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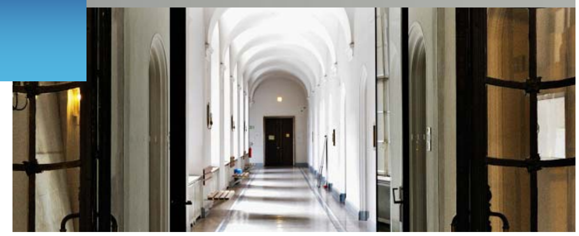
ViewPoint

July 2012

Central Clearing in Europe – Implications for Pension Plans



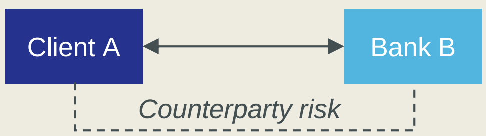
In Brief

- Central clearing aims to reduce systemic risk associated with over-the-counter ('OTC') derivatives, giving counterparties the ability to maintain existing positions and collateral in the event of defaults.
- In Europe, the European Market Infrastructure Regulation (EMIR) will legislate for mandatory central clearing of eligible derivative contracts via a central counterparty ('CCP').
- The technical standards of EMIR are likely to be in place by the end of 2012 (meeting a G20 commitment) but mandatory clearing is not expected until mid to late 2013.
- Initially, only the clearing of new interest rate swap and credit default swap transactions is likely to be mandatory.
- Pension plan investors have an exemption from central clearing for three to six years but existing OTC positions may be moved on a voluntary basis in order to benefit from the advantages of the cleared infrastructure.
- Additional costs incurred through clearing could include, initial and variation margin, collateral transformation, and fees paid to the CCP, clearing and executing brokers.

Introduction

Currently, many over-the-counter ('OTC') derivatives are traded bilaterally. Figure 1 shows a bilateral trade between an investor (Client A) and an investment bank (Bank B).

Figure 1: Bilateral trade



Implementation:

1. Client A initiates bilateral trade with Bank B

   Both Client A and Bank B bear counterparty risk

In this model, each counterparty bears the risk that the other will default on its obligations. From Client A's perspective, if Bank B were to default then Client A would lose any market exposure as well as potentially losing any unrealised profit. The costs of regaining lost exposure could be significant in the volatile market conditions that may be expected following the default of a large financial institution such as Bank.

The aim of centralized clearing is to reduce systemic and counterparty risks through the introduction of a well capitalized central counterparty ('CCP').

In the centrally cleared model (Figure 2), the trade is still executed much as before, but each counterparty now affirms the trade to a clearing broker (many investment banks will act as their own clearing broker). Once the trade is affirmed it is transferred to the CCP. The clearing broker has exposures to the CCP exactly equal to its client's exposures. Because of this 'pass through' of risk, the original counterparties to the trade bear counterparty risk to the CCP rather than their original counterparty or their clearing broker.

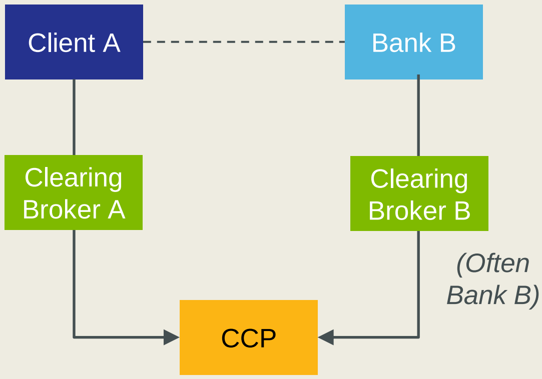
In the event that a clearing broker defaults, investors could transfer their positions and collateral to an alternative clearing member subject to the agreement of the new clearing member. This process, known as 'porting', allows an investor to maintain their market exposures and collateral position even after the default of their primary clearing broker.

Rationale For New Regulations

In the wake of the financial crisis following the default of Lehman Brothers in 2008, the G20 made the following commitment:

"All standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end 2012 at the latest. OTC derivative contracts should be reported to trade repositories. Non-centrally cleared contracts should be subject to higher capital requirements."

Figure 2: Centrally cleared trade



Implementation:

1. Client A initiates bilateral trade with Bank B
2. Client A affirms trade to Clearing Broker A and Bank B affirms trade to Clearing Broker B
3. Once all parties have affirmed the trade, it is automatically routed to the central counterparty ('CCP')

Counterparty risk is to the CCP

Following 18 months of negotiations, the European Market Infrastructure Regulation ('EMIR'), was agreed politically on 9 February 2012. Now that primary legislation for OTC derivatives reform has been agreed upon (both in Europe and the US), attention is turning to convergence of secondary rule making and the sequencing of the implementation of central clearing.

Eligible Instruments

Only new transactions for eligible products will be mandated for central clearing and the initial focus on eligible asset classes has been interest rate swaps and credit default swaps.

Inflation swaps, swaptions and total return swaps, for instance, are not currently supported by any CCP; although several are working towards broadening their product scope to include these derivatives over the next few years.

This fragmentation is problematic for portfolios containing a mix of eligible and ineligible products which have historically shown some level of inverse correlation (for example interest rate and inflation swaps). Previously, when considered in combination, the changes in value of these portfolios may have displayed some level of offsetting, reducing the volatility of any collateral requirements. This benefit is lost when each portfolio is considered in isolation.

The strength of a CCP

Central clearing does not fully remove counterparty risk, but transfers it from the executing broker to the CCP. If a clearing broker, or one if its clients, were to default, up to four levels of protection exist before the CCP itself would become insolvent.

Variation Margin ('VM'):The VM guards against the loss of unrealized gain on a derivative in the same way as daily collateral in the bilateral model.

Initial Margin ('IM'): CCPs collect IM to cover the expected loss on a derivative between the time of default and liquidation of the position.

Default Fund Contributions: A deposit paid by the clearing broker that provides a cushion to offset potential losses above and beyond those covered by IM.

CCP Contributions: Individual clearing houses may contribute a capped amount to the default fund. Generally these amounts may end up being relatively small when compared with the potential size of the default fund.

Collateralization Requirements and Costs

Variation Margin ('VM')

Bilateral trades are generally collateralized on a daily basis by passing assets equal to the current value of the derivative between the counterparties. The list of eligible collateral for bilateral trades is flexible and varies from a narrow range (for example cash in the base currency of the derivative) to a broad selection of assets and currencies that could include corporate bonds.

In the centrally cleared model this daily collateralization is replaced by a daily VM. Importantly, only cash will be eligible as VM at the CCP. In the absence of a non-cash alternative, there may be a requirement for some investors to use collateral transformation facilities such as repurchase agreements ('repo') either through their investment manager, their clearing broker or a third party. A repo is the sale of a security together with an agreement for the seller to buy back the security at a later date. This would enable ineligible collateral to be converted into eligible cash, however the associated costs would be passed on. In addition, the investor would bear the roll and financing risk of these repo transactions.

Table 1: Central Clearing - Summary

What is changing?	Comments	How it may impact you
All "eligible" derivative trades (CDS and interest rate swaps) must be centrally cleared through a central clearing counterparty ('CCP')	► **Reduces counterparty risk** relative to a bilateral OTC trade (although introduces some clearing member risk) ► Centrally cleared trades will require counterparties to post both **initial and variation margin** ► Requirement for banks to post initial and variation margin and default fund contributions to the CCP will make **derivative trading more capital intensive for banks** ► Centrally cleared trades will incur additional transaction costs and broker fees and come **with additional operational requirements** ► **Pension plans have exemption** from mandatory central clearing for three years which may be extended for up to an additional three years	► Counterparty credit risk will be reduced for centrally cleared trades ► Centrally cleared derivative trades may be **more capital intensive** ► Likely **higher costs for pension plans** as costs are passed on by the banks ► Higher **transaction costs** and operational costs likely for pension plans ► Pension plans **may choose not to use the exemption** depending on their circumstances if it reduces trading costs

Initial Margin ('IM')

In addition to VM, each trade will be subject to an IM. IM is a deposit posted to cover an estimated, potential change in value of the trade, and acts as a buffer should a counterparty default. Acceptable non-cash assets (generally restricted to highly liquid instruments such as government bonds) as well as cash can be used to cover this requirement. Pension plan investors have not always been required to post IM and as such this will be a new cost for many investors, such as UCITS investors.

The calculation of IM will differ from one CCP to the next but most are expected to use Value At Risk ('VaR') methodologies. These methodologies calculate an estimated worst loss by using historical market data to simulate changes in portfolio value. As such a portfolio's IM will vary slightly day by day and investors will need to have sufficient eligible assets available to meet the requirement and potential future increases.

Typically the IM increases with tenor, and varies for pay and receive fixed interest rate swaps, reflecting the historically observed changes over the past few years. Current estimates of IM for fixed interest rate swaps traded through the one UK based clearing house are around 50 times the PV01[1] of the swap.

Similar requirements for IM are currently being drafted for ineligible derivatives which remain on a bilateral basis. Possible outcomes include posting of IM by both counterparties to a third party or one way posting from the investor to the clearing broker. Margin levels for uncleared trades are likely to be similar if not greater than their centrally cleared equivalents.

If the assets forming the IM are operationally and legally segregated from those of the clearing broker, they cannot be used to cover the liabilities of a separate defaulting client of the clearing broker, or the clearing broker itself.

When the assets are segregated on a legally segregated operationally comingled ('LSOC') basis, the assets supporting any one client's positions are kept in the same account at the clearing broker but are legally segregated. This method is less expensive than full operational segregation, but still retains many of the benefits of legal segregation.

Other Costs

In addition, clearing brokers and the CCPs themselves may impose clearing fees in a similar way to the existing exchange traded derivatives market place. Competition between market participants may help to keep these fees to a minimal level.

Timeline

The European Securities and Market Authority ('ESMA') is required to draft technical specifications by September 2012. These will then be approved by the European Commission by the end of 2012 and the timeline for implementation imposed.

A phased approach to implementation is expected such that the majority of the rules may be finalized by the end of 2012, but will only take effect during 2013 or later. The requirement to centrally clear eligible contracts is not expected until the second or third quarters of 2013 at the earliest.

Pension plan investors have been granted a grace period of three years after the implementation of mandated clearing, during which time they will not be required to clear eligible products through a CCP. This three year exemption can potentially be extended a further three years so that qualifying pension plan investors may not be required to clear centrally until 2018. The grace period is designed to allow CCP's to expand the list of acceptable VM assets from cash only to include government bonds.

1. Present value of one basis point, i.e. the change in swap value of a 0.01% move in interest rates

Pension plan investors can however choose to clear centrally voluntarily and there may well be compelling reasons to do so including benefiting from the lower risk environment and potential higher costs of maintaining a bilateral position.

The Reporting Requirement

The financial crisis highlighted the fact that there was insufficient information about the OTC derivatives market available to regulators. To address this issue, market participants, with the support of the regulatory community, committed to establishing and utilizing trade repositories. These centralized registries will maintain electronic databases of open derivative transaction records, ensuring that industry supervisors have the information necessary to manage systemic risk. BlackRock is engaged with regulators in an attempt to ensure that considerations related to trade reporting, such as timing (pre-trade, real-time, or post-trade), liquidity and anonymity, are adequately addressed.

Conclusion

The aim of central clearing is to reduce systemic risk from OTC derivatives.

It is expected that the central clearing of new eligible transactions (initially interest rate and credit default swaps) will be mandatory from mid to late 2013, however pension plan investors have an exemption for three to six years. It is anticipated that a number of pension plan investors will choose to clear centrally voluntarily in order to benefit from the advantages of the centrally cleared infrastructure.

The additional costs associated with central clearing are not yet finalized, but will include the cost of posting IM and VM (although many pension plan investors already implement daily collateralization) as well as fees payable to the CCP, clearing and executing brokers.

BlackRock continues to support initiatives to strengthen oversight of the OTC derivatives market and is working directly with regulators, CCPs and clearing brokers in both Europe and the US to shape policy to the benefit of clients.

From a practical perspective BlackRock has engaged a number of brokers to act as clearing brokers for our centrally cleared positions and are actively clearing OTC derivatives across a large number of accounts in the US. Although European CCPs are much less developed than US CCPs we are taking similar steps to ensure we are capable of clearing voluntarily ahead of the clearing requirement from EMIR where we (in agreement with clients) view this as beneficial.

The next few months will see a number of CCPs entering the European market (for example CME and Eurex) with viable buy-side models, as well as further clarification of the regulations.

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