

# REGULATION IMPACT ANALYSIS — COUNTERPARTY CREDIT RISK

(OBPR ID: 20657)

## Background

APRA's development of its revised prudential framework for counterparty credit risk involved an equivalent process and analysis to that required for a Regulation Impact Statement (RIS) as set out in *The Australian Government Guide to Regulation* (the Guide).<sup>1</sup> Using this process, APRA has answered the seven RIS questions set out in the Guide, details of which are summarised below.

### Questions 1 and 2 — Assessing the problem and objectives of government action

In July 2012, the Basel Committee on Banking Supervision (Basel Committee) released a standard on capital requirements (interim standard) for bank exposures to central counterparties (CCPs), which aimed to ensure the capital framework better reflected the inherent risks of the various types of exposures to CCPs, whilst also ensuring there are incentives to centrally clear over-the-counter (OTC) derivative transactions. However, since the release of the interim standard, the Basel Committee has undertaken additional work to improve its framework and address a number of 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.

In 2014, the Basel Committee released *The standardised approach for measuring counterparty credit risk exposures*<sup>2</sup> and *Capital requirements for bank exposures to central counterparties – final standard* (final standard).<sup>3</sup> The final standard retains many of the features of the interim standard including the scope of application, treatment of trade exposures to qualifying CCPs (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 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 standardised approach to counterparty credit risk (SA-CCR) (rather than the current exposure method (CEM)) to measure exposure values.

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<sup>1</sup> *Australian Government Guide to Regulation*, March 2014.

<sup>2</sup> *The standardised approach for measuring counterparty credit risk*, Basel Committee (March 2014) <http://www.bis.org/publ/bcbs279.htm>.

<sup>3</sup> *Capital requirements for bank exposures to central counterparties – final standard*, Basel Committee (April 2014) <http://www.bis.org/publ/bcbs282.htm>.

In a September 2016 discussion paper, *Counterparty credit risk for ADIs*,<sup>4</sup> APRA outlined the problem in relation to the prudential framework for counterparty credit risk for authorised deposit-taking institutions (ADIs), noting that the existing non-modelled approaches to counterparty credit risk – in the form of the CEM and standardised method (SM) – have a number of limitations. For the CEM these limitations include:

- the CEM does not differentiate between margined and unmargined counterparty credit risk exposures in the calculation of potential future exposure;
- recognition of netting benefits is simplistic and does not reflect the economically meaningful relationships between derivative positions;
- the CEM formulation only uses two factors (asset type and 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 the CEM do not sufficiently capture the level of volatility as observed over recent stress periods, including during the global financial crisis.

For the SM, while more risk sensitive than the CEM, criticisms include that it fails to differentiate sufficiently between margined and unmargined transactions and there has been inconsistent implementation of the approach across ADIs.

As noted earlier, the limitations with the CEM and SM led to the Basel Committee developing a single non-internal model method for measuring exposure at default for counterparty credit risk – in the form of the SA-CCR. The objectives of the revised approach were to:

- provide for application to a wide variety of transaction types (margined, unmargined, centrally cleared, non-centrally cleared/bilateral);
- allow simple and easy implementation;
- minimise discretion by national authorities and institutions; and
- improve risk sensitivity of the capital framework without adding undue complexity.

APRA proposed changes to the prudential framework for counterparty credit risk were designed to address these deficiencies. Details of the changes were set out in a draft revised *Prudential Standard APS 112 Capital Adequacy: Standardised Approach to Credit Risk* (APS 112) and a new *Prudential Standard APS 180 Capital Adequacy: Counterparty Credit Risk* (APS 180). As part of the proposed changes, APRA indicated that all ADIs entering into derivative transactions would be required to use the SA-CCR methodology to measure their counterparty credit risk exposures and to hold capital for exposures to central counterparties consistent with the Basel Committee's final standard. APRA further revised its proposals after considering submissions from industry to the 2016 consultation. Details of

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<sup>4</sup> Refer to <http://www.apra.gov.au/adi/Pages/September-2016-Consultation-counterparty-credit-risk.aspx>.

the revised approach were set out in the 2017 discussion paper *Counterparty credit risk for ADIs*.<sup>5</sup>

## Question 3 and 4 — Options to achieve objectives and impact analysis

As set in the 2017 discussion paper, APRA considered three options in developing proposed revisions to its counterparty credit risk requirements.

Options	Approach
<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>	Only apply the SA-CCR to 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 existing counterparty credit risk prudential and reporting framework for 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.

Under this option, all ADIs would continue to use the CEM to measure counterparty credit risk exposures and the identified deficiencies noted above would remain.

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 range from moderate to significant in terms of impact. The actual indirect costs are likely to depend on the extent of an ADI's exposure to counterparty credit risk and its approach to managing this risk. These costs may become significant in market-stress events.

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 has several benefits compared to trading bilaterally, including:

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<sup>5</sup> Refer to <http://www.apra.gov.au/adi/PrudentialFramework/Pages/Consultation-counterparty-credit-risk-August-2017.aspx>.

- CCPs can reduce counterparty credit risk by netting exposures on a multilateral basis. That is, 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 the net exposure to that party and any potential loss in the event of default by another counterparty. Multilateral netting also reduces a counterparty's liquidity needs by netting its payment obligations.
- CCPs have systems, rules and resources that, in the event of default by one party, facilitate a more orderly and efficient resolution than would occur for bilateral transactions.
- Further, CCPs generally require all positions to have collateral held as a mitigant against counterparty credit risk.
- 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 is unable to find another appropriate remedy. In such cases, the CCP may pass on losses to its other members.

As APRA would maintain its current framework under Option 1, the identified deficiencies in capital requirements for exposures to CCPs would remain. This is also likely to result in a number of indirect costs due to capital requirements not favouring 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 the 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 SA-CCR. APRA consulted on this option in September 2016.

The SA-CCR is a new approach for measuring counterparty credit risk exposures that has been designed to address known deficiencies in the existing methodologies and 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.

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 greatest for ADIs with larger, more complex counterparty credit risk exposures and that are internationally active. The benefits from requiring smaller ADIs with lower levels of exposure to implement the SA-CCR would

be considerably less than those for ADIs with larger, more complex counterparty credit risk exposures.

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 would therefore impose additional, potentially substantial, compliance costs on ADIs. These costs are expected to include systems procurement and build costs, data and computation costs and regulatory reporting costs. APRA expects that this option would result in higher compliance costs than under Option 3, as it 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, more sophisticated ADIs).

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

Given the compliance costs associated with implementing the SA-CCR, an alternative option is to apply the SA-CCR methodology only to 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 ADIs with the largest exposures represent a substantial majority of the market, applying the SA-CCR to only those ADIs approved to use the internal ratings-based approach to credit risk (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 counterparty credit risk exposure, APRA considers that an equivalent level of financial safety could be achieved at significantly lower compliance costs by maintaining the current methodology (the CEM) and recalibrating the calculation (through the application of scaling factors) to approximate the additional conservatism in the SA-CCR and differentiating between margined and unmargined exposures in the calculation of capital requirements. This option would result in minimal additional compliance costs for those ADIs that 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 a limited number of ADIs.

This option would also involve amending APRA's requirements for counterparty credit risk to incorporate the Basel Committee's final standard on capital requirements for bank exposures to CCPs. As noted previously, 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 APRA's 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 on capital requirements for bank exposures to CCPs would be the same as under Option 2.

## **Question 5 — Consultation**

APRA initially consulted on changes to the prudential framework in relation to counterparty credit risk for ADIs in September 2016. This public consultation included a discussion paper *Counterparty credit risk for ADIs* which set out proposed changes consistent with those being promulgated by the Basel Committee. At that time, APRA proposed that all ADIs would be subject to a new framework for counterparty credit risk in the form of the SA-CCR. The submissions received generally supported APRA's proposal but did raise a number of concerns, including with the implementation timetable, the appropriateness of the requirements for ADIs with immaterial counterparty credit risk exposures and the treatment of multi-level client structures. In August 2017,<sup>6</sup> after consideration of the issues raised in submissions, APRA undertook further public consultation on revised proposals, the most significant of which was to allow ADIs with immaterial counterparty credit risk exposure to be subject to a simpler framework. APRA modified its original proposal to allow those ADIs with immaterial exposures to comply with an adjusted version of the CEM. APRA's response to material issues is set out in the Response to submissions letter on the APRA website.

## **Question 6 – What is the appropriate option**

As part of its public consultation in September 2016, APRA sought information from stakeholders on the compliance impacts of the proposed changes set out in the discussion paper, including associated substantive costs. Respondents were asked to use the Commonwealth Regulatory Burden Measurement tool to assess regulatory costs. Submissions to the September 2016 consultation provided regulatory cost estimates of the expected cost impacts of the proposals, notably moving from the existing framework to the SA-CCR. APRA has used the expected costs provided by industry to estimate the costs of each option. APRA has considered relevant compliance costs (i.e. administration, substantive and financial compliance costs as applicable) in estimating the regulatory cost of each option. These costs include the costs for ADIs of complying with a revised counterparty credit risk framework, which largely relates to system changes, updating internal policies and procedures and staff training. In estimating the costs, it has been assumed that ADIs will be directly affected, and that there are no direct costs expected to be incurred by other

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<sup>6</sup> Discussion paper, *Counterparty credit risk for ADIs*, 3 August 2017, APRA. Refer to <http://www.apra.gov.au/adi/PrudentialFramework/Pages/Consultation-counterparty-credit-risk-August-2017.aspx>.

stakeholders. All costs set out in the following tables reflect the amortised cost per year over a 10-year time horizon.

**Option 1 — Status quo**

Under this option, ADIs and other stakeholders would not incur any additional compliance costs as the existing framework would be unchanged (refer to Table 1). There would, however, be indirect costs as ADIs would no longer comply with international obligations should the SA-CCR framework not be adopted. This could also affect the ability of ADIs to participate in international markets.

**Table 1—Average annual regulatory costs**

Sector	Business	Community organisations	Individuals	Total change in costs
Total change in cost by sector (\$ million)	0	0	0	0

**Option 2 — Apply the SA-CCR to all ADIs**

Under this option, ADIs would incur additional costs as the existing counterparty credit risk framework would be modified to comply with the revisions to the Basel Committee’s framework. Costs incurred would be a result of updates to systems, processes and procedures to reflect the new requirements, legal costs and staff training (refer to Table 2).

The costs under this option would arise as a result of material changes to the counterparty credit framework as outlined. Changes include modifications to systems, procedures and processes to reflect the revised counterparty credit risk framework as well as changes to existing reporting requirements and new reporting requirements. This option would commence on 1 July 2019. APRA has previously indicated in public statements that the requirements would commence not earlier than 1 January 2019, hence the commencement timeframe allows industry additional time to prepare for the changes under this option.

**Table 2—Average annual regulatory costs**

Sector	Business	Community organisations	Individuals	Total change in costs
Total change in cost by sector (\$ million)	12	0	0	12

**Option 3 — Only apply the SA-CCR to ADIs with material levels of counterparty credit risk exposure**

This is a modified variant of Option 2. Under this option, only IRB ADIs would have to apply the SA-CCR framework. All other ADIs would be able to use a simplified approach to measuring their counterparty credit risk exposures in the form of an adjusted CEM. ADIs would incur additional costs as the existing counterparty credit risk framework would be modified to comply with the revisions to the Basel Committee’s framework. Costs incurred would be a result of updates to systems, processes and procedures to reflect the new requirements, legal costs and staff training (refer to Table 3).

As for Option 2, the costs associated with this option would arise as a result of material changes to the counterparty credit risk framework for a limited subset of ADIs, being ADIs with IRB approval, while for other ADIs the costs would be moderated as they would be subject to an adjusted form of the existing framework.

**Table 3—Average annual regulatory costs**

Sector	Business	Community organisations	Individuals	Total change in costs
Total change in cost by sector (\$ million)	7.2	0	0	7.2

### Summary assessment of options

**Table 4—Summary of net benefits of each option**

	Option 1	Option 2	Option 3
Compliance cost	No change	Moderate costs	Moderate costs
Complies with Basel counterparty credit risk framework	Not compliant	Compliant	Compliant
Reflects local conditions	No	No	Yes
<b>Overall</b>	<b>Moderate to high net cost</b>	<b>Moderate net cost</b>	<b>Moderate net cost</b>

Under Option 1, there would be no additional compliance costs. This is due to the fact that this option involved maintaining the existing requirements for counterparty credit risk without change.

Both options 2 and 3 will result in industry incurring compliance costs. For both options the costs will be moderate, although higher for Option 2, as under this option all ADIs would be required to implement the SA-CCR. Option 3 limits the number of ADIs to whom the SA-CCR would apply thereby resulting in lower overall costs. Both options 2 and 3 are considered compliant with the Basel counterparty credit risk framework but Option 3 reflects Australian conditions while Option 2 would not take account of Australian conditions in implementing the framework.

Therefore, in APRA's view, Option 3 achieves an appropriate balance in implementing the new Basel counterparty credit risk framework while taking account, with modifications, of Australian conditions. On this basis, APRA will adopt Option 3.



## **Question 7 – Implementation and review**

APRA expects to release the final requirements, entailing various prudential and reporting standards before mid-2018, with effect from 1 July 2019.

APRA's prudential framework is regularly reviewed, including consideration of whether the requirements continue to reflect good practice, remain consistent with international standards and remain relevant and effective in facilitating sound risk management practices.