



Australian Clearing House Central Counterparty Risk Management Controls

Summary of Responses to Key Initiatives

25 February 2010

Executive Summary

The role of the central counterparty (CCP) has been brought into sharper focus during the Global Financial Crisis (GFC) amid high price volatility and heightened risk of bank failures. In particular, regulators and market users are placing renewed focus on the financial integrity of CCPs at times of extreme market stress.

The RBA's stance on CCP-related issues since the GFC has been reflected in two documents published during 2009: the ASIC/RBA *Review of Participation Requirements in Central Counterparties* and the RBA's 2008/09 *Annual Assessment of ASX's Central Counterparties compliance with the Financial Stability Standards* (the FSS Assessment).

In contrast to the majority of CCPs, ACH does not routinely call margin on equity cash market exposures during the T+3 cycle or require its Clearing Participants to contribute to a mutualised default fund. Both approaches would enhance ACH's risk management controls by ensuring that there exists a 'defaulter-pays' element in the resources available to meet any losses arising from a Clearing Participant default in the equity cash market. This would provide additional protection to the pooled financial resources available to ACH and to the reputation of both ACH and Australia's financial markets.

On 30 October 2009 ASX released a Consultation Paper entitled *ACH Central Counterparty Risk Management Controls* seeking feedback on a number of alternative enhancements to ACH's risk control framework. In addition, where requested, ASX staff met bilaterally with a number of stakeholders to further outline the initiatives and provide further clarification. 21 submissions were received on behalf of 25 Participants, one system vendor and two industry associations. Appendix 1 provides the full list of respondents.

This paper provides a brief recap of the key initiatives outlined in the consultation paper and a high level summary of the responses received during the consultation process; it is not intended to catalogue the submissions. The views are those of the respondents and no opinion on the factual accuracy of the views is given at this stage. Following this Consultation Paper feedback, ASX is currently analysing the preferred way forward and will revert to the industry in the near future.

As usual for such broad consultation documents, respondents' views often diverged to reflect the variety of stakeholder business models. Nevertheless, ASX generally received consistent responses from the market on the key topics covered in the Consultation Paper. In addition, several variations to the documented solutions were also submitted.

Overall, there was:

- Broad acceptance of the conclusions drawn from the international comparison;
- Clear preference for a 'futures style' margining methodology;
- Reluctance to pass on margin to clients, on practical grounds and in part to avoid the need to segregate House and Client accounts in CHES.

Respondents agreed with some key ASX concerns, especially:

- The potentially significant liquidity impact of the volatility of the daily margin requirement;
- Ongoing and conversion costs for the market place, with several respondents highlighting a potential competitive disadvantage to the markets of Hong Kong and Singapore.

Some Participants expressed a view that:

- The need for a Default Fund was not conclusive; and
- Margining was not necessary given that existing Tier 1 risk controls significantly reduced the probability of a Clearing Participant default. However, Tier 1 CCP participation requirements are not a substitute for margin and the appropriateness of the 'defaulter pays' approach is outlined by the RBA in its 2008/09 Assessment of Clearing and Settlement Facilities. Furthermore, the Financial Stability Standard for Central Counterparties requires ACH to be capable of withstanding the impact of the default of the Clearing Participant with the largest settlement obligations in all but the most extreme circumstances, regardless of the probability of the event.

Additional areas for further consideration were also suggested:

- Reducing the length of the T+3 settlement cycle;
- Permitting client stock/funds to be 'locked' for settlement in CHESS prior to the settlement date; and
- Prolonging margining in the derivatives market to account for the settlements associated with stock option expiries.

ASX wishes to thank those institutions and stakeholders who responded to the Consultation Paper. The feedback will be carefully considered and there will be further discussion with respondents on several of the topics highlighted. ASX will continue its discussions with RBA and ASIC with a decision on the preferred way forward and an indicative timetable likely to be made public in the second quarter of this year.

ASX recognises the potentially significant impact that this important initiative could have on the market. In the context of addressing this and the multiple other challenges emerging within the evolving Australian financial market and regulatory environments, ASX looks forward to the continuing input of Clearing Participants and other stakeholders in shaping the optimum solution that achieves the risk management and regulatory objectives whilst minimising, wherever possible, the operational impact of the changes.

Summary of Feedback

International Comparison

Background

The Consultation Paper presented a review of risk controls applied by major international CCPs alongside the existing ACH risk controls in the equity cash market. ASX drew a number of conclusions from this analysis. In particular, that ACH clearly differs to international practice in the areas of cash market margining and the use of Clearing Participant contributions to default resources. As noted in the Consultation Paper, all CCPs reviewed, with the exception of ACH and CDP, impose margining or some form of regular revalued collateralisation on the equity cash market. Further, with ACH's equity cash market as the only exception, all CCPs surveyed also reflected a 'defaulter-pays' element in the financial resources available to meet a Clearing Participant's default in the equity cash market.

Feedback

The majority of the respondents agreed with the conclusions drawn from the comparison of CCP risk controls with several major international Clearing Participants, some confirming the analysis by consulting overseas counterparts to verify the application of risk controls by other equity market CCPs. Others believed that any comparison should also take into consideration other structural factors such as the level of retail participation in a market. Several respondents noted the single system (CHES) for both clearing and settlement processing is unique to Australia and were keen for enhancements to the ACH risk control framework to leverage off this in order to minimise any adverse impact on the market. There was also a call for ACH to concentrate its comparison on the risk controls used by the largest CCPs in the comparator group.

By and large, those that disagreed with the conclusions were surprised by the number of CCPs currently using margining and Participant default funds. Several respondents observed Australia had a history of market stability and ACH had comprehensive controls in place to reduce the probability of a Clearing Participant default, citing minimum capital requirements and high T+3 settlement rates. Typically, these respondents argued that a very low and reduced probability of a Clearing Participant default made further risk controls unnecessary. A small number also questioned whether a divergence from international practice and the Australian regulatory stance (as reflected in the publicly available documentation from the RBA) were sufficient drivers for change to the ACH risk control framework.

Potential Risk Management Controls

Background

The Consultation Paper sought feedback on three alternatives: 'futures' style margining; 'lookback' margining and a default fund. The up-front collateralisation inherent in these alternatives establishes a 'defaulter pays' element in the ACH risk resources and ensure any default losses would first be offset with the resources provided by the defaulting Clearing Participant, thereby protecting the interests of all market users.

The Consultation Paper also noted the risk characteristics specific to the equity cash market were the significant daily changes to unsettled positions due to new trades and the daily completion of settlement in the CHES batch. These could potentially lead to volatile end-of-day and intra-day margin calls.

Respondents were asked to provide an order of preference for the three methodologies and details of the expected impact.

Feedback

There was a general consensus that whilst the current ACH risk control framework is robust and had withstood the GFC well, the introduction of margining and a default fund would bring it further in line with the global benchmark levels. There were several responses in support of strengthening liquid capital requirements to reduce the probability of a Clearing Participant default in lieu of implementing controls to mitigate the impact of a Clearing Participant default event. Several Participants proposed reducing the T+3 settlement cycle to either a T+1 or T+2 settlement cycle. Two Participants raised the possibility of differential margining based on counterparty strength whilst another proposed the use of different margin models to cater for ACH's wide range of Clearing Participants. In addition to the risk characteristics discussed in the Paper, Clearing Participants noted that Australia had a high proportion of CHES sponsored holdings and many retail brokers required up front settlement from clients, all of which reduce the probability of a Clearing Participant default.

(i) Order of preference

Of those that provided a response to this question, the overwhelming preference was for 'futures-style' margining. The 'futures' style approach was preferred as the margin requirements would on average be lower, the model was perceived as more accurately reflecting the risk exposure and because respondents considered themselves to be able to manage the liquidity needs. Only two Participants indicated a primary preference for 'lookback' margining and two others advocated the sole use of a default fund. Those preferring the 'lookback' method cited a lower operational burden and increased market stability by avoiding swings in margin requirements. Respondents supporting the default fund thought it capital efficient, equitable, transparent, easiest to implement and better reflective of the equity environment. Several respondents were opposed to the use of mutualised resources.

(ii) Expected impact on organisation

The overwhelming majority of responses focused on the funding and associated cost implications as initially explained in the ASX Consultation Paper. Most respondents indicated it was too soon to provide details on the magnitude of potential costs but agreed the changes were potentially significant. Beyond this, other impacts raised included a reduced potential for arbitrage trading, reduced incentive to clear illiquid securities with higher margin requirements and less well-capitalised Clearing Participants were concerned they would be limited in their ability to fund margin requirements for large value trades. Some concerns were also expressed about the competitiveness of the Australian equity cash market if the ACH risk framework were to become more comprehensive than that of other exchanges in the region.

(iii) Eligible collateral

Respondents supplied a list of preferred non-cash collateral including domestic/international government debt and Australian semi-government securities, bank guarantees and stocks. Respondents also raised the possibility of establishing specific cover collateral against delivery positions which would then be excluded from margining – see below. There were also proposals to provide the CCP with access to stock in the entrepot account or step-in rights over the HINS accounts in a Clearing Participant default situation. One respondent was keen to ensure that the Clearing House held all collateral on trust.

Margining 1a

Background

As proposed in the Consultation Paper, under the 'futures' style approach, Clearing Participants would be called daily for the sum of the marked-to-market and risk margin on their unsettled novated equity cash market portfolio. The ACH VaR based risk model would be used to calculate the risk margin. The routine end-of-day margin calls would also be supported by an intra-day regime.

Feedback

Respondents were generally comfortable with a VaR methodology and noted the ACH Real Risk model based its risk estimates on the liquidity and volatility of each asset class. Several participants expressed a desire to estimate their own margin requirement daily and conduct 'what-if' analysis. A couple of respondents noted that VaR models were not designed to capture extreme losses and highlighted the continued necessity of supporting the ACH margining regime with stress testing measures. Of the respondents not supportive of a VaR methodology, one party raised SPAN as an alternative equity cash market margin calculator and there was a suggestion that an amended CAC regime would be preferable.

Proposals for improving the ACH Real Risk estimation approach included the continuation of margining exercised ETOs in the ACH derivatives market (similar to the current treatment of ACH LEPOs) in order to lower the magnitude of the spikes during expiry periods in the equity cash market. One respondent suggested the margin requirement only be based on T+1 and T+2 positions given T+3 positions would be settling approximately the same time the margin payment would be received. One respondent requested external validation of the ACH Real Risk model.

Whilst many Clearing Participants were confident their organisations would be able to manage the volatility in margin requirements under the 'futures style' approach, concerns were expressed about the wider liquidity affect of margin volatility, especially during intra-day margin calls.

Margining 1b

Background

The second margining alternative outlined was the 'lookback' approach which would produce higher requirements but lower daily volatility. As noted in the Consultation Paper, this would take into account historic levels of activity primarily with the objective of making margin calls more predictable and avoiding the operational need for routine daily margin calls. The 'lookback' margin requirement consists of a 'base' or minimum obligation supplemented with a 'top up' during expiry periods. Similar to the 'futures style', the 'lookback' would also be supported by an intra-day regime.

Feedback

There was little support for the 'lookback' approach or any amount of 'over-collateralisation' to mitigate the volatility of end of day and intra-day margin requirements. The majority of respondents acknowledged the benefits of the 'lookback' included increased market stability and a lower logistical burden however few perceived these benefits to outweigh the increased margin requirements generated under the methodology. Suggested enhancements to the 'lookback' included maintaining flexibility in the model to ensure the historical period was reflective of the forecast period.

With respect to 'over-collateralisation', one respondent proposed maintaining a bank guarantee lodged against equity cash market positions would assist to counter the daily (and intra-day) volatility in the margin requirement calculated under the 'futures' style and the Clearing Participant would on average benefit from a lower daily margin call (than otherwise calculated under the 'lookback').

Margining – General

Background

ASX noted that the implementation of either of the proposed approaches would have funding and associated cost implications for the market. ASX observed the standard practice overseas was for Clearing Participants to finance the margin and pass any costs of funding on to clients. The alternative would be to pass the margin requirements directly on to clients. Passing on the margin requirement would increase the likelihood of the need for a change to the current single omnibus account structure in the ACH cash market. ASX also proposed no margin offset between T+3 transactions and derivatives transactions, as an offset would likely only be 'accidental' given the longer term derivative trading strategies and the transitory nature of the T+3 cycle.

Feedback

All respondents noted passing margin requirements on to clients would be operationally and administratively complex. Consequently the overwhelming majority of respondents were of the view they would not be passing on the margin requirements and therefore did not see the need for account segregation. Issues raised with respect to passing on the funding cost were around loss of competitiveness and there were respondents who expressed a preference to have ACH mandate the disclosure of the margin cost to clients. General concerns were also expressed regarding the market wide liquidity impact of funding margin requirements. Several Clearing Participants proposed establishing a 'pre-settlement' mechanism whereby client funds held in trust for settlement would be made available to fund the margin requirement. The vast majority of Clearing Participants agreed with the ASX's analysis of the limited benefit of margin offsets.

Clearing Participant Default Fund

Background

ASX highlighted the benefits of a default fund which could be used in conjunction with – or, theoretically, in isolation from – margining controls. A potential method for determining individual fund contributions was also put forward for discussion. The default fund was put forward largely in response to the increased regulatory examination of CCPs' financial resources, including a particular emphasis on a diversified composition of those resources.

Feedback

The majority of respondents opposed the creation of a default fund, many claiming that the case for a default fund was not convincing although generally they did not address the benefits of diversifying sources of capital explained in the Consultation Paper. Virtually no respondent suggested significant changes to the default fund risk-based allocation formula. Views were also split on whether the default fund should be used in conjunction with or in isolation of a margining regime. Several respondents noted that the use of the default fund in isolation would likely result in a substantial contribution to a consequently very large fund.

Several Participants expressed considerable concern regarding the mutualised nature of the funds in a default fund and considered this a vehicle for transferring risk from less-risk averse clearers to more conservative clearers. Many responses were focused on the size of the resources already available (particularly in the form of the Restricted Capital Reserve) to the Clearing House. Responses also reflected confusion regarding the benefit of mutualising a small portion of equity cash market margins and did not address the capital efficiency generated by mutualising part of the margin requirement. Maintaining the Emergency Assessment powers as a final recourse was generally supported.

Appendix 1 – Respondents

Participants

Anziex Securities Pty Ltd
 Australian Investment Exchange
 Bell Potter
 Berndale Securities Limited
 Citigroup Global Markets Australia Pty Limited
 Citigroup Pty Ltd & Citigroup Securities Clearing Australia Limited
 Commonwealth Securities Limited
 Credit Suisse
 CST Equities
 Deutsche Securities Australia Limited
 DJ Carmichael
 EL & C Baillieu Stockbroking Ltd
 Euroz Securities
 Goldman Sachs JB Were P/L
 HSBC Custody Nominees
 J.P. Morgan Markets Australia
 J.P. Morgan Securities Australia Ltd
 JDV
 Macquarie Equities Limited
 Macquarie Securities (Australia) Limited
 Merrill Lynch Equities (Australia) Limited
 Morrison Securities Pty Limited
 Penson Financial Services Australia Pty Ltd
 Taylor Collison
 UBS Securities Australia Limited

System Vendors

GBST Holdings Ltd

Industry Associations

Australian Financial Markets Association (AFMA)
 Stockbrokers Association of Australia (SAA)