

Non-Cleared Swap Margin October 2012

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Overview

In response, the Group of Twenty (G20) initiated a reform program in 2009 to reduce the systemic risk from OTC derivatives. As initially agreed-upon in 2009, the G20's reform program included four elements:

- All standardized OTC derivatives should be traded on exchanges or electronic platforms, where appropriate.
- All standardized OTC derivatives should be cleared through central counterparties (CCPs).
- OTC derivative contracts should be reported to trade repositories.
- Non-centrally-cleared derivative contracts should be subject to higher capital requirements.

Overview (continued)

- Objectives of margin requirements for non-centrally-cleared derivatives
 - Margin requirements for non-centrally-cleared derivatives have two main benefits:
 - Reduction of systemic risk
 - Margin requirements for non-centrally-cleared derivatives would be expected to reduce contagion and spillover effects by ensuring that collateral are available to offset losses caused by the default of a derivatives counterparty. Margin requirements can also have broader macro-prudential benefits, by reducing the financial system's vulnerability and limiting the build-up of uncollateralized exposures within the financial system.

Overview (continued)

- Promotion of central clearing.
 - In many jurisdictions central clearing will be mandatory for most standardized derivatives. But clearing imposes costs, in part because CCPs require margin to be posted. Margin requirements on non-centrally-cleared derivatives, by reflecting the generally higher risk associated with these derivatives, will promote central clearing, making the G20's original 2009 reform program more effective.
 - This could, in turn, contribute to the reduction of systemic risk.

Margin & Capital

- Both capital and margin perform important risk mitigation functions but are distinct in a number of ways.
 - Margin is “defaulter-pay”. In the event of a counterparty default, margin protects the surviving party by absorbing losses using the collateral provided by the defaulting entity.
 - Capital adds loss absorbency to the system, because it is “survivor-pay”, using capital to meet such losses consumes the surviving entity’s own financial resources
 - margin is more “targeted” and dynamic, with each portfolio having its own designated margin for absorbing the potential losses in relation to that particular portfolio, and with such margin being adjusted over time to reflect changes
 - Capital requirements against each exposure are not designed to be sufficient to cover the loss on the default of the counterparty but rather the probability weighted loss given such default

Margin & Capital (continued)

- For these reasons, margin can be seen as offering enhanced protection against counterparty credit risk where it is effectively implemented.
 - In order for margin to act as an effective risk mitigant, that margin must be
 - (i) accessible at the time of need
 - (ii) in a form that can be liquidated rapidly in a period of financial stress at a predictable price.

Impact of Margin Requirements on Liquidity

- The potential benefits of margin requirements must be weighed against the liquidity impact that would result from derivative counterparties' need to provide liquid, high-quality collateral to meet those requirements, including potential changes to market functioning as result of an increasing demand for such collateral in the aggregate.
- Financial institutions may need to obtain and deploy additional liquidity resources to meet margin requirements that exceed current practices.
- Moreover, the liquidity impact of margin requirements cannot be considered in isolation.
- Rather, it is important to recognize ongoing and parallel regulatory initiatives that will also have significant liquidity impacts; examples of such initiatives include the BCBS's Liquidity Coverage Ratio (LCR), Net Stable Funding Ratio (NSFR) and global mandates for central clearing of standardized derivatives.

Principles & Requirements

- Appropriate margining practices should be in place with respect to all derivative transactions that are not cleared by CCPs.
- All financial firms and systemically-important non-financial entities (“covered entities”) that engage in non-centrally-cleared derivatives must exchange initial and variation margin as appropriate to the risks posed by such transactions.
- The methodologies for calculating initial and variation margin that must serve as the baseline for margin that is collected from a counterparty should
 - (i) be consistent across entities covered by the proposed requirements and reflect the potential future exposure (initial margin) and current exposure (variation margin) associated with the portfolio of non-centrally-cleared derivatives at issue
 - (ii) ensure that all exposures are covered fully with a high degree of confidence.

Principles & Requirements

(continued)

- Assets collected as collateral for initial and variation margin purposes can be liquidated in a reasonable amount of time to generate proceeds that could sufficiently protect collecting entities covered by the proposed requirements from losses on non-centrally-cleared derivatives in the event of a counterparty default
 - These assets should be highly liquid and should, after accounting for an appropriate haircut, be able to hold their value in a time of financial stress.
- Initial margin should be exchanged by both parties, without netting of amounts collected by each party (ie on a gross basis), and held in such a way as to ensure that
 - (i) the margin collected is immediately available to the collecting party in the event of the counterparty's default
 - (ii) the collected margin must be subject to arrangements that fully protect the posting party in the event that the collecting party enters bankruptcy to the extent possible under applicable law.

Principles & Requirements

(continued)

- Transactions between a firm and its affiliates should be subject to appropriate variation margin arrangements to prevent the accumulation of significant current exposure to any affiliated entity arising out of non-centrally-cleared derivatives.
- Regulatory regimes should interact so as to result in sufficiently consistent and non- duplicative regulatory margin requirements for non-centrally-cleared derivatives across jurisdictions

Scope of Coverage

- All derivatives that are not centrally-cleared by a CCP should be subject to margining requirements.
 - All five major asset classes of derivatives
 - Interest Rate
 - Credit
 - Equity
 - Foreign Exchange
 - Commodity
 - All derivative products (both standardized and bespoke) that are not centrally cleared by a central counterparty for any reason

Scope of Coverage (continued)

- The mandatory exchange of both initial and variation margins among parties to non-centrally-cleared derivatives (“universal two-way margin”)
 - One option would be to require the exchange of the full amount of initial and variation margins, and with the same requirements applied to all types of derivative market participants
 - promote consistency with central clearing mandates and would also promote collateralization of all exposures arising among parties to non-centrally-cleared derivatives.
 - would incur the most substantial liquidity costs
 - Varying the requirements across different types of derivative market participants may be justified under certain circumstances or for certain types of market participants to the extent that this does not undermine the benefits of margin requirements.
 - there may be a case for more stringent requirements for entities whose collapse may cause widespread disruption to the financial system, but the rules may be less stringent if an entity also maintains some other effective protection against a counterparty’s default.

Scope of Coverage (continued)

- One potential tool that has received broad support and that could be used to manage the liquidity impact associated with margin requirements
 - Provide for an initial margin threshold (“threshold”) that would specify an amount under which a firm would have the option of not collecting initial margin.
 - In cases where the initial margin requirement for the portfolio exceeded the threshold, the firm would be obligated to collect initial margin from its counterparty in an amount that is at least as large as the difference between the initial margin requirement and the threshold.
 - the threshold would apply to the aggregate initial margin otherwise required for an entire portfolio of non-centrally- cleared derivatives entered into by a firm with a counterparty, and not on a trade-by-trade basis

Scope of Coverage (continued)

- All covered entities that engage in non-centrally-cleared derivatives must exchange, on a bilateral basis, initial and variation margin in mandatory minimum amounts
 - This approach would incur the most substantial liquidity costs
 - The use of thresholds could potentially balance the policy goals of reducing systemic risk and promoting central clearing with mitigating the costs associated with the bilateral exchange of margin.
 - No unanimous view as to how the thresholds should be designed and calibrated to achieve an optimal compromise

Proposed Requirements

- The potential future exposure of a non- centrally-cleared derivative should reflect an extreme but plausible estimate of an increase in the value of the instrument that is consistent with a one-tailed 99 percent confidence interval over a 10-day horizon
 - based on historical data that incorporates a period of significant financial stress.
 - It is important that the initial margin amount be calibrated to a period of financial stress to ensure that sufficient margin will be available when it is most needed
 - The required amount of initial margin may be calculated by reference to either
 - (i) a quantitative portfolio margin model
 - (ii) a standardized margin schedule.

Proposed Requirements

(continued)

- Non-centrally-cleared derivatives will often be exposed to a number of complex and interrelated risks.
- Internal or third-party quantitative models that assess these risks in a granular form can be useful for ensuring that the relevant initial margin amounts are calculated in an appropriately risk-sensitive manner
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- Internal or third-party quantitative models that assess these risks in a granular form can be useful for ensuring that the relevant initial margin amounts are calculated in an appropriately risk-sensitive manner

Proposed Requirements

(continued)

- The use of such models is predicated on a satisfaction of several prerequisite conditions
 - First, any quantitative model that is used for initial margin purposes must be approved by the relevant supervisory authority.
 - Quantitative initial margin models must be subject to an internal governance process that continuously assesses:
 - the value of the model's risk assessments
 - tests the model's assessments against realized data
 - validates the applicability of the model to the derivatives for which it is being used
 - The use of models is also not intended to lower margin standards that may already exist in the context of some non-centrally-cleared derivatives
 - Intended to produce appropriately risk-sensitive assessments of potential future exposure so as to promote robust margin requirements

Proposed Requirements

(continued)

- There are some instances in which a simpler and less risk-sensitive approach to initial margin calculations may be warranted
 - Smaller market participants may not wish to undertake or may be unable to undertake the time and expense of developing and maintaining a quantitative model
 - May value simplicity and transparency in initial margin calculations, without resort to a complex quantitative model
 - The required initial margin amount would be calculated by multiplying the margin rate in the provided schedule by the gross notional size of the derivative contract, and then repeating this calculation for each derivative contract.
 - The total amount of margin required on a portfolio would then be computed as the sum of the initial margin requirements on each derivative

Eligible Collateral for Margin

- These assets should be highly liquid and should, after accounting for an appropriate haircut, be able to hold their value in a time of financial stress.
- the value of the collateral should not exhibit a significant correlation with the creditworthiness of the counterparty or the value of the underlying non-centrally-cleared derivatives portfolio in such a way that would undermine the effectiveness of the protection offered by the margin collected (ie the so-called “wrong way risk”)
- Accepted collateral should also be reasonably diversified.

Eligible Collateral for Margin (continued)

- Examples of the types of eligible collateral that satisfy the key principle would generally include:
 - Cash
 - High quality government and central bank securities
 - High quality corporate bonds
 - High quality covered bonds
 - Equities included in major stock indices
 - Gold

- Additional assets and instruments that satisfy the key principle may also serve as eligible collateral

Treatment of Provided Margin

- Requiring the segregation or other protection of initial margin collateral may create material incremental liquidity demands and trading costs relative to current practices
 - (i) firms would be required to divert significantly more liquid assets to provide initial margin to counterparties on a gross, rather than net, basis
 - (ii) firms would no longer retain the ability to use initial margin collected as a source of funding, for re- hypothecation or re-use, or for other discretionary purposes
- Initial margin should be exchanged on a gross basis and held in a manner consistent with the key principle above.
- Cash and non-cash collateral collected as initial margin should not be re-hypothecated or re-used

Impact of Margin Requirements for Non-Centrally-Cleared Derivatives

- The potential benefits of margin requirements must be weighed against their liquidity impact and other costs
 - There are a number of challenges inherent in attempting to quantify the liquidity impact of the proposed margin requirements, including uncertainty regarding:
 - (i) the extent to which certain types of non-centrally-cleared derivatives will move to central clearing in the near future
 - (ii) the extent to which derivative market participants may change their behavior in light of new margin requirements
 - (iii) the relative interaction of the margin requirements with other prudential regimes applicable to liquidity matters, including the LCR and NSFR

Impact of Margin Requirements for Non-Centrally-Cleared Derivatives

(continued)

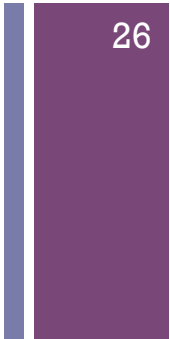
- The liquidity impact of any variation of the margin requirements contemplated above will be both material and significant
 - A choice to adopt a broad scope of applicability (eg universal two-way margin with a low threshold) is likely to significantly increase liquidity impact and overall impact on market function
 - A choice to require the segregation and no re-hypothecation/re-use of initial margin is likely to significantly increase liquidity impact
 - A choice to exempt certain types of non-centrally-cleared derivatives may significantly decrease liquidity impact and overall impact on market function

- Ultimately, the impact of margin requirements on non-centrally-cleared derivatives is complex and may only be fully understood over time with the benefit of hindsight

Proposed Standardized Initial Margin Schedule

<u>Asset Class</u>	<u>Percentage of Notional</u>
Credit: 0-2 year duration	2
Credit: 2-5 year duration	5
Credit 5+ year duration	10
Commodity	15
Equity	15
Foreign Exchange\Currency	6
Interest Rate: 0-2 year duration	1
Interest Rate: 2-5 year duration	2
Interest Rate: 5+ year duration	4
Other	15

Proposed Standardized Haircut Schedule



Asset Class

Haircut % of Market

Cash in same currency	0
Cash in different currency	8
High quality government and central bank securities: residual maturity less than 1 year	0.5
High quality government and central bank securities: residual maturity between 1 and 5 years	2
High quality government and central bank securities: residual maturity greater than 5 years	4
High quality corporate\covered bonds: residual maturity less than 1 year	1
High quality corporate\covered bonds: residual maturity greater than 1 year and less than 5 years	4
High quality corporate\covered bonds: residual maturity greater than 5 years	8
Equities included in major stock indices	15
Gold	15



Notes

Questions

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