Margins Take Center Stage

While new margin provisions – set to be phased in starting in 2015 – come with a bevy of challenges, we believe they promise sustainable success for firms that refine their internal operations and rewire their strategies.

Executive Summary

The world of over-the-counter (OTC) derivatives, with a notional value estimated at US$693 trillion as of June 2013, is at a crossroads. The cleared and bespoke OTC derivative trades are buffeted by recent regulatory changes. If the size of standardized derivatives cleared in exchanges stands at the 75% as estimated by the International Monetary Fund and the International Swaps and Derivatives Association (ISDA), the world of bespoke, complex derivatives that cannot be cleared centrally represents a material 25% of the overall derivative universe.

Standardized derivatives cleared in exchanges stood at 140 trillion for the first three quarters of 2013 – backstopped by Central Counter Party (CCP) Clearing House-mandated margins. However, the International Organization of Securities Commission (IOSCO) and the Basel Committee on Banking Supervision (BCBS) have introduced margin provisions for non-centrally cleared bilateral derivative contracts, to be phased in starting at the end of 2015. This has triggered a wave of concerns among firms – and presented some critical questions they must answer over the next 20 months before the new margining rules become an operating reality:

- Do we understand the cost implications of the initial and variation margins imposed on the centrally and non-centrally cleared derivatives?
- Do we have a robust capability for developing, maintaining, operationalizing and updating internal margining models?
- How efficient are our collateral margin management processes and applications?

As the race for high-quality collateral gains momentum and spikes costs, winning firms must rewire their margining strategy, operations and technologies to position themselves for sustainable success.

In this paper – the final in our three-part series on collateral management – we examine the impact of new margin requirements on derivatives trades. In the *first paper* we elaborate on the factors that propel the demand for collateral; in the *second*, we present a roadmap for optimizing collateral.

Margin Imperatives

Following the 2007 financial market meltdown, one of the key G-20 reform measures was to have all standardized derivative contracts traded on exchanges, clear the trades through CCP and impose bilateral margin requirements for all non-centrally cleared derivatives. While the centrally cleared standardized derivatives trades are already backstopped by CCP-imposed margins, the new regulations of BCBS and IOSCO for non-centrally cleared bilateral derivative trades extend margin requirements further to cover the entire derivative spectrum. These mandates seek to impart greater systemic stability, transparency and trust, and will amplify demand for high-quality collateral to meet margin requirements.

Growing Collateral Demand

The Treasury Borrowing Advisory Committee estimates the total incremental collateral demand due to new margin standards to be between US$1.6 and US$3.6 trillion under normal market conditions, and between US$3.2 and US$8.7 trillion in a stressed market. (For details, see our paper, "*The Collateral Conundrum: A $11 trillion Opportunity?*"). While expanded initial margin requirements for clearing standardized derivatives are expected to soak up between US$0.8 and US$2.0 trillion under normal market conditions, they are projected to stay between US$1.8 trillion and US$4.6 trillion under strained conditions. Beginning in 2015, the second major driver will be bilateral margin requirements for non-centrally cleared derivatives – pegged at between US$0.8 and US$1.2 trillion in normal times, and between US$1.8 and $4.1 trillion under stressed conditions.

Margin Issues Are No Longer Marginal

The final margin rules governing the non-centrally cleared bilateral derivative trades enunciated by the IOSCO-and-BCBS-sponsored Working Group on Margin Requirements (WGMR) have raised issues with material bearing on the functioning of the derivatives market. The core regulatory-driven issues that will amplify collateral demand and spike the cost of derivatives trade are:

- **The introduction of threshold for initial margin:** The initial margin (IM) must be posted for all non-centrally cleared bilateral derivatives trades, except for physically delivered and settled foreign exchange forwards and swaps. The IM must also be posted on a gross basis and kept segregated from the proprietary account. The introduction of the IM threshold of €50 million on a consolidated group-level basis, which offers the option to eliminate the initial margin on the first €50 million of exposure between two counterparties, is expected to soften margin demand. However, a possible variation that creeps into margin calculation methods points to operational challenges:

- **Initial margin calculation:** Firms have the choice to either use a standard margin schedule or an approved internal quantitative portfolio margin model to calculate their initial margin needs. Quantitative impact studies estimate that firms using internal models tend to report initial margin needs at least six to 11 times lower than those using the standardized margin schedule – opening up arbitrage opportunities. While regulators approve internal models for IM calculation, the biggest concern is the imminent variation set to creep in between the approved models of counterparties, which will show different IM values due to the complexity of the bilateral trade and the underlying analytics involved. The scope for interpretations that the analytics provide and the variegated sources of data used to arrive at an IM figure only add to the complexity. This can lead to costly disputes and time-consuming arbitration. Though ISDA has come up with a draft document to standardize IM calculation, the consensus is that even the most prescriptive guideline cannot prevent variation in outcomes.

- **Variation margin:** It is necessary to fully collateralize the mark-to-market exposure of the non-centrally cleared derivatives that must be posted on the following basis – zero threshold, daily calls and minimum transfer amounts not to exceed €500,000.

- **Segregation and Rehypothecation Rule:** This stipulates that while IM postings must be segregated and can be rehypothecated/used under conditions, VM postings can be rehypothecated/used without conditions.

- **Acceptable collateral:** BCBS and IOSCO rules prefer a broad set of acceptable collateral with appropriate haircuts ranging from 0% (in the case of cash) to 15 % (in the case of equities). An additional 8% haircut is imposed when cash collateral posted in currencies differs from the underlying derivative obligations.

Margin Management Issues

Our analysis shows that firm-level structural challenges can inhibit an efficient and effective margining process (see Figures 1 and 2, next page) and pose grave operational risks. The common operational issues stifling optimal marginal process throughput are:

- Lack of straight-through processing (STP), resulting in margin call inefficiencies – manual margin calls, substitutions and interest.
- The dominant presence of manual processes and involve paperwork.
- Lack of an audit trail against records/transactions.
- Firms' failure to post higher, collateral-heightening operational risks.

Quick Take

Non-Centrally Cleared Swap Trades in the U.S.

- Several swaps will still be traded bilaterally – swaps that are not required to be mandatorily cleared on exchanges, or when parties opt for clearing exemption.
- Under proposed Dodd-Frank rules, non-centrally cleared swaps would be subject to both IM and variation margin requirements. However, IM required for non-centrally cleared swaps will generally remain higher than centrally cleared swaps, making them less attractive.
- Authority to write margin rules for non-centrally cleared swaps is divided between the U.S. banking regulators (Federal Reserve, FDIC and OCC) and the CFTC. The U.S. banking regulators' rules will be followed by bank swap dealers, while CFTC rules will be followed by nonbank swap dealers.
- Under the proposed rules, IM can be calculated using a standardized method or an approved model. Moreover, swap dealers will be required to collect margins (IM and variation margin) from counterparties, but are not required to post these margins.
- Only highly liquid assets, such as cash, U.S. obligation, senior GSE debt obligation or farm credit bank-insured obligation (for IM) will be accepted as collateral. Haircuts will apply to all non-cash collaterals.
- Segregation rule will apply to IM.

- Traditional methods of communication, like e-mail, exchange of spreadsheets and fax, which result in "siloed" communications.
- Time-consuming "sanity checks," manual touch points, "four-eye" approval processes and fragmented settlement procedures.
- Labor-intensive processes, such as record-keeping and reporting of collateral activities, positions and balances (owing to the absence of overnight, automated reconciliation of positions); regulatory reporting of margins/collateral.
- Initial margin: Mutually negotiated between two counterparties as part of CSA (Credit Support Annex), exposing firms to counterparty risks.
- Variation margin: Less daily variation margin calls due to threshold limits and consolidated margin calls have not stress-tested the party's liquidity capabilities.

Rewiring Collateral Management: A Blueprint

The implication of these policy changes are material. In our view, winning firms must build a strategic plan by the end of 2015 to comply with regulatory changes, and use that time to rewire the collateral margin management process for the coming collateral era – a time when high-quality liquid assets will be expensive due to their anticipated demand. A strategic roadmap to counter regulatory and operational issues should encompass:

- Building an effective collateral management ecosystem – an infrastructure that drives optimal collateral usage (for details, refer to our paper on Collateral Optimization) and enables firms to decide to clear a trade centrally (or not) and to benefit from lower margin requirements.

Bilateral OTC

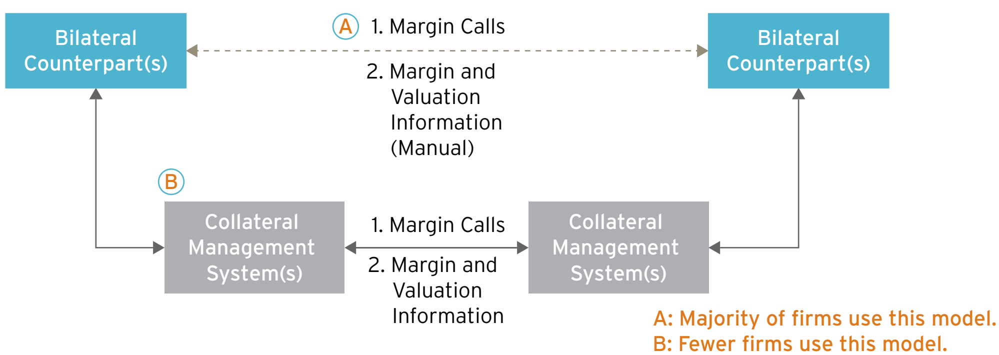

Figure 1

Central OTC

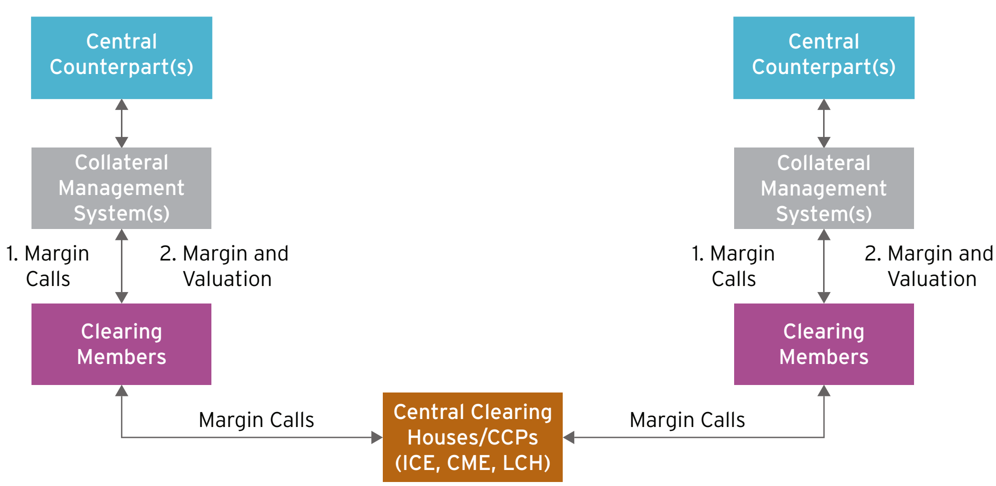

Figure 2

- Using electronic messaging platforms to improve the STP percentage – from pre-call to settlement.
- Obtaining regulatory approvals to use internal margining models. In most cases, new margining models must be developed.
- Optimizing netting and portfolio margining within asset classes to minimize margining requirements.
- Performing a thorough collateral analysis at the trading desk to help ensure the effective pricing of counterparty credit risk.
- Putting in place a robust margin-call management system and dispute-resolution process.
- Developing an enterprise-wide view of the IM threshold across multiple legal entities of the holding firm.
- Demonstrating efficient policies and processes that help ensure the segregation of collateral received, and protection in the event of a bankruptcy.
- Re-engineering legacy systems or building new ones that provide for margining effectiveness and efficiency such as:

  » Cash flow netting of coupons, broker fees and clearinghouse fees.
  » Adding an efficient haircut and eligibility management feature, with the ability to easily manage haircut and eligibility rules across agreements.
  » A report that provides collateral eligibility information that can be used to calculate the amount of client-owned eligible collateral available for use per the firm's position book and underlying CSA.
  » A mechanism for viewing enterprise-wide, available collateral positions online.

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