Council of Financial Regulators: Competition in the clearing and settlement of the Australian cash equity market

**Discussion Paper** 

June 2012

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### **CONSULTATION PROCESS**

### **Request for feedback and comments**

This paper seeks stakeholder feedback on the questions posed by the Council of Financial Regulators in relation to competition in the clearing and settlement of the Australian cash equity market.

Submissions should include the name of your organisation (or your name if the submission is made as an individual) and contact details for the submission, including an email address and telephone number where available.

While submissions may be lodged electronically or by post, electronic lodgement is strongly preferred. For accessibility reasons, please email responses in a Word or RTF format. An additional PDF version may also be submitted.

All information (including name and address details) contained in submissions will be made available to the public on the Treasury website, unless you indicate that you would like all or part of your submission to remain in confidence. Automatically generated confidentiality statements in emails do not suffice for this purpose. Respondents who would like part of their submission to remain in confidence should provide this information marked as such in a separate attachment. A request made under the *Freedom of Information Act 1982* (Commonwealth) for a submission marked 'confidential' to be made available will be determined in accordance with that Act.

In addition to seeking submissions, the Council will be conducting stakeholder consultation meetings on this issue. Should you wish to arrange a meeting, contact Treasury by **29 June 2012**.

Closing date for submissions: 10 August 2012

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# GLOSSARY

| ACCC                               | Australian Competition and Consumer Commission   |
|------------------------------------|--|
| The Agencies                       | ACCC, ASIC, the Reserve Bank and Treasury  |
| AML                                | Australian market licence (-holder)  |
| APRA                               | Australian Prudential Regulation Authority   |
| ASIC                               | Australian Securities and Investments Commission   |
| ASX                                | ASX Limited  |
| ASX Group                          | ASX Limited and its subsidiaries   |
| ASX securities                     | ASX-listed equities and other ASX-quoted securities  |
| ASXCC                              | ASX Clearing Corporation Pty Ltd   |
| CCA                                | Competition and Consumer Act 2010  |
| ССР                                | Central counterparty   |
| CHESS                              | Clearing House Electronic Subregister System   |
| Chi-X                              | Chi-X Australia Pty Ltd  |
| The Council                        | The Council of Financial Regulators  |
| CPSS                               | Committee on Payment and Settlement Systems  |
| CS facility                        | Clearing and settlement facility   |
| CSD                                | Central securities depository  |
|                                    | central securities depository  |
| The Dodd-Frank Act                 | Dodd-Frank Wall Street Reform and Consumer Protection Act (US)   |
| The Dodd-Frank Act<br>EMIR         |  |
|                                    | Dodd-Frank Wall Street Reform and Consumer Protection Act (US)   |
| EMIR                               | Dodd-Frank Wall Street Reform and Consumer Protection Act (US)<br>European Market Infrastructure Regulation  |
| EMIR<br>FMI                        | Dodd-Frank Wall Street Reform and Consumer Protection Act (US)<br>European Market Infrastructure Regulation<br>Financial market infrastructure   |
| EMIR<br>FMI<br>FSA                 | Dodd-Frank Wall Street Reform and Consumer Protection Act (US)<br>European Market Infrastructure Regulation<br>Financial market infrastructure<br>Financial Services Authority (UK)  |
| EMIR<br>FMI<br>FSA<br>FSS          | Dodd-Frank Wall Street Reform and Consumer Protection Act (US)<br>European Market Infrastructure Regulation<br>Financial market infrastructure<br>Financial Services Authority (UK)<br>Financial stability standards   |
| EMIR<br>FMI<br>FSA<br>FSS<br>IOSCO | Dodd-Frank Wall Street Reform and Consumer Protection Act (US)<br>European Market Infrastructure Regulation<br>Financial market infrastructure<br>Financial Services Authority (UK)<br>Financial stability standards<br>The International Organization of Securities Commissions |

# **EXECUTIVE SUMMARY**

In the course of its work on reform proposals for the regulation of financial market infrastructures (FMIs) during 2011, the Council of Financial Regulators (the Council) identified a number of issues for consideration around competition in clearing and settlement.

In its consultation paper, *Review of Financial Market Infrastructure Regulation*<sup>1</sup>, published in October 2011, the Council noted that it would be working with the Australian Competition and Consumer Commission (ACCC) to develop further analysis of these issues.

This paper has been prepared with contributions from the Australian Securities and Investments Commission (ASIC), the Reserve Bank of Australia, the Commonwealth Treasury and the ACCC (hereafter, the Agencies).

The paper sets out a preliminary assessment of the potential implications of competition relevant to the responsibilities of the Agencies; that is, the effective functioning of markets, financial stability, and competition and access. It identifies possible policy responses to allow the benefits of competition to be pursued while managing any adverse consequences.

The particular focus of the paper is competition in the clearing of Australia's largest cash equity market, the market for ASX-listed equities and other ASX-quoted securities (ASX securities). This reflects the interest from potential competing providers that has already emerged, and acknowledges that contestability in clearing cash equities has already been demonstrated in other jurisdictions. The Agencies do not see a strong prospect of direct competition emerging in the clearing of exchange-traded derivatives, at least in the short term, and there is currently no licensed provider of clearing and settlement services in over-the-counter (OTC) derivatives products in Australia. The Agencies also consider that competition is less likely to emerge in the provision of settlement services.

Stakeholder comment is sought on all issues raised, and the paper should not be taken as containing concluded views of the Council or the Agencies.

### MARKET FUNCTIONING

Competition between central counterparties (CCPs) could have implications for the functioning of the market for ASX securities.

For instance, to the extent that trade flow in the most liquid securities was attracted away from the incumbent exchange to a competing trading venue with a competing CCP, the economics of providing a trading and clearing service for companies with less liquid securities — perhaps including smaller companies — could be markedly altered. Furthermore, to maximise the breadth of trading opportunities and meet best-execution requirements, all participants are likely to face an incentive to connect (either directly or indirectly) to all trading and clearing venues. Since some of the costs of

<sup>1</sup> Available at: http://www.treasury.gov.au/contentitem.asp?NavId=&ContentID=2201.

participation in multiple facilities will be independent of the scale of a firm's activity, relative costs could rise for some firms, possibly altering the participation structure of the market.

The Agencies seek views from stakeholders as to consequences for the structure of and participation in trading and clearing markets in the event that competition in clearing emerged. One possible policy response to fragmentation considered in the paper is to encourage 'interoperability' between CCPs, such that the two sides of a trade could be cleared via different CCPs. In the presence of interoperability, a market participant could choose to clear trades executed across multiple trading venues via a single CCP, thereby avoiding the cost of multiple connections. Stakeholders' views are sought on the stability and effectiveness of interoperability — particularly from those with experience of interoperability in other jurisdictions — and its applicability to the Australian context.

### **FINANCIAL STABILITY**

A number of potential stability considerations also arise.

One fundamental concern is that CCPs may compete on the basis of less stringent risk controls. The cost of using a CCP extends beyond clearing fees and also comprises the payment of margin and/or contributions to a default fund. A CCP may, therefore, be able to attract trade flow by relaxing such requirements. There is little empirical evidence to suggest that a 'race to the bottom' has arisen in competitive clearing environments overseas, and indeed participants might be reluctant to use a CCP perceived to have weak risk controls. Nevertheless, it is important that regulators remain alert to the risk and rigorously enforce exacting risk-management standards.

Another concern is that any exit of clearing providers in a competitive environment implies some potential for market disruption as the associated segments of market activity must either cease or shift to the remaining infrastructure providers. It is critical that regulators have in place arrangements to ensure that any such transition could be effected smoothly, with minimum spillover to the underlying market. One possible response considered in this paper, on which views are sought from stakeholders, is for all CCPs serving the market to commit to a 'notice period' prior to any exit for commercial reasons, perhaps supported by capital to cover operating expenses for that period.

The paper also considers the possibility of risks arising from the manner in which non-ASX CCPs access the vertically integrated settlement system operated by ASX, ASX Settlement. The Agencies suggest that any risks might be mitigated where settlement arrangements are 'materially equivalent' to those in place for ASX's cash equity CCP, ASX Clear. Stakeholders are invited to offer views on what would constitute appropriate settlement arrangements for non-ASX CCPs.

Finally, competition is perhaps most likely to emerge from overseas-based CCPs seeking to extend their existing services to the Australian market. Therefore, Australian regulators will need to ensure that they have in place mechanisms for control and influence commensurate with the importance to the Australian financial system of any overseas-based CCP. This paper identifies location requirements as a possible response, such as were proposed in the Council's *Review of Financial Market Infrastructure Regulation*.

### **COMPETITION AND ACCESS**

The paper closes with a discussion of a potential impediment to effective competition in the clearing of ASX securities arising from market structure. In particular, the paper illuminates the possibility of a so-called 'essential facilities' problem, which could arise should a competing CCP find it difficult to gain effective access to ASX Settlement.

Stakeholders' views are sought on whether there is a material risk of such a problem developing, and on the potential regulatory options that might be pursued. These might include: penalties under section 46 of the *Competition and Consumer Act* (CCA); declaration of the settlement facility under the National Access Regime; or specific, targeted responses (such as a mandatory access undertaking, an industry-specific access regime, structural separation of the facility, or requirements for price transparency and the unbundling of services).

The Agencies invite comments on any of the issues considered in the paper. Some specific questions are highlighted. Following consultation, the Council may, if appropriate, make recommendations to the Government. ASIC and the Reserve Bank may also publish regulatory guidance on assessment of clearing and settlement facility (CS facility) licence applications, licence conditions and other matters relevant to competition in clearing.

# 1. INTRODUCTION

# **1.1** TERMS OF REFERENCE

On 8 April 2011 the Deputy Prime Minister and Treasurer referred a number of issues to the Council relating to the regulation of FMIs.

The Deputy Prime Minister and Treasurer sought the Council's advice on measures that could be introduced to ensure Australia's regulatory system for FMIs continues to protect the interests of Australian issuers, investors and market participants.

In the course of the review of FMI regulation, the question of competition in clearing and settlement arose. Council agencies had already been considering this issue in light of discussions with potential providers of central clearing services for ASX securities. The Council subsequently invited the ACCC to work with ASIC, the Reserve Bank and the Treasury to further develop analysis of the competition aspects of clearing and settlement.

## **1.2** Purpose of this paper

The benefits of competition and foreign participation have been observed in numerous markets in Australia. In respect of financial markets, the Australian Government report, *Australia as a Financial Centre: Building on Our Strengths* (the Johnson Report)<sup>2</sup>, identified that 'openness to new entrants is an essential condition for competition, efficiency and innovation'. Consistent with a recommendation of the report, the emergence of competition between market operators offering trading in ASX securities has contributed to lower trading costs and increased innovation. It may be that competition between providers of clearing and settlement services for this market will result in similar benefits.

However, while competition may deliver benefits, the entry of additional CS facilities to a market such as that for ASX securities is likely to bring about significant changes in the operating environment for banks, securities dealers, issuers and investors. Other sources of innovation in financial markets have given rise to policy concerns — for instance, around increased use of automated trading and complex trading strategies, and the use of dark pools — and has placed strain on market participants and investors in keeping up with change.

It is therefore important that any implications competition may have for financial stability and market functioning are understood, and that an appropriate policy framework is in place.

This paper takes openness to competition and foreign participation in clearing and settlement services as a starting point. It then sets out a preliminary assessment of the issues that might need to be addressed to ensure that such competition does not adversely impact the effective functioning of the market for ASX securities or the stability of the Australian financial system. The paper also

<sup>2</sup> Available at: http://archive.treasury.gov.au/afcf/content/final\_report.asp

discusses competition and access issues that could arise when considering the existing post-trade market structure for ASX securities, and how these might, in principle, be dealt with. Stakeholder feedback is invited on all of the issues raised in the paper.

Following consultation, the Council may, if appropriate, make recommendations to the Government. ASIC and the Reserve Bank may also publish regulatory guidance on assessment of CS facility licence applications, licence conditions and other matters relevant to competition in clearing.

# **1.3** Scope of this paper

This paper focuses primarily on competition in the clearing of ASX securities. Based on international experience to date and the economics of securities settlement, the Agencies do not currently anticipate any entrants seeking to compete in the settlement space. The contestability of securities settlement and related considerations are discussed in section 2.2.

Further, the focus on the market for ASX securities reflects the:

- importance of this market to the Australian financial system;
- existence of competition in the provision of trading services for this market;
- scope for competition in the clearing of this market; and
- interest from potential competing providers of clearing services.

Notwithstanding the focus on ASX securities, the issues discussed in this paper may be relevant for smaller cash equities markets in Australia, and the Agencies welcome views in this regard. The Agencies also recognise that competition may also arise in the clearing of derivatives in Australia. Currently, however, there does not seem to be a strong prospect of direct competition emerging in the clearing of exchange-traded derivatives, and in the absence of any licensed providers of clearing services in OTC derivatives products in the Australian market, it is perhaps premature to examine issues around competition in the clearing of OTC derivatives.<sup>3</sup>

<sup>3</sup> The regulatory framework for OTC derivatives markets is the subject of a separate consultation process. See Council of Financial Regulators (2012), *Implementation of a framework for Australia's G20 OTC derivatives commitments*, available at: http://www.treasury.gov.au/ConsultationsandReviews/Submissions/2012/Over-the-counter-derivatives-commitments-consultation-paper.

# 2. COMPETITION IN CLEARING AND SETTLEMENT

The post-trade functions of clearing and settlement are integral to the functioning of exchange-traded securities markets.

- A clearing facility, such as a CCP, manages the pre-settlement risks that exist between counterparties to a trade. Through a legal process known as novation, a CCP interposes itself between trades executed on the market. Thus, where a single CCP serves the whole market, this CCP becomes buyer to every seller and seller to every buyer. A CCP typically employs a number of risk controls to ensure that it can, with a high degree of confidence, meet a defaulting participant's obligations, even in the most extreme circumstances.
- A securities settlement facility provides for the final settlement of securities transactions. Settlement involves the transfer of title to the security and the transfer of cash. These functions are linked via appropriate delivery-versus-payment arrangements incorporated within the settlement process.

ASX securities traded on the ASX market and the Chi-X Australia (Chi-X) market are cleared and settled by subsidiaries of the ASX Group: ASX Clear Pty Ltd (ASX Clear) and ASX Settlement Pty Ltd (ASX Settlement). There are currently no alternative providers of clearing and settlement services for ASX securities in Australia.

The existing regime for regulating CS facilities in Part 7.3 of the *Corporations Act 2001* permits applications for CS facility licences to provide services even for a product that is already serviced by another CS facility. Accordingly, in the future it may be possible for Chi-X or other market operators seeking to compete with ASX's market to obtain clearing and settlement services from providers other than ASX Clear and ASX Settlement.

In light of existing commercial interest and the emergence of competition in clearing in other jurisdictions, the Agencies consider that clearing is contestable. However, as yet the Agencies have observed no interest from potential alternative providers of settlement services for ASX securities. Furthermore, to date there is little evidence of competition between settlement systems for equity securities overseas and certain aspects of securities settlement suggest that there may be important advantages in having a single provider.<sup>4</sup>

While the focus of this paper is on competition in clearing and the Agencies seek comment in this regard, the Agencies also welcome stakeholder views on whether settlement is likely to be contestable.

<sup>&</sup>lt;sup>4</sup> Recent regulatory proposals in Europe may, however, alter the competitive landscape for securities settlement. Recent proposals in this area are discussed in the Appendix.

# 2.1 CONTESTABILITY OF CLEARING

Internationally, the emergence of competition in the central clearing of exchange-traded markets is relatively recent and has been seen almost exclusively in Europe. The economics of clearing — high fixed costs, low variable costs, and strong network effects — might argue for just one (or very few) providers in a given market. Indeed, traditionally, national or regional stock exchanges offered the sole venue for the trading of their listed equities, with any central clearing of trades performed by the exchange itself, an affiliated CCP, or a third-party CCP with which the stock exchange had an exclusive arrangement.

In the past decade, however, technological developments and regulatory reforms in many jurisdictions (most prominently the United States and Europe) have dramatically changed the equity market landscape. In many jurisdictions it is now possible to transact a given security on a number of trading platforms. In Europe, the emergence of new trading platforms has been complemented by the emergence of new CCPs, offering trading platforms a choice of preferred CCP. Increasingly, so-called interoperability between CCPs has given rise to a market structure in which some trading platforms are served by multiple CCPs, thereby also permitting trading participants a choice of preferred CCP. Market structure developments in Europe are discussed further in the Appendix.

The entry requirements associated with providing clearing services for a given market are such that any new provider is likely to be seeking to build on existing capabilities in another market or product. These entry requirements include:

- the substantial fixed cost of setting up the required systems and technology;
- attracting staff with the necessary risk-management experience and expertise;
- establishing links with at least one trading platform and a settlement facility;
- attracting firms as clearing members; and
- meeting regulatory requirements.

Arguably, in extending the geographical scope of its service in a particular product, the only additional investments that an established CCP would need to make would be in implementing links with the relevant trading platform(s) and settlement facility, and in meeting any new regulatory requirements. Material additions to existing systems, staff and participants may not be required to provide the new service.

Competition between CCPs clearing ASX securities might be expected to deliver the types of benefits realised in other competitive markets. These benefits include lower fees to users (both clearing participants and market operators) through the reduction of an individual CCP's market power, and greater incentives to innovate as a means of attracting a higher market share.

In addition, the presence of multiple CCPs can support financial system stability by making it less likely that trading activity in the market would cease completely should a single CCP experience a persistent operational disruption or exit the market for either commercial, financial or legal reasons.

Competition in clearing ASX securities could also encourage competition in trading services by precluding the need for market operators competing with the ASX to reach agreement with the ASX

for use of its clearing services. Further, a market operator's ability to innovate in the trading services it provides may be enhanced by having tailored arrangements with a preferred CCP.

There are, however, also a number of potential costs and risks associated with competition in this space. These are considered in sections 4 and 5.

# 2.2 CONTESTABILITY OF SETTLEMENT

Despite the emergence of competition between providers of trading and, to a lesser extent, clearing services in a number of equity markets around the world, overwhelmingly these markets each continue to have a single facility that performs settlement. Often this facility also maintains (or plays an important role in maintaining) the market's central record of securities title.

The absence of competition among settlement facilities may reflect, among other things, certain advantages of having a single provider. For instance, the maintenance of security title in a single location arguably provides for more accurate whole-of-market recordkeeping, as there is no need to aggregate the records held in multiple facilities.

In addition, settlement facilities may, relative to CCPs, have less scope to leverage cross-jurisdictional operations when extending their services to new markets. For example, since a settlement facility's location determines which jurisdiction's courts govern the legality of settlement, local firms would have to submit to foreign law if they settled through an overseas-based facility. To the extent that local firms were unwilling to do this, it would follow that a prospective offshore provider of settlement services might be effectively forced to establish a new local operation, rather than use operations already established offshore. This could make entry to the market more costly and possibly less attractive.

Consequences of a lack of contestability in settlement, however, could include outcomes typically observed in uncompetitive markets, and the Council seeks views on whether stakeholders expect that price or non-price issues could emerge in relation to ASX's settlement facility.

Given the Agencies' preliminary view that there might be less scope for competition in the settlement of ASX securities, the remainder of this paper focuses on competition in clearing.

### Your feedback

Q1. Do you agree that clearing of ASX securities is contestable?

Q2. Do you agree that there is no evident demand for competition in the settlement of ASX securities? If so, do you have any views on whether price or non-price issues could emerge in relation to ASX's settlement facility?

# 3. REGULATORY CONTEXT

The licensing framework for CS facilities in the Corporations Act is permissive of competition between providers of clearing services. However, the Act requires that ASIC and the Reserve Bank have regard to a number of matters in providing advice to the Minister for Financial Services and Superannuation (the Minister) on a CS facility licence application. In addition, as in any market for goods or services, the ACCC has responsibility to promote competition and fair trading.

## **3.1** LICENSING FRAMEWORK FOR CS FACILITIES

Under section 824B of the Corporations Act, the Minister may grant an Australian CS facility licence if the Minister is satisfied that the requirements set out in sections 824B and 827A of the Act are met. In making this decision, the Minister must have regard to any relevant advice from ASIC and the Reserve Bank.

ASIC and the Reserve Bank work closely in regulating CS facilities and are responsible for advising the Minister on applications for CS facility licences and ensuring that operators comply with their licence obligations under Part 7.3 of the Act.

Section 824B(2) permits a CS facility regulated in a foreign country, with a principal place of business overseas, to apply for a licence. In reviewing such an application, ASIC will form a view on the sufficient equivalence of the regulatory regime in the CS facility's principal place of business. Similarly, the Reserve Bank will assess the sufficient equivalence of the regulatory regime in the CS facility's principal place of business in relation to the degree of protection from systemic risk. The focus is primarily on the regulatory outcomes achieved by the foreign regime, rather than the precise mechanisms for achieving those outcomes.<sup>5</sup>

## 3.1.1 ASIC's role

One of the primary statutory obligations of CS facility operators is to ensure that, to the extent it is reasonably practicable to do so, their clearing and settlement services are provided in a fair and effective way. ASIC is responsible on an ongoing basis for assessing a CS facility's compliance with its obligations, each year providing a report to the Minister on CS facility licensees' compliance with their general obligations under section 821A of the Act.

## 3.1.2 The Reserve Bank's role

Regulators around the world require CS facilities to meet certain risk-management standards that recognise these facilities' role in maintaining financial stability. Regulators are guided in this area by

<sup>5</sup> The Reserve Bank's assessment of sufficient equivalence does, however, also consider matters such as the clarity and coverage of stability-related principles applied by an overseas regulator, and the intensity of oversight. See Assessing the Sufficient Equivalence of an Overseas Regulatory Regime, available at: http://www.rba.gov.au/payments-system/clearing-settlement/standards/overseas-equivalence.html.

international recommendations developed by the Bank for International Settlements Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO).<sup>6</sup> In Australia, CS facilities licensed under section 824B(1) of the Act are required to meet either the *Financial Stability Standard for Central Counterparties* or the *Financial Stability Standard for Securities Settlement Systems* (FSS), as determined by the Reserve Bank. The FSS broadly replicate the relevant international recommendations through minimum measures that the Reserve Bank considers relevant in determining whether a CS facility meets the FSS. For CCPs, these minimum measures relate to, among other things: legal robustness; operational risk; measurement and mitigation of the risks brought to the CCP by its participants; arrangements for handling the default of a clearing participant; and the financial resources, such as margins and default fund contributions, to be called on in the event of a clearing participant default.

The Reserve Bank assesses, at least once each year, CS facility licensees' compliance with their obligations under the FSS (where they apply) and the requirement to do all other things necessary to reduce systemic risk, and reports to the Minister on the outcome of the assessment (section 823CA).

# 3.2 ACCC'S ROLE

The ACCC is an independent statutory authority with the objective of enhancing the welfare of the Australian community by fostering competitive, efficient, fair and informed Australian markets. Its aim is to bring greater competitiveness and fair trading to the Australian economy, working on the fundamental principle that this benefits consumers, business and the wider community.

The ACCC was formed in 1995 to administer the *Trade Practices Act 1974* (renamed the *Competition and Consumer Act 2010* (CCA) on 1 January 2011) and other relevant Acts.

The CCA deals with almost all aspects of the marketplace: the relationships between suppliers, wholesalers, retailers, competitors and customers. In broad terms the CCA covers unfair market practices, industry codes, mergers and acquisitions of companies, product safety, product labelling, price monitoring, and the regulation of industries such as telecommunications, gas, electricity and airports.

The following three sections of the paper explore the issues relevant to each regulator when considering competition in the clearing of ASX securities.

<sup>6</sup> Early in the last decade, CPSS and IOSCO developed *Recommendations for Central Counterparties* and *Recommendations for Securities Settlement Systems*. Along with the CPSS's *Core Principles for Systemically Important Payment Systems*, these recommendations have recently been reviewed and consolidated into a single set of principles for all FMIs. The Recommendations, Core Principles, and the new *Principles for financial market infrastructures* are available at: http://www.bis.org/list/cpss/tid\_61/index.htm.

# 4. MARKET FUNCTIONING

While ASIC's primary responsibility in respect of individual CS facilities is to ensure that they provide their services in a fair and effective manner, ASIC has a broader objective to promote fair and efficient markets. ASIC therefore takes a close interest in the potential implications of competition between CCPs for the functioning of the market for ASX securities. For instance, competition in clearing could fragment the set of settlement obligations underlying trading activity, which in turn might have consequences for the product coverage of CCPs and the structure of market participation.

## 4.1 ISSUES FOR CONSIDERATION

## 4.1.1 Effect of fragmentation on less liquid securities

Stock exchanges and their CCPs have traditionally offered trading and clearing in all equities listed on the exchange. By contrast, internationally, many new trading platforms and their CCPs have only offered trading and clearing in the most liquid securities.

Should the trading and clearing of ASX securities be fragmented along the lines of liquidity in a multi-CCP environment, there could be implications for the economics of providing a platform for exchange trading in smaller companies' equities (which are typically less liquid). This may in turn raise a public policy issue around access to capital markets for issuing companies.

In particular, in the event that trade flows in the most liquid securities were concentrated in a particular CCP, other CCPs would be left to manage exposures related to less liquid securities. This may be more difficult and costly than managing the risk of more diversified or more liquid portfolios because there is less scope for netting or offsetting exposures. Furthermore, price volatility is typically higher in less liquid stocks. If this was to lead to a decrease in the supply of clearing services for less liquid securities, it could in turn lead to a decrease in the supply of trading services for those securities.

## 4.1.2 Effect of fragmentation on participants

While competition between CCPs would be expected to lead to downward pressure on the fees charged to clearing participants, connecting to all CCPs in a multi-CCP environment could increase other costs to participants. Moreover, these increased costs could have a disproportionate effect on smaller market participants.

For instance, in a multi-market environment, market participants are likely to have an incentive to participate in all trading platforms for competitive reasons. In addition, the *ASIC Market Integrity* Rules (*Competition in Exchange Markets*) does require market participants to take reasonable steps to obtain best execution outcomes for clients, and from 1 March 2013 market participants will need to at least consider connecting to all available trading platforms. ASIC will update the industry on this transitional position in July 2012. In simple terms, for retail clients a market participant will be

required to execute a client order where the total consideration of doing so (that is, taking into account the market price and total cost of executing the transaction including clearing and settlement costs) is lowest<sup>7</sup>. If a market participant connects to all trading platforms and each trading platform uses a different CCP, that participant may also ultimately need to have arrangements in place with each CCP if it is to meet its obligations.

A broker may connect to multiple CCPs in a number of ways, including:

- joining each CCP as a direct clearing participant;
- establishing a connection with a clearing participant at each CCP; or
- establishing a connection with a single clearing firm that is a participant of each CCP.

Irrespective of how market participants access multiple CCPs, there will necessarily be an increase in the number of connections between firms and between firms and CCPs. A firm that participates in multiple CCPs incurs what might be considered the fixed costs of participation, such as connectivity costs and the opportunity cost of posting collateral to each CCP's default fund. Given that some of these costs might be largely independent of a firm's size or the scale of the activity it brings to a given CCP, it is possible that costs fall disproportionately on smaller firms and thus lead to a change in the participation structure of the market.

Where a firm's trades are cleared across multiple CCPs, there is also likely to be a loss of netting opportunities relative to the situation in which all trades are cleared by a single CCP. This 'unnetting' of obligations could leave a firm's total margin requirement across the multiple CCPs higher than it would have been at a single CCP. Again, the firm incurs an opportunity cost of posting collateral to meet this higher margin requirement. Managing multiple exposures to multiple CCPs also entails a degree of operational complexity.

#### Your feedback

Q3. Have the Agencies identified the right issues around fragmentation?

Q4. Do you have views on whether particular product or participation segments of the market for ASX securities would be affected in the event that competition in clearing emerged?

Q5. Are there any other factors related to the effective functioning of the market for ASX securities that should be considered?

<sup>&</sup>lt;sup>7</sup> 'Best execution outcome' will mean different things for different clients. For retail clients best execution outcome will mean best total consideration, which is the purchase price and transaction costs, unless the client instructs otherwise. For wholesale clients, best execution outcome may include best price, cost, speed and likelihood of execution.

# 4.2 POTENTIAL RESPONSES<sup>8</sup>

# 4.2.1 Interoperability

Interoperability between CCPs could be encouraged to mitigate any adverse effects of market fragmentation, with regulatory standards imposed in order to ensure that any interoperability arrangements were robust. Regulatory standards might also be needed to impose 'open access' obligations on CCPs in order to facilitate the establishment of interoperability links.

Interoperability creates the capacity for different CCPs to clear opposite sides of the same trade, thereby allowing a participant of one CCP to execute a cleared trade with a participant of another. Without interoperability, both sides of any centrally cleared trade must use the same CCP. By relaxing this requirement, interoperability reduces market fragmentation and facilitates participants' access to liquidity without requiring them to maintain connections with multiple CCPs.

However, interoperability entails significant costs that may make it unsuitable for some markets. For instance, interoperability gives rise to high set-up costs associated with harmonising fundamental aspects of the rules and procedures of linked CCPs. Additional risks also arise because links create a channel for transmission of stress between CCPs. This calls for additional risk mitigation measures (see Box A: 'Risk Management for Interoperable CCPs'). For example, regulators in Europe have required linked equity CCPs to, among other things, post additional collateral to each other to cover the inter-CCP exposures that the links create. The additional collateral is typically collected from participants. If interoperability were to emerge in Australia, similar risk-management regulations would be required to ensure compliance with the FSS.

Different forms of interoperability can have different risk implications. A form that may be operationally simpler to implement involves one CCP (most likely a smaller or new CCP) becoming a participant in another CCP (most likely the dominant incumbent). In this scenario, the 'senior CCP' collects margin from the 'participant CCP' in respect of the net exposures between participants of the two CCPs. However, in such an arrangement, the senior CCP is unlikely to be required to post margin to the participant CCP, possibly because of its market power in negotiating the arrangement. By contrast, a so-called 'peer-to-peer' interoperability arrangement might involve CCPs becoming customised participants of each other, with margin flowing in both directions. Such an arrangement may be more difficult to implement, particularly since it requires not only commercial agreement between the CCPs, but also that both implement significant procedural changes, which the senior CCP might avoid under alternative arrangements.

Since established CCPs may have little incentive to open up their markets to competitors, interoperability links might not develop in the absence of a regulatory mandate. For example, the European Commission called on the European industry to establish 'access guidelines', with the threat of regulatory action otherwise. In 2006, three industry groups created and signed the *Code of Conduct on Clearing and Settlement* (the Code of Conduct)<sup>9</sup>, further refined in 2007 in the *Access* 

<sup>8</sup> Section 5.2.2 also discusses a potential response to the risk that fragmentation leads to a decrease in the supply of clearing services for less liquid securities.

<sup>9</sup> Available at: http://ec.europa.eu/internal\_market/financial-markets/docs/code/code\_en.pdf.

*and Interoperability Guidelines.*<sup>10</sup> The guidelines required signatory CCPs to permit other CCPs to form links by becoming standard participants in their facilities, and — subject to certain conditions — to allow more customised links. The Code of Conduct also introduced obligations for trading facilities to openly provide their trade feeds to requesting CCPs, which — if activity on the trading facility was not to be fragmented — required the requesting and incumbent CCPs to set up a link. However, the obligations proved difficult to enforce, and will be strengthened through the *Regulation of the European Parliament and of the Council on OTC Derivatives, Central Counterparties and Trade Repositories,* formerly known, and still often referred to, as the European Market Infrastructure Regulation (EMIR).<sup>11</sup>

More information on European regulatory developments is provided in the Appendix. Other access issues in the Australian market context are discussed in section 6.

#### Your feedback

Q6. Do you have views on the stability and effectiveness of interoperability in other jurisdictions? If competition emerged, should interoperability between competing CCPs be encouraged in Australia?

Q7. Can you suggest any other responses to the issues raised in relation to market functioning?

#### BOX A: RISK MANAGEMENT FOR INTEROPERABLE CCPS

Interoperability significantly changes the risk profiles of the CCPs involved, primarily by creating exposures between them. The exposures arise because each interoperable trade establishes a contract between the two linked CCPs, in addition to the contracts created between each participant and its CCP. For example, once an equities trade has been novated across a link, the buyer owes payment to its CCP, the buyer's CCP owes payment to the seller's CCP, and the seller's CCP owes payment to the seller. The securities obligations flow in the other direction. Since each CCP has an obligation to the other, the risk arises that if a CCP experiences one or more participant defaults and has insufficient resources to absorb the losses, an inability to meet its own obligations could create problems for the second CCP.

Provided that each CCP prudently manages its exposures to its own participants, the likelihood of a CCP defaulting on its obligations is extremely low; any shortfall in a defaulting participant's margin would have to exceed the value of the CCP's default fund. Nevertheless, since the positions flowing across the link could feasibly comprise a large proportion of the market, an inter-CCP default could impose substantial losses on the second CCP. Furthermore, such a default would most likely occur at a time when the second CCP faced increased exposures to its own participants. Since any CCP default would be expected to cause significant market disruption, simultaneous defaults by multiple CCPs would amplify the stress.

It is therefore important that interoperable CCPs have adequate protection to withstand a linked-CCP default. This would likely entail each CCP holding sufficient resources to cover a default

<sup>10</sup> Available at: http://ec.europa.eu/internal\_market/financial-markets/docs/code/guideline\_en.pdf.

<sup>11</sup> The latest text for EMIR is available at: http://register.consilium.europa.eu/pdf/en/12/st06/st06399.en12.pdf

on the inter-CCP obligations, which would be proportional to the net of all individual trading obligations cleared across the link. These resources should be in addition to those held to cover direct exposures to participants so as to ensure that the CCP could withstand the simultaneous default of both a participant and a linked CCP.

Since the volume of trade flowing across a link could change substantially from day to day, inter-CCP collateralisation may be best achieved via a margining framework. This would involve daily collateral requirements based on the prevailing net bilateral position between the CCPs. If instead collateral requirements were not related to the outstanding positions, the inter-CCP exposure could grow — potentially rapidly — to outsize the collateral. To avoid this situation, linked CCPs that did not apply a margining framework should maintain additional funding sources to ensure that sufficient resources were available whenever required.

In addition to financial risk, interoperability can create legal and operational risks. Legal risks are more prominent if the link operates across jurisdictions, in which case differences in the legal status of, for example, novation, settlement finality or netting could create substantial exposures, including principal risk. Operational risks arise because each CCP becomes reliant on the other CCP's systems, including its margining and settlement procedures, and because the link itself increases the complexity of the CCPs' processes.

The nature of the risks presented by interoperability also depends on the structure of the CCP link network. For example, if the network includes more than two CCPs and some CCPs are not directly linked with others, indirect exposures will arise that can make it difficult for CCPs to monitor their exposures. In any network of links, managing stress could become more complex, with each CCP's financial condition depending on that of other CCPs. The network shape also has implications for settlement arrangements, since CCPs may face liquidity or security shortages unless their inter-CCP obligations can be sequenced efficiently or multilaterally netted across all the linked CCPs.

# 5. FINANCIAL STABILITY

Competition between CCPs could have a number of implications for financial stability.<sup>12</sup> For instance, a competing CCP's approach to risk management could differ from that of a monopoly CCP, while the entry or exit of CCPs from the market could increase the possibility of market disruption. More specifically, in the event of a multi-CCP environment emerging for ASX securities, consideration would need to be given to the appropriate settlement and oversight arrangements for all CCPs.

## 5.1 ISSUES FOR CONSIDERATION

## 5.1.1 'Race to the bottom'

In the presence of competition between CCPs, there is a risk that CCPs could compete on the basis of less stringent risk controls. To the extent that the opportunity cost of posting margin or making default fund contributions is an important determinant of market participants' trading decisions and their choice of trading and clearing venues, CCPs may have an incentive to relax these requirements in order to attract participants' trade flow. The opportunity costs incurred by participants could be further reduced by lowering eligible collateral standards, or increasing the remuneration on posted collateral. A CCP might also have the incentive to lower participation requirements (for example, minimum capital requirements) in order to encourage participation, in particular by firms previously ineligible to participate in a CCP directly.

The degree to which such an incentive exists will depend on the interplay between several factors, including, crucially, how any shortfall in financial resources would be allocated in the event of a participant default. For instance, in the case of a CCP that operates a default fund comprised mainly of participant contributions, participants in principle should weigh any cost savings from lower margin obligations against a higher expected call on their default fund contributions. As a result, the scope for a CCP to increase volumes by lowering margin requirements may be limited. And where a CCP's own resources are at risk in the event of a margin shortfall, there may be a direct disincentive to lower standards.

To date, there is little empirical evidence to support the notion of a race to the bottom among competing CCPs. CPSS (2010) suggests that there is 'tentative evidence' in respect of margin requirements in some equity and interest rate swap markets, and 'anecdotal evidence that CCPs offer different rates of remuneration [on posted collateral] based on commercial considerations'.<sup>13</sup> Zhu (2011) considers developments in the risk-management models employed between 2007 and 2010 by three European CCPs — LCH.Clearnet SA, European Multilateral Clearing Facility (EMCF) and

<sup>12</sup> See CPSS (2010), *Market structure developments in the clearing industry: implications for financial stability*, report of the Working Group on Post-trade Services, November, available at: http://www.bis.org/publ/cpss92.pdf. The report identified a number of potential risks to financial stability that might be posed by multi-CCP environments.

<sup>13</sup> Ibid

 $\mathsf{EuroCCP}$  — but finds little evidence to suggest that risk controls had been lowered as a result of competition.  $^{14}$ 

A related issue is the indirect effect of competition on risk management, possibly arising from an increased incentive to cut costs. Where fewer resources are devoted to operational staff and systems, the robustness of risk controls may be harmed. This could be particularly relevant to the introduction of new services. As in other markets, competition between CCPs is likely to create an incentive to innovate. It may be that, at the margin, the commercial pressure to bring new services to market leads to an erosion of the risk controls that might otherwise be applied around the implementation of a new service.

# 5.1.2 Instability in the event of exit of a provider

Competition in the market for clearing services, as in other markets, could involve both entry and exit of firms. The exit of a CCP will necessarily disrupt the segment of market activity that it clears.

The possibility that one or more CCPs eventually exit a multi-CCP environment for commercial reasons might depend in part on the size of the underlying market. As the share of market activity cleared by a given CCP increases, so do the opportunities for that CCP and its participants to net obligations. Further, the incentive among firms to consolidate the market and realise the associated netting benefits is likely to be higher in a smaller market.

Where an existing CCP was the sole clearing facility for a given trading platform, its exit would necessarily disrupt market activity on that platform. While the trading platform could seek to engage an alternative CCP, significant technical and contractual arrangements would first need to be put in place. Should the trading platform cease operating altogether, its participants would be forced to join alternative trading platforms if they wished to continue participating in the market. The risk of disruption in this case would be mitigated to the extent that firms already traded on multiple trading platforms.

## 5.1.3 Settlement arrangements for non-ASX CCPs

The technical design of the settlement system operated by ASX Settlement is such that the settlement arrangements for trades novated to a non-ASX CCP might not be directly equivalent to those for trades novated to ASX Clear. This could have implications for the risks faced by all CCPs.

Settlement of most transactions in ASX securities occurs in a single daily batch process run by the Clearing House Electronic Subregister System (CHESS), the settlement engine employed by ASX Settlement. This batch process reduces all scheduled securities transfers to a single net transfer per line of stock for each ASX Settlement participant. Settlement occurs on a delivery-versus-payment basis, with associated net interbank payment flows settled across Exchange Settlement Accounts at the Reserve Bank. These settlement arrangements have been in place for many years, dating back to when ASX was a mutually owned organisation.

Settlement instructions related to trades novated to ASX Clear are automatically scheduled for settlement in the CHESS batch. CHESS is able to distinguish between instructions relating to novated

<sup>14</sup> Zhu S (2011), *Is there a "race to the bottom" in central counterparties competition?* De Nederlandsche Bank Occasional Studies Vol 9 No 6, available at: http://www.dnb.nl/en/binaries/DNB\_OS\_0906\_WEB\_tcm47-266141.pdf.

trades and those related to non-novated transactions submitted manually by ASX Settlement participants. Non-novated transactions are negotiated bilaterally and the majority of these are undertaken to ensure that participants' accounts contain sufficient securities to meet settlement obligations arising from novated transactions.

Given the current design of ASX's systems, there is a question as to whether a non-ASX CCP might have to settle its obligations via non-novated settlement instructions. If so, these would be submitted manually by ASX Settlement participants acting on behalf of the non-ASX CCP's clearing participants, with matching instructions submitted by an ASX Settlement participant acting on behalf of the non-ASX CCP.<sup>15</sup> Once matched by CHESS, these instructions would be scheduled for settlement in the CHESS batch alongside other non-novated transactions and transactions novated to ASX Clear.

If trades novated to a non-ASX CCP had to be settled in this manner, there could be implications for the risks to be managed by all CCPs. Under these arrangements, a non-ASX CCP would be operationally dependent on its settlement agent (should it use one); ASX Clear does not face this issue. The arrangements might also create dependencies between competing CCPs due to the intermingling of obligations in the CHESS batch.

Moreover, in this case, current arrangements for handling settlement problems in CHESS would treat trades novated to a non-ASX CCP differently to trades novated to ASX Clear. These arrangements involve a 'back-out' algorithm within CHESS that allocates any shortfall in securities or cash. By design, the algorithm prioritises for settlement trades that have been novated to ASX Clear. This means that, in the event a settlement participant was unable to meet its obligations and the batch needed to be recalculated, it is more likely that trades cleared via a non-ASX CCP would be backed out than trades cleared via ASX Clear.

## 5.1.4 Oversight of offshore entrants

Prospective competition might be expected to emerge through overseas-based facilities seeking to expand the geographical scope of their services. Australian regulators' influence on overseas-based CCPs is likely to be less than that over CCPs located in Australia. This could compromise the regulators' ability to fulfil their mandates to promote financial stability and ensure the provision of fair and effective services.

Overseas-based CCPs that operate under a regulatory regime sufficiently equivalent to the Australian regime may be licensed to operate in Australia as overseas licensed facilities under section 824B(2) of the Corporations Act. The Reserve Bank has exempted CCPs licensed under this section from direct assessment against the FSS for such time as the Reserve Bank receives from the CCP's home regulator documentary evidence that the CCP complies with its local regulations.<sup>16</sup> However, the Reserve Bank acknowledges that where an applicant was seeking a licence to clear 'a particularly large or systemically important market in Australia', the Reserve Bank might advise the Minister that the facility apply for a domestic licence under section 824B(1). The facility would then

<sup>15</sup> Note that participants of the non-ASX CCP could themselves be ASX Settlement participants. Equally, a non-ASX CCP could become an ASX Settlement participant.

<sup>16</sup> See Notice of Variation of Financial Stability Standard for Central Counterparties, available at: http://www.rba.gov.au/payments-system/clearing-settlement/pdf/variation-counterparties-feb09.pdf.

be assessed in full against the FSS (see section 5.2.4).<sup>17</sup> In addition to their respective obligations under the FSS, the Act requires all CCPs licensed in Australia 'to do all other things necessary to reduce systemic risk'.

Australian regulators' reduced influence thus potentially arises through partial reliance on an (albeit sufficiently equivalent) overseas regulatory regime. In addition, regulatory influence may be diminished where some of a domestically licensed CCP's key personnel, infrastructure or resources are based offshore.

#### Your feedback

Q8. Do you consider that there is a risk of a race to the bottom on risk control standards in the event that competition in clearing emerged?

Q9. Are you aware of such a race to the bottom in other jurisdictions in which competition in clearing has emerged? What risk control standards have been impacted and how?

Q10. Do you have views on the risks that the exit of CCPs could pose to financial stability?

Q11. Do you have comments on the issues identified around access to ASX Settlement and settlement arrangements for non-ASX CCPs more generally?

Q12. Are there any other factors related to financial stability that should be considered?

## **5.2** POTENTIAL RESPONSES

## 5.2.1 Exacting risk-management standards

Even if a CCP had an incentive to compete on the basis of less stringent risk controls, its capacity to do so would be limited by regulatory risk-management standards. To the extent that these standards were sufficiently high, regulators might still be comfortable, even if the minimum standard became a *de facto* maximum. There might, however, remain a risk that a CCP responded to competitive pressures by eroding its risk controls over time on the periphery of the regulatory standards, or engaged in selective or weaker enforcement of its own rules designed to comply with such standards. This suggests that there remains a case for the degree of supervisory vigilance to increase where there is competition between CCPs.

The recently released CPSS-IOSCO *Principles for financial market infrastructures* provide a set of minimum risk-management standards to be applied by CCP regulators around the world, including in Australia. These updated Principles contain strengthened requirements in several areas, including the critical areas of credit and liquidity risk. In addition, their development has benefited from regulators' recent experiences with the various market structures (including competitive environments) in which some CCPs now operate.

<sup>17</sup> See Assessing the Sufficient Equivalence of an Overseas Regulatory Regime, Endnote 1, available at: http://www.rba.gov.au/payments-system/clearing-settlement/standards/overseas-equivalence.html.

To mitigate the risk that regulatory minima become *de facto* maxima, ASIC and the Reserve Bank could also consider strengthening regulatory standards to reflect the highest standard observed among incumbent and applicant CCPs. This approach could provide a mechanism by which Australian regulatory standards kept in step with international best practice. Any decision to strengthen regulatory standards would, however, require careful consideration of the overall effect on market efficiency.

## 5.2.2 Exit plans and *ex ante* commitments

To minimise the disruption that might be caused by the exit of a CCP, CCPs wishing to clear ASX securities could be required to commit *ex ante* to a specified notice period prior to any commercially driven exit from the market. There might also be a case for CCPs to support such commitments by setting aside some capital to cover the notice period. In a similar vein, *ex ante* contingency arrangements could be drawn up both by competing CCPs and the relevant market operator to ensure continued provision of clearing services for less liquid securities in the event of the exit of the incumbent CCP for those securities (see section 4.1.1).

There is precedent for such *ex ante* commitments in the case of Australian market licensees, and similar requirements have been introduced in other jurisdictions and in international standards to ensure that FMIs maintain sufficient resources to conduct an orderly wind down of their services.<sup>18</sup>

In the United Kingdom, for instance, Recognised Bodies (RBs) — which comprise 'Recognised Clearing Houses'<sup>19</sup> and 'Recognised Investment Exchanges' — are required to hold sufficient financial resources to:

- cover at least six months' operating costs (in the absence of alternative, bespoke arrangements acceptable to the UK Financial Services Authority (FSA)); and
- $\bullet$  ensure that they would be able to complete an 'orderly closure or transfer' of their services.  $^{\rm 20}$

Similarly, under Article 16 of EMIR, a CCP's capital must be sufficient to ensure, among other things, an orderly wind down or restructuring of its activities over an appropriate time span. EMIR has also imposed a floor, requiring that CCPs hold, at all times, initial capital of at least €7.5 million (or equivalent).

In the United States, regulators have consulted on rule-making under the *Dodd-Frank Wall Street Reform and Consumer Protection Act* (the Dodd-Frank Act)<sup>21</sup> regarding, among other things, the financial resources requirements that will apply to Derivatives Clearing Organizations (DCOs). These include that a DCO should have in place 'sufficient financial resources to cover its operating costs for a period of at least one year, calculated on a rolling basis'.<sup>22</sup>

<sup>18</sup> Principle 15 of the *Principles for financial market infrastructures*, which covers general business risk, requires that 'at a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses'.

<sup>19</sup> This definition includes CCPs and securities settlement systems.

<sup>20</sup> See REC 2.3 'Financial resources' of FSA Handbook, available at: http://fsahandbook.info/FSA/html/handbook/REC/2/3.

<sup>21</sup> Available at: http://www.gpo.gov/fdsys/pkg/PLAW-111publ203/pdf/PLAW-111publ203.pdf.

<sup>22</sup> See *Financial Resources Requirements for Derivatives Clearing Organizations*, available at: http://www.cftc.gov/ucm/groups/public/@lrfederalregister/documents/file/2010-25322a.pdf.

## 5.2.3 Materially equivalent settlement arrangements

Ensuring that settlement arrangements for non-ASX CCPs are materially equivalent to those for ASX Clear could mitigate some of the risks that might otherwise emerge from operational dependence between, or unequal treatment of, different CCPs in the settlement process.

In addition to complying with the FSS and doing all other things necessary to reduce systemic risk, a CS facility licence holder must, to the extent that it is reasonably practicable to do so, do all things necessary to ensure that the facility's services are provided in a fair and effective way. In providing services to a non-ASX CCP and its users, ASX Settlement would need to consider how it might best comply with these obligations.

As discussed in section 6.2 of this paper, there is a preference that ASX and any non-ASX CCP wishing to gain access to ASX Settlement come to mutually acceptable commercial and technical arrangements through negotiations.

While a materially equivalent settlement process for all CCPs might be ideal, the Agencies recognise that this could be difficult and costly to achieve from a systems and technology perspective. The Agencies are therefore open to the possibility of different CCPs employing different settlement arrangements, so long as each set of arrangements is acceptable to both ASX Settlement and the relevant CCP and consistent with both facilities' obligations under the Corporations Act.

## 5.2.4 Location requirements

Since there is a prospect that competition emerges through the entry of a CCP based overseas, it is important that Australian regulators have adequate control and influence to:

- minimise potential disruption and loss to Australian financial institutions, financial markets and the real economy in the event of a clearing participant's default or other financial stress to the CCP;
- ensure continuity of provision of clearing services to the market for ASX securities; and
- establish conditions whereby Australian regulators (and Australian participants) have effective oversight of the CCP and can exercise sufficient influence to ensure that it meets domestic and international standards for systemic risk management, provides its services in a fair and effective way, and offers due protections to Australian participants.

One potential vehicle is through the imposition of location requirements, as recommended by the Council further to the *Review of Financial Market Infrastructure Regulation*.<sup>23</sup> The Agencies acknowledge that there is a balance to be struck between the efficiency costs of imposing these requirements and the stability benefits for the Australian market. Location requirements and other measures to enhance regulatory control and influence must therefore be applied flexibly, proportionally and in a graduated fashion. They might conceivably also change over time as markets and a particular licensee's business evolve.

<sup>23</sup> The Council's advice as provided to the Deputy Prime Minister and Treasurer is available at http://www.treasury.gov.au/documents/2093/PDF/CoFR\_Letter\_to\_Deputy\_PM.pdf

In consultation with the other Council agencies, the Reserve Bank and ASIC continue to develop a framework for setting location requirements. Further detail will be provided on this shortly.

In the case of clearing ASX securities, it will be important for ASIC and the Reserve Bank to recognise that a new foreign entrant could conceivably establish a large market share over a short period of time. ASIC and the Reserve Bank would therefore need to establish regular review points and carefully assess the scope of requirements appropriate to the likely future scale and importance of such business.

### 5.2.5 Co-operative arrangements with overseas regulators

Formal co-operative arrangements between ASIC, the Reserve Bank and the home regulator of an overseas-based CCP are likely to be required to ensure that Australian regulators retain the necessary and appropriate influence over the Australian operations of an overseas-based CCP.

The need for the Reserve Bank to establish information sharing arrangements with overseas regulators is already set down in the variation to the FSS that provides for a possible exemption of overseas CCPs from direct assessment against the FSS. Section 827A(3) of the Corporations Act also acknowledges that in considering a licence application from an overseas CS facility, the Minister must also have regard to 'whether adequate arrangements exist for co-operation between ASIC, the Reserve Bank of Australia and the authority, or authorities, that are responsible for that supervision.'

Ultimately, ASIC and the Reserve Bank will seek co-operative oversight arrangements with overseas regulators commensurate with the importance of the CCP to the Australian financial system. A formal and influential role in any co-operative arrangement would give comfort that Australian interests will be given due consideration in those regulators' ongoing oversight of the relevant CCPs and in periods of market stress.

There is precedent for cross-border regulatory arrangements in respect of CCPs, and other FMIs. In Europe, for instance, LCH.Clearnet SA, a Paris-based CCP that clears (among other products) French, Dutch, Belgian and Portuguese equities, is regulated by a college of regulators comprising the market regulators and central banks of these four countries.

The Agencies expect that any co-operative oversight arrangements would be established in accordance with Responsibility E in the CPSS-IOSCO *Principles for financial market infrastructures*. The Principles state that: 'Central banks, market regulators, and other relevant authorities should co-operate with each other, both domestically and internationally, as appropriate, in promoting the safety and efficiency of FMIs'.

#### Your feedback

Q13. To what extent do you consider that application of risk-management standards consistent with the CPSS-IOSCO *Principles for financial market infrastructures* would mitigate the risk of a race to the bottom?

Q14. To what extent do you consider that exit plans and *ex ante* commitments would mitigate the risk of instability in the event of the exit of a competing CCP?

Q15. Do you have views on what *ex ante* commitments might be reasonable and how these might be imposed without creating barriers to entry?

Q16. To what extent do you consider that location requirements would mitigate the risk of diminished regulatory influence and control in the event that an overseas-based CCP provided clearing services for ASX securities?

Q17. Do you have views on what location requirements – and other measures to enhance regulatory control and influence – might be reasonable in the case of clearing ASX securities and how these might be imposed without creating unnecessary impediments to entry?

Q18. Do you have views on what would constitute appropriate settlement arrangements for non-ASX CCPs?

Q19. Do you have views on what would constitute a reasonable basis for co-operation with overseas regulators?

Q20. Can you suggest any other responses to the issues raised in relation to financial stability?

# 6. COMPETITION AND ACCESS

The prior sections of this paper have outlined the potential risks to market functioning and financial stability that may arise in the event of multiple providers of clearing services, and potential regulatory responses. Assuming these risks could be addressed via appropriate regulatory controls, market dynamics could typically then be expected to deliver efficient outcomes, such as lower fees and increased innovation. The existing Australian market structure for the clearing and settlement of ASX securities could, however, emerge as an issue for potential competitors. The market structure and the existing policy and legislative framework around competition and access are discussed in this section.

## 6.1 MARKET STRUCTURE

Where a vertically integrated firm supplies a monopoly service to a related market in which that firm also competes, it may have an ability and incentive to foreclose competition in that related market. Where the monopoly service is an essential input to competition in the related market, the vertically integrated firm may have an incentive to discriminate in the provision of that service to its downstream competitors. This is often referred to as the 'essential facilities' problem, and ensuring effective access to the monopoly service is necessary to facilitate competition in the related market.

Assuming that settlement remained a monopoly service, the existing market structure for clearing and settlement of ASX securities could present an essential facilities scenario. ASX would be a vertically integrated incumbent provider of clearing and settlement services, and any new provider of clearing services for ASX securities would require access to the existing settlement facility for those securities (that is, ASX Settlement).

## 6.2 EXISTING POLICY AND LEGISLATIVE FRAMEWORK

While it is preferable for ASX and any non-ASX CCP wishing to gain access to ASX Settlement to come to mutually acceptable commercial terms of access through negotiations, within the existing legal and regulatory framework for competition and access to nationally significant infrastructure facilities, the Agencies recognise that different regulatory arrangements have been applied in different industries. The following discussion elaborates on several important elements of the legal and regulatory framework, for illustrative purposes only. The Agencies have not formed a view about whether any targeted interventions mentioned under 'Specific Government responses' below would be necessary or appropriate in this context. The Agencies also recognise that there are costs and benefits to each of the options outlined below, and stakeholder views are sought in relation to these issues.

## 6.2.1 Section 46 of the Competition and Consumer Act 2010

Section 46 of the CCA provides that a corporation with substantial market power must not take advantage of that power for a prohibited purpose. Those prohibited purposes are:

- eliminating or substantially damaging a competitor of the corporation, whether in the market in which it has substantial market power or in any other market;
- preventing the entry of a person into that or any other market; or
- deterring or preventing a person from engaging in competitive conduct in that or any other market.

Section 46 may apply in a situation where a vertically integrated provider of monopoly services denies access to those services in order to foreclose competition in the related market.

If a corporation contravenes section 46, it may be subject to a pecuniary penalty. The maximum pecuniary penalty available is the greater of \$10 million, three times the benefits attributable to the contravention, or 10 per cent of the corporation's annual turnover. Additionally, the Court may grant injunctions in such terms as it thinks appropriate, and persons suffering loss or damage by conduct in breach of section 46 may recover damages from any person involved in the contravention.

## 6.2.2 The National Access Regime

Part IIIA of the CCA sets out a generic regime — known as the National Access Regime — for access to services provided by means of significant infrastructure facilities. Part IIIA is a generic access regime in the sense that it may apply across a range of industries.

Under the National Access Regime there are three key pathways for obtaining access to services provided by means of significant infrastructure:

- declaration/arbitration;
- a State or Territory regime certified as an effective access regime; or
- an access undertaking accepted by the ACCC.

The Regime is structured so that only one pathway should be available at any one time. A service cannot be subject to the declaration/arbitration process if there is an effective State or Territory regime in place or an undertaking has been accepted. Similarly, an undertaking cannot be accepted if there is an effective State or Territory regime in place or if a service has been declared.

Under the declaration provisions of Part IIIA, the designated Minister or any other person may apply to the National Competition Council (NCC) for declaration of a service. The NCC may recommend to the designated Minister that the service be declared if specified criteria are satisfied. These criteria are that:

- access to the service would promote a material increase in competition in at least one market other than the market for the service;
- it would be uneconomical for anyone to develop another facility to provide the service;
- the facility is of national significance, having regard to its size, importance to trade or commerce, or importance to the national economy;

- access is not already subject to an effective State or Territory access regime that has been certified as effective; and
- access, or increased access, to the service would not be contrary to the public interest.

If the Minister were to decide to declare the service, any disputes on access could be arbitrated by the ACCC under Division 3 of Part IIIA. The ACCC may make an arbitration determination which then sets the terms and conditions of access. Arbitration is available for any access seeker whose commercial negotiations have failed; arbitration is not restricted to the applicant for declaration (who indeed may not be an access seeker at all).

An owner of an infrastructure facility can also submit an access undertaking to the ACCC which, if accepted, sets the terms and conditions of access.

## 6.2.3 Specific Government responses

In addition to the options cited, a range of more specific and targeted options are available in the event an issue was found to exist. The examples cited here draw on previous experience and are not meant to represent an exhaustive list.

### Transitional arrangements

Parliament has provided for 'deemed declaration' as a transitional measure to deal with the privatisation of an industry previously characterised by public ownership. Section 192 (now repealed) of the *Airports Act 1996*, enacted in the context of the privatisation of a number of airports, provided that:

- airport operators were allowed 12 months after an airport had been privatised to have an access undertaking accepted by the ACCC; and
- if an undertaking were not accepted by the ACCC within the designated period, the relevant Minister was required to determine that each 'airport service' at the airport was a declared service for the purposes of Part IIIA.

Given that no undertakings were accepted by the ACCC prior to the expiry of the period, the relevant Minister determined that airport services at all privatised core-regulated airports were declared.

Another alternative, also employed as a transitional measure, is for Parliament to make a decision mandating the submission of an access undertaking.

Introduced in 2008 as a transitional measure following the end of the 'single desk' arrangement for Australian wheat exports, the *Wheat Export Marketing Act 2008* requires accredited wheat exporters who also operate export grain terminals to have a Part IIIA access undertaking accepted by the ACCC in order to maintain that accreditation. Without an access undertaking in place, the vertically integrated exporters are not permitted to export wheat. In accordance with this regime, operators of bulk wheat export terminals submitted access undertakings to the ACCC in 2009 and 2011, which the ACCC assessed and accepted.

Following a Productivity Commission review, the Minister for Agriculture, Fisheries and Forestry announced that these arrangements are to be phased out by 2014, on the basis that a voluntary code of conduct is developed and implemented by 30 September 2014.

Additionally, in 1997 the National Third Party Access Code for Natural Gas Pipeline Systems specified certain pipeline infrastructure that was 'covered' as from the date of the code's commencement.

### Industry-specific access regimes

As a further alternative, the Government has in some cases devised industry-specific access regimes separate to the generic access regime in Part IIIA. These include regimes for the telecommunications (Part XIC of the CCA), electricity (the National Electricity Law and Rules) and gas industries (the National Gas Law and Rules).

### Structural separation

It should also be noted that, where a monopoly is vertically integrated with a potentially competitive service, and competition is to be introduced into that potentially competitive market, structural separation of the monopoly element from the potentially competitive elements may also address competition concerns.<sup>24</sup>

Requirements for price transparency and service unbundling are less stringent measures that might also address possible anti-competitive behaviour by a vertically integrated facility. These introduce a degree of competitive pressure by affording potential customers of the facility (either firms or other facilities) greater information and choice when deciding which services to utilise. Such measures were introduced in Europe under the Code of Conduct, to meet broader transparency objectives.

### Your feedback

Q21. Do you have views on the effectiveness of the existing policy and legislative framework in addressing access to ASX Settlement?

Q22. Do you have views on whether transitional or longer term regulatory arrangements would be most appropriate in addressing any potential issues that could emerge in relation to competition and access to ASX Settlement?

Q23. Can you suggest any other options (regulatory or non-regulatory) to address any potential issues that could emerge in relation to competition and access?

<sup>24</sup> While the Johnson Report suggested that there may be merit in 'examining the case for the clearance and settlement mechanism in Australia becoming an industry owned and funded facility', the starting point of this paper is that of openness to competition in clearing and settlement services.

# 7. NEXT STEPS AND FEEDBACK

# 7.1 NEXT STEPS

This paper seeks stakeholder feedback on the questions posed in relation to competition in the clearing and settlement of the Australian cash equity market.

The Council intends to meet with interested stakeholders during the consultation period. Expressions of interest can be made through the contact point given on page iii of this paper.

Following the consultation process, the Council will consider the stakeholder submissions and will advise the Government of its findings in due course.

| Section                                   | Feedback questions  | Page  |
|---|---|-------|
| 2. Competition in clearing and settlement | <ul><li>Q1. Do you agree that clearing of ASX securities is contestable?</li><li>Q2. Do you agree that there is no evident demand for competition in the settlement of ASX securities? If so, do you have any views on whether price or non-price issues could emerge in relation to ASX's settlement facility?</li></ul>   | 5     |
| 4. Market functioning                     | <ul> <li>Q3. Have the Agencies identified the right issues around fragmentation?</li> <li>Q4. Do you have views on whether particular product or participation segments of the market for ASX securities would be affected in the event that competition in clearing emerged?</li> <li>Q5.Are there any other factors related to the effective functioning of the market for ASX securities that should be considered?</li> <li>Q6. Do you have views on the stability and effectiveness of interoperability in other jurisdictions? Should interoperability between competing CCPs be encouraged in Australia?</li> <li>Q7. Can you suggest any other responses to the issues raised in relation to market functioning?</li> </ul> | 10,12 |

# 7.2 FEEDBACK SOUGHT

| 5. Financial stability | Q8. Do you consider that there is a risk of a race to the bottom on risk control standards in the event that competition in clearing emerged?  | 18,22 |
|------------------------|--|-------|
|                        | Q9. Are you aware of such a race to the bottom in other<br>jurisdictions in which competition in clearing has emerged?<br>What risk control standards have been impacted and how?  |       |
|                        | Q10. Do you have views on the risks that the exit of CCPs could pose to financial stability?   |       |
|                        | Q11. Do you have comments on the issues identified around access to ASX Settlement and settlement arrangements for non-ASX CCPs more generally?  |       |
|                        | Q12. Are there any other factors related to financial stability that should be considered?   |       |
|                        | Q13. To what extent do you consider that application of risk-management standards consistent with the CPSS-IOSCO <i>Principles for financial market infrastructures</i> would mitigate the risk of a race to the bottom?   |       |
|                        | Q14. To what extent do you consider that exit plans and <i>ex ante</i> commitments would mitigate the risk of instability in the event of the exit of a competing CCP?   |       |
|                        | Q15. Do you have views on what <i>ex ante</i> commitments might be reasonable and how these might be imposed without creating barriers to entry?   |       |
|                        | Q16. To what extent do you consider that location<br>requirements could help to mitigate the risk of diminished<br>regulatory influence and control in the event that an<br>overseas-based CCP provided clearing services for ASX<br>securities?                                 |       |
|                        | Q17. Do you have views on what location requirements –<br>and other measures to enhance regulatory control and<br>influence – might be reasonable in the case of clearing ASX<br>securities and how these might be imposed without<br>creating unnecessary impediments to entry? |       |
|                        | Q18. Do you have views on what would constitute appropriate settlement arrangements for non-ASX CCPs?  |       |
|                        | Q19. Do you have views on what would constitute a reasonable basis for co-operation with overseas regulators?  |       |
|                        | Q20. Can you suggest any other responses to the issues   |       |

|                           | raised in relation to financial stability?   |    |
|---------------------------|--|----|
| 6. Competition and access | Q21. Do you have views on the effectiveness of the existing policy and legislative framework in addressing access to ASX Settlement?   | 26 |
|                           | Q22. Do you have views on whether transitional or longer<br>term regulatory arrangements would be most appropriate<br>in addressing any potential issues that could emerge in<br>relation to competition and access to ASX Settlement? |    |
|                           | Q23. Can you suggest any other options (regulatory or<br>non-regulatory) to address any potential issues that could<br>emerge in relation to competition and access?   |    |

# APPENDIX: EUROPEAN DEVELOPMENTS IN CLEARING AND SETTLEMENT MARKET STRUCTURE AND REGULATION

In recent years, the European FMI industry has undergone significant change as part of the formation of a single financial market. In order to promote the integration of markets previously fragmented along national lines, regulators have encouraged industry consolidation by removing impediments to cross-border competition. The following describes some aspects of the European experience, which are helpful in understanding competitive forces in the FMI industry and how they can be influenced by regulation. The first section describes the history of changes in the industry structure, and the second section looks at regulations around open access between trading, clearing and settlement facilities.

### CHANGES TO THE INDUSTRY STRUCTURE

At the establishment of the European single market, member countries' equity markets were typically each served by national infrastructure, a feature somewhat embedded by local legislation. In 2000, the first of a wave of cross-border mergers took place, which in subsequent years created a small number of corporate entities that provided infrastructure services in multiple regions. Most countries, however, were still served by national facilities, and regulatory differences made cross-border market entry difficult. Investors therefore often had to use multiple intermediaries to access other countries' markets, and the high cost of doing so was seen as a barrier to cross-border capital flows. In response, European regulators pursued a number of measures to open these services to competition, and further regulations are to be introduced. This has seen a reduction in the number of monopolies at the trading level, and, more recently with the development of suitable models for interoperability, an increase in competition at the clearing level.<sup>25</sup>

There are several particularly notable examples of evolution away from the model of 'national' infrastructure in Europe:

- (a) In 2000, Euronext was formed through the merger of equities exchanges and CCPs in Amsterdam, Brussels and Paris. The company publicly listed in 2001, and in 2002 also acquired the Lisbon equities exchange and CCP. (In 2007 Euronext merged with the New York Stock Exchange (NYSE), forming NYSE Euronext, of which NYSE and Euronext are now subsidiaries.)
- (b) In 2001, Clearnet the CCP for Paris markets and a subsidiary of Euronext merged with the CCPs of Euronext Amsterdam and Euronext Brussels. In 2003, the London Clearing House, a CCP clearing UK equities (among other products), merged with Clearnet to form the LCH.Clearnet group. As of June 2012, the London Stock Exchange Group is proposing to take a majority (up to 60 per cent) stake in the LCH.Clearnet Group. This transaction has received shareholder approval at both companies, but remains subject to regulatory approval.

<sup>25</sup> The European experience has been the subject of a study conducted for the European Commission on the evolution of post-trading costs. See Oxera (2011), 'Monitoring prices, costs and volumes of trading and post-trading services', report prepared for the European Commission DG Internal Market and Services, May, available at: http://ec.europa.eu/internal\_market/financial-markets/docs/clearing/2011\_oxera\_study\_en.pdf.

- (C) A third major cross-border provider is Euroclear Group, a user-owned organisation that provides securities settlement services for France, the Netherlands, Belgium, the UK, Finland and Sweden, across a number of central securities depositories (CSDs). The Group also owns Euroclear Bank, an international CSD. The current company expanded its operations through a series of mergers from 2001 to 2008, prior to which most of the settlement facilities were operating as national, vertically separated companies.
- (d) There has also been substantial consolidation among Nordic equities trading facilities and CCPs to form the current structure of OMX, a subsidiary of NASDAQ OMX.

To further advance European market harmonisation, the European Parliament introduced in 2004 (for implementation by 2007) the Markets in Financial Instruments Directive (MiFID)<sup>26</sup>, the objectives of which included the removal of barriers to competition between trading facilities. MiFID removed legislative mandates for nationally operated facilities, which quickly led to newly created trading facilities contesting the markets of a number of established exchanges — so called 'multilateral trading facilities' (MTFs). These new facilities included Chi-X Europe, BATS Europe, Turquoise and UBS MTF, which have since established competition in most of the major equities markets throughout Europe. Initially, they tended to use different CCPs to the incumbent exchanges, which also introduced some competition at the clearing level — including between CCPs created following the introduction of MIFID, such as EMCF and EuroCCP. Although each of these MTFs are still in operation, in 2009 a majority stake in Turquoise was acquired by the London Stock Exchange, and at the end of 2011 BATS Global Markets completed a takeover of Chi-X Europe.

Until recently, there was only one example of 'head-to-head' competition between CCPs in European equity markets. In 2003, LCH.Clearnet Ltd (the London-based subsidiary of the LCH.Clearnet Group) established CCP interoperability with SIX x-clear (a Swiss CCP), to compete for the clearing of Swiss equities. In 2008, via the same link arrangement, SIX x-clear also began to compete with LCH.Clearnet Ltd for the clearing of equities traded on the London Stock Exchange.

There has been industry and political demand for further competition in equities clearing, although it has taken some time to assuage concerns over risks created by the required links between CCPs. After the creation of the Code of Conduct and Access and Interoperability Guidelines, many requests for links were submitted among CCPs. However, recognising the effect these links would have on financial system risk, a number of regulators halted further link formation until suitable risk-management regimes could be established.

In late 2010, the same regulators approved a risk-management regime put forward by CCPs, and in mid-2011 LCH.Clearnet Ltd, SIX x-clear and EuroCCP set up a link to compete for equities traded on BATS Europe. Since BATS Europe's existing CCP, EMCF, was not initially involved in this link, trades were only routed to the linked CCPs if neither of the trading counterparties was using EMCF as its CCP. In January 2012, EMCF joined the link arrangement, and all four CCPs also set up a link to compete for equities traded on Chi-X Europe. Among other interoperable clearing arrangements recently established, Turquoise has launched competitive clearing of its trades across a link between EuroCCP, LCH.Clearnet Ltd and SIX x-clear. Turquoise announced in September 2011 its intention to extend this to CC&G (an Italian CCP), and EMCF also plans to join this arrangement subject to regulatory approval. In all, it is estimated that around 50 per cent of pan-European equity trading on organised platforms now takes place on platforms that offer participants a choice of CCP.

<sup>26</sup> Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:145:0001:0044:EN:PDF.

### **OPEN ACCESS REGULATIONS**

Since FMIs are operationally dependent on each other, effective competition at any point in the value chain (i.e. trading, clearing or settlement) relies on access to other FMIs on fair terms. Under MiFID and the Code of Conduct, European regulators have implemented rules to establish open access in some instances, although they have not yet had as wide-reaching and substantial an effect on the structure of the industry as might have been anticipated. This may soon change with the introduction of stronger requirements for FMIs under impending European policy reforms, including EMIR.

The provisions in earlier European regulations, such as MiFID, tended to be permissive with respect to open access to FMIs, rather than prescriptive in mandating it. Article 35, for example, states that 'Member States shall not prevent ... market operators operating an MTF from entering into appropriate arrangements with a CCP ... of another Member State'. While CCPs had to ensure that there were no obstacles to the provision of access, there was no obligation on the CCP receiving an application to grant an access request. The Code of Conduct placed a positive obligation on infrastructure organisations to provide access when requested. However, even abstracting from risk-management considerations, the Code of Conduct is voluntary and has proved to be difficult to enforce when a CCP identifies technical obstacles.

MiFID also gives market participants access rights to different levels of market infrastructure, although this has been largely ineffective in reforming the market structure. Article 34 gives investment firms the right of non-discriminatory, cross-border access to CCPs and settlement facilities. It also requires that regulated markets give their participants the right to designate their chosen system for settling transactions — although this does not cover MTFs, which are instead covered by Article 35. These rights have had less impact on market structure than expected for at least two reasons: first, they are subject to the necessary links being in place, without any mandate to establish such links; and second, they are focused on access to settlement facilities, whereas participants have been more interested in the right to choose which CCP to use.

Technical standards to be set by the European Securities Markets Authority under EMIR are likely to strengthen open access obligations among trading facilities and CCPs. Depending on how these are finalised, the introduction of stronger open access to trade feeds could result in a significant increase in the number of interoperable links between equities CCPs.

In March 2012, the European Commission issued a proposed regulation that would also introduce access rights for facilities at the settlement level.<sup>27</sup> Among other things, the proposed regulation would prevent a CSD from refusing to set up a link with another CSD on any grounds other than risk. Similar to EMIR, it would also give CSDs the right to request trade feeds from trading and clearing facilities, and require CSDs to offer their settlement services to any trading or clearing facility that requested them.

<sup>27</sup> Available at: http://ec.europa.eu/internal\_market/financial-markets/docs/COM\_2012\_73\_en.pdf.