REVIEW OF PARTICIPATION REQUIREMENTS IN CENTRAL COUNTERPARTIES

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CONTENTS

Summary

1. Background

2. Industry Reactions

3. The Role of Participation Requirements

4. Impact of the Change

5. Assessment

Annexure 1
Annexure 2

ASIC
Australian Securities & Investments Commission

RESERVE BANK *of* AUSTRALIA

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Review of Participation Requirements in Central Counterparties

Summary

In December 2008, the Australian Clearing House (ACH) implemented a change to its Clearing Rules, whereby the minimum 'core liquid capital' requirement for participants was increased from $100 000 to $2 million with effect from 1 January 2009, and further to $10 million with effect from 1 January 2010. Subsequently, Senator the Hon Nick Sherry, the Minister for Superannuation and Corporate Law, asked the Reserve Bank of Australia and the Australian Securities and Investments Commission (ASIC) to provide advice on what is an appropriate 'core liquid capital' requirement for participants in Australia's licensed clearing facilities.

The Minister asked that the investigation give due consideration to:

- the risk of concentration of clearing participants;
- the impact that concentration would have on the clearing system;
- the need to maintain stability in Australia's financial system;
- the impact of such changes on market participants; and
- any other matters deemed relevant, including how any change to $10 million should best be implemented to ensure the continued smooth operation of Australia's financial markets.

The Minister also stressed that the work should be undertaken in an open and transparent manner, involving participants and their representative organisations.

In response to the Minister's request, the Reserve Bank and ASIC undertook an extensive consultation process with participants in ACH. A letter was sent to all participants in late December 2008, inviting submissions on the issues and requesting information to support the analysis by the end of January. Twenty six submissions were received, many of these coming from small brokers who would be directly affected by the prospective increase in 'core liquid capital'. The Reserve Bank and ASIC followed up the written submissions with consultation with participants and the Australian Securities Exchange (ASX).

On the basis of the information received and the analysis conducted, the Reserve Bank and ASIC have concluded the following.

- There is a strong in-principle case for ACH setting a minimum level of capital for its clearing participants. An increase from the previous level of $100 000 is appropriate and will strengthen the financial standing of the central counterparty.
- There is no single answer to the question of what is an appropriate level of minimum capital for participants in Australia's central counterparties. An assessment of the precise level of minimum capital can only be made in the context of the whole suite of a central counterparty's

risk control measures. To some extent, there can be a trade-off between the level of minimum capital and other elements of the risk control framework. While the Reserve Bank encourages ACH to continue to examine its risk control framework in accordance with its obligations under the *Financial Stability Standard for Central Counterparties*, it does not see a case that, over the medium term, alternative arrangements would be unambiguously superior to those being proposed by ACH.

- Developments in financial markets over recent months, however, have made it appropriate to reassess the timetable for the implementation of an increase in minimum capital. In particular, the market for third-party clearing has not evolved in the way originally anticipated when ACH announced the prospective change in capital requirements in July 2008.
- Given these developments, an increase in minimum capital requirements to $10 million in January 2010 is likely to result in some small brokers finding their ability to offer competitive broking services curtailed. This could, in turn, impact on the efficiency of provision of broking services to regional and some retail clients.
- There is therefore a strong case for a more gradual implementation of the increase in minimum capital requirements, with an initial increase to perhaps $5 million in the first half of 2010, followed by an increase to $10 million sometime after that. A phased increase to $10 million would allow further time for the third-party clearing market to deepen and become more competitive and provide further scope for smaller brokers to examine various alternative business strategies. While a more gradual implementation of higher minimum capital requirements could expose ACH to slightly more risk, the Reserve Bank and ASIC assess that the trade-off is acceptable.
- Consistent with ACH's obligation to do all things necessary to ensure that its services are provided in a fair and effective way (to the extent that it is reasonably practicable to do so), ASIC encourages ACH to consider alternative arrangements to a $5 million minimum capital requirement for some existing participants. Whether such alternative arrangements are appropriate might take into account the nature of the participant's business and whether any other restrictions could be imposed on the participant to reduce risks to ACH (eg, the imposition of audit controls; restrictions on the nature of the participant's business).

In addition, the Reserve Bank is of the view that a number of other initiatives might enhance ACH's compliance with the *Financial Stability Standard for Central Counterparties*. In particular, the Reserve Bank would support moves by ACH to:

- introduce additional risk control measures, including more customised collateralisation of exposures beyond certain limits;
- set higher minimum capital requirements for third-party clearers, given the importance of these participants to the stability of ACH and the smooth functioning of a tiered clearing system; and
- review, particularly in the light of experience from the global financial crisis, whether there is a longer term case for considering other risk controls.

1. Background

1.1 Central counterparty clearing and risk controls

Most financial exchanges, and some over-the-counter (OTC) markets, are supported by central counterparty arrangements. Under such arrangements, the central counterparty interposes itself as the legal counterparty to all purchases and sales via a process known as novation. This process involves the replacement of the original contract by separate contracts between the buyer and the central counterparty and between the seller and the central counterparty.

Central counterparties facilitate anonymous trading, since participants need only monitor and assess the central counterparty, rather than each individual trading counterparty. They also offer important benefits in terms of standardised and robust risk management, and greater opportunities for netting of obligations. At the same time, they result in a significant concentration of risk in the central counterparty. In the event that a clearing participant defaults, the central counterparty may face a loss in closing out the defaulter's positions. The central counterparty must therefore have appropriate risk controls and other measures in place to provide confidence that, in all but the most extreme circumstances, a default can be accommodated without threatening the central counterparty's solvency or significantly disrupting financial markets or the financial system more generally.

Central counterparties have a variety of risk controls, which combined seek to address this risk. These can be broken down into three categories: ex-ante controls on exposures; margin policy; and arrangements to fund a shortfall.

- *Ex-ante controls on exposures*: These controls attempt to limit the central counterparty's exposures by restricting the trades that it accepts. Setting threshold requirements, either via the imposition of a minimum capital requirement or a minimum credit-rating, is the most direct way of doing this. Another possibility is the imposition of position or exposure limits, perhaps based on credit quality, although such limits are typically monitored only ex post. It is important to note that while capital requirements seek to ensure the financial standing of participants, central counterparties would typically rank equally with other creditors in the event of liquidation of a participant.[1] This leads to a second set of risk controls – margins.
- *Margin policy:* Margin requirements seek to manage the risk associated with exposures once they have been novated to the central counterparty. Three types of margin requirements are typically imposed in practice: (i) mark-to-market (variation) margin is generally called daily to cover any losses on a participant's open positions; (ii) a fixed level of initial margin is called in respect of each new position novated to the central counterparty to cover prospective future price moves before a defaulter's positions can be closed out; and (iii) some central counterparties, including the Australian central counterparties, also call for additional margin contributions from participants with particularly large or concentrated positions.

1 *Higher capital might in practice increase the likelihood that a central counterparty was able to recover some funds in the event of a participant default. However, a central counterparty has no higher priority than other creditors in liquidation and, since legal proceedings would likely be triggered to effect a claim, the central counterparty's access to such funds would be neither certain nor timely.*

- *Arrangements to fund a shortfall*: This is the last line of defence for a central counterparty. If a participant were to default and margin posted by the defaulter was not sufficient to fully cover any losses arising in the close-out of positions, the central counterparty needs to have in place arrangements for dealing with the shortfall. Such arrangements typically comprise a guarantee fund, made up of contributions by clearing participants and/or the central counterparty's own capital, supplemented with promissory resources in the form of default insurance or emergency assessments on participants.[2] In the event of a default, any contribution to the fund by the defaulting party would typically be utilised first.

1.2 Public policy objectives

In the first instance, the particular combination of risk controls implemented by a central counterparty is the responsibility of its board. These decisions must, however, be made in the context of any public policy requirements imposed on the central counterparty.

In Australia, a licensed central counterparty must meet two main public policy requirements. First, it is required to meet the *Financial Stability Standard for Central Counterparties* determined by the Reserve Bank.[3] Guidance to measure 2 of the Standard casts the specific financial stability objective of participation requirements as being 'to promote the safety and integrity of the central counterparty and in doing so limit the potential for financial system instability.' The guidance also acknowledges that 'participation requirements should include various financial requirements, such as a minimum credit rating or level of net tangible assets, so as to reduce the exposure of the central counterparty to credit and other risks,' while at the same time ensuring that 'access to the central counterparty is not restrictive beyond the need for ensuring financial system stability.' These requirements are consistent with international best practice, as set out in *Recommendations for Central Counterparties* drafted by the Bank for International Settlements Committee on Payment and Settlement Systems and the International Organisation of Securities Commissions.[4]

Second, a licensed central counterparty is required, under the *Corporations Act 2001*, to provide its services in a fair and effective way (to the extent that it is reasonably practicable to do so). A key consideration here is the basis for any differentiation between participants, and in particular assurance that no end users of the central counterparty are improperly disadvantaged by the way in which the central counterparty interacts with its clearing participants. Differentiation by reference to legitimate differences in risk or services provided is likely to be appropriate. In the context of a change in participation requirements, a central counterparty would, consistent with its obligation to provide services in a fair and effective way, need to consider the impact on existing participants. In this regard, it would be encouraged to consider any allowances that might reasonably be made for certain types of existing participants, particularly those with low risk profiles.

2 *Where a central counterparty's risk framework includes promissory contributions from participants, higher minimum requirements for participants might, by increasing average financial standing, increase the likelihood that such contributions could be made.*

3 *The* Financial Stability Standard *requires the following: 'A CS facility must conduct its affairs in a prudent manner, in accordance with the standards of a reasonable CS facility licensee in contributing to the overall stability of the Australian financial system, to the extent that it is reasonably practicable to do so.' The Standard is supported by a set of measures that the Reserve Bank considers relevant in assessing compliance. A licensed central counterparty is required to comply with the Standard on a continuous basis, with a formal assessment conducted once a year.*

4 *See http://www.bis.org/publ/cpss64.htm*

1.3 ACH's risk framework

Like all central counterparties, the risk framework at ACH utilises a combination of controls. These have evolved somewhat in recent years, with the key elements of both ACH's and SFE Clearing Corporation's (SFECC) current risk framework summarised in Table 1. Notwithstanding that ASX has recently taken a number of steps to apply a consistent risk-management approach across the two central counterparties, it is clear that there remain considerable differences, including in respect of participation requirements.

Table 1: Australian Central Counterparties' Risk-management Frameworks

Central counterparty	Minimum capital requirement	Margins (coverage)	Paid-up participant contributions	Order of application of guarantee fund
ACH Multi-asset	$2m (due to increase to $10m, January 2010) and risk-based requirement	Equity: - Additional[(a)] Derivatives: - Initial (99.7%) - MTM[(b)] - Additional	No	- ACH/ASX capital ($150m) - Insurance ($100m) - Emergency assessments on surviving participants ($300m total)
SFECC Derivatives	$5m (due to increase to $10m, or $20m, if a third-party clearer)	- Initial (99.7%) - MTM - Additional	Yes	- Defaulter's contributions - SFECC/ASX capital ($100m) - Non-defaulters' contributions ($120m total) - Insurance ($150m) - Emergency assessments on surviving participants ($30m total)

Note: The information in this table is taken from ACH and SFECC rulebooks and procedures and data presented in Reserve Bank assessments of the central counterparties.

(a) Additional margin is that applied in respect of large or concentrated exposures. In the case of ACH, such margin is applied where large exposures are identified through stress testing. For cash equities, this is not currently classified as margin in the ACH Rules, since the funds are not reserved solely to meet the default of the participant that posted them.

(b) MTM = mark-to-market margin.

ACH's risk framework involves a combination of minimum and risk-based capital requirements, some margining, and a pool of risk resources. Following the change which took effect on 31 December 2008, participants clearing cash equities or options are required to hold at least $2 million in 'core liquid capital'.[5] In addition, they are subject to a risk-based requirement under which they must hold sufficient 'liquid capital' (which overlaps in part with 'core liquid capital'), to cover counterparty risk, large exposure risk, position risk and operational risk (the

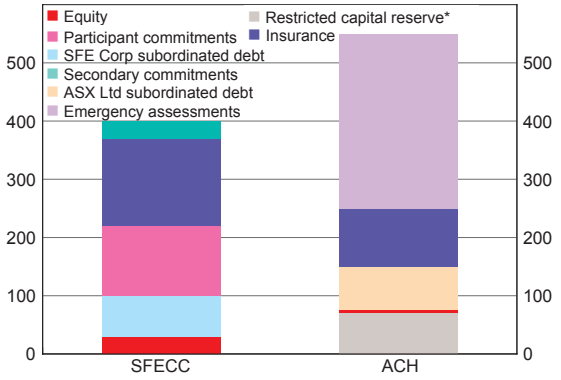
5 *'Core liquid capital' is defined by ASX to be the sum of: all paid-up ordinary share capital; all non-cumulative preference shares; all reserves, excluding revaluation reserves; and opening retained profits/losses, adjusted for current year movements.*

so-called 'total risk requirement').[6] The risk-based requirement also applies to ASX market participants, for whom the minimum 'core liquid capital' requirement remains at $100 000. With effect from 1 January 2010, ACH has announced a further increase in the minimum 'core liquid capital' requirement to $10 million.[7] This compares with SFECC's minimum capital requirement of $5 million currently. SFECC has also announced that it intends to increase its minimum capital requirement for participation to $10 million, with a higher minimum of $20 million for third-party clearers.[8]

As noted above, while these capital requirements give ACH some confidence in the financial standing of its participants, they do not provide the central counterparty with direct resources to draw upon in the event of default. If a default actually occurs ACH is, however, able to call on any margins held, and if these are not enough, its pooled risk resources.

Currently, ACH levies initial and mark-to-market margins for derivatives, but not cash equities.[9] For derivatives, ACH imposes initial and mark-to-market margins – consistent with the practice at SFECC. These are calculated overnight and collected from participants the next morning. In addition, ACH conducts 'stress tests' to simulate the impact on the clearing house of the failure of a clearing participant at the same time as a substantial movement in the market. Where such losses exceed a particular threshold, participants are obliged to lodge collateral with ACH. SFECC has similar arrangements for calling additional collateral from participants where stress tests indicate significant potential exposures.

Graph 1
SFECC and ACH Risk Resources



* This reserve was created from funds transferred from the National Guarantee Fund in 2005
Source: ASX

Finally, ACH can access a pool of risk resources to meet any obligation arising in the event of a participant default that is not covered by margin or other collateral; currently this amounts to $550 million (Graph 1). ACH's own capital, including subordinated debt issued to ASX as parent, would be the first to be drawn upon in the event of a default. SFECC also holds resources

6 *'Liquid capital', the relevant measure for comparison with the 'total risk requirement', is defined by ASX to comprise total tangible shareholders' funds held in liquid assets, net of any guarantees and indemnities. Participants clearing futures only may elect to be covered by an alternative capital regime, based either on a net tangible asset requirement (under which participants must hold a minimum of $5 million in net tangible assets) or compliance with the regime of another prudential supervisor. As at the end of December 2008, 57 ACH participants were subject to the risk-based regime, with a further 2 participants subject to the net tangible asset requirement.*

7 *ACH has announced that it proposes to broaden the definition of 'core liquid capital', so as to allow participants additional flexibility in meeting the new requirement. This flexibility is considered further in Section 4.1.1.*

8 *SFECC is yet to implement rule changes to give effect to this increase.*

9 *In an international context, ACH is unusual in that it does not impose initial and mark-to-market margins for cash equities. Some information on international central counterparties' risk frameworks is presented in Section 3.4.*

to meet such a shortfall, but the structure is somewhat different to that for ACH in that it also includes up-front contributions from participants.

2. Industry Reactions

ACH first announced its changes to participation requirements in a Market Information Document released on 7 July 2008.[10] There was a strong response from some clearing participants, many of whom stated that they would be adversely affected both by the size of the increase in minimum requirements and the proposed speed of implementation. Following this, the Minister asked both the Reserve Bank and ASIC to provide advice on what is an appropriate level of minimum core liquid capital requirements.

In late December 2008, the Reserve Bank and ASIC sent a letter to all ACH clearing participants requesting submissions and information to support analysis of the issue by 30 January 2009.[11] A total of 26 submissions were received. Many of these came from smaller brokers who would be directly affected by the increase in 'core liquid capital' requirements; these submissions were typically critical of the changes and ACH's handling of the process.[12] Among the submissions from larger brokers, some were supportive of an increase in minimum capital requirements; others, while acknowledging that they would not be directly affected, identified the potential impacts on smaller brokers. The Reserve Bank and ASIC followed up the written submissions with consultation with participants.

Four main issues were raised during the consultation process:

(i) *Rationale for the change*: A number of respondents argued that there was a lack of clarity as to ACH's motivation and rationale for the increase. Many therefore called for a clear statement on why such a significant change was considered necessary at this time, and why $10 million was an appropriate minimum threshold;

(ii) *Preference for a purely risk-based approach*: The increased minimum 'core liquid capital' requirement was seen by smaller brokers as undermining an effective risk-based capital regime. The view was widely held that this regime adequately captured the risks inherent in the brokers' business and the exposures they brought to the central counterparty. They argued that the prospective change would force them to hold significant excess capital;

(iii) *Difficulties in raising capital:* Many brokers affected by the increased minimum expressed reservations about their ability to raise capital in the current market environment; and

(iv) *Absence of a viable alternative access model*: It was argued that if a broker were unable to raise sufficient additional capital, it currently had no viable alternative channel to access ACH's clearing services. In particular, indirect participation via another clearing participant – ie, third-party clearing – was not deemed a feasible and economical

10 *See http://www.sfe.com.au/content/notices/notice2008_089a.pdf*

11 *See Annexure 1 for a copy of the letter, which was also sent to the Securities and Derivatives Industry Association (SDIA).*

12 *See Annexure 2 for a list of respondents to the consultation.*

alternative at present.[13] In these circumstances, some participants could be forced to exit the market, with the spillover potentially severe in some regions or market segments.

In considering these issues, the Reserve Bank and ASIC have focused on two main areas: the potential role of participation requirements within the risk management framework of a central counterparty; and the impact on the market of ACH's specific changes.

3. The Role of Participation Requirements

The Reserve Bank and ASIC both see an important role for minimum capital requirements to support the financial stability of a central counterparty. This section sets out the background to such participation requirements and the reasons why they are a valid risk management tool for central counterparties.

3.1 Capital requirements for market participants and central counterparties

It is important to note that participation requirements applied by a central counterparty are, in principle, distinct from requirements applied by a market operator or a settlement facility.

However, since ASX has a vertically integrated structure, these functional distinctions can sometimes be blurred, particularly given that the risk-based component of capital requirements applied by ACH is the same as that in place for market participants who do not clear for themselves. Furthermore, compliance with these requirements is, for both purposes, assessed by ASX Markets Supervision.

While ASX has a vertically integrated structure, a number of developments over recent years have helped to underline the crucial functional distinctions. These include the *Financial Services Reform* legislation of 2001 and changes to the licensing regime, the regulatory environment, and the organisational and corporate structure of the operators. Furthermore, separate operating rules and procedures for the market, the central counterparty and the securities settlement facility allow independent assessment of how each licensed entity manages the risks specific to its function. The separation between these functions would become even more apparent were competing market operators, and perhaps competing central counterparties, to enter the Australian market. Indeed, this has been the experience in other markets, most notably in Europe.

In principle, the participation requirements of a central counterparty need not be the same as those of the market operator(s) it serves. For a market operator, the goal of participation requirements is to protect the integrity of the market; it is not related to any financial risk assumed by the market operator. In contrast, a central counterparty takes on direct financial exposures to its participants. Given this, it has a strong interest in protecting its own robustness, reputation and financial standing

13 *Several (related) issues were raised. First, it was argued that the market for third-party clearing in Australia was not currently deep or competitive. Second, due to a high cost of transition, uncompetitive pricing and high switching costs, third-party clearing was seen as an uneconomical alternative by many participants. Use of a third-party clearer would also significantly alter the flexibility and tailored nature of their service to clients, particularly where a complete end-to-end service was deemed to be valued highly. Third, there were concerns as to the commitment of the existing providers of third-party clearing services to the Australian market, particularly since several of these were subsidiaries of institutions that had recently received government support or had experienced a change in ownership.*

by ensuring that it only assumes exposures to participants meeting a threshold credit quality. This issue is considered in more detail below.

3.2 Participation requirements and other risk controls

A central counterparty's choice between the alternative risk control measures set out in Section 1.1 is likely to reflect an assessment of their relative effectiveness, their relative opportunity costs, and their implications for underlying market activity. But while there is an element of substitutability between them, a central counterparty will typically have all three types of protection.

There are two main advantages of minimum capital requirements for a central counterparty:

- They provide comfort that a participant has sufficient financial capacity to absorb unexpected financial or operational shocks.[14] They also ensure that a participant is of sufficient scale to justify investment in more comprehensive operational and compliance frameworks, which might also be expected to reduce the potential for such failings. While retail brokerage businesses typically expose a central counterparty to relatively low risk, there inevitably remains some possibility of serious operational or risk-control problems. For instance, since the broker is responsible for all positions brought to the central counterparty, a risk-control failing that allowed a client to build up excessive exposures that it then failed to honour could leave a thinly capitalised broker with an obligation to the central counterparty that it was unable to meet.
- They can help to ensure that participants commit significant financial resources to the clearing business and assume the responsibility that direct participation entails. Indeed, to the extent that participants have capital allocated to this specific function, they have an incentive to monitor and control the risks they bring to the central counterparty. The less capital participants have, the less they have to lose in the event of a default.

Bringing these elements together, requiring a commitment of significant financial resources in order to become a clearing participant would be expected to support the financial standing of the central counterparty. Since a central counterparty concentrates counterparty risk management for the markets it serves, this is critical to retaining the confidence of participants: any doubt as to its risk-management approach could have severe implications for the market. A default event, irrespective of the size of the participant or the scale of loss incurred, could in this sense be seen as a sign of risk-management failings and hence harm the reputation of the central counterparty.

Furthermore, for a central counterparty relying on its own capital, the replenishment of the guarantee fund following a drawdown might also be difficult, particularly if reputational damage had been suffered. A central counterparty such as ACH therefore faces a strong incentive to minimise the probability of a call on its risk resources by assuming exposures only to participants meeting a threshold level of credit quality.

3.3 Why a risk-based approach by itself is not enough

During the consultation process, retail brokers argued that entirely risk-based requirements were more appropriate than minimum threshold requirements. They emphasised that their business was

14 *There have been several examples of such problems in the past year, although none have adversely affected the central counterparty. Recent examples include: operational failings causing system-wide disruption; losses incurred due to alleged fraudulent activity; losses arising from inadequate legal documentation; and rapid depletion of capital due to a protracted period of losses.*

inherently 'low risk' and hence their activities could be supported with a relatively low level of capital; the imposition of 'high' minimum capital requirements would leave them with excess capital.

Under the current risk-based regime at ACH, the brokers affected by the increase in minimum capital requirements all have relatively low absolute 'total risk requirements' (Table 2). Furthermore, they all hold 'liquid capital' significantly in excess of their 'total risk requirements', and hence, at least relative to their calculated risk exposures, typically have sizeable 'buffers' in place.

Table 2: Affected Participants' Capital Relative to Risk-based Requirements

Core liquid capital	Number of participants	Liquid capital (LC)	Total risk requirement (TRR)	Ratio LC/ TRR
$m		Average $m	Average $m	Average
2-3	6	2.09	0.27	7.8
3-5	4	2.43	0.76	3.2
5-7	7	5.96	0.72	8.3
7-10	0	–	–	–

Note: This table is based on data provided by ASX as at end-November 2008 (adjusted for subsequent resignations or acquisitions/mergers of participants).

In practice, however, such an approach may in this context have some limitations, including the following:

- In a risk-based regime, monitoring can only feasibly take place at discrete intervals and with imperfect information. Notwithstanding that a participant may be required to comply with its risk-based requirements on a continuous basis, monitoring cannot take place in real time;
- The effectiveness of a risk-based approach is dependent upon the accuracy of the measure(s) of risk adopted. The 'total risk requirement' was principally designed to support ASX in its assessment of the participant's impact on market integrity. As is the case with any single measure of risk, it inevitably is unable to capture the full range of risks against which the central counterparty is aiming to protect itself;
- Notwithstanding that a participant may hold capital in excess of its 'total risk requirement', an *absolute* rather than a *relative* buffer helps to guard against unexpected operational or risk-control failings such as those discussed above. This reflects the fact that such shocks could deliver losses not directly related to the magnitude of normal-course risks run by the participant.

Even if it were possible to supplement capital requirements with a thorough assessment of business and operational practices, ultimately it may not be feasible or economical for a central counterparty to conduct prudential monitoring to the same standard as a specialist regulator and to tailor its risk framework accordingly.

In some jurisdictions, central counterparties' participation requirements are linked to those of a specialist prudential regulator. Where this is the case, the central counterparty may be able to reduce the intensity of its own monitoring and place less emphasis on capital requirements within its risk

framework. In contrast in Australia, a wide range of institutions are participants in ACH and currently none are subject to prudential regulation by the Australian Prudential Regulation Authority (APRA). This strengthens the case for minimum capital requirements.[15]

3.4 International comparisons

Minimum capital requirements are a common feature of central counterparties around the world, even where other risk controls are employed.

Table 3 summarises the key risk controls employed by a selection of 15 central counterparties internationally, spanning equities, derivatives and multi-asset central counterparties from Europe, the United States and Asia. While the mix of risk controls varies considerably, there are a number of important features.

- With just two exceptions, all of the central counterparties in the sample apply minimum capital requirements; the exceptions, CDS and SIS x-clear, do not set requirements independently of the regulatory regimes applicable to their participants.
- The scale of minimum capital requirements does, however, differ considerably across the sample of central counterparties, ranging from a low of US$100 000 over the SEC requirement for a municipal securities broker participating in NSCC, to US$5 billion for a participant clearing interest-rate swaps at LCH.Clearnet Limited.
- Many central counterparties set different requirements depending on the participation status of the participant. In particular, higher requirements for third-party clearers are common, reflecting the important role they play in a tiered clearing system. Indeed, LCH. Clearnet SA and CC&G determine minimum capital requirements for third-party clearers based on the number of indirect participants for which they clear.
- Minimum capital requirements for self-clearers of the equivalent of A$10 million or higher are not unusual: at current exchange rates, six of the central counterparties surveyed have a minimum above this level for either cash equities, derivatives, or both.
- Of those applying minimum capital requirements of less than the equivalent of A$10 million, three are US central counterparties, two of which (NSCC and CME Clearing) base their minimum capital requirements on regulatory requirements.[16] These central counterparties also apply margins and rely heavily on either paid-up or promissory participant contributions to the guarantee fund.
- Two others, CDP and JSCC, each set a minimum of the equivalent of around A$5 million. These too have other risk controls in place, including participant contributions to the guarantee fund. Indeed, promissory participant contributions are notionally unlimited in the case of JSCC.
- HKSCC and OMX, while setting relatively low minimum capital requirements for self-clearers, both routinely call margins and set very high minimum requirements for third-party clearers. HKSCC also requires ex-ante participant contributions.

15 *ACH hopes that, further to recent legislative changes, authorised deposit-taking institutions will apply to become direct clearing participants. For these institutions, reliance will then be placed on the monitoring undertaken by APRA.*

16 *For instance, NSCC applies an incremental requirement over capital requirements imposed by SEC, and CME Clearing sets its requirements equal to SEC or CFTC requirements, subject to a US$2.5 million minimum.*

Table 3: International Comparison of Risk Frameworks

All values shown are in local currency terms

Central counterparty	Minimum capital requirement [a]	Margins [b][c] (coverage) [d]	Paid-up participant contributions	Order of application of guarantee fund
CDP (Singapore) Equities	S$5m	None	Yes	- Defaulter's contributions - CDP capital (S$25m) - Non-defaulters' contributions (S$15m total) - Insurance (S$45m) - Standby letter of credit (S$75m)
CDS (Canada) Equities	None, but participants must observe minimum standards applied by their relevant regulators	- Initial (99%) - MTM	Yes	- Emergency assessments on surviving participants (potentially unlimited)
EMCF (Netherlands) Equities	€7.5m – €25m	- Initial (99.7%)	Yes	- Defaulter's contributions - Non-defaulters' contributions - Emergency assessments on surviving participants
EuroCCP (UK) Equities	Excess of €20m – €70m over regulatory requirements	- Initial (99%) - MTM	Yes	- Defaulter's contributions - EuroCCP capital - Non-defaulters' contributions
HKSCC (Hong Kong) Equities	HK$5m – HK$300m	- MTM	Yes	- Defaulter's contributions - Non-defaulters' contributions
NSCC (US) Equities	US$0.1m – US$1m over SEC requirement	- Initial (97.5%)	Yes	- Defaulter's contributions - Resources from cross-guarantee arrangements with DTC, FICC and OCC - NSCC retained earnings (min 25% of US$43m) - Non-defaulters' contributions (US$6.6b total)
SIS x-clear (Switzerland) Equities	None, but participants must be of particular regulatory status	- Initial (99%) - MTM	Yes	- Defaulter's contributions - 50% of SIS default provisions - Non-defaulters' contributions (CHF 200m total) - Emergency assessments on surviving participants - SIS capital
CME Clearing (US) Derivatives	US$2.5m	- Initial (95 - 99%) - MTM	Yes	- Defaulter's contributions - CME capital (US$60m) - Non-defaulters' contributions (US$1.3b) - Emergency assessments on surviving participants (US$3.6b)

Table 3: International Comparison of Risk Frameworks

All values shown are in local currency terms

Central counterparty	Minimum capital requirement [a]	Margins [b][c] (coverage) [d]	Paid-up participant contributions	Order of application of guarantee fund
OCC (US) Derivatives	US$2.5m	- Initial - MTM	Yes	- Participant contributions (US$5.5b total) - Emergency assessments on surviving participants
OMX (Sweden) Derivatives	SEK10m – SEK500m	- Initial (99.2%) - MTM	No	- Fund contains OMX capital and retained earnings (SEK925m) and insurance (SEK1.2b)
CC&G (Italy) Multi-asset	€3m – €40m for equities; €10m – €40m for derivatives	- Initial (97.5 – 99.8%) - MTM	Yes	- Defaulter's contributions - CC&G capital (€5m) - Non-defaulters' contributions (equities and equity derivatives: €750m total) - Remainder of CC&G equity
Eurex (Germany) Multi-asset	€2.5m – €25m for equities; €12.5m – €125m for derivatives	- Initial (99%) - MTM	Yes	- Defaulter's contributions - Eurex reserves - Non-defaulters' contributions (€1b total) - Eurex equity (€105m) - Parental guarantee (€700m)
JSCC (Japan) Multi-asset	¥300m	- Initial - MTM	No	- Default fund contributions by member exchanges: equities (¥10.8b); derivatives (¥10.4b) - JSCC capital (¥10.6b) - Emergency assessments on surviving participants (unlimited)
LCH.Clearnet Ltd (UK) Multi-asset	£5m for equities (up to US$5b for interest rate swaps)	- Initial (99.7%) - MTM	Yes	- Defaulter's contributions - LCH capital (£20m) - Non-defaulters' contributions (£594m total) - Remainder of LCH capital (€209.3m)
LCH.Clearnet SA (France) Multi-asset	€10m – €37.5m	- Initial (99.7%) - MTM	Yes	- Defaulter's contributions - Non-defaulters' contributions

Note: The information in the table is taken from a variety of public sources, including central counterparties' websites, rulebooks, self-assessments and guidance documents.

(a) Where a range is shown, this typically reflects the application of different requirements for participants of different status; eg, higher requirements for third-party clearers.

(b) MTM = mark-to-market

(c) CCPs typically have the power to levy additional margins from participants, often based on the observation of large or concentrated positions, or information on the financial standing of the participants.

(d) Coverage, where available, is the central counterparty's stated confidence interval for price movements in the cleared product. However, the quoted confidence interval will apply over different horizons, depending on the central counterparty, since different assumptions are made as to the time frame for close-out.

4. Impact of the Change[17]

A market participant's capacity to provide competitive broking services need not be dependent upon its ability to access the central counterparty *directly*. If the market for third-party clearing is sufficiently deep and competitive, individual participants (particularly those that are small) may well find use of a third-party clearer attractive. Indeed, since a third-party clearer can take advantage of scale economies – because fixed costs are high relative to variable costs – it may be able to offer services at a lower cost than could a small broker if performing this role itself.

If, however, the third-party clearing market is not deep and competitive, increases in minimum capital requirements could potentially have an adverse impact on the market. In the case of the increase in ACH's minimum capital requirement to $10 million, for example, there are two possible effects:

- there could be an impact on the business of those brokers that currently hold less than $10 million in 'core liquid capital' and, to the extent that they service particular constituencies, potentially a reduction in access to trading services for some consumers; and
- depending on the responses of those with less capital than required, there could be implications for the structure of participation and the distribution of exposures across participants.

While the second of these effects would not appear to be material in this case, there is potentially a significant impact on a number of existing small brokers.

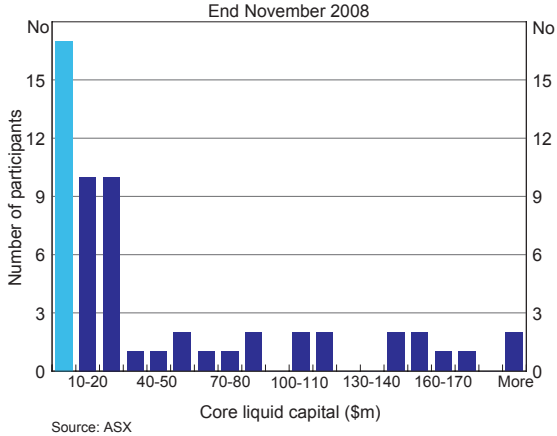
4.1 Impact on existing participants

The proposed increase in ACH's minimum capital requirement from $2 million to $10 million would directly affect 17 of the 57 existing participants subject to minimum 'core liquid capital' requirements as at the end of 2008. Of these 17, 10 have 'core liquid capital' of less than $5 million. Graph 2 shows the distribution of 'core liquid capital' among ACH's participants.

Graph 2

ACH Particpants' Core Liquid Capital

End November 2008



Source: ASX

Participants with insufficient 'core liquid capital' to meet higher threshold requirements would have three choices: (i) inject additional capital; (ii) move to third-party clearing; or (iii) merge or exit the business. Each of these choices has different implications for the participants themselves and the market.

17 *To assist in the analysis of potential impacts, ASX provided the Reserve Bank and ASIC with data on 62 ACH participants that were subject to minimum 'core liquid capital' requirements as at end-November 2008. Of these, 22 participants had less than $10 million in 'core liquid capital'. Four participants had less than $2 million in 'core liquid capital', three of which have subsequently resigned (and have been excluded from the analysis), while the fourth has injected additional capital. Since end-November 2008, a further two participants with 'core liquid capital' between $2m and $10m were acquired by, or transferred their business to, other ACH participants with 'core liquid capital' greater than $10m. These participants are also excluded from this analysis, and their positions transferred to the appropriate parties (assuming no netting).*

4.1.1 Injecting capital

In the current market environment, raising additional capital may be challenging for a number of affected participants. Furthermore, since participants consider that they already hold adequate capital to support their businesses, they would deem any additional capital injected 'lazy' capital. They argue that, were they unable to achieve an adequate return on capital, their parent entities, banks or other capital providers might reconsider the value of their investment in the business. In December 2008, ASX proposed a broader definition of 'core liquid capital' (so-called 'core capital') to ease the transition to a higher capital requirement.[18] While this proposal is still subject to the rule-change disallowance process, this broader definition includes, in addition to the components of 'core liquid capital', acceptable mark-to-market revaluation reserves, and the following assets (up to a value of $5 million):

- approved subordinated debt;
- additional cash collateral cover lodged with ACH; and
- unconditional third-party bank guarantees.

Notwithstanding this additional flexibility, affected brokers claim that injecting additional 'capital' could still have an adverse impact. Specifically, if subordinated or other debt was raised, perhaps to fund additional cash collateral lodged with ACH, there could be a direct reduction in profitability given that the cost of the debt would likely exceed the return that could be earned on the funds. For example, Table 4 considers the impact under the assumption that participants make maximum use of the additional flexibility in raising debt-like 'core capital', and that the cost of raising such funds is 2 percentage points higher than the return on investing them.

In this case, the calculated impact of a $10 million requirement across the sample of affected brokers would range from a decline in profits of less than 3 per cent, to a drop of 39 per cent.

Table 4: Impact on Participants' Profitability of Raising Debt-like 'Core Capital'

Core liquid capital	Number of participants	Additional 'core capital' required with a minimum of $10 million	Assumed debt-like component of 'core capital'	2007/08 profits	Ongoing reduction in profits if $10 million*	Per cent decline
$m		Average $m	Average $m	Average $m	Average $m	Average %
2-3	6	7.66	5.00	1.32	0.10	(7.6)
3-5	4	6.18	5.00	2.23	0.10	(4.5)
5-7	7	4.57	4.57	0.90	0.09	(10.1)
7-10	0	na	na	–	–	–

Note: This table is based on data on participants' 'core liquid capital' provided by ASX as at end-November 2008 (adjusted for subsequent resignations or acquisitions/mergers of participants) and data on participants' 2007/08 profits reported to ASIC.

* Assuming that participants make maximum use of the additional flexibility in raising debt-like 'core capital' (ie, they raise debt-like liabilities up to $5 million) and that the cost of raising funds is 2 percentage points higher than the return on investing them.

18 *See http://www.asxonline.com/intradoc-cgi/groups/derivatives/documents/communications/asx_022665.pdf*

4.1.2 Third-party clearing

Developments in the third-party clearing market have not played out as expected at the time ACH made its decision to increase minimum capital requirements. There are relatively few providers of third-party clearing services, possibly reflecting very little demand for these services in the past. But it may also be that the cost of direct participation has to date been lower than would be appropriate were it to reflect more accurately the risk to the central counterparty. As such, third-party providers may not yet have reached the optimal scale, and relative pricing is not yet at a level that attracts brokers away from direct participation.

Whatever the reasons for the lack of development of the market, it has resulted in a fairly concentrated third-party clearing market with limited choice of services for participants. As at the end of 2008, a total of 48 of the 94 trading participants on the ASX market used third-party clearing for at least a portion of their business: 37 of these channelled all of their trades via a third-party clearer; a further 11 participants used a third-party clearer for only a sub-set of their trades. There are two dominant providers of third-party clearing services, one primarily serving retail brokers; the other serving wholesale paticipants in the options market (Table 5).

Furthermore, the difficulties in the global financial system over recent months have affected (the parent firms of) some current and prospective providers of third-party services, leaving them under new ownership or subject to government support arrangements. This uncertainty is likely to make it difficult for small brokers to commit to such a model at this time.

Table 5: Providers of Third-party Clearing Services

Provider	Number of brokers
Berndale Securities Limited*	25
Fortis Clearing Sydney Pty Limited	20
UBS Securities Australia Ltd	4
Citigroup Securities Clearing Australia Ltd	3
E*Trade Securities Limited	2
Macquarie Capital Securities (Australia) Ltd	1

Note: This table is based on data provided in an ASX Participant Bulletin on 17 October 2008. The data exclude currently suspended trading participants.
*A subsidiary of Merrill Lynch

Contributing to this reluctance to commit is the high level of transition costs in moving to a third-party clearing model, or indeed in shifting between third-party clearers. These costs entail systems and operational costs as well as administration costs associated with establishing contracts between the third-party clearer and a broker's clients.[19] The high cost of transition could effectively lock a broker into its existing third-party clearing arrangement, or at least make it difficult to change, even if a cheaper alternative became available.

Several respondents to the consultation provided projections of the impact of third-party clearing on their profitability, with the general message being that third-party clearing would substantially increase operating costs and undermine competitiveness. In one case, a shift to third-party clearing was projected to wipe out profits entirely. Such projections are, however, very dependent upon the model of third-party clearing adopted and hence the potential fixed-cost savings over time. In principle,

19 *These include statutory disclosure and anti-money-laundering provisions. This process could be particularly burdensome for a broker offering a service to financial-planning intermediaries, who collectively might have tens of thousands of end-clients.*

there are a number of potential alternative third-party clearing and access models, each carrying different costs and risks and with different implications for the broker's underlying business model. Table 6 provides an overview of a subset of the alternative third-party clearing models.

Model 1 is most commonly applied currently in the retail market. In this model, the third-party clearer does not directly control the trade flow, but carries the broker's trades through clearing and settlement and assumes the broker's obligations as though they were its own. Model 2, of which there are currently no live examples in Australia, is the *de minimus* outsourcing model. Here, the third-party clearer only takes on the broker's exposures with the central counterparty, while the broker maintains client relationships and is responsible for both trading and settlement. Under Models 3 and 4, the trade flow is controlled by the third-party clearer, which allows it to better control the exposures it assumes on behalf of the broker. The only difference between these two models is that, in Model 4, the broker retains full control over its client relationships by continuing to sponsor their securities holdings in CHESS.[20] For many brokers, this is extremely important, since 'client service' is an integral part of their product offering. Furthermore, the third-party clearer may be a competitor in its brokerage business.

Table 6: Alternative Third-party Clearing Models

	Processes outsourced				
Model	**Trading**	**Clearing**	**Settlement**	**Client sponsor**	**Comment**
1 Traditional		✓	✓		The model commonly applied in the retail market. The third-party clearer does not directly control the trade flow or maintain client relationships.
2 Clearing only		✓			This model is not currently utilised, but would be feasible if a broker wanted to maintain maximum control within a third-party arrangement.
3 Referral broker (white label)	✓	✓	✓	✓	In this model, the broker outsources trading, clearing and settlement. It does, however, retain its market participant status as a referral broker.
4 Client management	✓	✓	✓		Here, the broker gives the third-party clearer control over trade flow as well as clearing and settlement, but continues to sponsor client holdings in CHESS. The broker therefore maintains all client relationships.

Note: This table is based on information gathered from ASX and providers of third-party clearing services during the consultation process.

20 *CHESS is the Clearing House Electronic Subregister System, the electronic book-entry register of holdings of approved securities managed by ASX Settlement and Transfer Corporation Pty Limited.*

Therefore, a broker should in principle be able to find a model to meet its specific preferences. However, the lack of depth in the marketplace and uncertainty as to the commitment of incumbent providers means that, for some brokers, use of third-party clearers poses some difficulties at the present time.

4.1.3 Merge or exit the business

Should a broker be unable to raise additional capital at an economical cost or to find a viable third-party clearing relationship, it may be forced to merge or exit the business. In such circumstances, brokerage markets in smaller Australian cities could be disproportionately affected. Indeed, several of the submissions from smaller brokers affected by the change were from brokers based in cities other than Sydney and Melbourne. Withdrawal of such regional operators could diminish competition for brokerage services in these areas.

Smaller brokers specialise mainly in retail brokerage, often providing tailored services to smaller companies and individual clients, or servicing a geographically concentrated group of financial planners (who may in turn support thousands of retail clients). They also sometimes provide niche research on smaller regional companies. Larger inter-state brokers providing a standardised service in multiple markets may not find it economical to replicate the tailored and specialised services provided by an exiting regional broker, leaving some constituencies with reduced access to brokerage services.

4.2 Concentration of exposures

Depending on the initial participation structure and the responses of participants, one possible outcome of an increase in minimum capital requirements is an increase in exposures of the remaining participants and hence increased concentration risk for the central counterparty. The analysis below considers whether such concentration could emerge following the change proposed by ACH.

Both the normal-course and stress-test exposures brought to the central counterparty by participants with less than $10 million in capital are relatively low in absolute terms (Table 7). Interestingly, however, notwithstanding that only seven of the 17 participants directly affected by the minimum capital change generate exposures in the derivatives market, some of the highest exposures are generated by the brokers with the lowest capital.

Given the relatively low level of exposures generated by these participants, the effect on risk concentration from a widespread shift to third-party clearing would not be material. The small number of affected participants active in the derivatives market account for less than 1 per cent of total initial margin posted, while in the cash equity market, affected participants account for approximately 2 per cent of total notional margin. With this level of exposures, even in the extreme case that *all* affected participants in the cash equity market moved to a third-party clearing arrangement with the principal third-party clearer for retail business, the distribution of exposures across ACH participants would change only marginally. Under this scenario, 80 per cent of exposures would be shared among 13 as opposed to 14 participants (Graph 3).

Table 7: Exposures to ACH Generated by Affected Participants

		Normal course				Stressed circumstances	
		Cash equity exposures [a]		Derivatives exposures [a]		Capital Stress Test [b]	
Core liquid capital	Number of participants [c]	Average	Max	Average	Max	Average	Max
$m		$m	$m	$m	$m	$m	$m
2-3	6	0.20	1.72	1.37	3.25	0.36	3.99
3-5	4	0.12	0.67	0.68	1.39	0.31	3.15
5-7	7	0.50	3.72	0.57	1.42	0.74	6.12
7-10	0	–	–	–	–	–	–

Note: This table is based on data on participants' 'core liquid capital' provided by ASX as at end-November 2008 (adjusted for subsequent resignations or acquisitions/mergers of participants) and exposure data for the quarter to end-September 2008.

(a) In the case of derivatives, initial margin collected is a reasonable proxy for normal course exposures faced by the central counterparty (ie, this is the margin collected to protect the central counterparty against adverse price movements arising before a defaulting participant's open positions can be closed out). For cash equity no margin is routinely collected, but ACH does calculate 'notional' initial and mark-to-market margins for exposure-monitoring purposes. The sum of both notional margin amounts is taken as the proxy for exposure in this case.

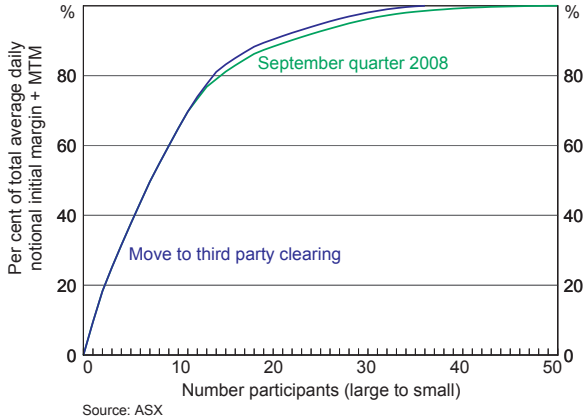
(b) Projected stress exposures offer a gauge of potential losses to the central counterparty across both derivatives and cash equities that could crystallise in more extreme market scenarios, in this case adjusting for any margin already collected on derivatives exposures. Capital stress tests, conducted daily, are based on actual participant clearing positions stressed against severe but plausible price movements.

(c) Not all participants are active in both the cash equities market and the derivatives market. Averages are therefore across only those generating exposures.

Nevertheless, it is important that those offering third-party clearing services are sufficiently robust and well capitalised. To the extent that a number of trading participants are dependent on their services, there is a case for third-party clearers to be required to be of higher credit quality and meet high operational and risk-management standards. Indeed, many international central counterparties set higher capital requirements for third-party clearers, and SFECC also plans to do so.

Graph 3

Average Daily Cash Market Notional Margins in ACH



Source: ASX

5. Assessment

The Reserve Bank and ASIC are of the view that there is a strong in-principle case for central counterparties to impose minimum capital requirements on participants. While imperfect, such requirements provide a broad measure of the financial standing of a participant and offer comfort that a participant has adequate resources to withstand an unexpected shock, perhaps arising from operational or risk-control failings.

For this reason, minimum capital requirements are a feature of central counterparty risk management around the world. Once a participant can demonstrate that it meets a threshold level of credit quality, a central counterparty commits to taking on any exposure generated by that participant and applies other controls to manage the resulting risks. In this context, an increase in ACH's minimum capital requirements from the previous level of $100 000 is appropriate and will strengthen its financial standing.

However, there is no single answer to the question of what is an appropriate level of minimum capital for participants. Assessments of this issue need to be made in the context of the central counterparty's whole suite of risk controls. While the Reserve Bank encourages ACH to continue to examine its risk control framework in accordance with its obligations under the *Financial Stability Standard for Central Counterparties*, it does not see a case that, over the medium term, alternative arrangements would be unambiguously superior to those being proposed by ACH.

Notwithstanding this assessment, raising minimum capital requirements significantly on the time frame initially proposed by ACH would have an impact on some market participants in Australia, many of which are longstanding participants with apparently low-risk business models. If the affected brokers wished to continue providing trading services to their clients, they would either need to raise additional capital (and therefore continue to clear directly), which may be difficult in current circumstances, or use a third-party clearer, for which the market is currently uncertain. If the cost of pursuing either of these options left them unable to offer a competitive service to clients, they could exit the market, with potential spillover to the provision of services to particular regions or retail clients.

In these circumstances, the Reserve Bank and ASIC see a strong case for a more gradual implementation of the increase in minimum capital requirements. This might involve an initial increase to perhaps $5 million in the first half of 2010, followed by an increase to $10 million sometime after that. A phased increase to $10 million would allow further time for the third-party clearing market to deepen and become more competitive and provide further scope for smaller brokers to examine various alternative business strategies. While a more gradual implementation of higher minimum capital requirements could expose ACH to slightly more risk, the Reserve Bank and ASIC assess that the trade-off is acceptable.

In addition to these conclusions, the Reserve Bank and ASIC have also reached some conclusions in relation to their own specific regulatory responsibilities. ASIC has considered ACH's obligation to do all things necessary to ensure that its services are provided in a fair and effective way (to the extent that it is reasonably practicable to do so). In this context, ASIC encourages ACH to consider alternative arrangements to a $5 million minimum capital requirement for some existing participants. Whether such alternative arrangements are appropriate might take into account the nature of the participant's business and whether any

other restrictions could be imposed on the participant to reduce risks to ACH (eg, the imposition of audit controls; restrictions on the nature of the participant's business).

The Reserve Bank has considered whether there are other initiatives that ACH might take to enhance its compliance with the *Financial Stability Standard for Central Counterparties*. In this respect, the Reserve Bank has identified three main possibilities. First, it would support moves by ACH to introduce additional risk control measures, including more customised collateralisation of exposures beyond certain limits. Indeed, ACH already has in place a contributions and additional cover regime, under which a participant is required to post collateral when stress tests reveal that the exposure associated with its positions exceeds a particular threshold. ACH plans to refine the regime by linking the threshold to a participant's internal credit rating.

Second, the Reserve Bank would support higher minimum capital requirements on third-party clearers, given the importance of these participants to the stability of ACH and the smooth functioning of a tiered clearing system. Many overseas central counterparties set higher levels of minimum capital for third-party clearers.

Finally, in light of the market volatility of recent months and the increased international focus on risk management and the role of central counterparty clearing, the Reserve Bank supports ongoing efforts by ACH to refine and further strengthen its risk-management framework. Issues that might usefully be considered include: whether there is a case for routine margining of cash equities (as is done in many other jurisdictions); and the composition and size of risk resources, including the role of own capital and the possibility of participant contributions.

Annexure 1

ASIC
Australian Securities & Investments Commission

RESERVE
BANK
of
AUSTRALIA

23 December 2008

Dear

REVIEW OF PARTICIPATION REQUIREMENTS FOR CENTRAL COUNTERPARTIES

As you will be aware, Australian Clearing House Pty Ltd (ACH) has recently changed its operating rules with the effect that the minimum core liquid capital requirement for participants will be increased to $2 million from 1 January 2009 and to $10 million from 1 January 2010. While Senator the Hon Nick Sherry did not disallow these rule changes, he has requested the Reserve Bank of Australia and the Australian Securities and Investments Commission to further investigate the appropriate level of core liquid capital requirement for participants in Australia's licensed clearing facilities. Additional background is set out at Attachment A.

As part of our review, we would welcome written responses from ACH clearing participants on the questions set out in Attachment B as well as on any other issue that you consider relevant. Some of the questions in Attachment B are general in nature while others request information on the implications for your business specifically. In responding to these questions, could you please indicate whether you currently hold core liquid capital above or below the proposed $10 million threshold.

We would welcome submissions by Friday, 30 January. Submissions should be sent to

Head of Payments Policy Department
Reserve Bank of Australia
GPO Box 3947
Sydney NSW 2001

or pysubmissions@rba.gov.au

Upon review of the responses, we will consider how best to organise further engagement with industry participants. We aim to finalise our advice to the Minister around late February.

If you would like to discuss this matter further, please contact Mark Manning at the RBA on (02) 9551 8703 (manningm@rba.gov.au) or Oliver Harvey at ASIC on (02) 9911 2363 (oliver.harvey@asic.gov.au).

Yours sincerely,

Mark Adams
Senior Leader Exchange
Market Operators
Australian Securities and
Investments Commission

Philip Lowe
Assistant Governor
(Financial System)
Reserve Bank of Australia

Attachment A - Background

Legislative overview

1. Under the terms of the *Corporations Act 2001*, Section 821A, a Clearing and Settlement facility licensee must, among other things: comply with the *Financial Stability Standards* determined by the Reserve Bank; do all other things necessary to reduce systemic risk; and do all things necessary to ensure that the facility's services are provided in a fair and effective way. Participation requirements are an important consideration in meeting these obligations.
2. From the perspective of reducing systemic risk, the Reserve Bank assesses whether a central counterparty has set its participation requirements at such a level that participants are 'of a sufficient financial standing such that the central counterparty is not exposed to unacceptable credit risks'. Such an assessment necessarily takes into consideration how participation requirements interact with other components of a central counterparty's overall risk-management framework (e.g. margin requirements and the overall quantum of risk resources available to the central counterparty).
3. At the same time, the 'fair and effective' provision of services includes the requirement that the central counterparty does not unduly differentiate between users of those services and that it supports the markets for which it clears in an efficient and robust manner.

Core liquid capital changes

4. In July 2008, Australian Securities Exchange (ASX) released a market information document entitled "Overview of Risk Management Changes to ASX's Central Counterparty Services". The document spelled out a number of changes that ASX has either undertaken or is proposing as part of its process of "seeking to attain industry best practice for its risk management activities and to consistently apply its risk appetite across both the SFE Clearing Corporation and the Australian Clearing House".
5. One of the changes highlighted in that document was the proposal to raise the core liquid capital requirements for ACH participants from $100 000 to:
   - $2 million by the end of 2008; and
   - $10 million by the end of 2009.
6. This proposal was the subject of changes to the relevant ACH operating rules, which were not disallowed by the Minister. In not disallowing the relevant rules, the Minister requested the Reserve Bank and ASIC to investigate further the appropriate core liquid capital requirement for participants in Australia's licensed clearing facilities.

7. In doing so, the Minister asked the Reserve Bank and ASIC to have regard to the following: the risk of concentration of clearing participants; the impact that concentration would have on the clearing system; the need to maintain stability in Australia's financial system; the impact of such changes on market participants; and any other matters deemed relevant, including how any change to $10 million should be best implemented to ensure the continued smooth operation of Australia's financial markets. The Minister requested that this work be undertaken in an open and transparent manner, involving market participants and their representative organisations.
8. He has asked that the Reserve Bank and ASIC provide him with joint advice within three months of the date of his request (11 March 2009).

Attachment B - Questions

1. *Specific questions*

a) Will your business be affected by the prospective increase in minimum core liquid capital requirements to $10 million? If so, please set out the consequences of this increase, including:

   i. whether or not you will seek to clear via a third-party clearer, or to inject additional capital?

   ii. if you are planning to increase your capital, whether ASX's proposed widening of the definition of core liquid capital makes it easier for you to meet the $10 million minimum requirement?

   iii. whether clearing via a third-party clearer would alter the nature, efficiency and competitiveness of your service to clients?

   iv. whether the time-frame (1 January 2010) envisaged for the increase in minimum core liquid capital requirements to $10 million poses difficulties for your business? If so, please outline your specific concerns and a time-frame that would be sufficient for you to deal with them.

b) If you do not support the proposed increase to $10 million, please outline what you consider to be an appropriate alternative figure or approach, including reasons.

2. *General questions*

a) How do you see participation requirements interacting with other elements of a central counterparty's overall risk-management framework – for instance, if participation requirements are low, does that imply that margin/contribution requirements should be higher?

b) Do you have any suggestions as to how the central counterparty could improve its ongoing monitoring of participants?

c) What do you consider to be the costs and benefits of a tiered[1] participation structure in a central counterparty? In particular, we would value your comments on factors such as the pricing and competitiveness of the market for third-party clearing services; potential economies of scale and netting benefits in third-party clearing; and issues arising from concentration in participation and reliance on third parties.

d) Do you consider that there is a case for higher minimum capital requirements for third-party clearers? If so, please outline your reasons.

1 *A tiered participation structure refers to a structure in which, rather than participating directly in the central counterparty, some market participants clear their trades indirectly via a third-party clearer.*

Annexure 2

The following institutions made submissions to the consultation:

Austock Group Ltd

Bell Direct (Third Party Platform Pty Ltd)

Burrell Stockbroking Pty Ltd

Cameron Stockbrokers Ltd

Commonwealth Bank of Australia Ltd

Credit Suisse Equities (Australia) Limited

D.J. Carmichael Pty Limited

E*Trade Australia Securities Ltd

E.L. & C Baillieu Stockbroking Ltd

Euroz Securities Ltd

F W Holst & Co. Pty Ltd

Fortis Clearing Sydney Pty Ltd

Goldman Sachs JBWere Pty Ltd

Hartleys Ltd

J P Morgan Chase & Co

Lonsec Ltd

Macquarie Equities Ltd

Macquarie Securities (Australia) Ltd

Morrison Securities Pty Ltd

Ord Minnett Ltd

Reynolds & Co Pty Ltd

Security & Derivatives Industry Association

Shadforths Ltd

Shaw Stockbroking Ltd

State One Stockbroking Ltd

Taylor Collison Ltd