Capital requirements for bank exposures to central counterparties

The proposed framework for determining capital requirements for bank exposures to central counterparties is an interim framework. This is being introduced by way of additions / amendments to the 'Master Circular - Prudential Guidelines on Capital Adequacy and Market Discipline- New Capital Adequacy Framework' issued vide DBOD.No.BP.BC.16 /21.06.001/2012-13 dated July 2, 2012 (hereinafter referred to as "NCAF") read with 'Guidelines on Implementation of Basel III Capital Regulations in India' issued vide DBOD.No.BP.BC.98 /21.06.201/2011-12 (hereinafter referred to as "Basel III Capital Regulation") dated May 2, 2012. The effective date of implementation of these guidelines would be as on April 1, 2013.

A. Present framework for capitalization of CCP exposures

Presently, treatment of exposures to Central Counterparties for the purpose of capital adequacy is as under:

- (i) The exposures on account of derivatives trading and securities financing transactions (e.g. Collateralised Borrowing and Lending Obligations CBLOs, Repos) to Central Counter Parties (CCPs) including those attached to stock exchanges for settlement of exchange traded derivatives, are assigned zero exposure value for counterparty credit risk, as it is presumed that the CCPs' exposures to their counterparties are fully collateralised on a daily basis, thereby providing protection for the CCP's credit risk exposures.
- (ii) A CCF of 100% are applied to the securities posted as collaterals with CCPs and the resultant off-balance sheet exposure will be assigned risk weights appropriate to the nature of the CCPs. In the case of Clearing Corporation of India Limited (CCIL), the risk weight will be 20% and for other CCPs, it will be according to the ratings assigned to these entities.
- (iii) The deposits kept by banks with the CCPs will attract risk weights appropriate to the nature of the CCPs. In the case of Clearing Corporation of India Limited (CCIL), the risk weight will be 20% and for other CCPs, it will be according to the ratings assigned to these entities.

B. Proposed Interim Framework

Background:

- (i) One of the lessons learnt from the recent crisis has been that OTC derivatives market may be one of the channels for contagion during the crisis. It was therefore, decided by the G20 leaders that standardized OTC derivative contracts should be settled through CCPs. Central clearing will reduce systemic risk by reducing the contagion risk as problems at one institution will not be transmitted to other institutions through OTC derivatives market. However, requirement of central clearing also concentrates too much risk within the CCPs and any failure of a CCP may be catastrophic for the entire financial system.
- (ii) Due to these reasons, the BCBS has formulated an interim framework for the capitalization of banks' exposure to CCPs in such a way that incentivizes robust regulation and supervision of CCPs and also very high standards of risk management within the CCPs. Under the new framework, banks' exposure to CCPs arising from OTC derivatives, exchange traded derivatives and Securities Financing Transactions (SFTs) will be subjected to capital requirements for counterparty credit risk.

Part A: Addition to the Existing Guidelines

To clarify certain terms used in this Framework, following definitions have been **added** to the Annex 2 of the Basel III capital regulation (circular No DBOD.No.BP.BC.98 /21.06.201/2011-12 dated May 2, 2012):

Addition to the sub-paragraph 5.15.3.3: Definitions and general terminology of Basel III Capital Regulations

- A **central counterparty** (CCP) is 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 and thereby ensuring the future performance of open contracts. 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.
- A qualifying central counterparty (QCCP) is an entity that is licensed to

operate as a CCP (including a license granted by way of confirming an exemption), and is permitted by the appropriate regulator/overseer to operate as such with respect to the products offered. This is subject to the provision that the CCP is 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 CPSS-IOSCO Principles for Financial Market Infrastructures.

- A **clearing member** is a member of, or a direct participant in, a CCP that is entitled to enter into a transaction with the CCP, regardless of whether it enters into trades with a CCP for its own hedging, investment or speculative purposes or whether it also enters into trades as a financial intermediary between the CCP and other market participants¹.
- A **client** is 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.
- **Initial margin** means a clearing member's or client's funded collateral posted to the CCP to mitigate the potential future exposure of the CCP to the clearing member arising from the possible future change in the value of their transactions. For the purposes of these guidelines, initial margin does not include contributions to a CCP for mutualised loss sharing arrangements (ie in case a CCP uses initial margin to mutualise losses among the clearing members, it will be treated as a default fund exposure).
- **Variation margin** means a clearing member's or client's funded collateral posted on a daily or intraday basis to a CCP based upon price movements of their transactions.
- **Trade exposures** include the current² and potential future exposure of a clearing member or a client to a CCP arising from OTC derivatives, exchange traded derivatives transactions or SFTs, as well as initial margin.
- Default funds, also known as clearing deposits or guaranty fund contributions (or any other names), are clearing members' funded or unfunded contributions towards, or underwriting of, a CCP's mutualised loss sharing

¹ For the purposes of this Annex, where a CCP has a link to a second CCP, that second CCP is to be treated as a clearing member of the first CCP. Whether the second CCP's collateral contribution to the first CCP is treated as initial margin or a default fund contribution will depend upon the legal arrangement between the CCPs. In such cases, if any, RBI should be consulted for determining the treatment of this initial margin and default fund contributions.

² For the purposes of this definition, the current exposure of a clearing member includes the variation margin due to the clearing member but not yet received.

arrangements. The description given by a CCP to its mutualised loss sharing arrangements is not determinative of their status as a default fund; rather, the substance of such arrangements will govern their status.

• Offsetting transaction means the transaction leg between the clearing member and the CCP when the clearing member acts on behalf of a client (eg when a clearing member clears or novates a client's trade).

Capital requirements for exposures to Central Counterparties

New sub-paragraphs **5.15.3.8 to 5.15.3.11** on CCPs will be added in Basel III capital regulations as indicated below:

5.15.3.8 Scope of Application

- (i) Exposures to central counterparties arising from OTC derivatives, exchange traded derivatives transactions and SFTs will be subject to the counterparty credit risk treatment laid out in this circular.
- (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 5.15.5 of NCAF (and as amended under Basel III Capital Regulations on page No. 48).
- (iii) When the clearing member-to-client leg of an exchange traded derivatives transaction is conducted under a bilateral agreement, both the client bank and the clearing member are to capitalise that transaction as an OTC derivative.
- (iv) For the purpose of regulatory capital calculation, CCPs will be considered as a financial institution. Accordingly, a bank's investments in the capital of CCPs will be guided in terms of paragraph 4.9, Section C of Annex 1 of Basel III Capital Regulation (circular No DBOD.No.BP.BC.98 /21.06.201/2011-12 dated May 2, 2012).
- (v) Capital requirements will be dependent on the nature of CCPs:
 - (a) For the purpose of capital requirements applicable to exposures to CCPs, CCPs have been divided into two groups: Qualifying CCPs (QCCPs) and non-Qualifying CCPs.
 - (b) QCCP has been defined in the para 5.15.3.3 (second bullet point).
 - (c) Presently, no regulator / supervisor has announced / disclosed any CCP as QCCP for the purpose of application of rules relating to capitalization of

bank exposures to CCPs. Therefore, all CCPs will be treated as non-QCCP till such time the relevant CCP regulator / supervisor publicly discloses that the supervised CCPs are meeting all the criteria relating to QCCP.

- (d) Regardless of whether a CCP is classified as a QCCP, 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.
- (e) 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.
- (f) 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.
- (g) Within three months of a central counterparty ceasing to qualify as a QCCP, unless Reserve Bank (DBOD) requires otherwise, the trades with a former QCCP may continue to be capitalised as though they are with 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

(i) Trade exposures

Clearing member exposures to CCPs

 Where a bank acts as a clearing member of a CCP for its own purposes, a risk weight of 2% must be applied to the bank's trade exposure to the CCP in respect of OTC derivatives, exchange traded derivative transactions and SFTs. The exposure amount for such trade exposure will be calculated in accordance with the Current Exposure Method (CEM) for derivatives or rules as applicable for capital adequacy for Repo / Reverse Repo-style transactions.

Exposures to Clearing Corporation of India Ltd (CCIL) to be reckoned on net basis

In cases, where the CCIL provides guaranteed settlement, banks may reckon their total replacement cost (MTM) on net basis i.e. on net replacement cost as part of trade exposure determination.

Exposures to other CCPs to be reckoned on gross basis

In case of such CCPs, the total replacement cost (MTM) will be computed on gross basis i.e. gross replacement cost as part of trade exposure determination.

Clearing member 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 CCP.

Client exposures

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 CCP), the client's exposures to the clearing member will be capitalized as its exposure (including potential CVA risk exposure) to clearing member as bilateral trades.

Treatment of posted collateral

• 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. Where assets or collateral of a clearing member or client are posted with a CCP 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 entity³ holding such assets or collateral.

³ Where the entity holding such assets or collateral is the CCP, a risk-weight of 2% applies to collateral included in the definition of trade exposures. The relevant risk-weight of the CCP will

- 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 custodian⁴, and is bankruptcy remote from the CCP, is not subject to a capital requirement for counterparty credit risk exposure to such bankruptcy remote custodian.
- Collateral posted by a client, that is held by a custodian, and is bankruptcy remote from the CCP, the clearing member and other clients, is not subject to a capital requirement for counterparty credit risk. If the collateral is held at the CCP on a client's behalf and is not held on a bankruptcy remote basis, the relevant risk-weight of the CCP will apply to assets or collateral posted.

(ii) Default Fund Exposures to QCCPs

- (a) Where a default fund is shared between products or types of business with settlement risk only (e.g. equities and bonds) and products or types of business which give rise to counterparty credit risk i.e. OTC derivatives, exchange traded derivatives or SFTs, 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.
- (b) 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 i.e. EAD.
- (c) Clearing member banks are required to capitalise its exposures arising from default fund contributions to a qualifying CCP by applying the following formula:
 - Clearing member banks may apply a risk-weight of 1111% to their default fund exposures to the qualifying CCP, subject to an overall cap

apply to assets or collateral posted for other purposes.

⁴ 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.

on the risk-weighted assets from all its exposures to the CCP (i.e. including trade exposures) equal to 20% times the trade exposures to the CCP. More specifically, the Risk Weighted Assets (RWA) for both bank *i*'s trade and default fund exposures to each CCP are equal to 5:

- -TE; is bank i's trade exposure to the CCP; and
- -DF_i is bank *i*'s pre-funded contribution to the CCP's default fund.

5.15.3.10 Expsoures to QCCPs may attract additional capital requirement

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. This might be considered appropriate where, for example, an external assessment such as an Financial Sector Assessment Program (FSAP) has found material shortcomings in the CCP or the regulation of CCPs, and the CCP and / or the CCP regulator have not since publicly addressed the issues identified.

5.15.3.11 Exposures to Non-qualifying CCPs

- (a) Banks must apply the Standardised Approach for credit risk according to the category of the counterparty, to their trade exposure to a non-qualifying CCP⁶.
- (b) Banks must apply a risk weight of 1111% to their default fund contributions to a non-qualifying CCP.
- (c) 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 should the CCP so require. Where there is a liability for unfunded contributions (i.e. unlimited binding commitments) the Reserve Bank will determine in its Pillar 2 assessments the amount of unfunded commitments to which an 1111% risk weight should apply to.

An illustration of present and proposed framework for capital requirements for

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⁵ The 2% risk weight on trade exposures does not apply additionally, as it is included in the equation.

⁶ In cases where a CCP is to be considered as non-QCCP and the exposure is to be reckoned on CCP, the applicable risk weight will be according to the ratings assigned to the CCPs. However, in the case of CCIL, a risk weight of 20 per cent will be applied.

bank exposure to central counterparties have been furnished in **Appendix**.

Part B: Deletion / Amendments to existing guidelines

Consequential changes to the Basel III Capital Regulation and Guidelines on Implementation of the Internal Rating Based (IRB) Approaches for Calculation of Capital Charge for Credit Risk (circular DBOD.No.BP.BC.67/21.06.202/2011-12 dated December 22, 2011) i.e. deletion / amendments are as under:

I. Deletion

- A. Following paragraphs of Basel III Capital Regulation will be deleted consequent upon the implementation of the new framework on capital requirements for bank exposure to CCPs.
- **5.15.3.4 (i):** The exposures on account of derivatives trading and securities financing transactions (e.g. Collateralised Borrowing and Lending Obligations CBLOs, Repos) to Central Counter Parties (CCPs) including those attached to stock exchanges for settlement of exchange traded derivatives, will be assigned zero exposure value for counterparty credit risk, as it is presumed that the CCPs' exposures to their counterparties are fully collateralised on a daily basis, thereby providing protection for the CCP's credit risk exposures.
- **5.15.3.4 (ii):** A CCF of 100 per cent will be applied to the banks' securities posted as collaterals with CCPs and the resultant off-balance sheet exposure will be assigned risk weights appropriate to the nature of the CCPs. In the case of Clearing Corporation of India Limited (CCIL), the risk weight will be 20 per cent and for other CCPs, it will be according to the ratings assigned to these entities.
- B. Para 1 and 2 of Annex 7 of guidelines on Implementation of the Internal Rating Based (IRB) Approaches for Calculation of Capital Charge for Credit Risk (circular DBOD.No.BP.BC.67/21.06.202/2011-12 dated December 22, 2011) as mentioned below will be deleted:

Transactions involving Central Counterparties

- 1. The exposures to Central Counter Parties (CCPs), on account of derivatives trading and securities financing transactions (e.g. Collateralised Borrowing and Lending Obligations, Repos, Reverse Repos) outstanding against them will be assigned zero exposure value for counterparty credit risk, as it is presumed that the CCPs' exposures to their counterparties are fully collateralised on a daily basis, thereby providing protection for the CCP's credit risk exposures.
- 2. Banks' securities posted as collaterals with CCPs and the resultant off-balance sheet exposure will be assigned risk weights as per the standardised approach appropriate to the nature of the CCPs and will be subject to review.

II. Amendment

Following paragraphs of NCAF and Internal Rating Based (IRB) Approaches for Calculation of Capital Charge for Credit Risk (circular DBOD.No.BP.BC.67/21.06.202/2011-12 dated December 22, 2011) will be amended, with changes indicated in **Bold and underlined**:

Para 5.15.5 (iii) of NCAF:

Failure of transactions settled through a delivery-versus-payment system (DvP), providing simultaneous exchanges of securities for cash, expose banks to a risk of loss on the difference between the transaction valued at the agreed settlement price and the transaction valued at current market price (i.e. positive current exposure). Failed transactions where cash is paid without receipt of the corresponding receivable (securities, foreign currencies, or gold,) or, conversely, deliverables were delivered without receipt of the corresponding cash payment (non-DvP, or freedelivery) expose banks to a risk of loss on the full amount of cash paid or deliverables delivered. Therefore, a capital charge is required for failed transactions and must be calculated as under. The following capital treatment is applicable to all failed transactions, including transactions through recognised clearing houses and Central Counterparties. Repurchase and reverse-repurchase agreements as well as securities lending and borrowing that have failed to settle are excluded from this capital treatment.

Para 5 (iii) of guidelines on IRB: Failure of transactions settled through a delivery-versus-payment system (DvP), providing simultaneous exchanges of securities for cash, expose banks to a risk of loss on the difference between the transaction valued at the agreed settlement price and the transaction valued at current market price (i.e. positive current exposure). Failed transactions where cash is paid without receipt of the corresponding receivable (securities, foreign currencies, or gold,) or, conversely, deliverables were delivered without receipt of the corresponding cash payment (non-DvP, or free delivery) expose banks to a risk of loss on the full amount of cash paid or deliverables delivered. Therefore, a capital charge is required for failed transactions and must be calculated. The following capital treatment is applicable to all failed transactions, including transactions through recognised clearing houses and Central Counterparties. Repurchase and reverse-repurchase agreements as well as securities lending and borrowing that have failed to settle are excluded from this capital treatment.

Appendix

Current and proposed capital adequacy framework on bank exposures to CCPs on account of derivatives and SFTs

Particulars	Existing guidelines	Proposed Guidelines
Exchange traded derivatives	(i) zero trade exposure (TE) (ii) deposits / collaterals placed with CCPs - RWs according to the ratings of CCPs	(i) For QCCP Min {(2% * TE _i + 1111% * DF _i); (20% * TE _i)}
		DF exposure – to be capitalized at 100% rate i.e. 1111% RWs
OTC derivatives - if settled through CCIL on	(i) zero trade exposure (ii) deposits / collaterals with CCIL- 20% RWs	(i) QCCP Min {(2% * TE _i + 1111% * DF _i); (20% * TE _i)}
guaranteed basis [Securities segment		TE – MTMs based on multilateral netting as recognized under PSS, Act + PFE
covering Government Securities, Forex		(ii) Non-QCCP TE - CCR charge as per CEM + SCVA capital charge
Settlement segment comprising of USD-INR		TE – MTMs based on multilateral netting as recognized under PSS, Act + PFE
segment and Forex Forwards segment]		DF exposure – to be capitalized at 100% rate i.e. 1111% RWs

OTC derivatives- if settled through CCIL on a non- guaranteed basis [IRS/FRA segment]	(i) CCR charge as per CEM (ii) deposits / collaterals with CCIL- 20% RW	TE - CCR charge as per CEM + SCVA capital charge TE - MTMs on gross basis and PFE.
SFTs – if settled through CCIL on a guaranteed basis [CBLO]	(ii) zero trade exposure (ii) deposits / collaterals with CCIL- 20% RW	(i) QCCP Min {(2% * TE _i + 1111% * DF _i); (20% * TE _i)} TE – MTMs based on multilateral netting as recognized under PSS, Act + PFE (ii) Non- QCCP DF exposure – to be capitalized at 100% rate i.e. 1111% RWs
SFTs – if settled through CCIL on a non-guaranteed basis	(i) TE – as per paragraph 7.3.8 of NCAF (ii) deposits / collaterals with CCIL- 20% RW	TE – as per paragraph 7.3.8 of NCAF