



# DISCUSSION PAPER

## Counterparty credit risk for ADIs

3 August 2017

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# Preamble

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On 15 September 2016, the Australian Prudential Regulation Authority (APRA) released for consultation:

- a discussion paper, *Counterparty Credit Risk for ADIs*;
- a draft new *Prudential Standard APS 180 Capital Adequacy: Counterparty Credit Risk* (APS 180); and
- a draft revised *Prudential Standard APS 112 Capital Adequacy: Standardised Approach to Credit Risk* (APS 112).

This package of documents outlined APRA's proposed implementation of the Basel Committee on Banking Supervision's *Standardised approach for measuring counterparty credit risk exposures* and *Capital requirements for bank exposures to central counterparties – final standard*.

This paper sets out APRA's response to submissions on the September 2016 discussion paper. After consideration of submissions, APRA has modified its position in a number of areas. Accompanying this paper are revised drafts of APS 112 and APS 180 incorporating APRA's updated proposed positions, in addition to revised drafts of *Reporting Standard ARS 112.2 Standardised Credit Risk – Off-balance Sheet Exposures* (ARS 112.2), *Reporting Standard ARS 118.1 Other Off-balance Sheet Exposures* (ARS 118.1) and new draft *Reporting Standard ARS 180.0 Counterparty Credit Risk* (ARS 180.0).

APRA invites written submissions on its proposals.

This discussion paper and the revised drafts of APS 112, APS 180, ARS 112.2, ARS 118.1 and new draft ARS 180.0 are available on APRA's website at: <http://www.apra.gov.au>.

Written submissions should be sent to [ADIpolicy@apra.gov.au](mailto:ADIpolicy@apra.gov.au) by 29 September 2017 and addressed to:

General Manager, Policy Development  
Policy and Advice Division  
Australian Prudential Regulation Authority

## Important disclosure notice – publication of submissions

All information in submissions will be made available to the public on the APRA website unless a respondent expressly requests that all or part of the submission is to remain in confidence.

Automatically generated confidentiality statements in emails do not suffice for this purpose.

Respondents who would like part of their submission to remain in confidence should provide this information marked as confidential in a separate attachment.

Submissions may be the subject of a request for access made under the *Freedom of Information Act 1982* (FOIA).

APRA will determine such requests, if any, in accordance with the provisions of the FOIA. Information in the submission about any APRA-regulated entity that is not in the public domain and that is identified as confidential will be protected by section 56 of the *Australian Prudential Regulation Authority Act 1998* and will therefore be exempt from production under the FOIA.

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# Executive summary

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The Australian Prudential Regulation Authority (APRA) is proposing revisions to its prudential framework for counterparty credit risk for authorised deposit-taking institutions (ADIs) to strengthen the framework and implement two revised standards issued by the Basel Committee on Banking Supervision (Basel Committee). The revisions proposed in this paper follow from APRA's first round of consultation on the proposals, conducted in late 2016.

This package of proposals has changed substantially since APRA's first consultation was released. In this consultation, APRA is seeking feedback on a simple alternative methodology for the measurement of counterparty credit risk exposures for ADIs with immaterial levels of exposure.

In September 2016, APRA released a discussion paper, a revised draft of *Prudential Standard APS 112 Capital Adequacy: Standardised Approach to Credit Risk* and draft new *Prudential Standard APS 180 Capital Adequacy: Counterparty Credit Risk* (APS 180), which set out its proposed implementation of the Basel Committee's *The standardised approach for measuring counterparty credit risk exposures* (the SA-CCR) and *Capital requirements for bank exposures to central counterparties – final standard*. APRA proposed that all ADIs entering into derivative transactions would be required to use the SA-CCR methodology to measure the counterparty credit risk exposures. APRA also proposed that all ADIs will be required to hold capital for exposures to central counterparties in a manner consistent with the Basel Committee's final standard.

APRA received five submissions in response to the September 2016 consultation. Submissions were generally supportive of APRA's proposals but raised concerns regarding implementation timing, the scope of application of the SA-CCR, and the treatment of multi-level client structures for central clearing. This paper summarises the main issues raised in submissions, provides APRA's response to those issues and invites comment on APRA's revised proposals.

In consideration of feedback received in response to the September 2016 consultation, APRA has refined its proposals in a number of areas. APRA is now proposing to apply the SA-CCR to ADIs with approval from APRA to use an internal ratings-based approach to credit risk, and allow other ADIs to continue to use a recalibrated current exposure method to measure counterparty credit risk exposures.

As indicated in APRA's March 2017 letter to ADIs, in light of feedback received during consultation, APRA decided to defer commencement of the new requirements in APS 180 to 1 January 2019 at the earliest.

Accompanying this discussion paper, APRA has also released draft reporting requirements for counterparty credit risk and margin requirements for non-centrally cleared derivatives.

APRA intends to finalise its revised prudential and reporting requirements for counterparty credit risk in late 2017, with commencement of the new requirements in January 2019 at the earliest. APRA considers that its proposals will improve risk sensitivity in the measurement of counterparty credit risk exposures whilst balancing considerations of efficiency, competition, contestability, competitive neutrality and the promotion of financial stability.

# Glossary

<b>ADI</b>	Authorised deposit-taking institution
<b>Adjusted CEM</b>	APRA's proposed adjusted current exposure method, as set out in Attachment E of draft APS 180.
<b>APRA</b>	Australian Prudential Regulation Authority
<b>APS 112</b>	<i>Prudential Standard APS 112 Capital Adequacy: Standardised Approach to Credit Risk</i>
<b>APS 180</b>	<i>Prudential Standard APS 180 Capital Adequacy: Counterparty Credit Risk</i>
<b>Basel Committee</b>	Basel Committee on Banking Supervision
<b>CEM</b>	Current exposure method – the Basel Committee's method for measuring the counterparty credit risk associated with OTC derivatives, exchange-traded derivatives, and long settlement transactions.
<b>CCP</b>	Central counterparty – a clearing house that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer. A CCP becomes counterparty to trades with market participants through novation, an open offer system, or another legally binding arrangement. For the purposes of the capital framework, a CCP is a financial institution.
<b>Clearing member</b>	A member of, or a direct participant in, a CCP that is entitled to enter into a transaction with the central counterparty.
<b>Client of a clearing member</b>	A party to a transaction with a CCP through either a clearing member acting as a financial intermediary, or a clearing member guaranteeing the performance of the client to the CCP.
<b>Counterparty credit risk</b>	The risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. An economic loss would occur if the transactions or portfolio of transactions with the counterparty has a positive economic value at the time of default.
<b>Default funds</b>	Clearing members' funded or unfunded contributions towards, or underwriting of, a CCP's mutualised loss-sharing arrangements.
<b>Initial margin</b>	Collateral that is collected to cover the potential future exposure that could arise from future changes in the market value of a derivative transaction over the close-out period in the event of a counterparty default.

<b>IRB ADI</b>	An ADI with approval from APRA to use an internal ratings-based approach to credit risk.
<b>Long settlement transaction</b>	A transaction where a counterparty undertakes to receive or deliver a security, a commodity, or a foreign exchange amount against cash, other financial instruments, or commodities at a contractually specified settlement or delivery date that is more than the lesser of (i) the market standard for the particular instrument and (ii) five business days after the date on which the parties enter into the transaction.
<b>OTC derivative transaction</b>	Over-the-counter derivative transaction – a customised, privately negotiated, risk-shifting agreement, the value of which is derived from the value of an underlying asset.
<b>QCCP</b>	A qualifying CCP – an entity that is licensed to operate as a CCP (including a licence granted by way of confirming an exemption), and is permitted by the CCP’s regulator/supervisor to operate as such with respect to the products offered. The entity must be based and prudentially supervised in a jurisdiction where the relevant regulator/overseer has established, and publicly indicated that it applies to the CCP on an ongoing basis, domestic rules and regulations that are consistent with the Committee on Payment and Settlement Systems and International Organization of Securities Commissions (CPSS-IOSCO) <i>Principles for Financial Market Infrastructures</i> . In order for a CCP to be a QCCP, it must also calculate or make available the necessary data to allow for the calculation of an ADI’s default fund capital charge.
<b>SA-CCR</b>	Standardised approach for measuring counterparty credit risk exposures – the Basel Committee’s new non-internal model approach for measuring counterparty credit risk associated with OTC derivatives, exchange-traded derivatives, and long settlement transactions.
<b>Standardised ADI</b>	An ADI that does not have approval from APRA to use an internal ratings-based approach to credit risk.
<b>Trade exposure</b>	An exposure a clearing member or a client of a clearing member has to a CCP reflecting a measure of the current mark-to-market value (replacement cost) and the potential future exposure arising from OTC derivatives, exchange-traded derivatives, long settlement transactions or securities financing transactions. The trade exposure is calculated on a bilateral basis, and must include the initial margin posted by an ADI, as well as any variation margin due to the ADI from the CCP that has not yet been received.
<b>Variation margin</b>	Collateral that is collected or paid to reflect the current mark-to-market exposure resulting from changes in the market value of a derivative transaction.



# Chapter 1 – Introduction

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## 1.1 Background

In September 2016, APRA outlined its proposed approach to implementing two new standards for counterparty credit risk released by the Basel Committee on Banking Supervision (Basel Committee): *The standardised approach for measuring counterparty credit risk exposures* (the SA-CCR)<sup>1</sup> and *Capital requirements for bank exposures to central counterparties – final standard*.<sup>2</sup>

APRA received five submissions from authorised deposit-taking institutions (ADIs), industry bodies and a central counterparty (CCP).<sup>3</sup> Submissions were generally supportive of APRA's proposals but raised a range of issues on the proposals, including the implementation timeframe, requirements for ADIs with immaterial counterparty credit risk exposures, and the treatment of multi-level client structures for central clearing.

On 6 March 2017, APRA wrote to all ADIs to advise that the new requirements for counterparty credit risk would not take effect until 1 January 2019 at the earliest. APRA also set out its intention to hold an additional consultation including proposed reporting requirements and consideration of a simple alternative methodology for measuring counterparty credit risk exposures for ADIs with an immaterial level of exposure.<sup>4</sup>

This paper set out new proposals for consultation relating to APRA's prudential and reporting requirements for counterparty credit risk, including reporting requirements for margining and risk mitigation for non-centrally cleared derivatives, and APRA's response to issues raised in submissions received in response to the September 2016 consultation.

## 1.2 The standardised approach for measuring counterparty credit risk exposures

The September 2016 discussion paper outlined APRA's intended implementation of the SA-CCR. APRA proposed that an ADI that entered into an over-the-counter (OTC) derivative transaction, exchange-traded derivative transaction or long settlement transaction would be required to use the SA-CCR to measure the counterparty credit risk exposure. APRA proposed adopting the SA-CCR methodology as set out by the Basel Committee, with an implementation date of 1 January 2018 rather than the Basel Committee's date of 1 January 2017.

<sup>1</sup> Basel Committee, *The standardised approach for measuring counterparty credit risk exposures*, March 2014, <http://www.bis.org/publ/bcbs279.htm>.

<sup>2</sup> Basel Committee, *Capital requirements for bank exposures to central counterparties – final standard*, April 2014, <http://www.bis.org/publ/bcbs282.htm>.

<sup>3</sup> APRA, *Counterparty credit risk for ADIs – September 2016*, <http://www.apra.gov.au/adi/Pages/September-2016-Consultation-counterparty-credit-risk.aspx>.

<sup>4</sup> APRA, *Letter to all ADIs: Counterparty credit risk for ADIs*, 6 March 2017, <http://www.apra.gov.au/adi/Documents/170306-letter-APS-180.pdf>.

Submissions expressed support for the consideration of a simple and conservative alternative methodology for ADIs with immaterial exposure to counterparty credit risk, and requested APRA provide additional implementation time for ADIs. Respondents also requested that APRA finalise its revised reporting requirements for counterparty credit risk at the same time as APS 180.

In consideration of submissions received, APRA is now proposing to maintain an adjusted version of the current exposure method (CEM) as a simple alternative methodology for the measurement of counterparty credit risk exposures by ADIs with immaterial exposure to counterparty credit risk. APRA has also included its proposed reporting requirements for counterparty credit risk in this consultation package.

### 1.3 Capital requirements for bank exposures to CCPs

In the September 2016 discussion paper, APRA proposed that all ADIs would be required to hold capital for exposures to CCPs in a manner consistent with the Basel Committee's *Capital requirements for bank exposures to central counterparties – final standard*. The main adjustments from the international framework were that APRA proposed an implementation date of 1 January 2018, rather than 1 January 2017, and did not propose implementing the specific treatment for multi-level client structures for central clearing.

Submissions were generally supportive of APRA's proposed implementation but raised concerns about the proposed implementation timetable – particularly regarding transitional issues for CCPs – and requested APRA include the specific treatment for multi-level client structures set out in the Basel Committee's framework. APRA has not included the specific treatment for multi-level client structures in the revised draft of APS 180.

### 1.4 Structure of this paper

Chapter 2 sets out new proposals relating to APRA's prudential framework for counterparty credit risk for consideration in this consultation.

Chapter 3 sets out details of the proposed reporting requirements for counterparty credit risk.

Appendix 1 sets out APRA's responses to material issues raised in submissions, and issues requiring clarification, on proposals in the September 2016 consultation.

Appendix 2 outlines the net benefits of the policy options considered by APRA.

### 1.5 Timetable

Following considerations of submissions received in response to this consultation, APRA anticipates releasing the final *Prudential Standard APS 112 Capital Adequacy: Standardised Approach to Credit Risk* (APS 112), *Prudential Standard APS 180 Capital Adequacy: Counterparty Credit Risk* (APS 180), *Reporting Standard ARS 112.2 Standardised Credit Risk – Off-balance Sheet Exposures* (ARS 112.2), *Reporting Standard ARS 118.1 Other Off-balance Sheet Exposures*

(ARS 118.1) and *Reporting Standard ARS 180.0 Counterparty Credit Risk* (ARS 180.0) in late 2017. APRA intends for the SA-CCR, the final requirements for bank exposures to CCPs and the associated reporting requirements to take effect from 1 January 2019 at the earliest.

## 1.6 Balancing financial safety and other considerations

In proposing revisions to its ADI prudential framework for counterparty credit risk, APRA has sought to find an appropriate balance between the objectives of financial safety and efficiency, competition, contestability and competitive neutrality, whilst promoting financial safety. On balance, APRA considers that the proposed revisions to the framework will achieve improved prudential safety outcomes.

PRIMARY OBJECTIVES	
Financial safety ↑	Financial system stability ↑
<p>The SA-CCR methodology represents a significant improvement in the risk sensitivity in the measurement of counterparty credit risk exposures.</p> <p>APRA proposes to recalibrate the CEM for ADIs with immaterial exposure to counterparty credit risk to achieve a comparable level of financial safety.</p> <p>The Basel Committee’s final standard of capital requirements for bank exposures to CCPs will provide incentives to ADIs to centrally clear and ensure sufficient capital is held against exposures to CCPs, which is expected to increase financial safety.</p>	<p>Financial system stability is expected to be improved by strengthening the capital framework for ADIs’ counterparty credit risk exposures, including exposures to CCPs.</p>
OTHER CONSIDERATIONS	
<p>Efficiency ↔</p>	<p>APRA’s proposal to maintain an adjusted CEM as a simple alternative to the SA-CCR for ADIs with immaterial exposure to counterparty credit risk is expected to enable a more efficient implementation and contribute to ongoing efficiency across the industry.</p> <p>Deferring the commencement date of the new requirements also enables efficient implementation and is expected to mitigate ADIs’ concerns regarding international harmonisation and transitional issues.</p>
<p>Competition ↔</p>	<p>No material impact on competition.</p>
<p>Contestability ↔</p>	<p>No material impact on contestability.</p>
<p>Competitive Neutrality ↔</p>	<p>No material impact on competitive neutrality. The impact of introducing two separate methodologies for the measurement of counterparty credit risk exposures is expected to be mitigated by calibrating both approaches equivalently.</p>

## 1.7 Request for cost-benefit analysis information

APRA requests that all stakeholders use this consultation opportunity to provide information on the compliance impact of the proposed changes and any other substantive costs associated with the changes. Compliance costs are defined as direct costs to businesses of performing activities associated with complying with government regulation. Specifically, information is sought on any changes to compliance costs incurred by businesses as a result of APRA's proposals.

Consistent with the Government's approach, APRA will use the methodology behind the Regulatory Burden Measurement Tool to assess compliance costs. This tool is designed to capture the relevant costs in a structured way, including a separate assessment of upfront costs and ongoing costs. It is available at <https://rbm.obpr.gov.au/home.aspx>.

Respondents are requested to use this methodology to estimate costs to ensure the data supplied to APRA can be aggregated and used in an industry-wide assessment. When submitting their cost assessment to APRA, respondents are asked to include any assumptions made and, where relevant, any limitations inherent in their assessment. Feedback should address the additional costs incurred as a result of complying with APRA's requirements, not activities that institutions would undertake due to foreign regulatory requirements or in their ordinary course of business.

## Chapter 2 – New proposals for consultation

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This chapter sets out APRA's new proposals relating to the prudential framework for counterparty credit risk.

The drafts of APS 112 and APS 180, released with this discussion paper, reflect the proposals in the September 2016 discussion paper and further changes to APRA's proposed position as detailed in this paper.

### 2.1 Scope of application of the SA-CCR

In the September 2016 discussion paper, APRA proposed to apply the SA-CCR methodology to all ADIs that transact OTC derivatives, exchange-traded derivatives and long settlement transactions. However, APRA invited views on the potential introduction of an alternative approach for measuring counterparty credit risk exposures for ADIs with immaterial counterparty credit risk exposure, and any eligibility criteria for such a treatment.

Several respondents supported the introduction of a simple and conservative alternative methodology for ADIs with immaterial exposures to counterparty credit risk. These respondents expressed the view that the SA-CCR would be disproportionately burdensome, complex and unsuitable for less sophisticated ADIs, which often have limited use of derivatives. Applying an add-on charge to the current approach or developing a variation of the current approach by substituting some of the complexities within the SA-CCR formulae were suggested as potential alternative methodologies. One respondent supported application of the SA-CCR methodology to all ADIs for reasons of international consistency.

In consideration of feedback received, in addition to the implementation burden and complexity of the SA-CCR, and low levels of counterparty credit risk exposure for many ADIs, APRA proposes introducing a simple approach for the measurement of counterparty credit risk exposures by ADIs with immaterial levels of such exposures.

As an alternative to measuring counterparty credit risk exposures using the SA-CCR, APRA proposes that an ADI with immaterial exposure may continue to use the CEM as set out in Attachment E of draft APS 180, subject to appropriate recalibration. Maintaining the CEM rather than implementing a new simple methodology will achieve an appropriate balance between risk sensitivity and simplicity whilst minimising compliance costs.

The SA-CCR has been calibrated to reflect the level of market volatility experienced during recent stress periods such as the global financial crisis, and provides more granular recognition of netting. Unlike the CEM, the SA-CCR also distinguishes between margined and unmargined transactions in the calculation of exposure at default (EAD). To achieve a broadly equivalent capital outcome while maintaining a deliberately simple approach, APRA proposes that an ADI using CEM scale the potential future credit exposure under the CEM to approximate the exposure at default (EAD) calculated under the SA-CCR. As margining is a key driver of EAD under the SA-CCR, APRA proposes to apply separate scaling factors for margined and unmargined transactions, with a factor of one to be applied to margined transactions and a factor of three to be applied to unmargined transactions. For the purposes

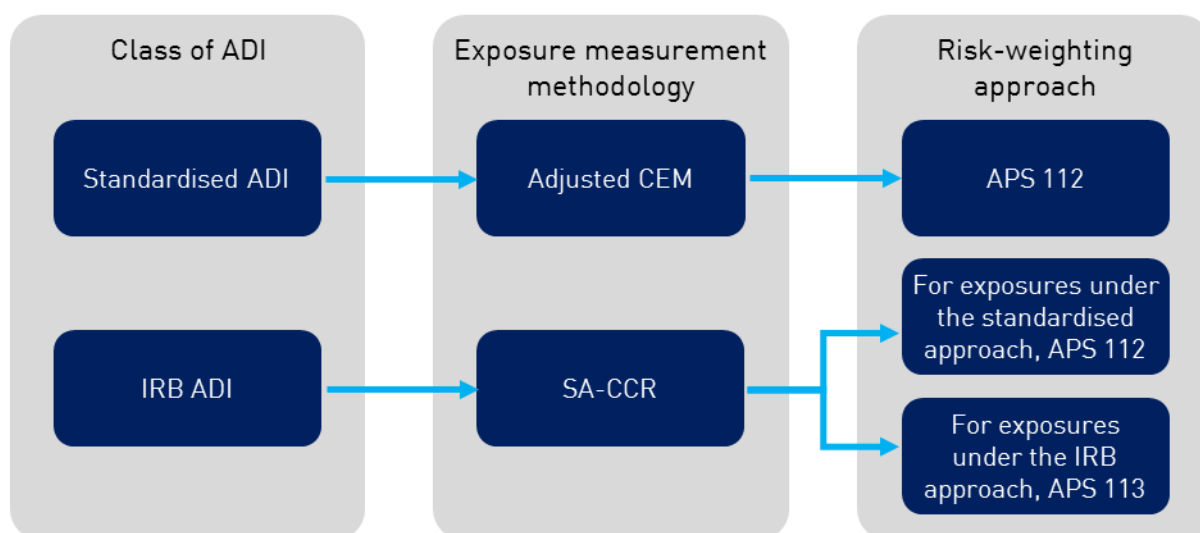
of the adjusted CEM, a transaction must be treated as margined where there is exchange of variation margin with a zero threshold. This approach is intended to allow standardised ADIs to receive recognition for the exchange of margin in the calculation of the potential future exposure, and recognises the complementary risk mitigation functions of margin and capital.

APRA proposes that an ADI with approval to use an internal ratings-based approach to credit risk (IRB ADI) must use the SA-CCR to measure its counterparty credit risk exposure arising from OTC derivatives, exchange-traded derivatives and long settlement transactions. For clarity, an IRB ADI must apply the SA-CCR methodology on a Level 1 and Level 2 basis; however, where applicable, exposures for which the ADI does not have IRB approval must be risk-weighted using the standardised approach to credit risk in APS 112.

An ADI that does not have approval from APRA to use an IRB approach to credit risk (standardised ADI) may use the adjusted CEM. For standardised ADIs, the use of the adjusted CEM is intended to achieve a broadly comparable capital outcome to that under the SA-CCR. APRA may require a standardised ADI to use the SA-CCR to measure its counterparty credit risk exposure if APRA considers that use of the adjusted CEM would not adequately measure the ADI's counterparty credit risk exposure, taking into account the nature of its business operations. This may include, for example, where a standardised ADI is a clearing member to a CCP. APRA also invites views on whether APS 180 should allow a standardised ADI to opt-in to use the SA-CCR in place of the adjusted CEM.

This approach is expected to achieve an equivalent scope of application to applying the SA-CCR to those ADIs with counterparty credit risk or notional derivatives exposures above a certain threshold, as standardised ADIs typically have limited counterparty credit risk exposures.

**Figure 1 – Proposed counterparty credit risk requirements by class of ADI (risk-weighting approach described applies to bilateral exposures)**



## 2.2 Implementation timing

In its consultation, APRA proposed an implementation date for the new requirements of 1 January 2018 - a delay from the Basel Committee's date of 1 January 2017 - with the

additional option for an ADI with immaterial exposure to apply for approval from APRA to extend its implementation of the SA-CCR until 1 January 2019. This timing was intended to provide at least one year for implementation.

A number of submissions expressed concerns about the proposed implementation date. Respondents contended that requiring implementation of the SA-CCR prior to the related reporting requirements, and without due consideration of other forthcoming changes including the revised Credit Valuation Adjustment (CVA) framework and the Basel Committee's revised market risk standard (known as the Fundamental Review of the Trading Book or FRTB) would increase costs and regulatory burden.<sup>5</sup> Submissions also noted the potential for competitive disadvantage if ADIs in Australia are required to adopt the SA-CCR before other jurisdictions.

Respondents also noted that implementing the Basel Committee's final standard for bank exposures to CCPs ahead of major jurisdictions may result in transitional issues as major global CCPs are not yet calculating and making available the data required under the final standard. Submissions requested that, where a qualifying CCP (QCCP) does not yet calculate its hypothetical capital requirement ( $K_{CCP}$ ) for clearing members, a clearing member ADI should be allowed to use the QCCP's c-factors and apply Method 1 under the Basel Committee's interim CCP rules.

Respondents requested that all ADIs be subject to an implementation date that is the later of 1 January 2019 or two years from the finalisation of APRA's calculation and reporting requirements. One respondent was supportive of the proposed implementation timetable.

In consideration of feedback received in response to consultation and the timetable for adoption of the SA-CCR and the Basel Committee's final standard for bank exposures to CCPs in other jurisdictions, APRA wrote to all ADIs in March 2017 advising that the new requirements in APS 180 would not take effect until 1 January 2019 at the earliest.

Deferring implementation of the SA-CCR and the final standard of capital requirements for bank exposures to CCPs is intended to allow for contemporaneous implementation of prudential and reporting requirements and greater consideration of the linkages with other frameworks. It should also mitigate some of the concerns regarding international implementation timeframes and transitional issues relating to major global CCPs. However, where an ADI is a clearing member of a QCCP that does not make available the data required under the final standard at the effective date of APRA's new requirements, the ADI should seek APRA approval for alternative arrangements for calculating its default fund capital charge on an interim basis. Continuation of the existing method used by ADIs in Australia to determine capital requirement for a default fund exposure to a QCCP, rather than using the Basel Committee's Method 1, would be the starting point in considering any interim arrangements.

APRA considers that one year is likely to be a reasonable timeframe for implementation. Accordingly, APRA intends to finalise APS 180 by end 2017, and anticipates that the new requirements will take effect from 1 January 2019 at the earliest. APRA intends for the reporting requirements to commence at the same time.

<sup>5</sup> Basel Committee, *Minimum capital requirements for market risk*, January 2016, <http://www.bis.org/bcbs/publ/d352.htm>.

## Chapter 3 – Proposed reporting requirements

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APRA proposes to amend its reporting requirements for counterparty credit risk in order to align with the proposed revisions to the prudential requirements. Together with this discussion paper, APRA has released drafts of revised ARS 112.2, ARS 118.1 and new ARS 180.0, which includes three draft reporting forms.

### 3.1 Reporting on counterparty credit risk exposures

In line with the proposed introduction of the SA-CCR and the final standard for bank exposures to CCPs, APRA is proposing to introduce two new reporting forms relating to counterparty credit risk exposures:

- *Reporting Form ARF 180.1 Standardised – Counterparty Credit Risk and CVA Risk* (ARF 180.1), which applies to standardised ADIs and includes information on bilateral exposures under the CEM, exposures to CCPs and the CVA risk capital charge; and
- *Reporting Form ARF 180.2 IRB – Counterparty Credit Risk and CVA Risk* (ARF 180.2), which applies to IRB ADIs (including for exposures that are subject to the standardised approach to credit risk) and includes information on bilateral exposures under the SA-CCR, exposures to CCPs and the CVA risk capital charge.

Both draft ARF 180.1 and 180.2 include enhanced reporting on exposures to QCCPs and non-qualifying CCPs. Reporting requirements for bilateral exposures under the CEM and on the CVA risk capital charge are fundamentally unchanged. Through ARF 180.2, APRA proposes to collect more detailed information about IRB ADIs' counterparty credit risk exposures under the SA-CCR.

APRA is also proposing amendments to ARS 112.2 and ARS 118.1 to remove items relating to market-related off-balance sheet exposures incorporated in the new ARF 180.1 and ARF 180.2.

### 3.2 Reporting on margin requirements for non-centrally cleared derivatives

APRA is also taking this opportunity to propose a new reporting form, *Reporting Form ARF 226 Margining and risk mitigation for non-centrally cleared derivatives* (ARF 226), to collect information on ADIs' non-centrally cleared derivatives activity.

Through ARF 226, APRA proposes to collect data on an ADI's aggregate month-end average notional amount of non-centrally cleared derivatives activity (at both the margining group and the Level 1 or Level 2 ADI consolidation), the exchange of margins, use of exemptions, and collateral posted and collected.

APRA proposes to apply the margining reporting requirements to all ADIs (including foreign ADIs) other than providers of purchased payment facilities.



# Appendix 1 – Response to submissions

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## The standardised approach for measuring counterparty credit risk exposures

In response to the September 2016 discussion paper, APRA received five submissions on its proposals relating to the introduction of the SA-CCR. Respondents sought clarification on aspects of the proposed methodology and raised a number of issues regarding the calibration of the SA-CCR. This appendix sets out the main issues raised and APRA's responses to these issues.

APRA proposed implementing the SA-CCR in a manner consistent with the framework set out by the Basel Committee. In response to the September 2016 discussion paper, APRA received feedback on the calibration of the SA-CCR methodology. Given APRA's desire to adopt the framework in an internationally consistent manner, APRA has not made any amendments to draft APS 180 in response to these comments.

Respondents also requested APRA incorporate the Basel Committee's August 2015 publication *Basel III: The standardised approach for measuring counterparty credit risk exposures: Frequently asked questions* (the Basel Committee's FAQs) in its prudential standards or guidance.<sup>6</sup> APRA has amended draft APS 180 to incorporate the answers to the Basel Committee's FAQs. The Basel Committee's work on addressing FAQs for the SA-CCR is ongoing, and APRA intends to incorporate any subsequent FAQs released by the Basel Committee in the final APS 180.

APRA also received a number of comments regarding the interaction between the SA-CCR and other frameworks. APRA notes this feedback and intends to address concerns relating to the relevant frameworks in due course.

## Recognition of collateral in the calculation of replacement cost

Draft APS 180 provided that, for each netting set, the replacement cost must be calculated as the total market value of all the derivative transactions in that netting set, less the haircut value of net non-cash collateral held by the ADI.

### Comments received

Respondents sought clarification regarding whether foreign exchange (FX) haircuts per Attachment H of APS 112 are applicable to collateral under the SA-CCR.

Respondents also requested confirmation that variation margin both held and posted, as well as initial margin held and initial margin posted to an unsegregated account, should be included in the calculation of net collateral held.

<sup>6</sup> Basel Committee, *Basel III: The standardised approach for measuring counterparty credit risk exposures: Frequently asked questions*, August 2015, <http://www.bis.org/bcbs/publ/d333.htm>.

Finally, respondents requested that the haircut value of cash collateral also be included when calculating the replacement cost of derivatives transactions for a netting set to align with the Basel Committee's SA-CCR methodology.

### **APRA's response**

Paragraph 29 of Attachment H of the September 2016 draft APS 112 set out the formula for applying the pre-calculated haircut ( $H(t)$ ) to the market value of the net collateral held by an ADI ( $C$ ). This formula has been relocated to Attachment D of APS 180 in the attached draft and amended to clarify that, under the SA-CCR, the applicable haircut ( $H(t)$ ) must be calculated in the same manner as currently required under the CEM (including FX haircuts in accordance with Table 8 of APS 112), but adjusted to reflect the required holding period using paragraph 41 of Attachment H of revised draft APS 112.

All posted and held initial and variation margin, except for that held in a bankruptcy remote manner, should be included in net collateral held by the ADI ( $C$ ).

The September 2016 draft of APS 180 omitted cash collateral from the definition of the collateral terms in the replacement cost. Revised draft APS 180 has been amended to redress this.

### **Asset class for gold and other precious metals**

The SA-CCR methodology as set out in draft APS 180 did not specify whether gold and other precious metals are included in the FX asset class or the commodity asset class.

### **Comments received**

Several respondents requested APRA clarify whether gold and other precious metals are to be included in the FX or commodity asset class under the SA-CCR.

Respondents noted that if gold is treated as a commodity, rather than included in the FX asset class as it is under the current framework, resultant capital requirements for gold transactions will be materially higher, with the potential for adverse consequences for the Australian market. Respondents expressed the view that gold should continue to be treated as an FX asset as this is consistent with gold's behaviour as an asset and industry treatment of gold for pricing and risk management.

### **APRA's response**

Gold is a commodity not a currency and ADIs should treat gold as a commodity under the SA-CCR. Other precious metals should also be treated as commodities, with different precious metals to be defined as different categories within the metals hedging set. This is consistent with the Basel Committee's SA-CCR paper, which classifies gold as a commodity in one example, and FRTB framework, which classifies gold as a commodity. APRA has clarified this treatment in revised draft APS 180.

### **Principal resetting cross-currency swaps**

Draft APS 180 proposed for a derivative contract that is structured such that on specified dates any outstanding exposure is settled and the terms are reset so that the fair value of the contract is zero, the remaining maturity equals the time until the next reset date.

## Comments received

Respondents requested APS 180 allow an ADI to use the next reset date for the purposes of calculating the credit exposure amount for principal resetting cross-currency swaps.

## APRA's response

APRA has amended paragraph 40(f) of Attachment D of draft APS 180 to clarify that, for a principal resetting cross-currency swap where any outstanding exposure and the terms are reset so that the fair value of the contract is zero at the reset date, an ADI may set the maturity as the next reset date. For transactions that do not meet these conditions, the maturity date must be set to the transaction's contractual maturity. An ADI may discuss with APRA transitional treatment for legacy transactions.

## Transactions with mandatory breaks

Draft APS 180 proposed that a transaction's maturity date must be set to the time interval between the calculation date (today) and the latest date when the transaction may still be active, measured in years. No specific treatment was proposed for transactions with mandatory breaks.

## Comments received

One submission suggested that, for transactions with mandatory breaks, the maturity date parameter should be set to the mandatory break date rather than to the final maturity date of the underlying transaction.

## APRA's response

APRA does not consider that a transaction with a mandatory break clause should be treated in the same manner as a transaction with a shorter contractual maturity. In a transaction with a mandatory break, there is still no certainty that the break will occur as the parties may choose to restructure the transaction prior to the break date. No change has been made to APS 180.

## Options

APRA proposed adopting the treatment for options as set out by the Basel Committee.

### *Sold options*

## Comments received

Several submissions noted that sold options do not generate credit risk for the seller, as they can never result in the client owing the seller money beyond unpaid premiums. Respondents requested that, where sold options are either not subject to any netting agreement, or the only transactions in a netting set, the EAD of the netting set should be set to zero, assuming no deferred premiums.

## APRA's response

Setting EAD to zero where sold options are in their own individual netting set, or the only transactions in a netting set, is consistent with the Basel Committee's FAQs, which specify

that 'the EAD can be set to zero only for sold options that are outside netting and margin agreements'. APS 180 has been amended to reflect this position.

Where sold options are included in a netting set containing other derivatives, EAD should be calculated according to Attachment D of APS 180, which allows sold options to offset the PFE of other positions in the netting set.

### ***Supervisory delta adjustment for options***

APRA proposed that the supervisory delta adjustment for options must be calculated according to one of four formulas depending on whether the option is a call or put option.

#### **Comments received**

Submissions requested clarification on the calculation of supervisory delta values for options:

- in the context of negative interest rates and/or negative strikes price values, where the calculation of  $\ln(P_i/K_i)$  is undefined; and
- where a strike price of an option equals zero, and the calculation of  $(P_i/K_i)$  is undefined.

Respondents suggested setting  $\ln(P_i/K_i)$  to zero in these undefined cases, which is equivalent to assuming the option is at the money.

#### **APRA's response**

This issue is currently being considered by the Basel Committee as part of its FAQs process. APRA intends to provide updated guidance in this area in the final APS 180.

## **Definitions of date parameters**

#### **Comments received**

One respondent requested the inclusion in APS 180 of examples of the calculation of the date parameters (maturity date, start date and end date) for the various types of interest rate derivative transactions, as set out by the Basel Committee.

#### **APRA's response**

Revised draft APS 180 notes that, for guidance, an ADI may refer to examples of maturity dates, start dates and end dates for various transactions published by the Basel Committee.

## **Capital requirements for bank exposures to central counterparties – final standard**

In April 2014, the Basel Committee issued its final standard on capital requirements for bank exposures to CCPs. The final standard retains many of the features of the Basel Committee's July 2012 interim framework – which APRA implemented in 2013 – including the scope of application, treatment of trade exposures to QCCPs and the capital requirements for exposures to non-qualifying CCPs. Notably, the final standard includes a new approach for determining the capital charge for default fund exposures to QCCPs, an explicit cap on capital requirements for exposures to QCCPs so those charges cannot exceed the charges

that would be applied if the CCP were non-qualifying, specified treatment for multi-level client structures, and utilises the SA-CCR as opposed to the CEM.

The September discussion paper and draft of APS 180 set out APRA's proposed implementation of the Basel Committee's final standard of capital requirements for bank exposures to CCPs. APRA's proposed framework was consistent with the Basel Committee's standard, except that APRA did not propose incorporating the specific treatment for multi-level client structures.

This appendix sets out comments received in relation to APRA's proposals relating to capital requirements for bank exposures to CCPs in response to the September 2016 consultation, and APRA's responses.

## **Multi-level client structures**

The Basel Committee's final standard includes specific treatment for multi-level client structures, which allows a lower-level client bank transacting with a higher-level client to obtain the same concessional risk weights available to a client bank transacting directly with a clearing member to the QCCP.

In the September 2016 consultation, APRA did not propose incorporating this treatment in draft APS 180 to avoid undue complexity and on the understanding that multi-level client structures are not widely used by ADIs in Australia. APRA indicated it would consider the need to include the specific treatment of multi-level client structures in APS 180 based on industry feedback.

### **Comments received**

Respondents requested APRA incorporate the Basel Committee's treatment for multi-level client structures in APS 180. Respondents noted that IRB ADIs in Australia currently participate in multi-level client structures for central clearing for reasons including volume and market access, operational ease and the credit risk and/or jurisdiction of the clearing member. Submissions noted that ADIs would be disadvantaged relative to global competitors if the treatment of multi-level client structures is not included in APS 180.

### **APRA's response**

APRA has considered the issues raised and does not propose incorporating the specific treatment for multi-level client structures in APS 180. Given the limited use of multi-level client structures by ADIs in Australia, APRA is not convinced that inclusion of the specific treatment for such structures is warranted, particularly given the additional complexity this would add to the framework. As a result, APRA has maintained its original proposal.

## **Margin period of risk for centrally cleared exposures**

For the clearing member ADI-to-QCCP leg of an OTC derivative transaction cleared through a QCCP, APRA proposed that the clearing member ADI must use a margin period of risk (MPOR) of at least 10 days in calculating its trade exposure to the QCCP.

### **Comments received**

One respondent requested the required MPOR for the ADI-to-QCCP leg of centrally cleared exposures be reduced to reflect the operating nature of clearing houses and avoid creating asymmetries between the centrally cleared and client transactions.

### **APRA's response**

APRA proposed that an ADI must use an MPOR of at least 10 days for ADI exposures to QCCPs for consistency with the Basel framework. While APRA acknowledges that the time between the last exchange of collateral and the exposure with a QCCP being closed-out and replaced may be shorter than 10 days in practice, APRA proposes maintaining the requirement that an ADI set the MPOR for centrally cleared exposures to at least 10 days for international consistency.

### **Variation margin retained by a QCCP**

Paragraph 12(d) of Attachment B of draft APS 180 provided that where a QCCP retains variation margin against certain transactions and that variation margin is not protected against the insolvency of the QCCP, the transaction's maturity factor must be set to the maturity factor of the unmargined case.

### **Comments received**

Several respondents requested this paragraph be removed due to practical difficulties associated with verifying whether a CCP retains variation margin. Submissions noted that variation margin is not typically retained by CCPs as it is used to pay margin owing to clearing members on the other side of the transaction, nor is it typically held in a bankruptcy remote manner (irrespective of whether it is retained). Submissions also noted that the proposed treatment is inconsistent with the bilateral case.

### **APRA's response**

This paragraph refers to the practice of some options CCPs, which collect variation margin from members but do not post variation margin to members, rather waiting until the contract maturity or sale of the contract to make any payment. In most of these cases the ADI's collateral would be protected from the bankruptcy of the CCP by being held by a custodian. Where the CCP does not hold the variation margin in a bankruptcy remote manner, the posting ADI will have an exposure to the CCP, which APRA considers warrants the maturity factor being set to the unmargined case.

### **Posted collateral in trade exposure**

APRA proposed that the posted collateral component of trade exposure should be excluded from the trade exposure subject to the applicable risk weights, and risk-weighted in accordance with paragraphs 24 to 27 of Attachment B of draft APS 180.

### **Comments received**

Respondents requested clarification regarding how posted collateral is to be excluded from trade exposure for the purpose of risk-weighting, as the SA-CCR methodology embeds posted collateral – except for posted collateral held in a bankruptcy remote manner – in the calculation of the replacement cost component of EAD.

### **APRA's response**

APRA acknowledges the difficulty associated with excluding posted collateral that is not held in a bankruptcy remote manner from the trade exposure given the SA-CCR methodology embeds posted collateral within the calculation of replacement cost through the net independent collateral amount.

APS 180 has been amended to reflect that collateral that is not held in a bankruptcy remote manner is embedded within the SA-CCR calculation, and should be risk-weighted as part of the trade exposure and not separately. As the risk weights applied to trade exposure and posted collateral do not differ, except in relation to posted collateral held in a bankruptcy remote manner, this change has no material effect on the calculation of risk-weighted credit exposures for counterparty credit default risk arising from trade exposure to a CCP (trade exposure RWE).

APRA does not intend to require disclosure of posted collateral that is embedded in the EAD under SA-CCR.

### **Application of CVA risk capital charge to intermediated client transactions**

APRA proposed that an ADI that provides client clearing services – either by acting as a financial intermediary, or by guaranteeing the performance of its client to the CCP (or QCCP) – must calculate counterparty credit risk requirements on its exposures to its client following the requirements for bilateral transactions (comprising both default risk RWE and a CVA risk capital charge).

#### **Comments received**

Respondents requested confirmation that it is not necessary for an ADI to calculate a CVA risk capital charge on client cleared trades where the ADI does not guarantee the performance of the trade to the client. Respondents noted that the Basel Committee's rules refer to a clearing member capitalising its exposure (including 'potential CVA risk exposure') to clients as bilateral trades, and requested APRA refer to 'potential CVA risk exposure' for consistency.

#### **APRA's response**

Where an ADI acts as a financial intermediary between a client and a CCP, the ADI-to-client transaction must be capitalised as a bilateral exposure. APRA considers that the ADI's exposure to its client should be treated in the same manner as any other bilateral transaction and consequently should always include a CVA risk capital charge.

### **Collateral held by a custodian**

APRA proposed that all collateral held by a custodian that is bankruptcy remote from the QCCP is subject to a zero risk weight. Footnote 13 provides additional clarification regarding the definition of a custodian.

#### **Comments received**

One submission requested clarification that a QCCP that takes collateral as a trustee (therefore rendering the collateral largely bankruptcy remote from its own assets) satisfies the definition of custodian and the collateral eligible for a zero risk weight.

### **APRA's response**

Where a QCCP acts as a trustee and holds collateral in a manner consistent with the requirements set out in footnote 13 of draft APS 180, the collateral is eligible for a zero risk weight. Collateral that is held in a manner that does not satisfy these conditions is not eligible for a zero risk weight.

### **Risk-weighting of exposures to clients**

For transactions with non-qualifying CCPs, APRA proposed that all ADIs must apply the standardised credit risk weights as set out in APS 112 in calculating trade exposure RWE in respect of the ADI's exposure to the non-qualifying CCP and any exposure to the ADI's clients.

### **Comments received**

Submissions requested confirmation that the requirement to determine risk weights in accordance with the standardised approach to credit risk, rather than the IRB approach for an IRB ADI, should only apply to client transactions that are guaranteed to the client by the ADI and that would be added to the ADI's exposure to the non-qualifying CCP. Where a clearing member ADI acts as an intermediary between a client and a non-qualifying CCP, submissions contended that the clearing member ADI should be allowed to use the IRB approach to credit risk to determine risk weights if it has IRB approval.

Submissions noted that APRA's proposed approach would disadvantage IRB ADIs in Australia that clear client trades relative to international competitors.

### **APRA's response**

APRA has amended APS 180 in response to this comment. A clearing member ADI that acts as an intermediary between a client and a CCP must capitalise its exposure to its client using the bilateral treatment set out in Attachment A to draft APS 180, and may risk-weight the exposure using the IRB approach if the clearing member ADI has IRB approval. The risk weighting approach applied to a clearing member ADI's exposure to the client should not vary depending on whether the CCP is a QCCP or non-qualifying CCP.

### **Membership of CCPs**

#### **Comments received**

Respondents requested confirmation that the measures relating to membership of CCPs set out in APRA's 4 June 2013 letter to all ADIs, *Membership of central counterparties*, no longer apply.<sup>7</sup>

#### **APRA's response**

APRA has updated APS 180 to incorporate relevant aspects of the guidance in the June 2013 letter. The June 2013 letter will cease to apply to locally incorporated ADIs when the new requirements in APS 180 take effect. The letter remains relevant for foreign ADIs.

<sup>7</sup> <http://www.apra.gov.au/adi/PrudentialFramework/Documents/130604-Letter-to-ADIs-re-CCPs.pdf>



## Risk management requirements for centrally cleared exposures

Draft APS 180 proposed that an ADI must ensure that it maintains adequate capital for its exposures to CCPs, and must consider whether it might need to hold capital in excess of the minimum capital requirements. It also set out the requirement that a clearing member ADI undertake appropriate scenario analysis and stress testing of whether the level of capital held against exposures to a CCP adequately addresses the inherent risks of those exposures.

### Comments received

One submission requested clarification regarding:

- the circumstances in which an ADI would need to hold capital in excess of the minimum capital requirements for exposures to CCPs; and
- the purpose of stress testing the level of capital held against exposures to CCPs. The submission noted that modelling future default fund commitments is particularly challenging given an individual member does not have visibility of the total risk contribution or portfolio of other clearing members.

### APRA's response

These risk management requirements for centrally cleared exposures are fundamentally unchanged from the current requirements in Attachment C of APS 112.

It may be appropriate for an ADI to hold additional capital against its exposures to a CCP where, for example, an external assessment such as a Financial Sector Assessment Program (FSAP) has found material shortcomings in the CCP or the regulation of the CCP, and the CCP and/or the CCP regulator have not addressed the issues identified.

APRA acknowledges that undertaking highly accurate stress testing is likely to be challenging given information limitations. Appropriate stress testing may, for example, include a reverse stress test of the ADI's position or of when an additional default fund contribution may be required.

## Capital charge for default fund exposure to a QCCP

Where a QCCP's pre-funded own resources are shared among product types, paragraph 5 of Attachment C of draft APS 180 proposed requiring a clearing member ADI to ensure that the QCCP allocates those funds to each of the calculations, in proportion to the respective product-specific EADs, in calculating its own default fund exposure to that QCCP.

### Comments received

Submissions requested guidance on how an ADI can ensure a QCCP undertakes calculations in the required manner, and contended that this is not a reasonable obligation to place on an ADI.

### APRA's response

APRA acknowledges that an ADI cannot exercise control over a QCCP and has amended the wording in Attachment C of APS 180 to better reflect this.

Where an ADI treats a CCP as a QCCP for the purposes of calculating its default fund exposure, the ADI should satisfy itself that the QCCP undertakes all calculations in the manner required under APS 180.

## Calculation of the hypothetical capital requirement of the QCCP

Draft APS 180 provided that a clearing member ADI may rely on the QCCP to calculate the hypothetical capital requirement of the QCCP ( $K_{\text{CCP}}$ ) and provide to the clearing member ADI the necessary data to calculate its default fund capital charge, provided any calculations undertaken by the QCCP satisfy conditions relating to transparency, frequency and regulatory reporting.

### Comments received

One respondent requested guidance on APRA's expectations in relation to the conditions for the calculation of  $K_{\text{CCP}}$ , in particular:

- the granularity and transparency of the calculations;
- the format in which these calculations should be made available to bank clearing members;
- what would constitute 'material changes to the number of or the exposure of cleared transactions' to require calculations to be repeated; and
- what would constitute 'sufficient aggregate information' for the purpose of reporting to APRA.

### APRA's response

APRA will not prescribe specific requirements for a QCCP's calculation of  $K_{\text{CCP}}$ . Provided the QCCP's disclosures to a clearing member ADI meet the requirements in Attachment C of APS 180 and enable the ADI to calculate its default fund capital charge in the manner required under APS 180, the QCCP may determine an appropriate granularity, transparency, format and frequency for the calculations in consultation with its clearing members and supervisor.

In order for an ADI to rely on a QCCP's calculation of  $K_{\text{CCP}}$ , the QCCP must report sufficient aggregated information to APRA on a quarterly basis. Reporting to APRA must allow the decomposition of a clearing member ADI's default fund capital charge into its components, and provide an understanding of the nature and size of the QCCP's exposure. At a minimum, this would include reporting of each of the components of  $K_{\text{CCP}}$ .

## Appendix 2 – Policy options and estimated comparative net benefits

APRA considered several policy options in developing the proposed revisions to the ADI framework for counterparty credit risk and the associated reporting requirements.

Three policy options and the potential costs and net benefits are set out below. APRA intends to incorporate feedback from industry on the policy options and provide estimated comparative net benefits when it finalises the revisions to its counterparty credit risk framework for ADIs. The analysis of costs associated with each option focuses on compliance costs, that is, the direct administrative, substantive (business) and financial costs incurred by ADIs in complying with government regulation. Indirect costs for ADIs and other stakeholders arising as a consequence of regulation (or not applying regulation) are also considered.

Any information provided in response to APRA's request for cost-benefit analysis information (refer to section 1.7) will be used by APRA to quantify the change in regulatory burden using the Regulatory Burden Measurement Tool, and inform calculations of the net benefits of the proposals.

<b>Option 1: Status quo</b>	Maintain APRA's existing prudential requirements for counterparty credit risk
<b>Option 2: Apply the SA-CCR to all ADIs</b>	Apply the SA-CCR to all ADIs. The Basel Committee's final standard for bank exposures to CCPs would also be applied to all ADIs.
<b>Option 3: Apply the SA-CCR to some ADIs</b>	Apply the SA-CCR to only ADIs with material levels of counterparty credit risk exposure. The final standard for bank exposures to CCPs would be applied to all ADIs.

### Option 1: Status quo

Under this option, APRA would maintain its current counterparty credit risk prudential and reporting framework for all ADIs. APRA's current framework requires all ADIs to utilise the CEM to calculate exposure at default for counterparty credit risk. The current framework also includes capital requirements for exposures to CCPs based on the Basel Committee's July 2012 interim standard for bank exposures to CCPs.

Maintaining the status quo would not result in any immediate additional compliance costs for ADIs; however, there are likely to be a range of indirect costs. These include potential costs resulting from inconsistencies with the international framework and inadequate capital being held against counterparty credit risk exposures, including exposures to CCPs.

These indirect costs are not easily quantifiable but could be moderate to significant. The costs are likely depend on the extent of an ADI's exposure to counterparty credit risk, as well

as its approach to managing counterparty credit risk. These costs are likely to be most significant in market stress events.

The CEM has a number of known deficiencies. In particular, the CEM has been criticised for the following limitations:

- the CEM framework does not differentiate between margined and unmargined counterparty credit risk exposures in the calculation of potential future exposure;
- the CEM's recognition of netting benefits is simplistic and not reflective of the economically meaningful relationships between derivative positions;
- the CEM formulation uses only two factors (the type of asset and the residual maturity) to estimate the exposure amount for different products. As a result, the CEM is not granular enough to capture risks and correlations within asset classes; and
- the supervisory add-on factors in CEM do not sufficiently capture the level of volatilities as observed over recent stress periods, including during the global financial crisis.

The Basel Committee's SA-CCR is a new approach for measuring counterparty credit risk exposures that has been designed to address the known deficiencies in the existing methodologies and is intended to achieve a more risk sensitive and accurate measurement of counterparty credit risk exposures. Under the revised framework, the exposure value determined under the SA-CCR is multiplied by the risk weight assigned to the counterparty to the transaction to generate the counterparty credit risk capital requirement.

Under this option, all ADIs would continue to use the CEM to measure counterparty credit risk exposures and these identified deficiencies would remain unaddressed. This option would also mean that APRA's regulatory framework would not be appropriately aligned, as APRA has implemented mandatory margin (collateral) requirements for certain transactions, but ADIs would not receive recognition for variation margin agreements in the calculation of capital requirements.

This option would also involve maintaining APRA's current framework of capital requirements for exposures to CCPs, which is based on the Basel Committee's July 2012 interim standard. Trading through CCPs yields several benefits compared to trading bilaterally:

- First, CCPs can reduce counterparty credit risk by netting exposures on a multilateral basis. In other words, CCPs can offset an amount due from a party on one transaction against an amount owed to that party on another transaction, reducing the magnitude of that party's net exposure and potential loss in the event of default by another counterparty. Multilateral netting also has the benefit of reducing a counterparty's liquidity needs by netting its payment obligations.
- In the event of default by one party, CCPs have systems, rules and resources to facilitate a more orderly and efficient resolution than would otherwise occur for bilateral transactions.
- Further, CCPs generally require all positions to have collateral, held as a mitigant against counterparty credit default risk, against them.
- Finally, trading through CCPs increases market transparency by making information on activities and exposures available to regulators and the public.

While wider use of CCPs has the potential to lower entity-level counterparty credit risk and increase the systemic resilience of OTC derivatives markets, an ADI that enters into transactions with a CCP takes on an exposure to that CCP. The ADI may still be liable for loss if another member of the CCP defaults and the CCP is unable to cover the resultant losses out of the collateral contributed by the defaulter or find another appropriate remedy. In such cases, the CCP may pass on losses to its other members.

The Basel Committee's interim standard of capital requirements for bank exposures to CCPs aimed to ensure the capital framework better reflected the inherent risks of the various types of exposures to CCPs, whilst ensuring there are incentives to centrally clear OTC derivative transactions. However, since the release of its interim standard, the Basel Committee has undertaken additional work to improve its framework and address several known deficiencies in the interim standard, including:

- instances of insufficient capital being held against exposures to some CCPs;
- instances of capital charges for exposures to CCPs being higher than for bilateral transactions; and
- capital treatment penalising the maintenance of substantial default funds.

The final standard for bank exposures to CCPs retains many of the features of the July 2012 interim framework including the scope of application, treatment of trade exposures to QCCPs and the capital requirements for exposures to non-qualifying CCPs. However, to address deficiencies in the interim standard, the final standard includes a new approach for determining the capital requirements for default fund exposures to QCCPs and an explicit cap on capital charges for exposures to QCCPs so those charges cannot exceed the charges that would apply if the CCP were non-qualifying, and utilises the SA-CCR (rather than the CEM) to measure exposure values.

As APRA would maintain its current framework, which is based on the interim standard, rather than implementing the final standard under this option, the identified deficiencies in capital requirements for exposures to CCPs would persist. This is also likely to result in a number of indirect costs due to capital requirements not appropriately incentivising central clearing, inconsistencies with the international framework – which are likely to be particularly pronounced due to the reliance on large global CCPs to make available to ADIs data necessary to undertake the required calculations – and insufficient capital being held against certain exposures to CCPs.

## **Option 2: Apply the SA-CCR to all ADIs**

A second option is for APRA's counterparty credit risk framework, including reporting requirements, to be amended to fully incorporate the Basel Committee's SA-CCR and final standard of capital requirements for bank exposures to CCPs. APRA consulted on this option in September 2016.

As the SA-CCR is designed to address the deficiencies identified in the CEM, APRA considers that there are significant benefits associated with implementation. In particular, the SA-CCR is a marked improvement over the CEM in terms of granularity and risk sensitivity in the measurement of counterparty credit risk exposures. This option would address the deficiencies outlined under Option 1 above.

The benefits of implementing the SA-CCR are likely to be highest for ADIs that have larger and more complex counterparty credit risk exposures and are active internationally, with lower benefits anticipated to result from requiring smaller ADIs that have low levels of exposure to implement the SA-CCR.

While the SA-CCR methodology has been designed to improve risk sensitivity without creating undue complexity, it does require more complex calculations than the CEM. Implementation of the SA-CCR will therefore impose additional compliance costs on ADIs. Compliance costs are expected to include systems procurement or build costs, data and computation costs, and regulatory reporting costs. APRA expects this option would result in higher compliance costs than under Option 3, as this option would involve applying the SA-CCR methodology to all ADIs, including those with immaterial levels of counterparty credit risk exposure.

This option would also involve updating APRA's capital requirements for exposures to CCPs to reflect the Basel Committee's final standard. The benefits of incorporating the modifications to the capital framework for exposures to CCPs include ensuring ADIs hold a more appropriate level of regulatory capital against the risks they undertake in transacting with CCPs, and ensuring alignment of incentives for central clearing.

ADIs are also expected to face compliance costs associated with the implementation of the final standard for bank exposures to CCPs. These costs are expected to be significantly lower than the costs associated with SA-CCR implementation as many elements of the framework for bank exposures to CCPs would remain unchanged, and fewer ADIs would be affected by the changes as core aspects of the revised framework such as the calculation of capital requirements for default fund exposures to QCCPs are only relevant for ADIs who are clearing members of QCCPs (i.e. large and sophisticated ADIs).

### **Option 3: Apply the SA-CCR to ADIs with material levels of counterparty credit risk exposure**

Given the substantial compliance costs associated with implementing the SA-CCR, an alternative option is to apply the SA-CCR methodology to only those ADIs with material counterparty credit risk exposures and apply a simpler alternative to other ADIs.

This option is expected to result in similar benefits to Option 2 due to the high concentration in counterparty credit risk exposures amongst the largest ADIs in Australia. As the ADIs with the largest exposures represent a substantial majority of the market, applying the SA-CCR to only IRB ADIs would result in use of the SA-CCR for the majority of all ADIs' exposures, and by the main participants in international markets. Further, some of the key benefits associated with the SA-CCR include more granular and meaningful recognition of netting, and differentiation between margined and unmargined exposures. These benefits are likely to be most relevant for ADIs that have the most sophisticated netting and margining practices for their portfolio of OTC derivatives, exchange-traded derivatives and long settlement transactions.

For ADIs with immaterial levels of exposure to counterparty credit risk, APRA considers that an equivalent level of financial safety could be achieved at significantly lower compliance costs by maintaining the current methodology (known as the CEM) and recalibrating the

calculation (through the application of scaling factors) to approximate the additional conservatism in the SA-CCR and differentiate between margined and unmargined exposures in the calculation of capital requirements. APRA expects this option would result in minimal additional compliance costs for those ADIs that would maintain an adjusted version of the CEM. Under this option, APRA could also allow a standardised ADI to opt-in to using the SA-CCR.

Compliance costs for those ADIs required to implement SA-CCR under this option are expected to be equivalent to those under Option 2; however, the aggregate compliance costs associated with this option are likely to be materially lower than under Option 2 due to the application of the SA-CCR to fewer ADIs.

This option would also involve amending APRA's requirements for counterparty credit risk to incorporate the Basel Committee's final standard of capital requirements for bank exposures to CCPs. As noted above, the costs associated with implementation of the final standard for exposures to CCPs are expected to be substantially lower than the cost of implementing the SA-CCR and, while the final CCPs standard would apply to all ADIs, many aspects of the revised framework are relevant only where an ADI undertakes a certain activity, such as participating as a clearing member of a QCCP. The costs and benefits associated with implementation of the Basel Committee's final standard of capital requirements for bank exposures to CCPs would be the same as under Option 2.



 **APRA**