



भारतीय रिज़र्व बैंक
RESERVE BANK OF INDIA
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RBI/2016-17/120

DBR.No.BP.BC.30/21.06.201/2016-17

November 10, 2016

The Managing Director/
Chief Executive Officer
All Scheduled Commercial Banks
(Excluding Regional Rural Banks)

Madam / Dear Sir,

Guidelines on capital requirements for bank exposures to central counterparties

Please refer to the paragraph 4 of [Statement on Developmental and Regulatory Policies issued by RBI on October 4, 2016](#). It was indicated therein that RBI will issue final guidelines on capital requirements for bank exposures to central counterparties. Accordingly, final guidelines are annexed. These guidelines will become effective from April 1, 2018.

Yours faithfully,

(Ajay Kumar Choudhary)

Chief General Manager

Encl: as above

Guidelines on capital requirements for bank exposures to central counterparties

Para 5.15.3.8, 5.15.3.9 and 5.15.3.10 of Basel III Capital Framework will be replaced by the following framework.

5.15.3.8 Capital requirement for exposures to Central Counterparties (CCPs)

Scope of Application

- (i) Exposures to central counterparties arising from OTC derivatives transactions, exchange traded derivatives transactions, securities financing transactions (SFTs) and long settlement transactions will be subject to the counterparty credit risk treatment as indicated in the paragraphs below. Long Settlement Transactions are transactions where a counterparty undertakes to deliver a security, or a foreign exchange amount against cash, other financial instruments, or vice versa, at a settlement or delivery date that is contractually specified as more than the lower of the market standard for this particular instrument and five business days after the date on which the bank enters into the transaction.
- (ii) Exposures arising from the settlement of cash transactions (equities, fixed income, spot FX, commodity etc.) are not subject to this treatment. The settlement of cash transactions remains subject to the treatment described in paragraph 5.15.4 of this Circular.
- (iii) When the clearing member bank-to-client bank leg of an exchange traded derivatives transaction is conducted under a bilateral agreement, both the client bank and the clearing member bank are to capitalise that transaction as an OTC derivative.
- (iv) For the purpose of capital adequacy framework, a CCP will be considered as a financial institution. Accordingly, a bank's investments in the capital of CCPs will be guided in terms of paragraph 4.4.9 of this Circular.
- (v) Capital requirements will be dependent on the nature of CCPs, viz., Qualifying CCPs (QCCPs) and non-Qualifying CCPs. A Qualifying CCP has been defined under paragraph 5.15.3.3 of this Circular.
 - a. Regardless of whether a CCP is classified as a QCCP or not, a bank retains the responsibility to ensure that it maintains adequate capital for its exposures. Under Pillar 2, a bank should consider whether it might need to hold capital in excess of the minimum capital requirements if, for example, (i) its dealings with a CCP give rise to more risky exposures or (ii) where, given the context of that bank's dealings, it is unclear that the CCP meets the definition of a QCCP. As regards designation of CCPs as

QCCPs, please follow the RBI circular on Banks' Exposure to Central Counterparties (CCPs) dated January 7, 2014.

- b. Banks may be required to hold additional capital against their exposures to QCCPs via Pillar 2, if in the opinion of RBI, it is necessary to do so.
- c. Where the bank is acting as a clearing member, the bank should assess through appropriate scenario analysis and stress testing whether the level of capital held against exposures to a CCP adequately addresses the inherent risks of those transactions. This assessment will include potential future or contingent exposures resulting from future drawings on default fund commitments, and/or from secondary commitments to take over or replace offsetting transactions from clients of another clearing member in case of this clearing member defaulting or becoming insolvent.
- d. A bank must monitor and report to senior management and the appropriate committee of the Board (e.g. Risk Management Committee) on a regular basis (quarterly or at more frequent intervals) all of its exposures to CCPs, including exposures arising from trading through a CCP and exposures arising from CCP membership obligations such as default fund contributions.
- e. Unless Reserve Bank (DBR) requires otherwise, the trades with a former QCCP may continue to be capitalised as though they are with a QCCP for a period not exceeding three months from the date it ceases to qualify as a QCCP. After that time, the bank's exposures with such a central counterparty must be capitalised according to rules applicable for non-QCCP.

5.15.3.9 Exposures to Qualifying CCPs (QCCPs)

(i) Trade exposures

Clearing member exposures to QCCPs

Where a bank acts as a clearing member of a QCCP for its own purposes, a risk weight of 2% must be applied to the bank's trade exposure to the QCCP in respect of OTC derivatives transactions, exchange traded derivatives transactions, SFTs and long settlement transactions. Where the clearing member offers clearing services to clients, the 2% risk weight also applies to clearing members' trade exposure to the CCP that arises when the clearing member is obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that CCP defaults. The risk weight applied to collateral posted to the CCP by the bank must be determined in accordance with paragraphs under treatment of collateral posted.

The exposure amount for such trade exposure will be calculated in accordance with the Standardised Approach for Counterparty Credit Risk (SA-CCR) for derivatives and rules as applicable for capital adequacy for Repo / Reverse Repo-style transactions¹. For this purpose, a minimum margin period of risk of 10 days has to be used for computation of trade exposures to CCPs for OTC derivatives. Where CCPs retain variation margin against certain trades and the collateral given is not protected against the insolvency of the CCP, the minimum time risk horizon applied to banks' trade exposures on this trades must be the lesser of one year and the remaining maturity of the transactions, with a floor of 10 business days.

Where settlement is legally enforceable on a net basis in an event of default and regardless of whether the counterparty is insolvent or bankrupt, the total replacement cost of all contracts relevant to the trade exposure determination can be calculated as a net replacement cost if the applicable close-out netting sets meet the requirements set out in **Appendix 1**.

Banks will have to demonstrate that the conditions mentioned in **Appendix 1** are fulfilled on a regular basis by obtaining independent and reasoned legal opinion as regards legal certainty of netting of exposures to QCCPs. Banks may also obtain from the QCCPs, the legal opinion taken by the respective QCCPs on the legal certainty of their major activities such as settlement finality, netting, collateral arrangements (including margin arrangements); default procedures etc. If the bank cannot demonstrate that netting agreements meet these requirements, each single transaction will be regarded as a netting set of its own for the calculation of trade exposure.

Clearing member bank exposures to clients

The clearing member will always capitalise its exposure (including potential CVA risk exposure) to clients as bilateral trades, irrespective of whether the clearing member guarantees the trade or acts as an intermediary between the client and the QCCP. However, to recognize the shorter close-out period for cleared transactions, clearing members can capitalize the exposure to their clients by applying a margin period of risk of at least five days while computing the trade exposure using the SA-CCR.

If a clearing member collects collateral from a client for client cleared trades and this collateral is passed on to the CCP, the clearing member may recognise this collateral for both the CCP-clearing member leg and the clearing member-client leg of the client cleared trade. Therefore, initial margin posted by clients to their clearing member mitigates the exposure the clearing member has against these clients. The same treatment applies, in an analogous fashion, to multi-level client structures (between a higher level client and a lower level client).

¹ Please refer to paragraph 7.3.8 of this Master Circular.

For this purpose, a multi-level client structure is one in which banks can centrally clear as indirect clients; that is, when clearing services are provided to the bank by an institution which is not a direct clearing member, but is itself a client of a clearing member or another clearing client. For exposures between clients and clients of clients, these guidelines use the term “higher level client” for the institution providing clearing services; and the term “lower level client” for the institution clearing through that client.

Client bank exposures to clearing member

Where a bank is a client of the clearing member, and enters into a transaction with the clearing member acting as a financial intermediary (i.e. the clearing member completes an offsetting transaction with a QCCP), the client’s exposures to the clearing member will receive the treatment applicable to the paragraph “clearing member exposure to QCCPs” of this section (mentioned above), if following conditions are met. Likewise, where a client enters into a transaction with the CCP, with a clearing member guaranteeing its performance, the client’s exposures to the CCP may receive the treatment mentioned in the paragraph “clearing member exposure to QCCPs” if conditions below are met. This treatment will also be applicable to exposures of lower level clients to higher level clients, provided that for client levels in-between the conditions below are met.

- (a) The offsetting transactions are identified by the QCCP as client transactions and collateral to support them is held by the QCCP and / or the clearing member, as applicable, under arrangements that prevent any losses to the client due to:
 - (i) the default or insolvency of the clearing member;
 - (ii) the default or insolvency of the clearing member’s other clients; and
 - (iii) the joint default or insolvency of the clearing member and any of its other clients. That is, upon the insolvency of the clearing member, there is no legal impediment (other than the need to obtain a court order to which the client is entitled) to the transfer of the collateral belonging to clients of a defaulting clearing member to the CCP, to one or more other surviving clearing members or to the client or the client’s nominee.

The client must have conducted a sufficient legal review (and undertake such further review as necessary to ensure continuing enforceability) and have a well-founded basis to conclude that, in the event of legal challenge, the relevant courts and administrative authorities would find that such arrangements mentioned above would be legal, valid, binding and enforceable under the relevant laws of the relevant jurisdiction(s).

- (b) Relevant laws, regulations, rules, contractual, or administrative arrangements provide that the offsetting transactions with the defaulted or insolvent clearing member are highly likely to continue to be indirectly transacted through the QCCP, or by the QCCP, should the clearing member default or become insolvent. In such circumstances, the client positions and collateral with the QCCP will be transferred at the market value unless the client requests to close out the position at the market value.

Where a client is not protected from losses in the case that the clearing member and another client of the clearing member jointly default or become jointly insolvent, but all other conditions mentioned above are met and the concerned CCP is a QCCP, a risk weight of 4% will apply to the client's exposure to the clearing member.

Where the client bank does not meet the requirements in the above paragraphs, the bank will be required to capitalize its exposure (including potential CVA risk exposure) to the clearing member as a bilateral trade.

Treatment of posted collateral

- (a) In all cases, any assets or collateral posted must, from the perspective of the bank posting such collateral, receive the risk weights that otherwise applies to such assets or collateral under the capital adequacy framework, regardless of the fact that such assets have been posted as collateral. Thus collateral posted from Banking Book will receive Banking Book treatment and collateral posted from Trading Book will receive Trading Book treatment. In addition, this collateral is subject to the counterparty credit risk framework of the Basel rules, regardless of whether it is in the Banking Book or Trading Book. This includes the increase due to haircuts under either the standardised supervisory haircuts or own estimates. Where assets or collateral of a clearing member or client are posted with a QCCP or a clearing member and are not held in a bankruptcy remote manner, the bank posting such assets or collateral must also recognise credit risk based upon the assets or collateral being exposed to risk of loss based on the creditworthiness of the entity holding such assets or collateral. Where the entity holding such assets or collateral is the QCCP, a risk-weight of 2% applies to collateral included in the definition of trade exposures. The relevant risk-weight of the QCCP will apply to assets or collateral posted for other purposes. Collateral posted which is not held in the bankruptcy remote manner must be accounted for in the Net Independent Collateral Amount (NICA) while computing exposure using SA-CCR.
- (b) Collateral posted by the clearing member (including cash, securities, other pledged assets, and excess initial or variation margin, also called over-

collateralisation), that is held by a custodian², and is bankruptcy remote from the QCCP, is not subject to a capital requirement for counterparty credit risk exposure to such bankruptcy remote custodian.

- (c) Collateral posted by a client bank, that is held by a custodian, and is bankruptcy remote from the QCCP, the clearing member bank and other client banks, is not subject to a capital requirement for counterparty credit risk. If the collateral is held at the QCCP on a client's behalf and is not held on a bankruptcy remote basis, a 2% risk weight will be applied to the collateral if the conditions established in paragraph on "client bank exposures to clearing members" of this section are met (mentioned above). A risk weight of 4% will be made applicable if a client is not protected from losses in the case that the clearing member and another client of the clearing member jointly default or become jointly insolvent, but all other conditions mentioned in paragraph on "client bank exposures to clearing members" of this section are met. If none of these requirements are fulfilled, capital requirements for the collateral posted will be as applicable to an exposure to CCPs not covered under clearing exposure.

(ii) Default Fund Exposures to QCCPs

Where a default fund is shared between products or types of business with settlement risk only (eg equities and bonds) and products or types of business which give rise to counterparty credit risk ie OTC derivatives, exchange-traded derivatives, SFTs or long settlement transactions, all of the default fund contributions will receive the risk weight determined according to the formulae and methodology set forth below, without apportioning to different classes or types of business or products. However, where the default fund contributions from clearing members are segregated by product types and only accessible for specific product types, the capital requirements for those default fund exposures determined according to the formulae and methodology set forth below must be calculated for each specific product giving rise to counterparty credit risk. In case the CCP's prefunded own resources are shared among product types, the CCP will have to allocate those funds to each of the calculations, in proportion to the respective product specific exposure.

Whenever a bank is required to capitalise for exposures arising from default fund contributions to a QCCP, clearing member banks will apply the approach set out in Appendix 2. This approach directly computes capital requirements for default fund

² In this paragraph, the word "custodian" may include a trustee, agent, pledgee, secured creditor or any other person that holds property in a way that does not give such person a beneficial interest in such property and will not result in such property being subject to legally-enforceable claims by such persons, creditors, or to a court-ordered stay of the return of such property, should such person become insolvent or bankrupt.

exposures to QCCPs. The capital requirement thus computed can be converted into risk weighted assets by multiplying with a factor of 12.5.

Cap with regard to QCCPs

Where the sum of a bank's capital charges for exposures to a qualifying CCP due to its trade exposure and default fund contribution is higher than the total capital charge that would be applied to those same exposures if the CCP were for a non-qualifying CCP, the latter total capital charge shall be applied.

5.15.3.10 Exposures to non-qualifying CCPs

Banks have to apply the Standardised Approach for credit risk in the main framework, according to the category of the counterparty, to their trade exposure to a non-qualifying CCP. Further, a risk weight of 1250% will apply to their default fund contributions to a non-qualifying CCP. For the purposes of this paragraph, the default fund contributions of such banks will include both the funded and the unfunded contributions which are liable to be paid if the CCP so requires. Where there is a liability for unfunded contributions (ie unlimited binding commitments), RBI will review in its Pillar 2 assessments the amount of unfunded commitments to which a 1250% risk weight applies.

Requirements for Recognition of Net Replacement Cost in Close-out Netting Sets

A. For repo-style transactions

The effects of bilateral netting agreements covering repo-style transactions will be recognised on a counterparty-by-counterparty basis if the agreements are legally enforceable in each relevant jurisdiction upon the occurrence of an event of default and regardless of whether the counterparty is insolvent or bankrupt. In addition, netting agreements must:

- (a) provide the non-defaulting party the right to terminate and close-out in a timely manner all transactions under the agreement upon an event of default, including in the event of insolvency or bankruptcy of the counterparty;
- (b) provide for the netting of gains and losses on transactions (including the value of any collateral) terminated and closed out under it so that a single net amount is owed by one party to the other;
- (c) allow for the prompt liquidation or setoff of collateral upon the event of default; and
- (d) be, together with the rights arising from the provisions required in (a) to (c) above, legally enforceable in each relevant jurisdiction upon the occurrence of an event of default and regardless of the counterparty's insolvency or bankruptcy.

B. For Derivatives transactions

Banks may net transactions for the purpose of these guidelines (e.g., when determining the RC component of a netting set) subject to novation under which any obligation between a bank and its counterparty to deliver a given currency on a given value date is automatically amalgamated with all other obligations for the same currency and value date, legally substituting one single amount for the previous gross obligations. Banks may also net transactions subject to any legally valid form of bilateral netting not covered in the preceding sentence, including other forms of novation. In every such case where netting is applied, a bank must satisfy that it has:

- (i) A netting contract with the counterparty or other agreement which creates a single legal obligation, covering all included transactions, such that the bank would have either a claim to receive or obligation to pay only the net sum of the positive and negative mark-to-market values of included individual transactions in the event a counterparty fails to perform due to any of the following: default, bankruptcy, liquidation or similar circumstances; (the netting contract must not contain any clause which, in the event of default of a counterparty, permits a

non-defaulting counterparty to make limited payments only, or no payments at all, to the estate of the defaulting party, even if defaulting party is a net creditor)

- (ii) Written and reasoned legal reviews that, in the event of a legal challenge, the relevant courts and administrative authorities would find the bank's exposure to be such a net amount under:
- The law of the jurisdiction in which the counterparty is incorporated and, if the foreign branch of a counterparty is involved, then also under the law of the jurisdiction in which the branch is located;
 - The law that governs the individual transactions; and
 - The law that governs any contract or agreement necessary to effect the netting.

[if RBI is not satisfied about enforceability under relevant laws, , the benefit of netting while computing exposure amount cannot be obtained.]

- (iii) Procedures in place to ensure that the legal characteristics of netting arrangements are kept under review in light of the possible changes in relevant law.

A netting set is a group of transactions with a single counterparty that are subject to a legally enforceable bilateral netting arrangement and for which netting is recognised for regulatory capital purposes under the provisions of above requirements. These requirements have to be satisfied on an on-going basis.

Computation of capital charge for Default Fund Exposures to QCCPs

Clearing member banks will apply a risk weight to their default fund contributions determined according to a risk sensitive formula that considers (i) the size and quality of a qualifying CCP's financial resources, (ii) the counterparty credit risk exposures of such CCP, and (iii) the application of such financial resources via the CCP's loss bearing waterfall, in the case of one or more clearing member defaults. The clearing member bank's risk sensitive capital requirement for its default fund contribution (KCMi) must be calculated using the formulae and methodology set forth below. This calculation will be performed by the QCCP by following the relevant provisions of this section, and the accuracy and integrity of the computation will be reviewed by the concerned CCP's supervisor at least on a quarterly basis. *Failure to perform the required computation which is in accordance with this section and its review by the CCP's supervisor will make the CCP as non-QCCP.*

The steps for calculation will be the following:

First, calculate the hypothetical capital requirement of the CCP due to its counterparty credit risk exposures to all of its clearing members and their clients. Kccp is a hypothetical capital requirement for a CCP, calculated on a consistent basis for the sole purpose of determining the capitalisation of clearing member default fund contributions; it does not represent the actual capital requirements for a CCP which may be determined by a CCP and its supervisor. Kccp is calculated using the formula:

$$K_{ccp} = \sum_{CM_i} EAD_i * RW * 8\%$$

Where

RW is a risk weight of 20%. This risk weight may be increased if RBI considers it necessary to do so.

EAD_i is the exposure amount of the CCP to Clearing Member (CM) 'i', including both the CM's own transactions and client transactions guaranteed by the CM, and all values of the collateral held by the CCP (including the CM's prefunded default fund contribution) against these transactions, relating to the valuation at the end of the regulatory reporting date before the margin called on the final margin call of that day exchanged.

The sum is over all clearing member accounts.

Where clearing members provide client clearing services, and client transactions and collateral are held in separate (individual or omnibus) sub-accounts to the clearing member's proprietary business, each such client sub-account should enter the sum

separately, ie the member EAD in the formula above is then the sum of the client sub-account EADs and any house sub-account EAD. This will ensure that client collateral cannot be used to offset the CCP's exposures to clearing members' proprietary activity in the calculation of KCCP. If any of these sub-accounts contains both derivatives and SFTs, the EAD of that sub-account is the sum of the derivative EAD and the SFT EAD.

In the case that collateral is held against an account containing both SFTs and derivatives, the prefunded initial margin provided by the member or client must be allocated to the SFT and derivatives exposures in proportion to the respective product specific exposures, calculated according to relevant provisions applicable for SFTs and other transactions.

If the default fund contributions of the member (DFi) are not split with regard to client and house sub-accounts, they must be allocated per sub-account according to the respective fraction the initial margin of that sub-account has in relation to the total initial margin posted by or for the account of the clearing member.

For derivatives, EAD_i is calculated as the bilateral trade exposure the CCP has against the clearing member using the SA-CCR. A margin period of risk of 10 days must be used to calculate the CCP's potential future exposure to its clearing members on derivative transactions. All collateral held by a CCP to which that CCP has a legal claim in the event of the default of the member or client, including default fund contributions of that member (DFi), is used to offset the CCP's exposure to that member or client, through inclusion in the PFE multiplier in accordance with the provisions for computing multiplier under SA-CCR for computing aggregate PFE.

For SFTs, EAD is equal to $\max(EBRM_i - IM_i - DFi; 0)$, where

-EBRM_i denotes the exposure value to clearing member 'i' before risk mitigation; where, for the purposes of this calculation, variation margin that has been exchanged (before the margin called on the final margin call of that day) enters into the mark-to-market value of the transactions;

-IM_i is the initial margin collateral posted by the clearing member with the CCP;

-DF_i is the prefunded default fund contribution by the clearing member that will be applied upon such clearing member's default, either along with or immediately following such member's initial margin, to reduce the CCP loss.

Any haircuts to be applied for SFTs must be the standard supervisory haircuts prescribed under the credit risk mitigation section of this master circular.

As regards the calculation in this first step:

The netting sets that are applicable to regulated clearing members are the same as those referred to in the above paragraph on clearing member exposure to QCCPs of

this section. For all other clearing members, they need to follow the netting rules as laid out by the CCP based upon notification of each of its clearing members.

Second, calculate the capital requirement for each clearing member using following formula:

$$K_{CM_i} = \max \left(K_{CCP} * \left(\frac{DF_i^{pref}}{DF_{CCP} + DF_{CM}^{pref}} \right); 8\% * 2\% * DF_i^{pref} \right)$$

Where

K_{CM_i} – is the capital requirement on the default fund contribution of member i;

DF_{CM}^{pref} – the total prefunded default fund contributions from clearing members;

DF_{CCP} – the CCP's prefunded own resources (eg contributed capital, retained earnings, etc), which are contributed to the default waterfall, where these are junior or pari passu to prefunded member contributions; and

DF_i^{pref} - the prefunded default fund contributions provided by clearing member i.

This approach puts a floor on the default fund exposure risk weight of 2%.

The QCCP, must make a calculation of K_{ccp} , DF_{ccp} and DF_{CM}^{pref} in such a way to permit the supervisor of the CCP to oversee those calculations, and it must share sufficient information of the calculation results to permit each clearing member bank to calculate their capital requirement for the default fund. Banks should ensure that relevant supervisor/regulator of QCCP has confirmed the accuracy of computations performed by the concerned QCCP.

K_{ccp} must be calculated on a quarterly basis at a minimum. However, in cases where there are material changes like CCP starting clearing of a new products, etc. the computation will be done more frequently.

The CCP must make available to the supervisor of any bank clearing member sufficient aggregate information about the composition of the CCP's exposures to clearing members and information provided to the clearing member for the purposes of the calculation.

Such information must be provided no less frequently than the bank supervisor would require for monitoring the risk of the clearing member that it supervises. K_{ccp} and K_{CM_i} must be recalculated at least quarterly, and should also be recalculated when there are material changes to the number or exposure of cleared transactions or material changes to the financial resources of the CCP.
