



**Council of Financial Regulators:
Competition in the clearing and settlement
of the Australian cash equity market
Discussion Paper June 2012**

ASX submission

10 August 2012

Contents

Chapter 1: Introduction	3
Chapter 2: Investment and innovation in Australia's financial infrastructure	6
Chapter 3: Benchmarks and the cost-benefit analysis ('size of the prize')	8
Chapter 4: Risks to financial stability	14
Chapter 5: Competition and open market structure	17
Chapter 6: Inter-connectedness and non-discrimination –the same rules are needed for the same activities	24
Appendix: Detailed responses to questions	26

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Chapter 1: Introduction

ASX welcomes the opportunity to contribute to the debate on the potential benefits and risks of competition and foreign participation in clearing and settlement. It is an important debate. The policy decisions that flow from this discussion will determine the position and strength of Australia's financial markets in the Asian region, define the risks that regulators and the government assume in managing critical financial infrastructure, and influence the financial outcomes for participants in Australia's financial markets.

ASX welcomes competition where this provides a clear net benefit to the profitability and stability of Australia's financial markets and improves Australia's global competitive position.

Building a World Class Market Infrastructure

Australia's financial market infrastructure has proven to be strong and resilient in the face of a number of international financial crises. ASX is committed to a program of continued investment and innovation to ensure that its clients have access to a world class market infrastructure for clearing and settlement in Australia.

These investments by ASX include upgrades to Australia's clearing and settlement infrastructure, adoption of globally recognised risk management standards, the development of OTC clearing services (including AUD interest rate swaps), the ability to cross margin between the two ASX clearing houses to make capital efficiencies available to customers, the creation of multi-currency capabilities and the establishment of a new collateral management service to allow customers to better utilise the collateral held in ASX's equities and fixed income depositories. ASX is uniquely placed to make these investments and its current business has sufficient scale to generate a reasonable risk adjusted rate of return.

Designing an Appropriate Market Structure

The issues raised by the Discussion Paper invite an analysis of what is an appropriate clearing and settlement structure for a market the size of Australia. Up to now Australia has had a simple, effective and well understood model with ASX as the single operator of clearing and settlement facilities for the Australian cash equity market.

With the exception of Europe, where there are multiple clearing and settlement facilities for the same securities, every other major equity market has single facilities. It is important that policy makers fully consider all the implications from importing a uniquely European market structure into a market the size of Australia's to avoid a repeat of the unintended consequences that flowed from competition in equities trading.

If regulators are open to change this market structure, the onus must be on those advocating change to produce substantial empirical evidence demonstrating that the benefits of change outweigh any increased costs to participants and increased risks to Australia's financial markets stability. The burden of proof in the case of clearing and settlement is necessarily high given the critical nature of the infrastructure and heightened risk in the current volatile global economic environment.

The debate should not be focused on changing the regulatory structure for clearing of cash equities to simply assist the entry of large global competitors. It should be focused on the most efficient clearing and settlement infrastructure for participants and investors, the preservation of market integrity and systemic risk, and the impact on Australia's position as a regional financial centre. If a foreign facility is allowed to operate within Australia under different rules to a locally licensed facility, fundamental questions about the impact on systemic stability, the direct control of Australian regulators, investor confidence and competitive neutrality need to be addressed.

All stakeholders need to consider if the 'size of the prize' is justified by the associated costs and risks. In this case stakeholders need to be defined to include not only Government, regulators and financial market intermediaries but also the 'ultimate customers' of Australia's financial infrastructure – listed companies, fund managers, the superannuation sector, and retail investors. It is important that their views are sought during the consultation process to ensure their perspectives are taken into account, and their interests are served, before major policy decisions are made to change current arrangements.

The collective costs, risks, and benefits to all stakeholders of any change to today's market structure need to be assessed in the context of clearing and settlement fees being a function of the modest scale of the Australian market and the full range of processing and risk management services that are bundled together. It also needs to recognise the dynamic nature of the industry and competitive forces at work today which are supported by an effective competition law framework.

Measuring the Costs and the Benefits

Often the public debate on these issues takes a simplistic view, focussing on the easy to identify potential benefits such as lower fees but not the harder to quantify offsetting operational and regulatory costs and risks. The recent experience of a change to the market structure for trade execution demonstrates that it does not follow that with new entrants there is either a net reduction in costs or that lower fees are passed on to end-consumers, including fund managers and retail investors. As demonstrated in trade execution, the direct costs can outweigh the benefit of fee reductions and fragmentation brings with it operational and regulatory issues for the whole industry.

A very small portion of the total cost of clearing paid by end customers, around \$50 million, are fees charged by the central counterparty (CCP) for its clearing services. Even if it was assumed savings in clearing could be as high as 25-50% (and there is no guarantee that fee reductions would eventuate), the gross benefit for all end customers would be no more than \$12.5-25.0 million p.a assuming the full amount was passed through by intermediaries in lower fees.

Balanced against the potential benefits are the direct operational and regulatory costs borne by CCPs and participants associated with a more complex market structure and a higher risk profile of Australia's financial markets, particularly if clearing functions are performed overseas.

The Discussion Paper also implies that regulators may require changes to operational processes such as the CHESS back-out algorithm, a review of the batch processing system and re-consideration of a Real Time Gross Settlement System (RTGS) model. Industry participants need to understand that RTGS may be the only practical way to manage the settlement cycle in a multi-CCP environment and the implication this would have for the loss of the significant netting benefits of the batch settlement model. In this environment ASX will need to review settlement processes and the current T+3 settlement cycle – either to meet any mandated regulatory requirements (such as equivalent treatment of trades from different CCPs and/or settlement certainty) or to remain competitive.

Moreover, when assessing the level of clearing fees in Australia against global benchmarks regulators should take account of the nature of the services provided, particularly the capital structure of the CCP. ASX Clear contributes more of its own capital, and relies less on financial contributions from its participants, than its global peers.

It is therefore not guaranteed that there will be net economic benefits from multiple clearing operations. The most efficient model may be the existing single provider model, as several other countries have concluded.

Preserving Financial Market Stability

If policy makers decide to change the current market structure for clearing and settlement, it is important that this does not come at the expense of compromising financial stability.

Regulators must either be confident that there is no increased risk to the stability of Australia's financial markets or, if there is, articulate how that can be managed so that it is an acceptable risk. Moreover, the interconnectedness of the Australian cash equity market means that the same rules need to apply to all providers. If the regulators are confident that financial stability can be preserved with foreign based facilities operating in Australia, then those same conditions must be available to ASX. The conditions that apply to new entrants should be designed to promote greater efficiency and stability of the system as a whole, for the benefit of consumers of the services provided, not merely the suppliers of those services. A "graduated approach" that

benefits large overseas players is not appropriate and would directly discriminate against ASX and any users that do not have a global presence.

Meeting the Competitive Challenge

ASX is meeting the competitive challenge brought about by the global industry pressure for lower costs. ASX has provided open access to its post-trade infrastructure to new exchanges at a low cost. Chi-X is charged \$275,000 p.a. to access ASX's clearing and settlement infrastructure and smaller exchanges pay between \$50,000 and \$100,000 p.a (for a more limited settlement service). In addition, ASX will soon implement the first stage of a new fee structure that will see an unbundling of clearing and settlement fees. This project was started in early 2011 with the aim of providing customers with greater choice of services and transparency of pricing.

The Discussion Paper does not identify any reason to change the existing competition law regime. The commercial incentives that are already in place and the past conduct of ASX demonstrate that it does give access to important services on reasonable commercial terms. The existing competition law framework is effective.

ASX's Perspective

This paper provides ASX's perspective on these critical issues and believes the following considerations should be taken into account by policy makers when making a decision around clearing and settlement market structure:

- **Chapter 2: Investment and innovation in Australia's financial infrastructure.** Sets out ASX's investments that will ensure that its clients have access to world class clearing and settlement services in Australia.
- **Chapter 3: Benchmarks and the cost-benefit analysis.** Provides an overview of international experience with market structures in clearing, comparisons of clearing costs, the importance of market size and a view on the experience of the introduction of competition in cash equity trading in Australia.
- **Chapter 4: Risks to financial stability.** Outlines the need for the Government and regulators to be confident that the systemic and operational risks that may arise with a change in market structure are fully understood and managed.
- **Chapter 5: Competition and open market structure.** Addresses the current competitive environment and ASX's role in providing access to its clearing and settlement infrastructure.
- **Chapter 6: Inter-connectedness and non-discrimination – the same rules are needed for the same activities.** Argues that it is important to apply the same rules to all facility operators given the impact disruptions can have on market confidence.
- **Appendix 1.** Provides responses to the questions raised in the consultation paper.

There should be a heavy onus on those advocating a change in the clearing and settlement market structure to demonstrate that there will be net benefits which flow to end-users, particularly fund managers and retail investors. This case has not been made out. Fragmentation (and interoperability) of equity clearing is a uniquely European idea driven by specific policy objectives. No other major single market has gone down this path and for good reasons. Any net cost savings are likely to be minimal, risks for investors will increase and it is unlikely to assist Australia's position in Asia.

Assisting new global entrants into the Australian market and letting market forces determine the outcomes will appeal to some stakeholders who may directly benefit. That does not make it a sound policy development for the Australian market place.

Chapter 2: Investment and innovation in Australia's financial infrastructure

Executive summary

- Clearing and settlement facilities are critical financial market infrastructure requiring significant investment to keep pace with the needs of customers and regulators, and to ensure Australia's financial services sector maintains its global competitiveness.
- ASX is committed to investing in Australia's financial infrastructure to deliver capital and operational efficiencies to its customers.
- The next three years will see ASX enhance Australia's clearing and settlement infrastructure by developing a locally-based OTC derivative clearing service and providing benefits to participants from more efficient margining and collateral management arrangements.

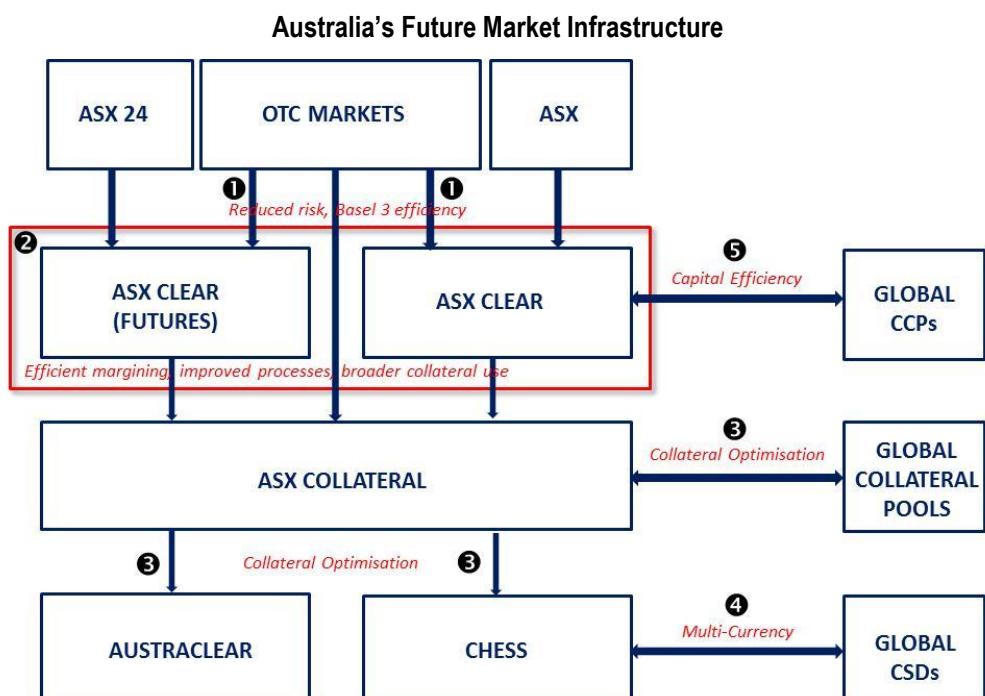
The existing clearing and settlement infrastructure for Australia cash equities was built at a time when a simple market structure was in place in Australia. That structure involved a single platform for trading ASX listed equities, a single Central Counterparty Clearing House (CCP), and a single Central Securities Depository (CSD).

Historically these three separate functions have been performed exclusively within the vertically integrated ASX Group. Trading was conducted through the ASX trading platform and the clearing and settlement of completed trades was conducted through the CHESS (Clearing House Electronic Subregister System) by the Group subsidiaries ASX Clear and ASX Settlement respectively¹.

More recently ASX has provided access to its clearing and settlement infrastructure to new exchange entrants at a low cost (see Chapter 5).

Global financial centres are increasingly competing for the listing of securities and the associated trading and post-trade services. If Australia is to maintain a globally relevant market, as well as advance its aspiration to be a regional financial centre, Australia's market infrastructure needs to be globally competitive. This requires investment.

In 2012, ASX commenced a major upgrade of Australia's clearing infrastructure. The investments that ASX is committed to over the next few years are represented in the following diagram.



1. **OTC Clearing** – ASX is working with industry to develop a domestic clearing solution consistent with Australia's G20 commitment to centralised clearing of standardised AUD denominated OTC derivatives.
2. **Margin and collateral efficiency** – facilitating position offsets between XJO index options and SPI futures contracts.
3. **Collateral management** - develop a service that facilitates greater use by customers of non-cash AUD collateral held in Austraclear and CHESS, providing operational efficiencies and funding cost reductions. This service will be extended to non-AUD collateral assets in a later phase.
4. **Multi-currency clearing/settlement** – developing new products and services that meet the needs of customers trading in global markets.
5. **CCP linkages** – examining opportunities to drive greater capital and operational efficiencies for customers through technical links with foreign CCPs.

These investments and service innovations are in response to growing customer requirements for choice in services and efficiency in processing and the utilisation of capital and collateral. Significant investments are being committed by ASX to ensure that Australia's financial market infrastructure is competitive and will meet global and domestic regulatory requirements imposed by CPSS-IOSCO and the RBA's Financial Stability Standards (FSS). This includes the current investment to develop cash market margining.

This extended range of clearing and settlement infrastructure will provide all participants in the Australian marketplace with reduced costs; more efficient operational processes and connectivity; and greater risk capital efficiency.

The use of the existing Australian domestic license holders means that these services will be subject to the Australian licensing regime (overseen by the RBA and ASIC). Specifically this provides for a single onshore default fund for futures and swaps to leverage ASX's capital contribution to the default waterfall which is substantially higher than other offshore CCPs (see page 11 for details of ASX Clear's default fund).

ASX's business model as a vertically integrated exchange group enables it to make a long-term commitment to invest in the initiatives that are needed to ensure Australia's financial market infrastructure keeps pace with world-best standards, particularly given the relative modest size of our securities markets.

Chapter 3: Benchmarks and the cost-benefit analysis ('size of the prize')

Executive summary

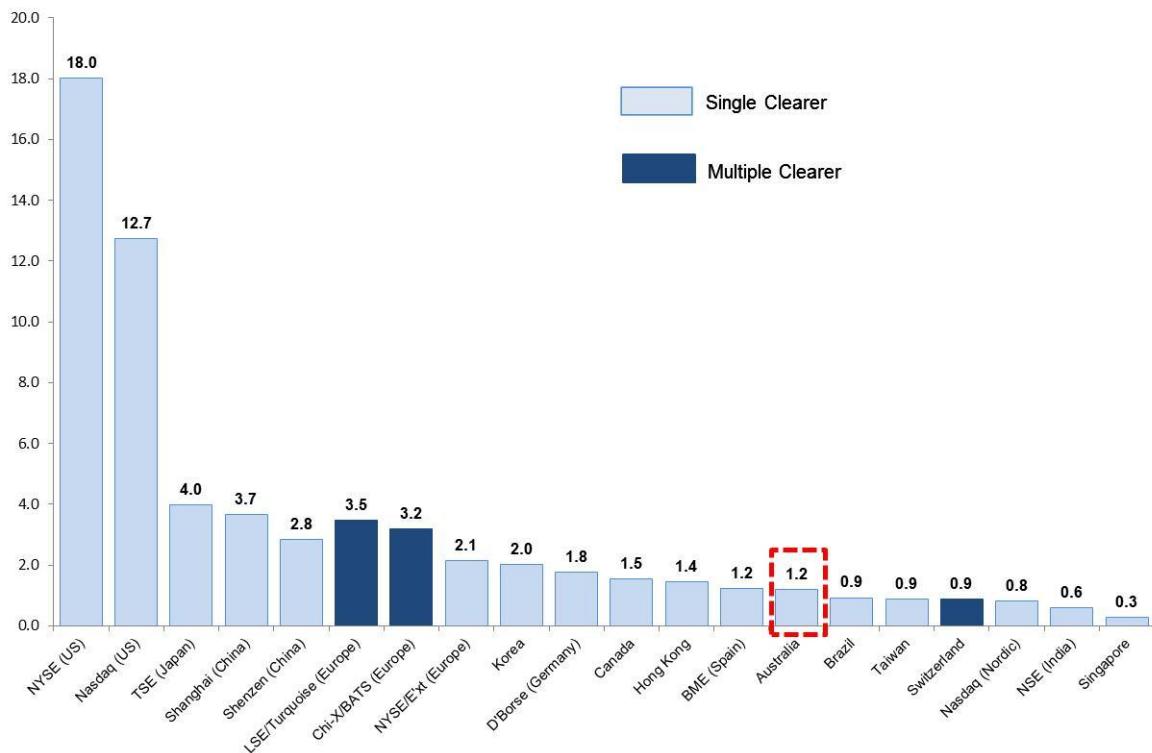
- Fragmentation (and interoperability) of equity clearing is a uniquely European idea driven by specific policy objectives. All other major global equity markets operate with the support of a single clearing house.
- Australia aims to improve its relevance as a financial centre in the Asian region. The importation of public policy from Europe without considering the Australian context (in particular size of the market) runs the risk of unintended outcomes. If policy makers want to look to international experience there are strategic reasons to consider closer alignment of Australia's market structure with its Asian counterparts.
- A simple comparison of fees suggests that Australia's clearing and settlement fees are relatively high by international benchmarks. This analysis is incomplete and ignores two important factors:
 - Clearing and settlement services rely on scale to bring down costs. Australia is a small market in global terms, with the value of trading less than many peer markets we benchmark against.
 - It is important to compare risk controls. ASX Clear contributes substantially more capital to support its clearing operations than market participants. This is different from other markets, where participants contribute those capital needs upfront.
- The total annual cost to the Australian economy of exchange clearing and settlement services is modest. In FY11 ASX's revenue from clearing services was around \$50 million and from settlement services around \$46 million. These fees are lower in FY12 due to the reduced level of overall activity. The total fees provide a natural cap on any potential 'savings'.
- In the case of clearing services, there are substantial operational, compliance and regulatory costs that come with a change in market structure. The true costs are currently unknown; however they are likely to substantially reduce (or even exceed) savings that are likely to be made available to end consumers.
- Industry participants need to understand that a natural consequence of the introduction of a change to clearing market structure may involve significant change to existing industry practices. For example, a multi-CCP environment may require significant changes to the existing settlement cycle.
- Australia's experience with competition in trade execution provides insights into the net benefits (or costs) of a change in market structure. There is little evidence that the benefits of the exchange fee reductions have been passed on to end consumers, in particular to retail investors. Moreover, the increased level of market fragmentation that resulted from the change will increase indirect costs to retail investors and fund managers. It is likely that the net outcome of the change in market structure will prove to be negative for Australia's investors and domestic industry participants, with very few, if any, 'winners'.

Global comparison of clearing structures for cash equities

Most global equity markets operate with the support of a single clearing house. Fragmentation and interoperability of clearing is a European solution designed to address the policy objective of creating a single pan-European capital market and lowering cross-border transaction costs within the EU.

Equity clearing with a single clearing house model is driven by economies of scale and operational efficiencies. The following diagram provides a simple overview of the global clearing arrangements in different jurisdictions, with an indication of the size of trading in the national markets.

Global Equity Markets: Annual Value Traded (\$UStr) & Clearing Structures



Global markets of broadly similar size to Australia generally retain a single CCP model, as do many other larger markets.

In the Americas, Canada and Brazil, both around the size of Australia's market also have single clearing houses for equities trading. In the US (a much larger market), despite the significant fragmentation of the trading landscape spread between regulated exchanges and other platforms, all trades are cleared and settled through a single facility (DTCC).

In Asia each market is currently serviced by a single clearing house. In India there is competition for listings between two vertically integrated exchanges with trading and post-trade services conducted within the infrastructure of the exchange.

A market structure of multiple competing clearers has been limited to a segment of the European market. The issue is to understand the genesis of this outcome and what implications it has for Australia.

The 'European model' developed in the context of a policy objective to create a pan-European capital market out of the multitude of national exchanges and in particular to reduce the costs associated with 'cross-border' trading within the EU. This process started by breaking down national borders in trading with the enactment of a regulatory framework by the European Commission that facilitated the entry of a number of new pan-European multilateral trading facilities (MTFs). These new platforms lowered trade fees aggressively to attract market share from regulated exchanges, particularly order flow from price sensitive high frequency traders (HFT). However such aggressive pricing meant that those who were unable to attract sufficient liquidity in a short period of time, either merged (with other MTFs or exchanges) or exited from the market.

Clearing arrangements in Europe remained an impediment to HFT as fees in Europe are based on trade numbers (not value) and so are not suited to strategies involving many small trades. New clearing facilities emerged to cater to this market segment and also pursued aggressive pricing strategies to capture market share. While it is still early days in assessing the overall impact of competition in European clearing, this aggressive pricing may eventually lead to a similar shake-out in the number of CCPs as it did with MTFs.

Policy makers in Europe have responded to the fragmentation of clearing by actively encouraging interoperability between CCPs to merge these fragmented liquidity pools. There is a continued push for the spread of this market structure more broadly throughout Europe, possibly extending to mandating access arrangements across the market. The complexity involved in such arrangements is evidenced by the fact that only a handful of agreements have been finalised out of more than 90 applications.

In a similar vein the final plank in this strategy involves the European Central Bank sponsoring an initiative to create a “domestic” borderless market for securities settlement across Europe through the TARGET2-Securities (T2S) initiative.

It is not clear what lessons Australia should take from the European experience, other than that a multi-CCP market structure and interoperability of clearing services are technically possible. The large divergence in size of the relevant trading markets (Europe is around ten times larger than Australia) makes comparisons problematic. In addition the starkly different policy drivers, in Europe’s case the creation of a single ‘European’ market out of multiple national markets as a means to lower overall costs of cross-border trading is very different to the starting point of a single Australian market. Australia consolidated its fragmented State-based markets and infrastructures in the 1980s. These two aspects highlight the different contexts between Australia and Europe within which potential changes to the clearing and settlement market structure need to be considered.

Given the Australian Government’s regional financial centre aspirations it is worth observing that the ‘Asian model’ for post-trade processing remains that of a centralised and vertically integrated model. As such, Australia’s policy direction does not seem to align with the one being pursued elsewhere in the region. While this does not mean that changes cannot be pursued, it does mean Australia needs to acknowledge that the impact of such a strategy may be to limit its ability to link up with other regional players to leverage our expertise in this sector and more closely integrate into Asia.

The risk is that Australia appears to be copying the clearing market structures of Europe, rather than referencing the more relevant markets in our region.

The Discussion Paper does not indicate whether the work has been done to make an informed assessment of whether the existing Australian market structure is in fact the most efficient model given the operational and capital efficiencies associated with it. No evidence is put forward to suggest that it has.

Global comparisons of the costs of clearing

Some will claim that Australian fees for equity post-trade services are high when compared with international benchmarks. However, it is important to understand that the full cost of using a facility goes beyond trade related fees and must take into account contributions to default funds, margining and collateral requirements.

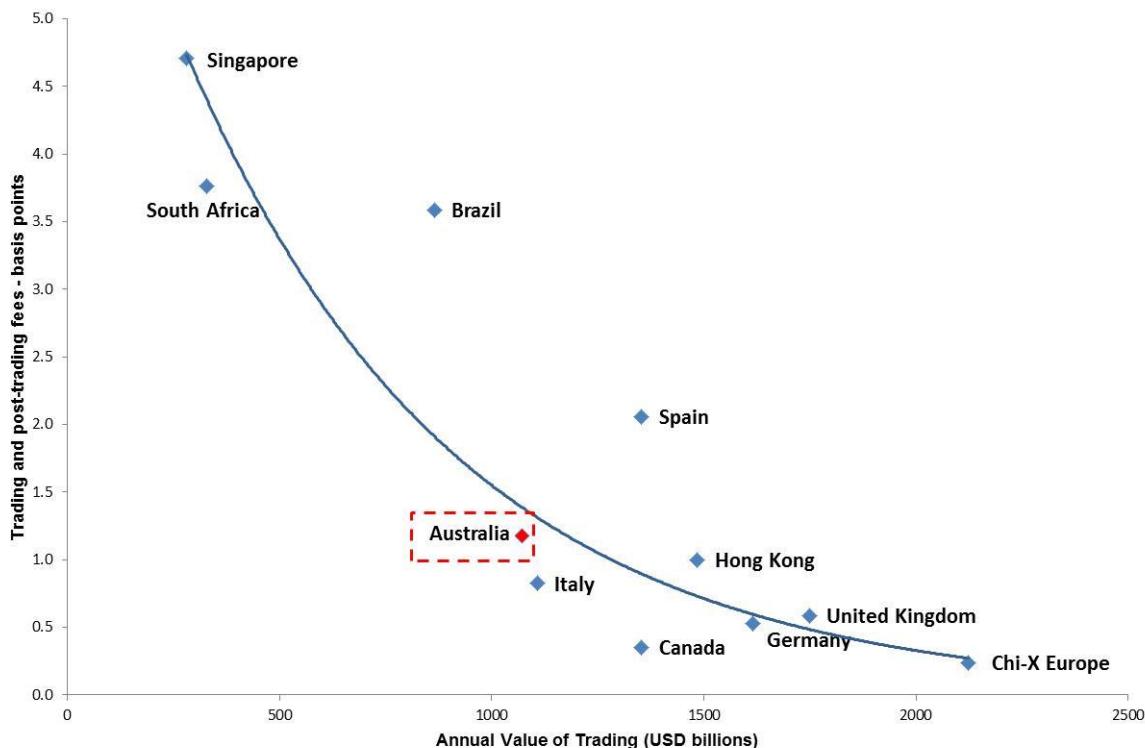
Costs of clearing services are largely driven by economies of scale² as the fixed costs associated with establishing a facility (including such things as default funds and technology costs) can be significant but the marginal cost of processing individual trades are small.

For these reasons it is hard to compare the average cost of clearing and settlement against international benchmarks without adjusting for these scale effects.

A recent study by Oxera Consulting³ for the Brazilian regulatory authorities (based on a methodology used for earlier analysis it had performed for the European Commission) on the introduction of competition into trading, clearing and settlement of equity markets examined the average costs of trading (including post-trade processing) across a range of trading platforms (including Australia). The analysis concluded there was a strong correlation between the size of the market and the average fees charged, particularly when post-trade processing was included in the analysis. As the report notes the aim was not to provide precise cost estimates in each market but rather to provide an indicative picture of relative costs.

While there are many difficulties in benchmarking the precise costs of clearing, not least because they will generally impact on different types of traders in a different ways given structure of fees (e.g. an ad valorem basis or number of transactions basis), the following chart from the Oxera report provides an indicative overview that highlights, in general terms, the negative correlation between size of market and the costs of trading.

Relationship between the cost of trading and post-trading versus size of market (value traded)⁴



Source: Based on Oxera Consulting (2012), log curve added by ASX

As noted above, it is also not possible for any comparative analysis to take into account the full range of costs that participants face in accessing a CCP given the range of service offerings they provide.

ASX Clear⁵, for example, has a significantly higher CCP-funded proportion of its default fund than its global peer CCPs. Of ASX Clear's \$250m of fully paid up resources, \$3.5m comprises own equity, \$71.5m reflects the amount paid into a restricted capital reserve from the National Guarantee Fund (NGF) in 2005, and \$175m are subordinated loans provided by ASX Clearing Corporation (ASXCC).

ASX Clear is the only cash market CCP in all the countries represented in the chart (above) that does not require participant contributions as part of fully paid up resources⁶. By making these capital contributions, ASX Clear is relieving its participants from making any capital contributions themselves (with an associated funding opportunity cost).

It is not only the proportion of CCP capital contribution that is of significance for the clearing house's participants but also the order in which these financial resources are applied in the event of a default. The ASX Group clearing houses apply their own resources first in the case of a default situation while most other peer CCPs we examined apply participant contributed funds ahead of its own funds.

'Size of the prize'

In FY11 ASX's clearing fees generated \$50 million in revenue for ASX shareholders. Settlement fees were a further \$46 million. ASX has reported that value of equity cash market trading in FY12 was down 11% on FY11, and this will flow through to lower clearing and settlement revenues when ASX presents its FY12 results.

The revenues received by the clearing and settlement facilities are a small component of the total fees charged by all intermediaries for these services.

However, even if you assumed possible fee savings for clearing services could be as high as 25-50% (and there is no guarantee that fees would fall), this would translate to total gross savings for all investors of between \$12.5-\$25.0 million, if they were fully passed through by intermediaries.

The experience with the introduction of competition into trade execution provides guidance on the framework that is needed to assess the full range of positive and negative impacts on all stakeholders including listed companies, fund managers, superannuation funds, and retail investors.

In summary, while ASX reduced its annual trading fees to intermediaries by \$17 million (or around 1%⁷ of the total revenues received by all intermediaries from equity trading), new costs on the industry include an ASIC supervision levy of around \$17.5 million⁸ per annum for equity markets, along with significantly higher technology and compliance costs. The costs are appropriately borne by those who promoted the change in market structure given it is not clear that any benefits have been passed through to retail and institutional investors.

So, in effect, the net benefits were negative in the period after the introduction of competition.

Change in market structure is also affecting the economics of trading for customers as trading participants merge or consolidate their order flow with larger participants.

Academic research by Professor Alex Frino has also identified that, given the scale of the Australian market, the new market structure risks a widening of bid-ask spreads through fragmentation. In particular, he found that if 20% of trading in the 200 largest ASX-listed securities moves away from lit markets and into dark execution, trading costs on the lit exchange(s) will increase by almost 1 basis point, which is significantly above the exchange level trading fees saved by the intermediaries.

Applying a similar approach to a change in the market structure of clearing suggests that the net benefits, under even generous assumptions of potential fee reductions, are likely to be small or even possibly negative. So it does not follow that new entrants will reduce overall costs or improve the efficiency of the operation of the market.

New entrants in clearing are likely to cause significant upfront and ongoing costs for facility operators and participants, including IT costs, connection costs, compliance costs, and new ASIC/RBA supervisory costs. In addition there will be capital costs (contributions to default funds, etc), and operational and capital costs associated with reduced netting of positions.

The extent and nature of these costs will depend on the final characteristics of any new entrants. That is, whether it is a domestic or foreign CCP, the risks and costs imposed if a foreign CCP holds Australian collateral offshore, whether interoperability is required to be established, and whether the regulators require changes to the settlement process to address stability issues. The cost of some of these changed processes, for participants and their customers, could be substantial.

The entry of a new clearing house would mean that it is likely that some supervision responsibilities for clearing and settlement participants will transfer to ASIC as was the case with the entry of a new market operator. As well as participant level supervision there needs to be a whole-of-system ability to monitor the end to end operations of the cash equity market. These issues are not canvassed in the Discussion Paper.

ASX expects that any additional costs will be recovered from the industry - whether that be through a supervision style levy based on cost recovery principles or a commercial principle of a return on investment commensurate with the regulatory and commercial risks involved.

Competition between CCPs may generate a change in market structure amongst clearing participants, just as competition in trading is doing for trading participants. These industry effects will also flow-through to the economics of clearing and the cost for end-customers.

Whether any fee changes are likely to flow to smaller clearing participants and their customers is unclear. Depending on the form competitor entry takes, the beneficiaries may be largely international investment banks who are already members of offshore facilities, and who will look to move clearing offshore. In Europe the largest beneficiaries have been HFT.

Trade execution venues such as Chi-X trade in the most liquid ASX listed securities and have provided a market in which the economics of a particular HFT business trading in these types of securities is attractive. This HFT market segment can improve its business economics further if a tailored suite of clearing and settlement services is made available to it.

ASX understands from consultations with settlement participants that it can be difficult and costly for them to pass through changes in fee structures to their customers. Their ability to do so is affected by their particular business model and their practices as significant changes may also be needed to back office processing and billing systems. This means that changed fee structures may not be passed on by these intermediaries.

Chapter 4: Risks to financial stability

Executive summary

- Australian regulators must be able to state confidently that a change in market structure will benefit the market as a whole without increasing the risk to the financial system.
- ASX is a local business and its operations, systems, people, directors and capital are located in Australia. This provides local regulators with full oversight of our operations and an ability to respond quickly and effectively in distress or crisis situations.
- Australia will soon implement controls that will allow Australian regulators to control and manage ASX's clearing and settlement operations in the case of distress or a crisis. This is an important element in ensuring the financial stability of Australia's financial markets. Precisely how this will apply in the case of a foreign CCP is not clear.
- The risk to a clearing house comes mainly from a default of one of its participants that may trigger a material financial risk to the clearing house itself:
 - By its nature, credit risk in financial markets can appear quickly and with material impacts. Therefore, it is important to ensure that any default can be worked through in an orderly and timely fashion and under a clear regulatory and legal framework. This should not be compromised in return for marginal cost savings.
 - There are several examples of international defaults that raise question as to the certainty of the control and workout process when resolved across time zones and national borders.
- ASX is not aware of circumstances where ASIC and RBA have been active participants in resolving cross-border distress or crisis situations. The international co-operation arrangements which would be relied on in these circumstances are largely untested. The priority that would be given to the interests of the Australian market and its investors in a cross-border default situation is unclear.
- Many of the specific requirements to operate a market with more than one clearing house are currently unknown.
- A "graduated approach" is not appropriate. Experience in other markets suggests that imposing controls later, when problems arise, is very difficult.

ASX notes that one conclusion of a review by the global regulatory body The Committee on Payment and Settlement Systems (CPSS) of the market stability implications of changing clearing structures was that:

"... there is no evidence that the industry is settling on one particular structure. Specific market structures may create specific risks and amplify interdependencies between systems and markets. These warrant careful consideration by both market participants and the authorities. However, there is no evidence to suggest that one market structure is superior to another, either in terms of CCP risk management or in terms of wider systemic risk. In fact, many risks occur in several types of structures."

The Discussion Paper points to some of the new types of risks which arise in competitive market structures and have been identified through the work of CPSS. The risks and costs are also heavily affected by the regulatory standards that are imposed on any new entrant and on ASX's existing clearing and settlement facilities.

ASX has a keen interest in the conditions that will be imposed on new providers of licensed clearing and settlement facilities servicing the Australian cash equity market. This is because ASX will have a direct commercial and operational relationship – and hence commercial exposure – to these providers as a business. ASX as a market and facility operator relies on the robustness and reliability of the end to end processing of transactions to support the confidence of businesses that rely on funding from Australia's capital markets and investors in its market. The impact that these facilities can have on the stability of the Australian financial system

is reflected in licence conditions to operate the facilities to ensure “so far as is reasonably practicable, that systemic risk is reduced.”

The conditions imposed by the Australian regulators will affect not only the terms under which a new clearing house can operate, but also may necessitate changes to ASX’s existing post-trade processes. (see Chapter 5).

Australia stakeholders are still in the early stages of understanding what the potential impacts may be and how any new risks that would be introduced by changing the post trade processing arrangements that are in place today can be appropriately managed.

ASX’s observation of market disruptions in other jurisdictions (including those where flow-on effects have been felt in Australia) is that even sophisticated market traders may not appreciate the consequences of arrangements which they enter into with participants. MF Global was a situation that regulators can refer to. This incident took place on 1 November 2011 and the impact of UK insolvency law on the entitlement of Australian market users under Australian law is not yet resolved.

While such delay, when associated with the default of a single clearing participant, imposes significant costs on a relatively small group of people, a default by a CCP would have more serious effects across the market – even if that CCP only had a relatively small market share. A CCP needs to be able to open for business the ‘next day’ to ensure the market can continue to operate. The RBA’s proposed step-in arrangements will allow that to happen – but it is not clear how these arrangements would work in a cross-border default.

In particular how would these arrangements be implemented without the risk of an Australian regulator in effect providing support for the CCP’s foreign operations in the event that the financial difficulties are global or regional in nature? These mechanisms would need to be clearly addressed in advance to ensure any step-in arrangements were robust and can function effectively and quickly in the event of a default situation.

ASX is not aware of any circumstances where Australian regulators have been placed in the situation of having to actively resolve such complex cross-border insolvencies, although experience overseas has highlighted the difficulties. In the course of the GFC, two circumstances arose where such events escalated into issues between national governments in Europe.

- When the pan-European consortium that owned ABN AMRO got into financial difficulties the British and Dutch Governments’ took over and nationalised the respective parts of the group that operated in their jurisdiction.
- When Icelandic commercial banks collapsed in 2008, the British Government felt obligated to step in to protect the assets of British account holders despite holding the view that the responsibility lay with the Icelandic authorities.

ASX notes that the complex issues surrounding recovery and resolution regimes for financial market infrastructures are the subject of ongoing work in international regulatory forums. These policy positions, when finalised, will be important in providing greater certainty about the resolution of default situations. However, until these pieces of the puzzle are answered significant uncertainty will remain.

The recent CoFR guidance on the how Australian regulators propose to exert influence over foreign clearing and settlement facilities indicated that a facility may have a strong domestic connection but not be considered systemically important. The example given was that a CCP clearing a small segment of the Australian equity market may not be considered systemically significant.

Whether such a designation would have implications for the resolution of cross-border default situations is less clear. The Financial Stability Board noted earlier this year in guidance on an efficient global framework for the centralised clearing of OTC derivatives that one safeguard should be “resolution and recovery regimes that ensure the core functions of CCPs are maintained during times of crisis and that consider the interests of all jurisdictions where the CCP is systemically significant.”

While such an approach may be sensible on global systemic stability grounds, if applied more broadly, say in the case of foreign clearing of equities, it could see the interests of Australian based customers of a CCP being given lower priority to those of the customers located in the home jurisdiction of a foreign CCP.

A change in the industry structure introduces complexity and new risks. However, the arrangements put in place should involve no diminution of Australian regulators' ability to maintain systemic stability and protect the interests of Australian investors.

All stakeholders, customers and regulators need to understand the implications of the full range of new elements to implement a change in market structure which could be considered to achieve potentially modest cost savings. It is only when all the issues are understood that fully informed decisions can be made.

Important threshold matters to address include:

- Do the regulators have a good understanding of the risks at a whole-of system and institutional level?
- Can these risks and future developments be supervised and will the Australian regulators have the direct control they need to manage risks? In particular, if a major problem emerges, will they have the ability to resolve the situation quickly and effectively?
- Do the users of the services and the wider body of investors, particularly retail investors, and companies that access the Australian cash equity market understand the consequences and changes that these developments bring?

Chapter 5: Competition and open market structure

Executive summary

- A growth in dark execution and aggregation of holdings by large settlement participants is changing the nature of the demand for services and competitive dynamics in clearing and settlement.
- ASX has opened up its clearing and settlement infrastructure to other exchanges on a non-discriminatory basis and at low cost.
- ASX recognises that the changes in market structure of Australia's equity markets require different and more transparent and segmented clearing and settlement services. In February 2011 ASX announced that it would 'unbundle' its clearing and settlement services. The first stage of that process separating clearing from settlement services and giving more transparency on these fees is almost complete.
- There is no need for further regulation of competition and access. An effective regime already exists.

There are a range of services provided by a settlement facility that are contestable.

The growth in dark execution and the internalisation of settlement activity that can occur through the aggregation of holdings by custodians and other intermediaries provides contestability in settlement services by giving customers flexibility to reduce the need to utilise chargeable messages within CHESS.

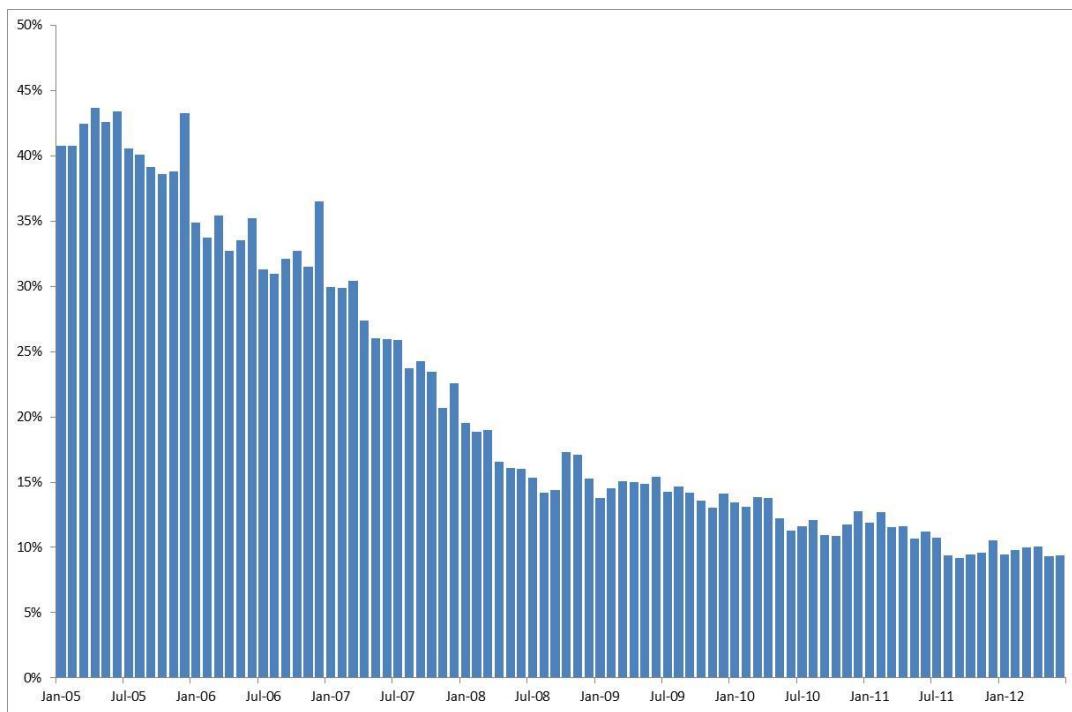
The nature of Australia's settlement regime, particularly the use of CHESS sub-registry arrangements provides a flexible mechanism for large settlement participants and/or registries to choose to provide some key components of settlement service, without going through the process of establishing a licensed CSD.

CHESS participants can use the sub-registry structure to effect the transfers of securities between accounts. That is, they perform CSD-like activities.

This trend in the market for settlement services shows that they are contestable. If the trend continues it may also raise, at some point, questions for regulators about the overall impact on the certainty, finality and efficiency of settlement processes of these activities and if the appropriate controls are in place to oversight them.

The sharp decline in the ratio of delivery versus payment (DvP) messages to trades to record low levels (see following chart) could be a result of an increase in activity occurring without passing through the ASX settlement system. This is reflective of the changes going on in market structure, including consolidation of activity within trading, clearing and settlement participants and the growth in HFT traders who have different post-trade needs.

Ratio of DVP Settlement Instructions to Trades



Developing a regulatory framework that retains and builds on the strengths of the existing post-trade infrastructure (financial stability and operational efficiency) while facilitating competitive activity is an important element in ensuring investor confidence in our markets (by guaranteeing delivery of securities/cash in a timely manner) and in maintaining systemic stability.

New entrants should enter the market and 'compete on the merits' by investing in facilities and taking risks. Competition law principles are designed to foster competition in markets, not to aid specific competitors participating in a market by facilitating their access to particular services.

CHESS is an established system that was purpose built for the Australian market and which has serviced the market for many years. It is well accepted and supported by participants who have built their own back-office systems around its core structure.

It is possible to leverage off the open access arrangements to post-trade infrastructure by providing access to CHESS on non-discriminatory basis and at reasonable cost to reduce the administrative and technical costs associated with the entrance of new service providers. ASX has already provided access to new service providers in an effective way at a low cost.

The emergence of alternate clearing and/or settlement operators will necessarily impact on both the economics and operation of clearing and settlement in Australia. It will be important that the potential benefits of new entrants can be delivered with minimal disruption to operational efficiency or systemic risks.

Open access arrangements to ASX post-trade infrastructure

One issue raised in the Discussion Paper was whether additional regulatory intervention may be necessary for access to the ASX settlement facility.

ASX has committed to operating its business on a commercial basis and in a fair and transparent manner in compliance with the law and its regulatory obligations under the regulatory framework as it develops.

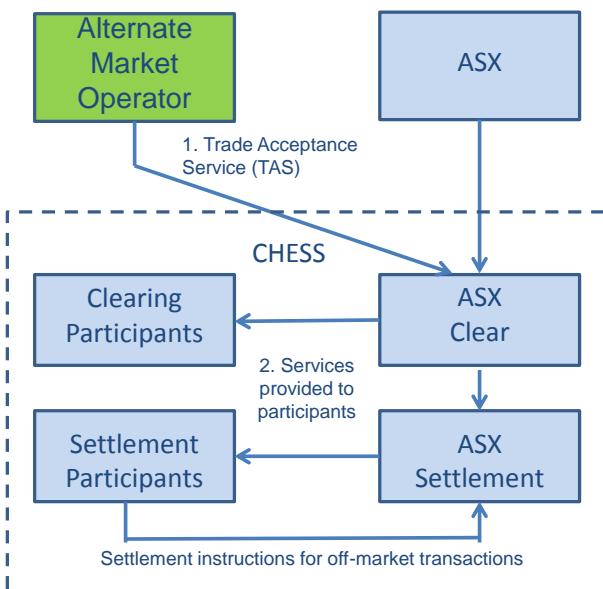
ASX developed access arrangements to its CHESS infrastructure for other listing and trade execution venues. These are made available on a non-discriminatory basis and at a low cost.

Today the ASX's settlement facility can service a new entrant clearing house with settlement arrangements. If a new clearing house enters the Australian market that Alternative Clearing Facility (ACF) can use a settlement agent to net transactions which are then settled through the normal CHESS process of batch settlement. This can be done with existing service arrangements, participant structures and back office arrangements. ASX implemented these arrangements when Chi - East was proposed as a regional offshore trade execution venue.

The following examples outline the structural arrangements ASX Clear and ASX Settlement established to provide access to its post-trade infrastructure in relation to competing trading and clearing offerings in ASX-listed securities.

Trade Acceptance Service (TAS) for alternate Australian licensed trading venues

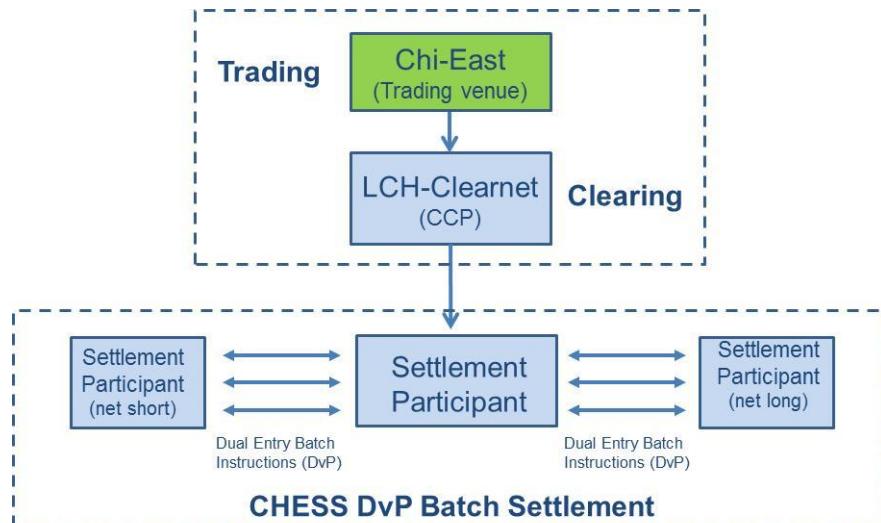
The TAS allows trades in CHESS-eligible ASX quoted securities executed on alternate trading platforms to be cleared and settled on the same basis as trades executed on ASX's market. The TAS is made available to AMOs under a published set of contractual terms (an initial application fee of \$10,000 and an annual service fee based on the level of expected activity).



Access for foreign trading venues and clearing houses

ASX Group provided access to its post-trade infrastructure to facilitate settlement of trades coming from an offshore trading platform (Chi-East) cleared by an offshore clearing house (LCH-Clearnet). This access was provided through a designated agent (an ASX Settlement participant) who would match settlement instructions in CHESS for inclusion in DvP batch settlement. This model was provided at no cost to either the foreign trading platform or CCP. The settlement participant paid the same trade related fees as any other settlement participant for the service provided. While the link was established there was no activity sent through the link prior to Chi-East ceasing operations.

Chi-East clearing and settlement arrangements



The fees ASX charges for listing venues and market operators for access to CHESS are modest and provided on a non-discriminatory basis:

- ASX's annual charge to Chi-X for clearing and settlement arrangements is \$275 000.
- ASX's annual charge to other domestic exchanges (eg currently NSX and SIM-VSE) for access to its settlement infrastructure is in the range of \$50 000 to \$100 000.

Settlement changes that need to be considered if clearing market structure changes

ASX is committed to providing non-discriminatory access to CCPs to the ASX Settlement infrastructure. A commercially based solution can be developed through negotiation with the parties, as it has been in the past.

The choice of how that access would operate in practice would need to be considered given the nature of the specific services provided. When an access model is developed ASX would provide the same access to other service providers on equivalent terms.

There is a range of operational models that could be employed to connect to CHESS to provide a seamless settlement service. Some of the issues raised include:

- ASX believes that novated trades from different CCPs should not be co-mingled because ASX Clear and its participants would not want find themselves in the position of having to provide liquidity in the event of a default of an alternative CCP or a clearing participant of an alternative CCP or vice versa for the other CCP.
- ASX Settlement would also need an alternative CCP to provide similar default liquidity arrangements as ASX Clear does to ASX Settlement. A separate batch would require costs to be met to establish and maintain.
- Trades from an alternative CCP could be settled through a separate batch. RBA considered separating novated and non-novated trades into separate batches as part of their 2008 review into settlement practices. The negative response of industry participants meant that this approach was not pursued at the time.
- It is possible to effectively treat the trades of all CCPs equivalently through a series of batch settlements during the day treating both ASX Clear and other CCP trades as novated.
 - Taken to the extreme this would mean moving away from Australia's Model 3 settlement arrangements and more to a Model 1 RTGS approach. The option to fundamentally change the settlement process was raised as a preferred option in the RBA's 2008 settlement review. Such a move would involve a significant change for ASX Settlement participants. The RTGS settlement

model is one of the offerings provided by ASX Settlement, although the loss of batch settlement netting benefits means it is also the most expensive for participants.

Assessing the costs and benefits of particular access arrangements is best handled through negotiations between the parties as it enables a service which addresses the needs of market users to be developed. Any requirement that involved significant changes to existing settlement arrangements should also be subject to broader consultation with all stakeholders.

Settlement arrangements can impact significantly on the costs of those services to end users – with the ability to net down transactions being a key driver of the overall cost. ASX must also satisfy the Australian regulators that as far as is reasonably practicable its clearing and settlement facilities continue to reduce systemic risk and are operated in a fair and effective way.

ASX is developing options for making new flexibility available through ASX's settlement arrangements. Three of the options being developed, which will allow customers to choose the option that best suits their business needs, are outlined below.

- Service offering 1: Existing single batch settlement with a single payment facility. This option is best suited for new activity where the expected volume and value of the activity is small;
- Service offering 2: Single batch settlement with segregation via a new payment facility. This option is best suited where the expected volume and value of activity is expected to be more significant with potential contagion implications.
- Service offering 3: RTGS (ie DvP1) line by line settlement per transaction. This option is best suited for low volume but high value settlement activity which could have significant contagion implications

The features of these three settlement models are summarised in the following table.

	Service offering 1	Service offering 2	Service offering 3
DvP settlement	Yes	Yes	Yes
STP functionality – standard messaging	Yes	Yes	Yes
Multilateral netting	√√√	√√	N.A.
Settlement finality (likelihood of successful settlement)	√√	√√	√√√
Operational efficiency (settlement aggregation; streamlined processes)	√√√	√√	√
Effective systemic risk management – contagion limitation	√√	√√√	√√√
Settlement fail rates	Low	Low	N.A.
Costs to users	Low	Medium	High

These different service offerings provide flexibility to meet the needs of different customer groups. However, it is possible that the introduction of new entrants, or further refinement of regulatory standards, may drive further change going forward. For example, if a regulatory mandate required a settlement facility to treat the novated trades of different CCPs equally, or if it was determined that the RBA's FSS required a change to Australia's settlement practices, it may necessitate a move to only provide an RTGS offering.

Unbundling of ASX clearing and settlement services and fees

ASX announced in February 2011 an initiative to unbundle its post-trade services and fees.

ASX has been consulting with a range of customers and industry groups for several months on the unbundling of services. The feedback from that consultation has been that ASX fee unbundling can impact the economics of these customers, many of whom are intermediaries. The impact is greatly affected by the many and varied business models, back office systems and billing processes and practices with their customers.

The bundled service and fee structure model, in place since 2006, reflected a ‘one-size-fits-all’ offering that no longer fully meets the flexibility needs of customers given changes in market structures and industry practice.

The first phase of this project, the unbundling of cash market clearing from cash market settlement services is almost complete. An announcement will be made in the coming weeks. It will give customers a clearer understanding of the settlement services ASX offers and provides them with greater choice to select services that meet their individual needs. It also provides scope for ASX to introduce a more transparent fee structure which clearly aligns charges with the specific services provided.

Given the dynamic nature of changes in market structure here and overseas as well as emerging trends in client clearing preferences, ASX will continue to review its service offering and the potential to further unbundle and tailor the clearing services it provides.

There is no need for further regulation of competition and access

New entrants should enter the market and ‘compete on the merits’ by investing in facilities and taking risks. Competition law principles are designed to foster competition in markets, not to aid specific competitors participating in a market by facilitating their access to particular services.

There is no evidence to suggest that the existing policy and legislative framework is not functioning in an appropriate manner, particularly in light of the overarching objective of preserving the stability of the financial system. The case has not been shown that the single provider model is not the most economically efficient one; certainly it is the model which operates in most major markets outside of Europe.

ASX already provides access to its CHESS infrastructure to facilitate the services provided by other trading platforms and clearing houses. These arrangements were negotiated between the parties in good faith and on commercial terms.

The Discussion Paper itself does not identify any particular regulatory issues, only potential risks. Accordingly, any serious consideration of new regulatory arrangements is premature.

In relation to the matters identified in Part 6 of the Discussion Paper, there can only be a potential issue if ASX has market power. As the Discussion Paper concludes, clearing is contestable. Settlement might be less contestable. But no evidence is put forward to show that a lack of interest in entering the market is anything but an indication that there are economies in a single player or that competitive activity can occur (as it is) outside the licensing framework. It might also show that ASX is acting in a highly competitive manner and there is no demand for an alternative service. There is simply no a priori way of assuming which of those options apply.

ASX should not be assumed to have market power, particularly in light of the global competition for listing and trading on security exchanges. Similarly, it should not be assumed that the imposition of any further regulation would be beneficial to both market participants and the market itself. Indeed, unjustified and disproportionate regulation may have a destabilising effect on ASX and the Australian financial system itself.

It is premature to consider an access regime under Part IIIA of the Competition and Consumer Act 2010 (CCA) as ASX is willing to provide access on reasonable terms. There are only a few limited circumstances, such as set out in Part IIIA, where access will be mandated. These circumstances include where:

- access or increased access would promote a material increase in competition in another market; and
- it would be uneconomical for anyone to develop another facility to provide the service.

Such circumstances have not been shown to exist - any access regime would relate to access to settlement and not clearing, since the latter is contestable. It is unlikely that an access regime would materially affect competition in clearing (because it is contestable) or trading or related markets (because of the level of global competition, presence of Chi-X and potential for other entrants and general competitive forces operating in those markets).

The Competition Principles Agreements and the National Access Regime also provides a guide for determining whether access to particular services should be declared. It sets out that the indicia to be taken into account include:

- the legitimate business interests of the owner of the facility; and
- the cost to the owner of providing access and the economic value to the owner of any additional investment the access seeker has agreed to make.

It is obviously not an object of access regimes to give third parties a free ride. Pricing principles are an essential element of the principles of access. The pricing principles should recognise the need to provide incentives to operate in an efficient and competitive manner. Indeed, the National Access Regime (s44ZZCA) sets out that regulated access prices should:

- be set so as to generate expected revenue for a regulated service/s that is at least sufficient to meet the efficient costs of providing access to the regulated service; and
- include a return on investment commensurate with the regulatory and commercial risks involved.

Should an access regime be declared, ASX and the access seeker would be obliged to negotiate in good faith. ASX has negotiated in good faith in other situations and would be willing to continue to do so if this was the case. Good faith negotiations require:

- A willingness on the access seeker to pay commercial rates that reflect the pricing principles set out in the CCA. When ASX has entered into commercially resolved access style arrangements ASX has not sought to procure unreasonable rates that overstate its costs or risks – if ASX was required to negotiate under a declared access regime ASX would only seek a price that recognises the need to provide incentives to operate in an efficient and competitive manner.
- That the access seeker be willing to be subject to proportionate terms and conditions that safeguard the integrity of the ASX facilities and the stability of the market overall, that is, the principal objects of regulation of clearing and settlement facilities. Those matters need proper investigation and consideration, in conjunction with the market regulators – ASIC and the RBA.

Chapter 6: Inter-connectedness and non-discrimination – the same rules are needed for the same activities

Executive summary

- The inter-connectedness of Australia cash equity market means that a disruption that affects any CCP no matter what their market share could affect the post-trade process for the market as a whole. (see Chapter 4)
- Accordingly any new CCP clearing Australian trades should operate under the same strict location and step-in requirements as ASX Clear.
- Moreover, non-discriminatory treatment means these requirements need to be the same for any CCP clearing Australian cash equities. Large overseas players should not be given a discriminatory competitive advantage.
- If regulators allow any of the facilities, capital, collateral or other functions to be located offshore, then ASX should be given the same opportunity.
- ASX needs to be able to compete on its merits with any new entrants. This is a fundamental underpinning of ASX's ability to invest in Australia's market infrastructure (see Chapter 2).

The Council of Financial Regulators recently released supplementary guidance on its approach to ensuring Australian regulators have appropriate influence over foreign clearing and settlement facilities operating in Australia. This guidance proposes a graduated approach that may require an offshore CCP to have a domestic licence if that CCP is clearing a small market share only where there is a 'high level' of retail participation.

ASX submits that clearing for the Australian cash equity market should have clear Australian domestic licence and location requirements. These are needed to ensure that it is Australian regulators who determine or influence outcomes in crisis situations and Australian regulators and policy makers which make the judgement calls on matters that impact systemic stability in Australia.

Retail investors are active in the Australian cash equity market – their expectation is that the protections and regulatory safeguards can be readily accessed. ASX's view is that the inter-connectedness of the market and connection with ASX's clearing and settlement infrastructure means that retail participation should trigger these requirements no matter what the market share or level of retail participation.

While the regulators may become parties to formal international co-operative oversight agreements between regulatory agencies, ASX is not aware that the practicality of these arrangements has been tested in distress situations. If a clearing house is not able to open for business because issues are not resolved the impact would be quickly felt throughout the market.

In addition, to the financial stability and operational inter-connectedness issues regulatory arrangements should be non-discriminatory treating the same activities/facilities in the same way.

The terms under which new entrants can operate in Australia should not be to facilitate the entry of global players with a consequential hollowing out of Australia's market infrastructure. The probable outcome of such incentives is that international players will conduct clearing activities offshore leaving domestic only participants with a higher cost domestic facility.

Endnotes

¹ ASX Group also operates a CCP, ASX Clear (Futures), for the exchange traded derivatives market (ASX24) as well as a CSD (Austraclear) offering real-time settlement of debt securities.

² A July 2009 Report prepared for the EC's Internal Market and Services Directorate found that throughout the value chain volume is the single most important determinant of unit price.

³ Oxera Consulting (June 2012): "What would be the costs and benefits of changing the competitive structure of the market for trading and post-trading services in Brazil?" report prepared for Comissão de Valores Mobiliários.

⁴ The Oxera methodology is based on developing a user profile and applying it to trading in a given market to determine the costs. This recognises that the trading and post-trading costs are dependent on the way the fees are structured and the nature of the trading strategy undertaken. As such it is indicative only. The data in this diagram relates to the costs for an institutional investor using large intermediaries.

⁵ A similarly high CCP contribution to the futures clearing house ASX Clear 24 is also well above its global peers.

⁶ See RBA/ASIC (2009) "Review of Participation Requirements in Central Counterparties," p 12-13.

⁷ ASX estimated that the total revenue by all intermediaries from Australian equities trading was around \$1.5 bn in FY11 compared to total value traded that year of \$1.3 trillion. The gross reduction in ASX fees equated to approximately 1% of the total cost to investors of trading.

⁸ The ASIC levy on participants in cash equity markets is estimated to be \$22.81 million over the 18 months to June 2013, annualised this amount comes to \$15.2 million. In addition, market operators are also levied an annualised supervision fee of around \$2.3 million for equity market supervision.

Appendix: Responses to Consultation Paper Questions (chapter references are to the body of the submission)

Competition in clearing and settlement

Question	ASX Response
Q1. Do you agree that clearing of ASX securities is contestable?	<ul style="list-style-type: none">• Clearing is a contestable service. It is possible to have one or more licensed clearing facilities servicing the same underlying market. There is evidence of active interest in entry by new operators.• The existing Australian licensing system for clearing facilities provides for multiple licensed providers of such services. There is no barrier to new entrants entering the Australian market on the same regulatory basis as ASX's clearing house.• Whether a fragmented clearing market structure is an appropriate market structure for Australia is a different question. Overseas experience suggests that a market structure that fragments clearing is the exception rather the rule in foreign markets (the exception being Europe). (see Chapter 3, pp8-10)• The emergence of larger clearing participants means that disintermediation may reduce the demand for novation to a CCP and create competitive activity by providers that are not licensed and regulated facilities.
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?	<ul style="list-style-type: none">• There is a range of services provided by the ASX settlement facility that are contestable. (see Chapter 5, pp17-18).• The regulatory framework (ie. Chapter 7, Corporations Act) was legislated on the basis that, from a legal and regulatory point of view, there are no impediments to the licensing of multiple settlement facilities.• While a new licensed CSD is less likely to enter the market – there is nothing that would stop one being established and competing for settlement services of particular securities. That is, it might resemble the market structure of share registries, where there are multiple firms competing to provide registry services for individual listed companies or through aggregation of activity within a single participant. Such a market structure is more likely than having the settlement of an individual security split between facilities given the natural efficiencies of having CSD functions for a security performed by one facility.• ASX's settlement services are provided on a non-discriminatory basis and on reasonable commercial terms. ASX will shortly announce the outcome of the first phase of its work on the unbundling of clearing and settlement fees. This will provide more transparency for customers using these services and the opportunity for intermediaries to engage in competitive activity at different points in the value chain.• There is also competitive activity from CSD like services being provided outside the licensing framework. The design of Australia's settlement regime, particularly the use of CHESS sub-registry arrangements - means that large settlement participants and/or registries can currently provide some CSD-like services, without establishing a licensed CSD.

Market functioning

Question	ASX Response
Q3. Have the Agencies identified the right issues around fragmentation?	<ul style="list-style-type: none"> • The impact of fragmentation of clearing on the economics of the service (eg netting of obligations) is an important consideration for clearing participants and their customers and is a significant driver of the overall cost of clearing. • The costs of connecting to multiple CCPs may well add to the operating costs of fragmentation for participants. There is also likely to be a higher risk and cost imposed if a foreign CCP holds collateral offshore. These costs can be expected to be passed on to end investors. Some of these costs (e.g. those related to connectivity and compliance) may impact more significantly on smaller brokers and may drive changes in the structure of clearing participation – just as competition in trade execution is having a flow-on effect on the structure of brokers.
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?	<ul style="list-style-type: none"> • ASX (Clear) and ASX (Settlement) provide clearing and settlement services for all securities listed on ASX (whether traded on ASX, Chi-X, or in dark pools). ASX also provides settlement services for small companies listed on alternate exchanges (such as NSX and SIM-VSE). • The Discussion Paper rightly identifies the impact of fragmentation on the costs of clearing less liquid securities as an important issue to be considered. Competition in trading has, to date, been limited to the most liquid securities (S&P/ASX 200 Index constituents) and ASX would anticipate a similar segmentation in the market if competition in clearing emerges. Certainly that appears to have been the case in Europe, where competition in trading and post-trade services, seems to have been concentrated in larger and more liquid stocks. • There is no reason why new entrants providing clearing would not limit their services to these larger and more liquid securities in Australia. Potential cherry-picking of the more liquid/lower volatility market segments, if successful, can be expected to have flow-on effects to the average cost of providing clearing services for the remaining securities. <ul style="list-style-type: none"> ○ Clearing services are businesses that are characterised by large scale economies so any significant reduction in the overall value passing through the infrastructure would likely impact on the average costs. (see Chapter 3, pp10-11). ○ In addition, managing the risks associated with novation of less liquid, and more volatile, securities is more difficult. This would likely require a CCP to reconsider the structure and level of its risk controls if it was only clearing trades in these less liquid securities and this would likely further raise the overall post-trade costs for this segment of the market.

Question	ASX Response
Q5. Are there any other factors related to the effective functioning of the market for ASX securities that should be considered?	<ul style="list-style-type: none"> • If regulations are not applied in a non-discriminatory manner between service providers it will potentially drive market structure outcomes. Conditions applying to ASX Clear should also apply to other facilities providing the same services. ASX Clear should be able to operate under the same conditions as other operators. • ASX does not believe it would be a good outcome from the perspective of the Australian financial system (systemic risk management, health and relevance of the Australian financial services industry and Australia's regional financial centre aspirations) to have a potentially significant portion of this critical risk management provided from offshore. However if large global CCPs entering the Australian market can be located and regulated offshore then any clearing provider (including ASX) should be allowed to locate and operate services from offshore. • It is unclear to what extent the emergence of multiple CCPs may require the same framework for regulatory oversight that has been established in relation to competition in trading. In particular it has not been made clear whether there would be a transfer of some supervisory functions from the CCP to regulators, the introduction of "Clearing Integrity Rules" (equivalent to the Market Integrity Rules in relation to trading side) and whether additional responsibilities to monitor and enforce the rules may be necessary. • The additional risks of dealing with foreign-based infrastructure providers would need to be clearly disclosed, to both clearing participants connecting to these facilities and also to end investors particularly retail investors. Investors' choice of trade execution broker may be affected by the clearing and settlement arrangements they offer. The impact of best execution obligations on clearing and settlement arrangements should be carefully explained to end investors. <ul style="list-style-type: none"> ○ For example, the legal jurisdiction governing any funds held in, and transactions processes by, a foreign-based CCP must be clearly determined as an important element of the protection of Australian clients in event of a default of the CCP or the clearing participant, and must be clearly disclosed to retail investors and fund managers.
Q6. Do you have views on the stability and effectiveness of interoperability in other jurisdictions? Should interoperability between competing CCPs be encouraged in Australia?	<ul style="list-style-type: none"> • As the Discussion Paper noted equity clearing interoperability has been raised as one means of reducing the costs associated with fragmentation of clearing. It is technically feasible; although in practice has only been implemented in Europe. • The recent RBA Bulletin article on interoperability provided a good overview of the potential costs associated with putting in place such linkages. Depending on how interoperability is implemented there can be significant set up and ongoing operational costs. • There may also be a need for additional capital contributions from participants/CCPs to cover the new inter-CCP default risks, or a margining arrangement put in place. In practice these costs may be spread across all participants i.e. the costs are not fully borne only by participants who use the interoperability link. • The actual costs for participants are very dependent on the choice of interoperability model proposed. A peer-to-peer (ie CCP to CCP) model is potentially the most complicated and expensive option while a clearing participant-to-CCP model may be a much simpler, less expensive option, and quicker to implement.

Question	ASX Response
	<ul style="list-style-type: none"> While interoperability is technically feasible it is not likely to be a first-best option in the initial phases of a multi-clearing house market structure and should only be contemplated where it is clear that the economic benefits outweigh the economic costs. This would seem, at a minimum, to require significant fragmentation of clearing activity between CCPs to justify the fixed costs in establishing such a link. Europe, where interoperability is in place between some CCPs, is a much larger clearing market than Australia. The costs and risks associated with interoperability increase significantly when the two CCPs are located in different countries, with different legal systems, and operating in different time zones. These issues are particularly acute in the event of a default in one CCP where competing bankruptcy and other laws may be invoked.
Q7. Can you suggest any other responses to the issues raised in relation to market functioning?	<ul style="list-style-type: none"> A detailed understanding of the proposed model and entities is needed to properly respond.

Financial stability

Question	ASX Response
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?	<ul style="list-style-type: none"> Yes. The Discussion Paper acknowledges that any mandated minimum regulatory risk standards are likely to quickly become the 'norm' rather than the 'minimum' in a competitive market. Mandated minimum standards need to be high enough to ensure systemic stability. Many of the regulatory standards to manage systemic risks relate to the financial protections CCPs have in place to manage a potential default of one, or more, of its clearing participants and to ensure if such an event does occur it does not undermine the financial viability of the CCP. These controls can include regulatory capital requirements, margining of positions, and contributions to default funds. All of these regulatory controls will impose costs on the CCPs, clearing participants and their customers. This means that there is a strong commercial incentive to find the least costly way of meeting any standards. While a choice by a CCP about how much of these costs should be borne through their own contribution of capital is a commercial matter, the absolute level of resources required to be contributed should not be. The RBA's Financial Stability Standards (FSS) are very broad based principles (at least currently). ASX's approach to compliance with the standards has been developed through on-going dialogue with the RBA in a regulatory environment of direct oversight and control by the Australian regulatory agencies. We would expect that any changes to the regulator's interpretation of the FSS in the context of a change in market structure would also be conveyed to all existing CCPs to ensure a consistency of approach.

Question	ASX Response
	<ul style="list-style-type: none"> • ASX's current standards, as assessed by the RBA, already meet the minimum accepted under the FSS. To the extent that these standards are above minimum levels required in a competitive environment ASX would have to consider the scope to amend its approach to risk controls while still maintaining compliance with the FSS to ensure its ongoing ability to compete. • This may have practical impacts on the approach taken to these controls. <ul style="list-style-type: none"> ○ For example, the current approach to default funds may become more dynamic (that is more frequently adjusted both up and down). ASX Clear has built up a default fund by contributing its own capital, but not reduced it when volatility has receded, and providing an additional risk buffer. However, in a competitive environment such buffers are less likely to be maintained. ○ Another example would be that it would be less likely that there would be a unilateral tightening of risk standards by any single CCP above minimum levels, as have occurred in the past (for example, the actions taken by ASX Clear during the GFC) – as they could be relatively easily avoided by those participants who are members of more than one CCP and who have the ability to shift their activity between clearers. • The new FSS due to be in place by end 2012 will change current requirements but the same principle applies. ASX will ensure it meets any new requirements and would expect that these would also represent the minimum standard acceptable to the RBA. That is, we would not expect the RBA to be prepared for an alternative CCP to meet lower standards but still be considered to fully comply with the FSS. • The short term costs for participants associated with tighter risk controls will tend to influence decisions on how risk controls are imposed in a multi-clearer market. This competitive dynamic may, in practice, require regulators to be more proactive in times of financial disturbances in communicating their expectations to facility operators, compared to the current circumstances when a CCP is more able to react quickly and independently to tighten market wide controls. A single CCP in a multi-clearing house market structure is only able to manage their own financial stability not to manage the risks for the whole market.
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?	<ul style="list-style-type: none"> • As noted earlier Europe is the only jurisdiction where clearing competition in cash equities has emerged. It is still a relatively new phenomenon and it is too early to make conclusive judgements about how the process will play out. • ASX is not aware of a reduction in regulatory standards in Europe, although we understand that the interpretation and application of the standards varies between national regulators. In the longer term there must be questions about the sustainability of the very aggressive price reductions used to attract market share and the impact these will have on the longer-term viability of some of the new CCPs. • ASX assumes that the annual RBA public assessment process, which is a feature of the enforcement of the FSS, would also extend to other operators of clearing and settlement facilities operating in Australia, in order to provide the market with confidence that systemic risk issues are being appropriately addressed. Such an assessment approach, applied consistently across facilities, would identify any issues around reductions in risk management standards or cost-cutting that may negatively impact a CCP's risk management controls.

Question	ASX Response
Q10. Do you have views on the risks that the exit of CCPs could pose to financial stability?	<ul style="list-style-type: none"> • There would be significant transitional issues, for clearing participants and their customers from the exit of a facility operator, even if it were the result of an orderly exit. If it occurred in a crisis situation (when there is little or no forewarning) those risks would be exacerbated. We do not have experience with the departure of a CCP in Australia – but we do have experience with the departure of clearing participants both in default situations and in a more orderly fashion. • The collapse of MF Global, which was a major clearer in some ASX24 derivative markets, caused disruption to these markets (particularly grains and wool futures markets where they were the main clearer). It also severely disrupted customers who relied on MF Global for clearing services, both due to the financial burden of having their accounts frozen as well as the inability to trade in the market until arrangements with another clearing participant could be put in place. • The extent of any impact of an orderly CCP departure would depend on the nature of its business and its participants. That is, how many clearing participants would be directly affected (i.e. because they were not already a member of another CCP) and how quickly they could either become a member or could establish alternative third-party clearing arrangements as an interim measure. • Transferring customer accounts can be a time consuming and complex administrative task. It may be that the departure of a CCP from the market may also involve significant administrative processes – although the extent that this will cause problems is hard to anticipate in isolation from the circumstances of the day. • In cash equities (as compared to derivatives) the disruption associated with the exit of a CCP may not be as severe given the short (T+3) equity settlement cycle although the potential impact on retail investors and market confidence is an important consideration.
Q11. Do you have comments on the issues identified around access to ASX Settlement and settlement arrangements for non-ASX CCPs more generally?	<ul style="list-style-type: none"> • The existing processes for settlement of ASX-listed equity securities are well accepted by clearing participants and integrated into their back-office systems. The processes have well defined and quite tight deadlines for submission of settlement instructions to ensure they operate efficiently for all users. • Australia operates a Model 3 settlement process where there is a daily batch settlement processes which involves reducing all scheduled securities transfers to a single net transfer per line of stock for each participant. This reduces the operational risks and financial burden on participants in the settlement process. This model has worked well for a market the size and structure of Australia's. • Changes to existing settlement arrangements can be implemented in response to either regulatory requirements and/or customer needs, although each option involves different costs for participants and levels of risk. (see Chapter 5, pp 20-21) <ul style="list-style-type: none"> ○ The treatment in the settlement batch of trades from different sources (eg ASX Clear novated, non-ASX CCP novated, and non-novated trades) raises important design questions which would need to be addressed, including their priority in the back-out algorithm (used to manage the consequences of a default event). If the regulators apply a graduated approach to location requirements, and if the level of retail participation in a market is used as a measure of what location requirements are imposed, then these matters will also need to be considered.

Question	ASX Response
	<ul style="list-style-type: none"> • ASX clearing and settlement facilities have licence requirements to provide fair and effective provision of services as well as the obligation to meet the RBA's FSS. In addition, existing obligations under s46 of the Competition and Consumer Act (CAA) are sufficient to deal with any potential concerns. • ASX has a track record of providing low cost access to existing post-trade infrastructure on non-discriminatory terms. The charge for this access reflects the costs of connectivity and operational costs of managing the services. (see Chapter 5, pp 19-20) • The practical issues around access may be complicated when they involve an overseas based CCP, conducting its clearing business in a different time zone, outside of normal Australian business hours. There would need to be processes agreed to ensure that any technical problems could be addressed in real-time to avoid unnecessary delays to the settlement process or an increase in the settlement fail rate.
Q12. Are there any other factors related to financial stability that should be considered?	<ul style="list-style-type: none"> • The oversight of the activities of CCPs located offshore is an important element in adopting a regulatory framework that provides Australian regulators with sufficient powers to protect systemic stability. • ASX notes that Australia's regulatory framework provides for foreign-based CCPs to operate under a sufficiently equivalent regulatory regime (although the precise detailed of how this would be implemented not yet been specified in detail), but with the scope to require a full Australian licence (and hence full RBA FSF compliance) where the foreign CCP seeks to 'clear a particularly large or systemically important market in Australia.' • It is important to note that for foreign operated facilities it is not only the equivalence of rules that are important but also the equivalence of monitoring and enforcement of those rules. • Clearing and Settlement facilities are a key factor in ensuring the maintenance of systemic financial stability. The seamless operation of these facilities is an important underpinning of confidence in the market. • Clearing and settlement facilities need to earn a return sufficient to fund ongoing operating costs, the costs of maintaining their contributions to default funds, and funding important investment in system upgrades and enhancements. The latter are necessary to not only meet customer driven demands for new services but to respond to an increase in regulatory requirements around systemically important financial market infrastructure. Post-GFC CCPs are increasingly, seen by regulators as a means of managing a range of large systemic risks and are in the group of financial institutions that should be subject to significant controls to minimise the risk of failure.

Question	ASX Response
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?	<ul style="list-style-type: none"> • ASX notes the Discussion Paper suggests that if regulators set minimum standards that are high enough then they may be comfortable if the minimum standards become de facto maximum standards, as the forces of competition will naturally drive standards towards these benchmarks. This proposition assumes that any standards are applied equally across all facilities. • Based on this principle, ASX assumes that if Australian regulators set standards for an alternative CCP below those standards currently adopted by ASX then it will provide a reasonable basis for ASX to reduce its standards to that level and still be considered to comply with the RBA's FSS obligations. • The Australian regulatory authorities are the appropriate setters of risk management standards applying in Australia. If they believe that these standards should be set above the emerging international CPSS-IOSCO benchmarks, based on the size and structure of the Australian market, then that is clearly their regulatory role. We would assume that decision would be informed by the normal consultation processes with key stakeholders. • ASX does not support the suggestion raised in the Discussion Paper that any higher standards a new foreign entrant was subject to in their home jurisdiction should be automatically applied to all facilities offering services in Australia. Imposing regulatory standards from other jurisdictions risks unintended consequences. While keeping Australian standards in step with international benchmarks is an admirable objective it needs to be interpreted in the context of the different circumstances, market structures and practices in each market. That is, a holistic assessment of all of the regulatory arrangements needs to be undertaken, not looking individually at each piece of the system. • ASX agrees with the Discussion Paper that regulators need to be able to ensure that facility operators maintain supervisory vigilance and that is why the annual RBA assessment process against FSS principles is such an important process.
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?	<ul style="list-style-type: none"> • The requirement for an up-front commitment by a CCP to provide a minimum 'notice period' prior to an exit on 'commercial' grounds, supported by a capital requirement equivalent to operating expenses for that minimum period seems a sensible control. • ASX Clear complies with the six month operating expenses requirement suggested in the CPSS-IOSCO principles. However, this type of requirement does not address instability issues it simply provides some measure of the funding and resources available to the CCP. • Exit plans are an important discipline but will only address exits that are planned.
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?	<ul style="list-style-type: none"> • Given the importance of service continuity and the systemic importance of the clearing and settlement financial infrastructure we do not think that such commitments are an unreasonable imposition on providers, particularly given the potential disruption that might result from an exit of a service provider. • Ex ante commitments are only enforceable, in practice, if the resources are committed in advance and held in a manner that is clearly segregated in Australia.

Question	ASX Response
	<ul style="list-style-type: none"> These commitments should not be regarded as barriers to entry. They are properly characterised as important regulatory controls and safeguards to ensure confidence in the market.
Q16. To what extent do you consider that location requirements could help to mitigate the risk of diminished regulatory influence and control in the event that an overseas-based CCP provided clearing services for ASX securities?	<ul style="list-style-type: none"> Location requirements are an important control tool for regulators in maintaining oversight of service providers and the ability to act in the event of a crisis, and providing greater certainty for end investors. (see Chapter 6, p 24) These elements are particularly important when crises emerge or are isolated to a foreign jurisdiction. Payment and settlement facilities for securities transactions should not become another channel for propagating systemic disturbances across borders. It is also necessary to clarify the step-in requirements for Australian regulators in the event of CCP financial difficulties. (see Chapter 4, pp 15-16). ASX does not agree that the 'graduated approach' outlined in the CoFR guidance "Ensuring Appropriate Influence over Cross-Border Clearing and Settlement Facilities" is an appropriate way to apply regulatory standards to foreign-based facilities in the clearing of Australian cash equities ASX believes that domestic location requirements need to apply to support investor protection and confidence in Australia's cash equity market. Alternatively if the regulators are satisfied that domestic location requirements are not required then the same conditions should apply to all operators. Without location requirements Australia risks seeing more and more of its critical financial market infrastructure being provided from offshore. This not only has implications for the size of the local financial sector (and Australia's regional financial centre ambitions) but more importantly would also potentially impede local regulators ability to respond in times of crisis, particularly when that crisis is of a global/regional nature and foreign regulators could be inclined to prioritise their response to stabilizing the financial conditions in their own jurisdictions. Australia's approach also does not seem to align with other countries in the region where centralised, locally-based models of post-trade infrastructure are the norm.
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?	<ul style="list-style-type: none"> Location requirements should not be regarded as impediments to entry. Regulators should not be providing assisted entry to large global players. Location requirements are properly characterised as important regulatory controls and safeguards for financial stability, investor protection and market confidence. Australian licensing and assessment against Australia's FSS are both important controls allowing regulators to monitor and manage risks. Another important requirement is the location of default funds and margin payments, to ensure that in the event of participant or CCP default that resources are within the jurisdiction of Australian regulators and courts. Any other outcome would be likely to extend the periods of time for customers to be able to access their funds as issues work their way through complex legal proceedings.

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	<ul style="list-style-type: none"> The aftermath of the collapse of MF Global has shown that even having funds located in Australia doesn't extinguish competing cross-border claims on the funds and provide certainty for investors. If the contracting CCP is based in the UK, the UK administrator will claim the margin monies held in Australia (we believe that under UK law all client monies of a UK CCP would be pooled in the event of administration of that CCP). Having the CCP incorporated and licensed in Australia with the default fund and margin monies held in Australia would place the relevant jurisdiction within Australia and minimise the delays in release of the funds. The location of the technology and having the clearing conducted during Australian business hours would be important in the real-time management of systems disruptions. Any disruption to post-trade processing, regardless of its source, can have flow-on effects on trading activity and confidence in the market.
Q18. Do you have views on what would constitute appropriate settlement arrangements for non-ASX CCPs?	<ul style="list-style-type: none"> The Discussion Paper indicated a preference for parties to come to mutually acceptable commercial and technical settlement arrangements. ASX believes this is clearly the preferred solution. It is also an approach that has already been successfully used to provide third-party access at a low cost to ASX infrastructure. (see Chapter 5, pp18-20)
Q19. Do you have views on what would constitute a reasonable basis for co-operation with overseas regulators?	<ul style="list-style-type: none"> Formal arrangements with overseas regulators need to be agreed up-front, both for initial oversight and information sharing as well as specifying any enhanced arrangements that would apply if a "graduated approach" to regulatory arrangements was operational. ASX believes additional requirements to apply to a foreign-based CCP should not be left to negotiate with a foreign regulator at a later date as it would add significant uncertainty to the process. It is also important that procedures are in place to ensure that Australian regulators receive early advice on changes to regulatory arrangements in the foreign jurisdiction so that they can assess the impact of those changes and determine if they will have a material impact on whether the overseas jurisdiction continues to be considered to be sufficiently 'equivalent'.
Q20. Can you suggest any other responses raised in relation to financial stability?	<ul style="list-style-type: none"> The detail of any arrangements needs to be considered given the potential impact on stability, investor protection and market confidence.

Competition and access

CoFR Proposal	ASX Response
Q21. Do you have views on the effectiveness of the existing policy and legislative framework in addressing access to ASX Settlement?	<ul style="list-style-type: none">The current links between CHESS infrastructure and other trading platforms (eg Chi-X, NSX, and SIM-VSE) work well, are made available at a low cost. These were established through direct negotiation between the parties where the costs and benefits of different options could be discussed. (see Chapter 5 pp18-20)The existing regulatory regime is effective in addressing access matters. (see Chapter 5 pp22-23)
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?	<ul style="list-style-type: none">The existing regime is effective.
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?	<ul style="list-style-type: none">The existing regime is effective.