

# Capitalization of Bank Exposures to Central Counterparties

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# Banks & CCP's: Issues & Background

- **Before Basel III**, the Basel accord provided that derivatives and securities financing transactions (SFT) with central counterparties (CCP's) would receive an exposure value of zero, including credit risk, default funds (DF) and posted collateral
  - The recent financial crisis highlighted the need for banks to recognize and capitalize for counterparty credit risk (CCR) and systemic risk
- The **G-20 2009 Pittsburgh summit** agreed “all standardized OTC derivatives contracts should be cleared through central counterparties by end 2012 at the latest. ... Non-centrally cleared contracts should be subject to higher capital requirements”
  - Basel III dramatically increases the capital requirements for OTC derivatives – e.g. capitalization of credit valuation adjustment (CVA) risk; increase to asset value correlation (AVC)
- The Basel Committee on Banking Supervision (**BCBS**) is **mandated** to ensure that bank exposures, including those to CCP's, are adequately capitalized
  - CPSS-IOSCO establishes standards for CCP's and its members supervise CCP's, including their risk management and capitalization
- As **capital drives behaviour**, BCBS recognized that requiring capitalization of bank exposures to CCP's would create incentives and would impact CCP behaviours.
  - BCBS sought to ensure incentives were appropriate and consequences were not unintended
  - BCBS recognized the need to consider financial system and CCP issues – not just bank capitalization issues – and worked extensively with CPSS-IOSCO to fulfill the G-20 directive and BCBS's mandate while respecting these other priorities
  - BCBS also consulted with other stakeholders and gathered QIS data (quantitative impact studies)
- BCBS wanted to **ensure banks evaluate risks to CCP's** and track and manage exposures to CCP's
  - With a nil capital requirement, this risk management was unlikely to take place
- BCBS sought to recognise the **risk-reducing, financial stability enhancing role of CCP's** due to: multi-lateral netting; robust, centralized risk management (e.g. initial margin); and mutualisation of losses among clearing members (CM)
  - BCBS also recognized that CCP's concentrate counterparty and operational risks and present systemic risks if they fail
  - BCBS relies on CPSS-IOSCO with respect to CCP rules, supervision and capitalization - BCBS is focused on adequacy of bank capitalization and the soundness of the banking system

# Highlights of Basel III Capitalization of Bank Exposures to CCP's

- **Qualifying vs. non-qualifying CCP's** – markedly preferential capital treatment for QCCP exposures when compared to bilateral OTC derivative and SFT capital requirements
  - Qualifying CCP (QCCP) status is based on CPSS-IOSCO supervision/recognition – and the ability to provide bank's with information required to calculate capital
  - Non-qualifying exposures capitalized as bilateral OTC derivative/SFT exposures – creating a material incentive.
  - Cash settled transactions (e.g. Delivery vs. Payment) not covered by CCP rules
- **Trade related exposures**, including market to mark exposures, potential future exposures and posted collateral
  - Exposures are calculated using the exposure methodology the bank generally applies (standardized; CEM; IMM)
    - 2% risk weight on trade exposures
  - 0% risk weight on CCP for collateral posted if the collateral is bankruptcy remote (e.g. with custodian)
    - Continue to have capital requirements for collateral risk
- **System Wide CCP Failure** – National bank supervisors may, in the event of a “system wide failure” of a settlement system, clearing system or central counterparty, use discretion to waive capital charges
- **Loss of QCCP Status:** If a CCP loses its QCCP status, a 3 month grace period is available to allow banks to transition
- **Indirect CCP Access:** Where a bank is a client of a CM, and the CM is acting as a financial intermediary to offset the client's trades with a CCP, the client may treat its trade exposure to the CM as an exposure to the CCP (i.e. 2% risk weight) if:
  1. Arrangements exist that make it highly likely a trade with a defaulting CM would, via another CM or a CCP trade, continue to be cleared by the CCP and not unwound – so called “porting”
  2. The offsetting transactions between the CCP and the CM are identified as client transactions; and
  3. Collateral posted by the client to the CM is held in a way that is bankruptcy remote should the CM and/or its other clients fail
    - Reasoned legal opinions are required to support a position that the collateral is not exposed to loss when the CM and/or the CM's other clients fail
    - If the client is not protected from a joint CM and other client failure, the collateral trade exposure receives a 4% risk weight

# Highlights of Basel III Capitalization of Bank Exposures to CCP's (cont'd)

- **Default Fund (DF) Exposures to QCCP's:** As each CCP and its supervisor determine its capital and DF base, a risk sensitive approach is desirable to reflect the riskiness of a bank's participation in that CCP and to create desirable incentives
  - However, as CCPs have different business models (e.g. products; scope; collateral and DF requirements), concerns existed about whether a single risk sensitive approach could work for all CCPs, so an alternative (less risk sensitive) approach was developed
- **Risk Sensitive Approach (Method 1)** evaluates a CCP's financial resources compared to a standardized measure of the CCP's risks and evaluates a CM bank's resulting exposure to loss based on this evaluation of risks and the CCP's own financial resources and loss waterfall – it uses 3 steps:
  1. **CCP Hypothetical Capital (K<sub>ccp</sub>):** CCP's evaluate the risks to their CM's using the Current Exposure Method (CEM), as adjusted for CCPs, and after considering the collateral and DF contributed by hypothetically defaulting members.
  2. **Aggregate CM Capital Requirements (K<sub>cm</sub>):** Considering the aggregate hypothetical CCP capital requirement (K<sub>ccp</sub>), less the CCP's own DF financial resource contribution and the contribution to loss assuming the default of 2 average CM's, the aggregate CM capital requirements are calculated
    - This employs an analysis of whether the CCP's financial resources are unlikely, likely (at least in part) or highly likely to use the DF's from non-defaulting CMs to cover the losses – and creates an appropriate risk weight
    - It also considers whether non-defaulting CMs are exposed to greater risk due to inadequately funded DFs.
  3. **Allocation of CM Capital Requirements:** This is a pro-rata allocation of the capital (i.e. K<sub>cm</sub>) all CM's (if they were banks) would hold based on their pro-rata DF. An adjustment is made to recognize reduced risk for granular and diversified CCPs vs increased risk for non-granular, concentrated CCPs.
- **Alternative Approach (Method 2):** A CM bank may, as an alternative to the Risk Sensitive Approach, calculate capital using a less-risk sensitive approach – i.e. a CM bank holds capital based on RWA equal to the lesser of:
  - a) 20% of its trade exposures to a CCP; and
  - b) The aggregate of 2% of trade exposures and 1250% of its DF exposure.
  - The theory seeming to be that CCPs are at least as financially stable as banks and, under the Basel standardized approach, bank exposures would receive a 20% risk weight.

## Discussion Points

1. To support the use of the Alternative Approach to calculating capital a bank should hold when capitalizing its CCP exposures, is it reasonable to conclude that CCPs (undiversified and concentrated; varying capital requirements) are at least as stable as banks?
2. Can CCPs and their supervisors develop a better, consistent, risk sensitive methodology for calculating the risk a CM bank takes by providing a DF and reduce the need to use CEM?
3. Are DF funds limited to the amount contributed where practical circumstances (e.g. CCP arrangements for capital calls; practicalities of needing to support a CCP under stress) are considered?
4. Should CCPs, as financial market utilities, be operated as for-profit enterprises?
5. Should CCPs have implicit or explicit government support to ensure financial stability? – e.g. access to central bank liquidity
6. Does indirect clearing reduce the risk to a client if it is not assured that another CM or the CCP will take over its trades?
7. Does the non-risk sensitive method for calculating bank exposures to CCP's reasonably ensure that CCPs are treated equitably and that banks are well capitalized for these exposures?
8. Should CCP supervisors work towards a prudential capital regime for CCPs to help ensure financial stability?