the ASX and ASX 24 markets had adequate arrangements in place for meeting their statutory obligations under s792A(c), and the provision of those services was sufficiently resourced under s792A(d); and
 - ASX Clear, ASX Settlement, ASX Clear (Futures) and Austraclear had adequate arrangements in place for meeting their statutory obligations under s821A(c), and the provision of those services was sufficiently resourced under s821A(d).

Agreed actions

- 33 ASX Group has agreed to take action in nine areas. While these agreed actions are important, they do not cause us to qualify our overall conclusion that ASX Group licensees met their statutory obligations during the period of the review.
- 34 The agreed actions can be found in Section B of this report.

Market conditions

- 35 A discussion of the market conditions and various market events for the assessment period is contained in Section C of this report. Some key features of the market conditions and events for the 2010–11 financial year, and during the more recent period, were:
- The S&P/ASX 200 index continued its upward trajectory throughout the 2010–11 financial year, finishing 8.7% higher. Throughout the first half of the 2011–12 financial year, the S&P/ASX 200 index fell by 11.6% as global share markets reacted to a number of destabilising events including the lack of a definitive solution to the European debt crisis.
 - Volatility generally trended downward during the 2010–11 financial year. However, following a number of events such as the credit rating downgrade of the United States, measures of volatility still remain higher than at the start of the 2011–12 financial year.

Agreed actions from our previous assessment

- 36 In November 2011, we published our most recent assessment report of the ASX Group, which included nine agreed actions.
- 37 Our current assessment followed a more compressed timeline than has historically been the case. This was partly to enable a more prompt review of ASX Group's response to the market outage of 27 October 2011 and to ensure that active steps are being taken to focus on the issues associated with that market event.
- 38 Because this current assessment follows shortly after the previous one, a number of the ASX Group's agreed actions from our previous assessment are still a work in progress.
- 39 One area of improvement has been ASX Group's communication with the market on technology changes, which we think is important for the operation of a transparent market and one that is fair and efficient. These improvements have included more frequent updates to keep the market informed of schedules of upcoming technology releases.
- 40 Details on the status of ASX Group's agreed actions from the last assessment are set out in Section D.

Consultation

- 41 Our findings and agreed actions are set out in Section B of this report. ASX Group has had the opportunity to view and comment on the factual accuracy of this report. Where appropriate, this report reflects ASX Group's comments.

Ongoing areas of consideration

- 42 Our next assessment will commence towards the end of this calendar year. Ongoing areas of consideration which have not formed a focal part of this assessment include the following:

MF Global

- 43 On 1 November 2011, ASIC issued a media release noting that companies in the MF Global group had been placed into administration. We also noted that this affected a number of MF Global group companies in Australia and that insolvency firm Deloitte had been appointed as administrator for these companies.³ Subsequently, on 2 March 2012, creditors resolved to wind up the MF Global group of companies.

³ ASIC Advisory (11-237) *MF Global* (1 November 2011) at www.asic.gov.au

- 44 Also, in a notice to its members on 1 November 2011, ASX Group advised that it had decided to suspend the agricultural markets for grain and wool, 'given the significant percentage of open interest held by MF Global, in order to maintain a fair, orderly and transparent market'. The market was closed for a period before reopening.
- 45 The timing of these events means that the subsequent activity undertaken by ASX Group falls outside the period of this assessment report. Any observations in respect of this process will, if appropriate, be the subject of our next assessment. More broadly, ASIC is monitoring the matter closely, speaking regularly to the liquidators, obtaining updates, reviewing remuneration and cost claims, and monitoring the liquidators' various court applications.

Trading fees and incentives

- 46 We have recently discussed with ASX Group and other market operators issues relating to the transparency of trading fees and incentives to users of the relevant market and/or clearing and settlement facilities.
- 47 We consider that the fees schedule of a financial market, including any trading incentive programs, should be transparent to the market. This is consistent with a market operator's general obligations, including ensuring that the market is fair, orderly and transparent. Transparency will promote 'fair access' for participants and will enable users to understand how the market operates.
- 48 On a like basis, we consider that trading rebates or other trading incentives attached to the rights of shareholders of a financial market operator (or its related entities) should also be transparent to the market where those incentives are similar in effect to fee-based trading incentives. This position is also consistent with a market operator's general obligations (including ensuring that the market is fair, orderly and transparent, as well as managing conflicts of interest). The level of disclosure of such arrangements would depend on the particular circumstances.
- 49 Our position is in line with the regulatory approach to the transparency of trading fees and incentives of equity financial markets in the United States, Canada and the United Kingdom. We note the approach in these markets continues to evolve as trading fee incentives continue to change.
- 50 We will continue to keep the subject area of trading fees and incentives under review. We note that this subject area is a current proposed mandate for IOSCO's Standing Committee on Regulation of Secondary Markets. This reflects the fact that this is an evolving area of interest to regulators globally.

B Agreed actions

Key points

We have considered the adequacy of ASX Group's arrangements and resources for the operation and supervision (as relevant) of its markets and clearing and settlement facilities.

Our view is that the ASX Group licensees complied with their statutory obligations as they existed at the time of the assessment period—however, there are nine areas where ASX Group has agreed that further action is warranted. These agreed actions relate to ASX Group's:

- technological resources (Agreed Actions 1 and 2);
- obligations to ensure that it has adequate arrangements for managing conflicts between its commercial interests and the need for it to ensure that its market operates in a fair, orderly and transparent manner (Agreed Actions 3 and 4); and
- obligations to monitor and enforce compliance with its operating rules (Agreed Actions 5 to 9).

While these agreed actions are important, they do not cause us to qualify our overall conclusion that ASX Group licensees met their statutory obligations during the assessment period.

Nature of agreed actions

- 51 Our agreed actions can be broken down into three categories:
- *technology*—the obligation for ASX Group licensees to have sufficient resources, including technological resources, to properly operate their markets and clearing and settlement facilities;
 - *conflict handling*—ASX Group's ongoing obligation to ensure that it has adequate arrangements for managing conflicts between its commercial interests and its statutory obligations; and
 - *monitoring and enforcing compliance*—ASX Group's obligation to have adequate arrangements for monitoring and enforcing compliance with its operating rules.

Technology

- 52 Technology is a fundamental driver for markets and, in the context of ASIC's strategic priorities, it is critical for the operation of efficient markets. For this reason, technology is a key focus of our assessment of licensees, where its importance is likely to be even more critical in the foreseeable period. For this assessment, we focused on the ASX Trade outage on 27 October 2011, and the issues experienced with the Austraclear system, also in October 2011.

Agreed Action 1: Technology enhancements

- 53 During the 2010–11 financial year, ASX Group’s systems availability exceeded its internal benchmarks, despite some issues with ASX Group’s trading platforms that were discussed in our previous assessment report (REP 265).
- 54 In the 2011–12 financial year, ASX Group’s system availability was hampered by a number of substantial outages, leading to it failing to meet its internal benchmarks for October 2011.
- 55 We reviewed the adequacy of ASX Group’s technological resources, paying particular attention to the ASX Trade outage on 27 October 2011 and the technical issues experienced with its Austraclear system since the release of an upgrade, also in October 2011.
- 56 ASX Group undertook a review of its technology arrangements following these events. As a result of its preliminary findings, which ASX Group shared with us in January 2012 and which we agree with, ASX Group is enhancing its arrangements in four key areas. These initiatives involve the deployment of additional resources by ASX Group in relation to:
- its arrangements for trading system support;
 - its testing framework;
 - a review of the legacy code within its systems; and
 - its emergency processes for dealing with what ASX Group terms as ‘catastrophic’ events.
- 57 Details of these initiatives are set out below. ASX Group agreed to provide ASIC with a detailed report by 31 May 2012, outlining its progress in implementing these enhancements.

Trading system support

- 58 The ASX Trade outage on 27 October 2011 was triggered by an upgrade implemented the weekend before the outage to reduce the latency of the internal network supporting the primary trading system.
- 59 As a result of some software issues, use of the ASX Trade and backup system was not initially possible. ASX Group subsequently halted all trading on ASX Trade for almost four hours, between 10.05 am and 2.00 pm.
- 60 ASX Group advised that it had never experienced these software issues before, so it contacted its trading system provider, NASDAQ OMX (NOMX), through NOMX’s overseas helpdesk for assistance. While contact with NOMX was initiated within 15 minutes of the incident occurring, it took over 45 minutes for a NOMX support person with a requisite

understanding of the trading system's underlying code and ASX Group's configuration to be brought in to assist.

- 61 Having appropriate support arrangements in place is critical to ensure prompt resolution of incidents in times of system malfunction.
- 62 ASX Group has advised that it is in discussions with its vendor, NOMX, about setting up an office in Sydney, which will have support staff that understand ASX Group's configuration and have a thorough understanding of the trading system's code. Under the proposal, ASX Group will have a direct line to these support staff, without having to go through NOMX's overseas helpdesk.

Testing framework

- 63 The addition of the ASX Trade outage on 27 October 2011 to the list of trading system incidents with ASX trading systems since late 2010 (discussed in our previous assessment report (REP 265)) raised concerns about the testing framework employed by ASX Group. It is critical that testing processes are appropriate for the new technologies that are being introduced.
- 64 ASX Group has reviewed the effectiveness of its testing strategies and will implement a number of changes. Firstly, it will share its test plans across all the business units performing the different aspects of testing. Secondly, ASX Group is considering creating a new staff position that will have responsibility for reviewing end to end test plans and acting in a quality assurance capacity across the entirety of ASX Group's systems testing.

Legacy code review

- 65 Along with its vendor, NOMX, ASX Group undertook intensive investigation in the days following the 27 October 2011 ASX Trade outage to determine the underlying cause and implement appropriate solutions. ASX Group identified and isolated the root cause of the outage as being related to a switch in a key component of the ASX network production infrastructure which was in use after the network upgrade the previous weekend. The problem could be reproduced in its production environment, but not its test environment, and had not arisen since the particular switch was rebooted.
- 66 This hardware issue interacted with a software issue (some legacy code that had not been updated since the system code was developed) to ultimately cause the outage.
- 67 We understand that there are other areas of legacy code within ASX Group's trading systems which should be analysed to ensure that they, too, cannot cause issues in the future.

68 ASX Group advises that, with its vendor NOMX, it has begun a complete review of its systems code, looking for areas that have not been changed since the code was developed. While we agree with this action, we also recommend that, for future releases of its trading platform, ASX Group should ensure that appropriate testing of its legacy code is carried out.

Emergency processes for catastrophic events

69 The ASX Trade outage on 27 October 2011 also occurred on an options expiry day. While ASX Group advised that the October exchange-traded option (ETO) expiry completed according to schedule, given the limited trading time that remained in the day, some market participants may have experienced execution stress in trying to close out client positions.

70 An important strategic objective for ASIC is for market operators to operate fair and efficient markets and, in situations such as those experienced on 27 October 2011, the limited trading time available to complete transactions on an ETO expiry date may undermine this objective.

71 ASX Group considered that it should review its emergency processes for what it terms as ‘catastrophic’ events (such as where ETO positions cannot be closed out on expiry dates) to ensure that there are contingencies to appropriately manage such events.

72 On 3 April 2012, ASX Group issued a consultation paper seeking responses from industry on the management of ETO expiries in the event of a market interruption on expiry day. Industry input is being sought as a result of the wide range of feedback it received during the ASX Trade outage that occurred on 27 October 2011. The consultation also compares international derivatives exchanges’ processes for managing these events.

Agreed Action 1: Technology enhancements

ASX Group agreed to provide ASIC with a detailed report by 31 May 2012, outlining its progress in implementing these enhancements with the aim of improving its arrangements.

ASX Group provided its report in accordance with this agreed action and in it confirmed that:

- new support arrangements from ASX’s trading system provider will commence in the third quarter of this calendar year;
- changes have been made to ASX Group’s testing arrangements, including the appointment of an Enterprise Quality Assurance Analyst in April 2012;
- ASX Group’s legacy code review is well advanced and any future changes to its legacy code will be tested as part of the new testing framework before going in to production; and

- feedback on its consultation about emergency processes for 'catastrophic events' has been received and will be considered in finalising its policy.

ASIC will continue to monitor ASX Group's progress.

Agreed Action 2: Regular use of backup trading infrastructure

- 73 As a result of certain software issues, use of the ASX Trade backup system was not initially possible following the ASX Trade market outage on 27 October 2011. While these software issues were subsequently resolved, they interacted with a hardware issue which ultimately caused the outage.
- 74 In response to the ASX Trade outage, ASX Group decided to defer its implementation schedule and transition date of ASX Trade to its new data centre at Gore Hill from November 2011 to February 2012.
- 75 In February 2012, ASX Trade and ASX Trade24 were successfully migrated and are now operating out of ASX Group's Gore Hill site (with backup provided at ASX Group's Bondi site) and have been doing so without incident.
- 76 As an additional measure, to potentially reduce the risk of a hardware issue, which was a contributing factor of the ASX Trade outage, we think there is merit in ASX Group utilising its backup facilities regularly for its normal trading activities to ensure it is able to offer an effective backup service when needed.
- 77 ASX Group has agreed to run a backup test environment and plans to implement this with minimal disruption to participants one weekend each quarter. ASX Group intends this program to align with the six-monthly upgrade schedule, which would therefore mean that half of the quarterly backup test environments would occur on the same weekend as the twice-yearly upgrade. ASX will test the backup site with a 'normal trading' environment and mandatory participant involvement. This will commence in the third quarter of this calendar year.
- 78 ASX Group will also consider further the implications of using its backup site for normal trading during the Christmas to New Year period and, to that end, has agreed to publicly consult by the end of September 2012 with participants and other stakeholders on the potential benefits and impacts of this proposal.

Agreed Action 2: Regular use of backup trading infrastructure

ASX Group has agreed that, for one weekend each quarter, commencing in the third quarter of this calendar year, it will run a backup test environment with a 'normal trading' environment and mandatory participant involvement. ASX Group has also agreed to publicly consult by the end of September 2012 with participants and other stakeholders on the potential benefits and

impacts of using its backup site for normal trading during the Christmas to New Year period.

Conflict handling

79 The second category of agreed actions relates to ASX Group's ongoing obligation to ensure that it has adequate arrangements for managing conflicts between its commercial interests and the need for it to ensure that its market operates in a fair, orderly and transparent manner,⁴ and its clearing and settlement services are fair and effective. Our focus was on reviewing how these arrangements operated in practice for entities with which ASX Group has an inherent conflict of interest (real or perceived). We also reviewed the processes ASX Group had in place to manage considerations in respect of ASX Group's new CEO, and his board membership of another ASX-listed company.

Agreed Action 3: Decisions on 'review parties'

80 The Corporations Act imposes an obligation on licensees (such as those within the ASX Group) to ensure that their commercial interests do not prevail over the requirement to ensure that their markets are fair, orderly and transparent, or that their clearing and settlement facilities are provided in a fair and effective way.

81 We reviewed how ASX Group's arrangements operated in practice during the assessment period. We also examined ASX Group's processes for managing any potential conflicts of interest arising from ASX Group's new CEO's board membership of another ASX-listed company, Tabcorp Holdings Limited (TAH).

82 To assess the operation of ASX Group's conflict handling arrangements during the assessment period, we reviewed ASX Group's procedures and practices and its decisions concerning what it terms as 'review parties'.

83 Review parties are:

- parties whose business is in direct competition with ASX Group's business in a material way;
- parties in whom ASX Group holds a substantial shareholding; or
- parties with whom ASX Group has commercial arrangements (such as MF Global).⁵

⁴ The Corporations Act also prescribes arrangements for dealing with possible conflicts of interest that may arise from ASX's securities being listed on its own market. These arrangements include ASIC making decisions and taking action under the listing rules in relation to ASX's listing, such as releasing company announcements and granting trading halts.

⁵ In February 2003, ASX disclosed to the market that 'ACI was contracted by ASX for the development of agricultural futures contracts, and that ACI principals include MF Global'. ASX Group determined that MF Global Australia Limited, MF Global Securities Australia Limited and MF Global UK Limited should be review parties for this reason.

- 84 As part of ASX Group's conflict handling arrangements, ASX Group assigns to its Regulatory Assurance unit the role of reviewing decisions made by ASX Group's business units to ensure that review parties are treated impartially. Following our review, we believe that greater visibility should be given to the market about how ASX Group identifies these review parties and, more generally, manages its conflicts of interest.
- 85 In response, ASX Group has agreed to a range of actions, including that it will establish a section on its public website that clearly sets out how it manages its actual or perceived conflicts of interest, which will provide greater visibility on:
- the types of conflict or potential conflict that ASX Group is required to manage and the names of the various review parties; and
 - the measures, framework and processes that ASX Group has put in place to manage its conflicts of interest.
- 86 Transparency of this type will support investor confidence in the fairness of the financial markets operated by ASX Group.
- 87 Also, while we found no evidence to suggest that review parties were not being treated impartially, there was, on occasion, insufficient detail for us to clearly determine how or why Regulatory Assurance had reached its conclusion on certain matters. ASX Regulatory Assurance has agreed to review its procedures and templates for making these decisions and will provide ASIC with a copy of the reviews on a quarterly basis.

Agreed Action 3: Decisions on 'review parties'

ASX Group has agreed to a range of actions, including that it will establish a section on its public website that clearly sets out how it manages its actual or perceived conflicts of interest, including the names of the various review parties, and the measures, framework and processes that ASX Group has put in place to manage its conflicts of interest. ASX Group has also agreed that ASX Regulatory Assurance will review its procedures and templates for making their decisions on review parties, and will provide ASIC with a copy of the reviews on a quarterly basis.

Agreed Action 4: CEO's arrangements

- 88 ASX Limited's board has agreed to ASX Group's CEO being appointed as a non-executive director of TAH. Previously, no other ASX Group CEO has held a dual role of this type, and ASX Limited's board charter needed to be amended to allow this.
- 89 ASX Group's framework for managing any potential conflicts of interest arising from ASX Group's CEO and his association with TAH are stipulated in various staff policies. These policies establish information barriers (i.e. no direct access between the CEO and ASX Compliance staff on the

supervision of listed entities) and physical barriers (i.e. the CEO has no access to ASX Compliance areas or computer systems).

- 90 For transparency and certainty, and also to support investor confidence, ASX Group has agreed that it is important that it discloses to the market the nature of these potential conflicts of interest and how they are being managed. This information will include a list of the arrangements ASX Group has in place to deal with this situation, and will be updated periodically on the ASX Group website. The board of ASX Limited and ASX Compliance will approve the ongoing adequacy of the arrangements ASX Group has in place.

Agreed Action 4: CEO's arrangements

ASX Group has agreed to make public the nature of the potential considerations arising from the CEO's position on the board of another ASX-listed entity and the arrangements it has in place to manage these considerations. This information will be updated periodically on the ASX Group website, and the board of ASX Limited and ASX Compliance will approve the ongoing adequacy of the arrangements ASX Group has in place.

Monitoring and enforcing compliance

- 91 The third category of agreed actions relates to ASX Group's obligation to have adequate arrangements in place for monitoring and enforcing compliance with its operating rules. Our focus was on reviewing ASX Group's processes for admission of participants, its enforcement and disciplinary process, and its process for considering rule waivers.

Agreed Action 5: Participant admission process

- 92 ASX Group considers applications for admission of various participant classes under its respective operating rules.
- 93 Corporate entities make application for approval as participants in order to access the respective trading platform for markets operated by ASX and Australian Securities Exchange, and/or to participate in the clearing and settlement facilities operated by ASX Clear, ASX Clear (Futures), ASX Settlement and Austraclear.
- 94 The assessment of applications for participant status and subsequent admission as a participant within the ASX Group can be a complex process, which at various stages requires the interaction of many ASX Group business units.
- 95 We assessed ASX Group's participant admission process by reviewing its policies, procedures and documentation for a number of applications across a range of ASX Group participant classes and rulebooks.

- 96 ASX Group's operating rules (and operating procedures) identify admission criteria that applicants must satisfy before ASX Group can grant admission status. We consider that, before approving an applicant's admission as a participant, ASX Group must have evidence that the applicant satisfies the requirements of the operating rules for admission and is in a position to commence operations immediately once admission is granted. ASIC considers that any conditions imposed for admission should generally not contain matters required to be met under the operating rules.
- 97 We identified that applicants who did not appear to provide appropriate evidence that all the requirements of the operating rules were satisfied before admission, and who did not appear to be in a position to commence operations immediately upon admission, were admitted by ASX Group as market participants of ASX or as trading participants of ASX 24. In these circumstances, ASX Group determined to formally grant the entity admission as a participant under the operating rules, but indicated to the participant that certain conditions still needed to be met before trading, clearing and/or settlement could commence.
- 98 For instance, we noted an example of where participant admission was granted as 'conditional admission', or subject to 'conditions precedent to admission and conditions subsequent to admission'. The participant's admission was conditional on the provision of additional documentation to demonstrate that it had the necessary systems and processes in place to perform the required reporting and calculations. While these conditions were met before trading, clearing and settlement operations commenced, we consider that a participant's ability to comply with the admission criteria, such as those that require sufficient organisational competencies and/or adequate facilities, should be demonstrated upon admission (as per the operating rules) and not when its operations commence, which can be some time after a participant is admitted.
- 99 In this particular example, a significant period of time elapsed between when the participant was admitted, on 1 August 2011, and when it commenced operations on 30 November 2011. In our view, this four-month delay also calls into question the currency of the information submitted as part of the participant's application.
- 100 ASX Group has agreed to review its process for admitting participants. One proposal for further consideration with ASIC is that, where a prospective participant is not in a position to meet the criteria set out in the ASX Group operating rules for admission, rather than being granted 'admission' on a conditional basis, applicants could instead be granted conditional 'approval'—the satisfaction of which, within a designated timeframe, would result in admission.

- 101 In this context it should be noted that, immediately upon ‘admission’, a participant is required to comply with the ASIC market integrity rules and ASX Group operating rules. Even where the participant does not, for instance, immediately commence operations as an ASX Group participant, it will still need to comply with obligations that can include capital reporting, client funds reconciliation reporting, the appointment of responsible executives and daily beneficial ownership reports.
- 102 The practice of granting admission on a ‘conditional’ basis may create contrary expectations for the entity in question. It may also create confusion for other market users, particularly where ASX Group market circulars do not make clear the basis on which the purported ‘admission’ is granted.
- 103 ASX Group has agreed to undertake a review of its processes for admission of participants, particularly in the context of the approach to granting admissions on a conditional basis. As part of this review, ASX Group has agreed to continue its ongoing discussions with ASIC on these issues.

Agreed Action 5: Participant admission process

ASX Group has agreed to commence a review of its arrangements for participant admission and implement improvements, which include:

- applying its pre-validation of applications more rigorously to determine whether the applicant is in a position to have its application considered. If the application is deficient, it should be returned for re-lodgement at a time the applicant is in a position to provide the required information;
- reviewing its procedures for accepting, assessing and approving an application to ensure that an applicant provides evidence that it has satisfied the requirements of the operating rules before admission being granted;
- determining the date on which a participant’s admission takes effect (rather than this being at the participant’s discretion), after being satisfied that the participant is in a position to commence trading, clearing and/or settlement operations immediately upon admission. This should then be communicated to the market, only after respective ASX business units have confirmed they have no objections to the admission and the commencement of operations;
- amending its management paper submitted to the relevant decision maker to incorporate significantly more information about an applicant’s proposed management structure, details of its proposed trading and/or clearing operations, the proposed access model and location of trading and clearing activities, and details of any outsourcing arrangements; and
- before admission taking effect, preparing documentation which records the relevant business unit sign-off that all matters have been finalised and the applicant is in a position to commence trading, clearing and/or settlement operations upon admission.

Agreed Action 6: Communication about participant admission

104 In the previous 12-month period, ASX Group's Operations unit disseminated over 1,400 bulletins and circulars to the market. Communication of this type is important for transparency to the participant, market users and ASIC. We reviewed a sample of ASX Group's participant application documentation, and noted certain instances of erroneous communication about participant admission between ASX Group and prospective participants, in ASX Group's communication to the market and in the provision of information to ASIC about participants.

Prospective participants

105 In certain instances, ASX Group made incorrect references to relevant operating rules, or the relevant ASX Group entity, or used terms that were not disclosed in the operating rules. We also noted instances where the documentation advising an applicant of approval and/or admission as a participant was not an accurate reflection of the approval granted by the decision maker.

Notices to market

106 We noted a number of erroneous notices that were issued to the market about market participant admission. For instance, three notices were issued with inconsistent terminology, incorrect names of the participant and different dates of admission. Two notices contained incorrect terminology and an incorrect participant identifier number (PID), and another two notices contained incorrect terminology and the PIDs were not identified.

Provision of information to ASIC

107 In accordance with Part 4.2 of ASIC Market Integrity Rules (ASX 24 Market) 2010, *Provision of information about market participants*, the market operator must maintain certain information about each market participant and advise ASIC in writing of any changes that are made to the information (including any changes resulting from the admission of new market participants) within two business days of the change being made.

108 In December 2011, we received a notification from ASX Group in accordance with Part 4.2 of the ASIC Market Integrity Rules (ASX 24 Market) 2010 about a participant. In this notification, the names of the trading participant and clearing participant and the date of admission were incorrect. In addition, the information wrongly advised that the participant was admitted as a clearing participant of Australian Securities Exchange.

Agreed Action 6: Communication about participant admission

ASX Group has agreed to review its practices and procedures to improve its communication arrangements, and has agreed to amend its procedures to ensure a more rigorous process is followed in its communication with participants, the market and ASIC.

Agreed Action 7: Risk ratings review

- 109 A central component of ASX Group's framework for monitoring and enforcing compliance with its operating rules are the scheduled and ad hoc risk-based thematic compliance reviews ('spot reviews') conducted by ASX Compliance's Participants unit.
- 110 To assist in prioritising the rules that potentially should be subject to rule compliance reviews or other compliance activities, the Participants unit conducted an analysis of each ASX Group Rulebook in 2010–11 to identify high-risk and medium-risk rules, and the controls that currently exist within the ASX Group to monitor and enforce compliance with those rules.
- 111 The risk rating (high, medium or low) assigned to each rule was assessed in terms of the potential impact of a breach of the rule to ASX itself, to the relevant ASX market or clearing and settlement facility, and to the breaching participant. Rules were also risk assessed in terms of the likelihood of non-compliance. Rules that have been determined as having a high or medium risk attached—and that do not have specific processes in place to monitor and enforce their compliance—are prioritised in the selection of potential topics for targeted compliance reviews.
- 112 In a number of instances, we did not understand why some rules were rated as low risk, and ASX Group has agreed to have further discussions with us about the appropriateness of some of these ratings.

Agreed Action 7: Risk ratings review

ASX Group has agreed to discuss with ASIC in the coming months the appropriateness of some of the risk weightings assigned to respective operating rules.

Agreed Action 8: Rule monitoring outcomes

- 113 Before the transfer of market supervision, significant breaches of the operating rules were referred to ASX Group's Disciplinary Tribunal for consideration. When breaches were found, fines were imposed and a disciplinary announcement issued providing details of the matter to the market.
- 114 Almost all matters that were previously considered by ASX Group's Disciplinary Tribunal concerned rules that were subsequently transferred to

ASIC following the transfer of market supervision. Even so, ASX Group has retained a number of operating rules that are important to the ongoing fairness and efficiency of the markets and clearing and settlement facilities it operates. Enforcement activity for rules of the type retained by ASX Group has traditionally included forms of action other than fines, such as management letters directed to the participant concerned. The ASX Group may also impose fines under its existing arrangements, and any decision of this type may be appealed to the Appeal Tribunal.

- 115 It is important that the marketplace continues to be aware of ASX Group's activity in the monitoring and enforcement of its operating rules. For this reason, ASX Group has agreed that, as part of its monthly market update, it will also disclose to the market the outcome of its enforcement activities each month (e.g. 'x' number of management letters issued and the rules to which those enforcement activities relate).

Agreed Action 8: Rule monitoring outcomes

ASX Group has agreed that, in its monthly ASX Compliance report which is released to the market, it will include statistics on monitoring and enforcement outcomes for that period.

Agreed Action 9: Waiver framework

- 116 Following a review of ASX Group's waiver framework, we had some issues with ASX Group's arrangements for monitoring complaints about waivers and its level of reporting on waivers to ASIC through its annual regulatory report.

Waiver complaints

- 117 According to its procedures, ASX Group's Regulatory Assurance unit reviews waivers to check whether any complaints are received about waivers granted. During our assessment, ASX Group encountered difficulties in providing information about complaints received about waivers due to system constraints and the inability to search the system other than by manual means. It is important that ASX Group is able to more efficiently monitor specific complaints about waivers—in particular, where shareholders' rights may have been affected.
- 118 ASX Group has agreed to pursue initiatives that will enable searches and reports on the waivers database to be conducted more efficiently, which would include the ability to search the system for complaints about waivers. This is intended for implementation in the 2012–13 financial year.

Waiver reporting

- 119 Since its annual regulatory report for the year ending 30 June 2010, ASX Group's reporting on waivers to ASIC has diminished. Before this reporting period, ASX Group provided a summary of its most common waivers and

discussed the basis for some of its decisions. Since its 30 June 2010 report, ASX Group has reported only on the number of waivers granted. ASX Group has agreed to include further information about waivers in subsequent reports to ASIC.

Agreed Action 9: Waiver framework

ASX Group has agreed to enhance its complaints system to more efficiently and effectively capture complaints made about waivers. ASX Group has advised that changes to its complaints system are in progress to facilitate this, for inspection by ASIC. ASX Group has also agreed to include more comprehensive information on waivers in its annual regulatory report.

C Market conditions

Key points

A discussion of the market conditions and various market events for the assessment period is contained below. Some key features of the market conditions included:

- Overall, the S&P/ASX 200 index (ASX 200) continued its upward trajectory throughout the 2010–11 financial year, finishing 8.7% higher. Over the first half of 2011–12, the ASX 200 fell by 11.6%.
- Volatility levels generally trended downward during the course of the 2010–11 financial year. The first quarter of 2011–12 saw a spike in volatility and measures of volatility remained higher in the following two quarters than at the start of 2011–12.

Market performance

- 120 Following the widespread downturn during the second half of 2008 and the beginning of 2009, the S&P/ASX 200 index (ASX 200) began to recover during the 2009–10 financial year to finish 11% higher (although from trough to year end, the market was up 38%): see Figure 2.
- 121 The ASX 200 continued to perform well throughout 2010–11, rising by 8.7% to finish the financial year at 4,608 points (after reaching a high of 4,971 points in early April 2011). The first half of the 2011–12 financial year saw widespread declines across global share markets and, as a result, the ASX 200 fell by 11.6% during the first seven months of 2011–12.
- 122 The start of the third quarter, however, saw the ASX 200 begin to recover some of its lost ground. After finishing 2011 at 4,056 points, the ASX 200 increased by 5.1% to reach 4,262 points on 31 January 2012. The improved performance followed on the back of some better than expected economic indicators from the United States, and a large-scale liquidity injection by the European Central Bank (in late December 2011) into the European banking system in order to limit the potential contagion effects that would arise in the event of an escalation in the sovereign debt crisis.

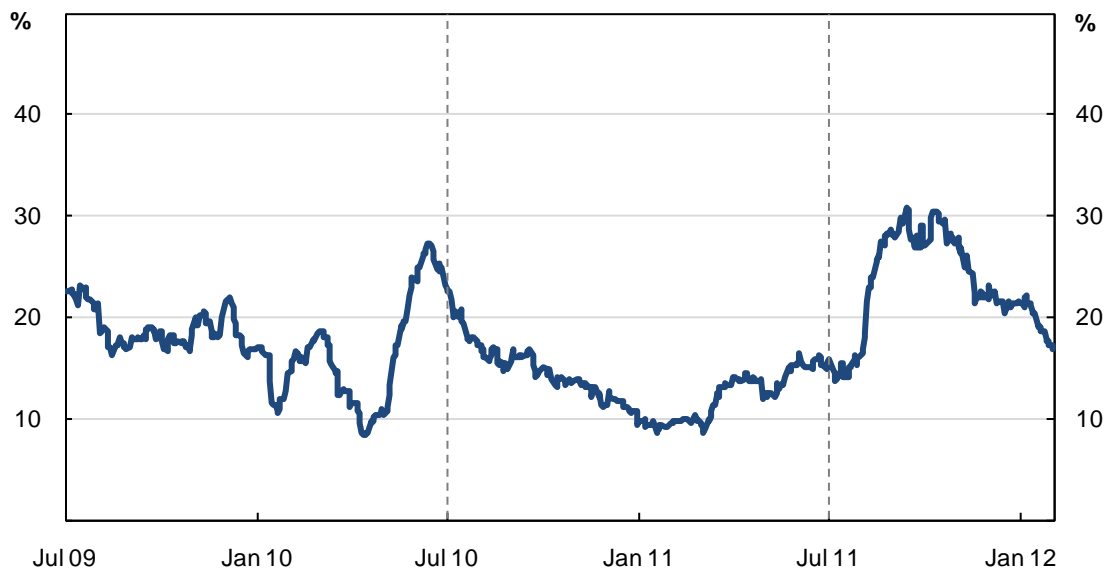
Figure 2: The S&P/ASX 200: July 2009–January 2012

Source: Bloomberg

Volatility of the market

- 123 The evolution of risk in the ASX 200 is depicted by the 30-day volatility indicator: see Figure 3.⁶ An increase in the volatility measure can be interpreted as an increase in the perceived riskiness of the overall stock market.
- 124 Volatility trended downwards during the first three quarters of the 2009–10 financial year before increasing dramatically during the fourth quarter on the back of concerns about the European sovereign debt crisis. Following this episode, volatility returned to more normal levels over the course of 2010–11, finishing the financial year 7% lower at 15.9%.
- 125 After remaining relatively stable throughout 2010–11, volatility spiked again in the first quarter of 2011–12 in response to concerns about whether or not the US Congress would reach a resolution on raising the debt ceiling, and the subsequent downgrading of the US sovereign credit rating by Standard & Poor's. Measures of volatility continued to fall throughout the third quarter of 2011–12, but remained above the levels recorded at the start of the financial year.

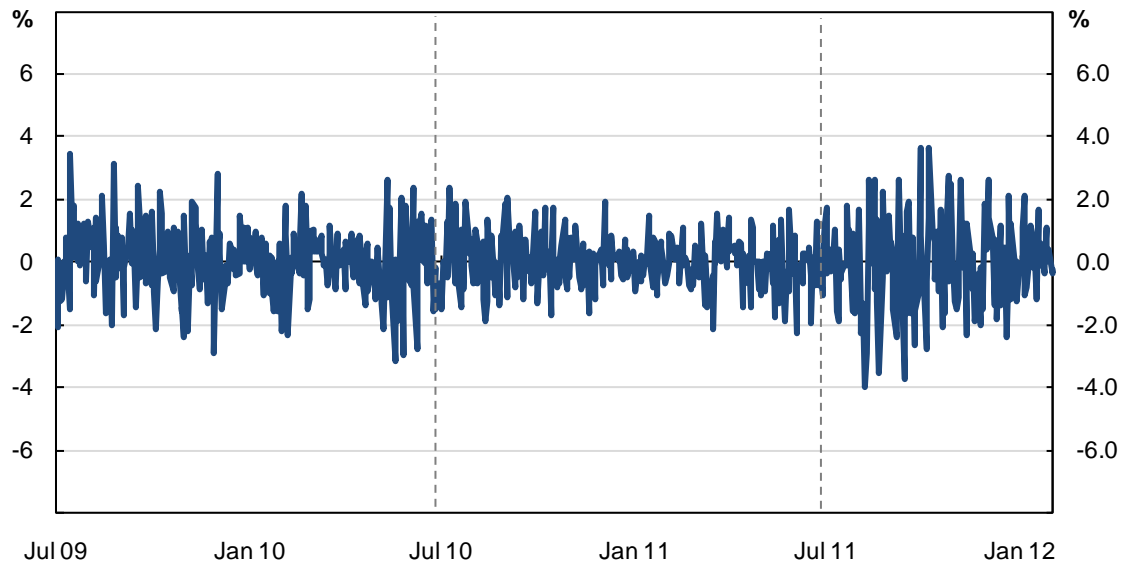
⁶ The indicator measures the standard deviation of changes in the closing price of the index for the 30 most recent trading days. The measure is then expressed as an annualised percentage.

Figure 3: S&P/ASX 200 30-day volatility: July 2009–January 2012

Source: Bloomberg

Daily growth rates

- 126 The daily movement of the ASX 200 index over the 2009–10 and 2010–11 financial years are shown in Figure 4.
- 127 Daily growth rates remained relatively stable during the course of the 2009–10 and 2010–11 financial years (although still volatile from a historical perspective), with changes in the index generally fluctuating between $\pm 2\%$ throughout 2010–11. Daily price movements became more volatile during the first half of 2011–12, reflecting rising tensions surrounding the US debt ceiling debate and subsequent downgrade of the US sovereign credit rating, as well as mounting concerns over a Greek sovereign debt default and the contagion effects for the European economy. Price movements stabilised during the third quarter of 2011–12 (to within the $\pm 2\%$ band), following the implementation of the European Central Bank's emergency loan program at the end of December 2011.

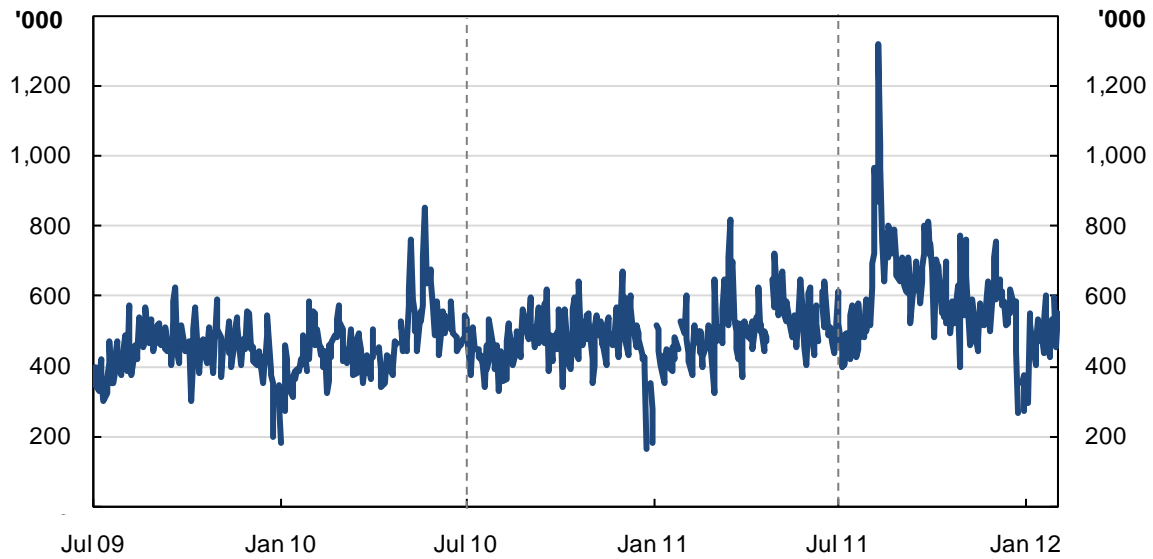
Figure 4: Daily changes in the closing price of the S&P/ASX200: July 2009–January 2012

Source: Bloomberg

Market activity

- 128 Following an increase during the 2009–10 financial year, the daily number of executed trades in ASX 200 companies continued to grow during 2010–11, with the average daily number of executed trades increasing to 491,241 (up from 459,768 in 2009–10): see Figure 5.
- 129 The average daily number of executed trades rose dramatically through the first half of the 2011–12 financial year (with a daily average of 591,940 up until 31 January 2012). The sustained increase in the number of executed trades over the past few years has been driven by the increasing adoption of automated trading techniques.
- 130 However, it should be noted that the substantial increase in the average for the first half of the 2011–12 financial year was also influenced by the events on 9 August 2011, when the number of executed trades increased to 1.32 million as markets reacted to the news of the downgrade of the US sovereign credit rating by Standard & Poor's. The number of trades executed on 9 August 2011 was almost twice as high as the number of daily trades executed at the peak of the crisis surrounding the collapse of Lehman Brothers in September 2008, and nearly three times as high as the average daily number of executed trades in the 2010–11 financial year.

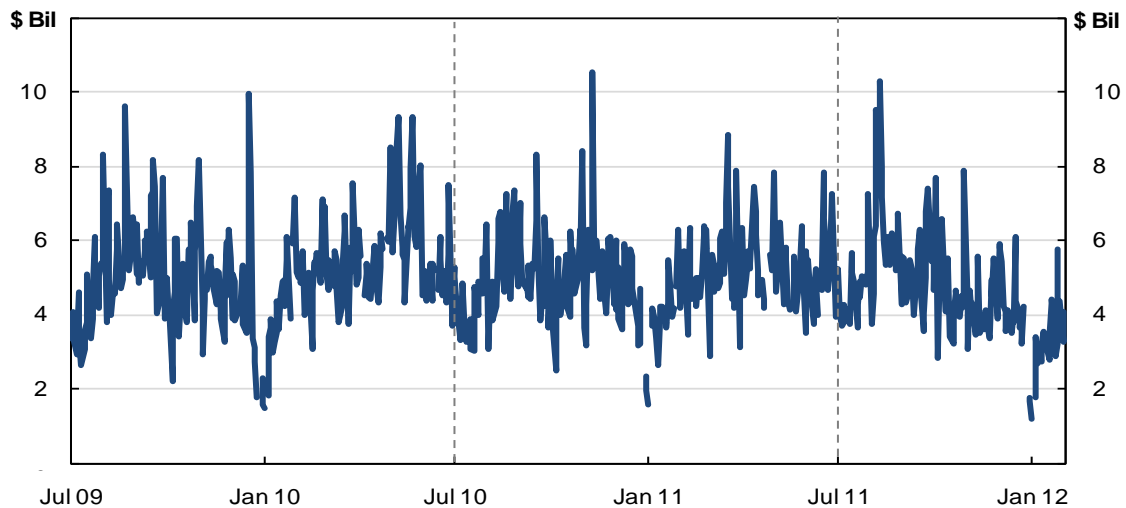
Figure 5: Daily number of trades across the S&P/ASX 200: July 2009–January 2012



Source: IRESS

131 Figure 6 shows the value of daily turnover on the ASX 200. Average daily turnover declined marginally during the 2010–11 financial year to \$5.0 billion (after averaging \$5.1 billion during 2009–10). Average daily turnover dropped sharply throughout the first seven months of 2011–12, falling to \$4.6 billion. The decrease in average daily turnover is in line with the decline in equity values over this period.

Figure 6: Value of daily turnover across the S&P/ASX 200: July 2009–January 2012



Source: IRESS

D Agreed actions from previous assessment

Key points

In November 2011, we published our most recent assessment report of the ASX Group, which included nine agreed actions. ASX Group has taken steps to comply with these—however, a number of them remain in progress.

- 132 In November 2011, we published our most recent assessment report of the ASX Group, which included nine agreed actions. Our current assessment followed a more compressed timeline than has historically been the case. As a result, a number of ASX Group's agreed actions from our previous assessment are still a work in progress.
- 133 Table 1 lists ASX Group's progress against each agreed action arising from our previous assessment. Some matters remain to be addressed.

Table 1: Agreed actions from previous assessment of ASX Group

| Agreed actions | Status |
|--|---|
| <p>Agreed Action 1: Engagement with ASIC about innovative changes</p> <p>ASX Group agreed to work to develop a forward-looking process with ASIC for keeping us and its participants updated about its technological changes.</p> | <p>Following the ASX Trade outage on 27 October 2011, ASX Group's CEO communicated to the ASIC Chairman that ASX Group had decided to slow down the implementation of its upgrade program and introduce additional implementation phases between then and the middle of 2012.</p> <p>The most significant consequences were to delay transition of ASX Trade to its new data centre until 6 February 2012 (from 21 November 2011) and to formalise technology updates between ASX Technology and ASX Operations units and ASIC. ASX Group also agreed to maintain communication between its CEO and ASIC's Chairman on major initiatives.</p> <p>ASX Group will also develop a protocol with ASIC for the communication of technology changes and circulate this to ASIC during the fourth quarter of 2011–12. ASX Group has provided its draft protocol to ASIC, and we will now work with ASX Group to finalise it shortly.</p> |
| <p>Agreed Action 2: Communication improvements for major technological releases</p> <p>ASX Group agreed to periodically publish similar publications to those issued in May and August 2011 for future releases of other key technology systems, so that industry has a rolling schedule of ASX Group information technology releases for the next 12 months.</p> <p>ASX Group also agreed to maintain an ongoing dialogue with industry to ensure that changes are released and managed in a way that limits any undue disruption to market users.</p> | <p>In May 2011, ASX Group released a document setting out its release management for ASX Trade and, in August 2011, ASX Group released a document detailing its technology releases relating to clearing and settlement.</p> <p>ASX Group will periodically publish similar release management documents, so that there is a rolling schedule for the next 12 months. It will also continue to maintain ongoing dialogue with industry to ensure that changes are released and managed in a way that limits any undue disruption to market users.</p> <p>This process will be documented in the protocol for Agreed Action 1.</p> |

| Agreed actions | Status |
|--|--|
| <p>Agreed Action 3: Determine and publish agreed notice periods for minor technological changes</p> <p>ASX Group agreed to inform participants of a scheduled period for major system upgrades (e.g. monthly, quarterly or annual). ASX Group committed to an agreed period of notice for participants before rolling out minor interim changes. This would allow participants time to reprogram, and perform conformance testing of their own systems, particularly any algorithm-related systems.</p> | <p>ASX Group has committed to finalising an agreed period of notice for participants, which will depend on the circumstances of the change, before rolling out scheduled minor technical changes or upgrades. This will allow participants time to reprogram, and perform conformance testing of their own systems, particularly any algorithm-related systems.</p> <p>This process will be documented in the protocol for Agreed Action 1.</p> |
| <p>Agreed Action 4: Harmonise approach to participant readiness</p> <p>ASX Group agreed, unless there are extenuating circumstances, to harmonise its approach to determining participant readiness for upgrades. This should include documenting the process for obtaining evidence about participant readiness, and outlining what measures will be taken, depending on the assessed implications of the upgrade.</p> | <p>ASX Group will, except where there are extenuating circumstances, harmonise the approach to determining participant readiness for upgrades across ASX and ASX 24, including:</p> <ul style="list-style-type: none"> • documenting the process for determining the measures that will be taken, depending on the assessed implications of the upgrade, and for obtaining evidence about participant readiness; and • developing a process for obtaining a formal attestation from participants to confirm their system functionality and connectivity, and their ability to comply with set implementation dates for mandatory changes. This will include the appropriate and necessary workarounds by ASX and participants where attestations are unable to be obtained or it is impractical to do so. <p>ASX Group's Project Management Office, and Operations and Technology units are aware of the revised process that will be implemented for future updates, and ASX Group's Regulatory Assurance unit will review how this process is implemented when the next update occurs.</p> |
| <p>Agreed Action 5: Determining participant readiness</p> <p>To assist in better achieving participant readiness for system upgrades, ASX Group agreed to engage participants about electing a single key person. This key person should be able to cross possible 'Chinese walls' within a participant's business to expedite and more clearly communicate to ASX Group relevant matters during key system upgrades and modifications.</p> | <p>ASX Group will engage with participants about electing a single key person who is able to cross possible 'Chinese walls' within a participant's business to expedite and more clearly communicate to ASX Group relevant matters concerning key system upgrades and modifications.</p> <p>ASX Group has compiled a list of key contact points for each participant, which will be updated on a six-monthly basis in April and September.</p> |

| Agreed actions | Status |
|---|--|
| <p>Agreed Action 6: Approach to discussing and recording suspected continuous disclosure matters</p> <p>ASX Group agreed to ensure that its listings advisers undertake training, which ASIC is prepared to assist with, on the specific requirements of evidence in actions for alleged breaches of s674(2) and 1309(1).</p> | <p>ASX Group's Chief Compliance Officer (CCO) and General Manager of Listings have been in regular contact with ASIC during the second quarter of the 2011–12 financial year to finalise the content of training for listings advisers to take place during the third quarter of 2011–12. Training was conducted on 14 March 2012.</p> |
| <p>Agreed Action 7: Approach to application of listing rule exceptions for continuous disclosure</p> <p>ASX Group agreed that it would include enhanced guidance in Guidance Note 8 to make it clearer to listed entities that:</p> <ul style="list-style-type: none"> • ASX expects them to give information in response to ASX queries, even where the entity may feel that it holds a legitimate view that it is not in breach of s674(2) and it can rely on ASX Listing Rule 3.1A; and • even if listed entities have information that they regard as confidential or incomplete, they are still expected to disclose that information to ASX listings officers, if requested, but that if ASX agrees that the information is exempt from disclosure under Listing Rule 3.1A, ASX will not require the information to be released to the market. | <p>ASX Group was aiming to release a revised draft of Guidance Note 8 <i>Continuous disclosure: Listing Rule 3.1</i> for public consultation in April 2012.</p> <p>ASX Group has agreed with ASIC that it would be appropriate to defer the release of this consultation draft of Guidance Note 8 until the High Court has handed down its decision in the Fortescue Metals case. This case is likely to consider the legal effect of ASX Listing Rule 3.1 and s674 of the Corporations Act, and both ASIC and ASX consider that any revision to Guidance Note 8 should reflect the High Court's views on these provisions. ASX Group will be aiming to release a revised draft of Guidance Note 8, taking into consideration the High Court's judgement, for public consultation shortly after the decision is handed down.</p> |
| <p>Agreed Action 8: Futures contract monitoring</p> <p>ASX Group agreed to recommence monitoring all ASX 24 futures contracts at a client account level, throughout the life of the contract, and review with ASIC the effectiveness of this activity over the next year.</p> | <p>ASX Compliance recommenced monitoring all ASX 24 futures contracts at a client level, throughout the life of the contract, from 28 November 2011. A review with ASIC is scheduled to take place in October/November 2012.</p> |
| <p>Agreed Action 9: Performance indicators</p> <p>ASX Group agreed to continue to work with ASIC over the coming six months, with a view to agreeing new performance measures that would assist in providing a point of reference to discuss ongoing indicators of the way in which activities are undertaken by licensees year-on-year.</p> | <p>ASX Group will work with ASIC to finalise draft performance metrics, which will be circulated to ASIC by the end of July 2012.</p> |

Key terms

| Term | Meaning in this document |
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| ASIC | Australian Securities and Investments Commission |
| ASIC Market Integrity Rules (ASX Market) 2010 | Rules made by ASIC under s798G of the Corporations Act for trading on ASX |
| ASIC Market Integrity Rules (ASX 24 Market) 2010 | Rules made by ASIC under s798G of the Corporations Act for trading on ASX 24 |
| ASX | ASX Limited or the exchange market operated by ASX Limited |
| ASX 24 | The exchange market operated by Australian Securities Exchange |
| ASX Clear | ASX Clear Pty Limited (formerly known as Australian Clearing House Pty Limited) |
| ASX Clear (Futures) | ASX Clear (Futures) Pty Limited (formerly known as SFE Clearing Corporation Pty Limited) |
| ASX Compliance | ASX Compliance Pty Limited (formerly known as ASX Markets Supervision Pty Limited) |
| ASX Group | ASX, Australian Securities Exchange, ASX Clear, ASX Clear (Futures), ASX Settlement and Austraclear |
| ASX Settlement | ASX Settlement Pty Limited (formerly known as ASX Settlement and Transfer Corporation Pty Limited) |
| ASX Trade | ASX's equities trading platform |
| Austraclear | Austraclear Limited |
| Australian market licence | Australian market licence under s795B of the Corporations Act that authorises a person to operate a financial market |
| Australian Securities Exchange | Australian Securities Exchange Limited (formerly known as Sydney Futures Exchange Limited) and the operator of the ASX 24 market |
| CEO | ASX Group's Managing Director and Chief Executive Officer |
| Ch 7 (for example) | A chapter in the Corporations Act (in this example numbered 7) |
| Corporations Act | <i>Corporations Act 2001</i> , including regulations made for the purposes of that Act |
| Corporations Regulations | Corporations Regulations 2001 |

| Term | Meaning in this document |
|--|---|
| ETO | Exchange-traded option |
| IOSCO | International Organization of Securities Commissions |
| IOSCO Objectives and Principles of Securities Regulation | The Objectives and Principles of Securities Regulation, originally adopted by IOSCO in September 1998, as amended from time to time |
| market licensee | Holder of an Australian market licence |
| NOMX | ASX's trading system provider, NASDAQ OMX |
| PID | Participant identifier number |
| s794C (for example) | A section of the Corporations Act (in this example, numbered 794C), unless otherwise specified |
| TAH | Tabcorp Holdings Limited |
| transfer of market supervision | The transfer of supervision of certain trading rules to ASIC on 1 August 2010 |