



Pension Fund Clearing: The Final Countdown

The September 9 Category III clearing deadline is upon us - pension funds, ERISA funds, and endowments will soon be mandated to centrally clear their Over-the-Counter (OTC) swaps. The majority of Category III participants have already been onboarded during the Category II onboarding of asset managers. While Category III appears less climactic than the June 10 Category II deadline, over which there was intense industry scrutiny, it nevertheless marks a significant milestone in the implementation of the Dodd-Frank Act (DFA). Marking the final phase of clearing as it does, we will now get a much better picture of the competitive lay of the land for client clearing among Derivative Clearing Organizations (DCOs) in the US, particularly in rates. Pension funds are heavy users of interest rate swaps (IRS), which they use to manage liability exposures, but they are less active in Credit Default Swaps (CDS).

We expect a gradual, yet significant, uptick in rates clearing volumes as this last demographic comes online. In terms of sizing the US OTC rates market, Category III firms represent 15% of dealer-to-customer IRS volumes, up to US\$37 trillion in notional terms. There are still some obstacles, however, to their successful onboarding. Depending on whether they are self-managed or institutionally managed, there are degrees of documentation still to complete. There are also concerns over a clause under Basel III related to the ability of intermediaries to claim pledged assets that could lead to the passing on of punitive bank capital charges. Meanwhile, Futures Commission Merchants (FCMs) are structuring their fees on a risk-weighted basis to maximize the opportunity from a sector that uses swaps infrequently but usually in very large size.

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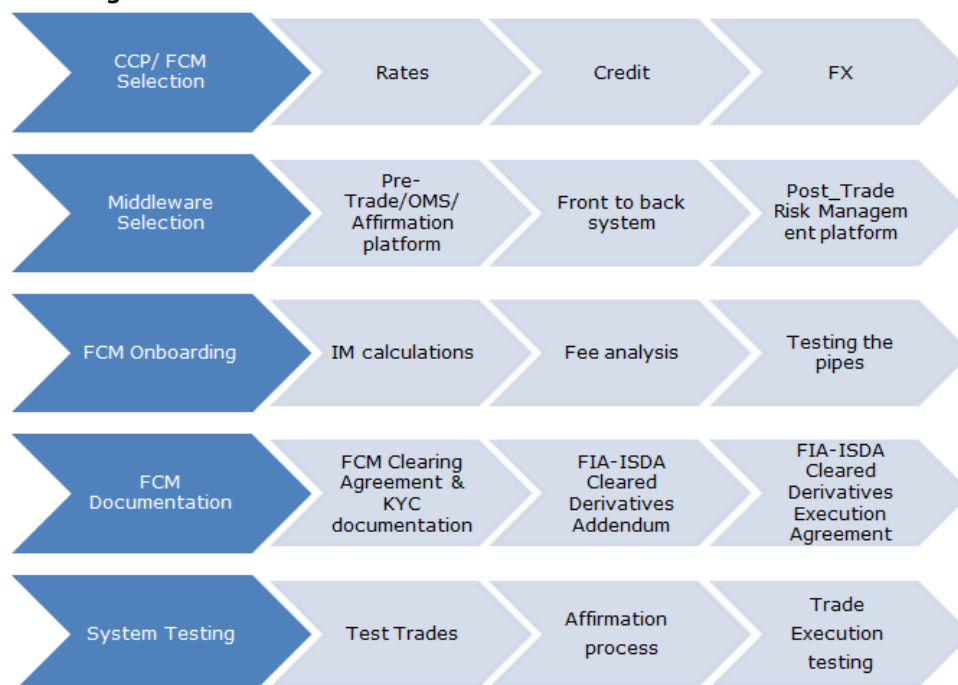
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Introduction

There are two types of pensions, self-managed and institutionally managed. Self-managed funds will have to go through the same process that active users of swaps and institutional money managers went through to meet their Category I & II deadlines in March and June respectively. They will need to select their DCO, select their FCM, complete the necessary documentation, identify their middleware provider, implement systems, onboard, test workflow and review margin processes.

For those self-managed funds that have yet to start this process there is not a moment to lose. Failure to meet the necessary requirements in time will mean being shut out of the swaps market. Awareness levels are lower among pension funds than other swaps users. Some pension fund swaps traders may be surprised to discover that their operations and legal teams have yet to finalize the necessary central clearing arrangements. Exhibit 1 outlines the onboarding workflow checklist. For pension funds that are well on their way to clearing - let this serve as a check. Others are urged to rapidly finalize their plans so their derivative trading strategies may continue uninterrupted.

Exhibit 1: Onboarding Workflow Checklist



Source: TABB Group

The good news is that the majority of pension funds are institutionally managed and have already completed many of these preparations as their representatives have rushed to meet the earlier deadlines. Of the two thousand US pension funds that fall under the Category III mandate, we estimate that 80% of them, or 1600 funds, are institutionally managed and will enjoy substantial relief from many of the pains of associated with central clearing

readiness. They will be able to leverage their managers' relationships with FCMs and DCOs, for example.

Prior relationships aside, Know Your Customer (KYC) forms still require early completion. Pension funds cannot expect FCMs to pull their original articles or authorization forms for derivatives trading out of the filing cabinet. They will need to provide all the necessary forms to enable FCMs to fill in the KYCs required as part of the Business Conduct Standard (BCS) rules that came into effect for Swap Dealers on May 1.

The Price is Right

Selecting an FCM is the first critical step in the onboarding process. The criteria for selecting an FCM are wide and varied including where the FCM is domiciled, the products/currencies covered, capacity issues, ease of documentation, or the FCM's credit rating. Traditional relationships often play a significant role, either from an OTC trading perspective, or because the FCM currently clears futures for the fund. Pricing also plays a role. FCMs have three main pricing schemes for swaps clearing:

- Per ticket (on average between \$200 and \$500)
- Per million notional (on average between \$5 and \$25)
- A risk-weighted DV01 charge (as a % of initial margin)

FCMs will typically look to charge pension funds on risk-weighted basis, given the infrequency of their trade activity, the long duration of their trades, and the scale of their swaps transactions. Pension funds trade in blocks, often in sizes north of a "yard" (US\$1 billion), using IRS to hedge long-term pension liabilities as well as synthetically increase their portfolios' duration while conserving plan capital. Given this behavior, it benefits FCMs to charge client fees on a risk-weighted basis if, for example, a pension fund is only transacting three IRS trades a year but in sizes of a billion dollars or more and with durations of 50 years. Percentages of initial margin for such transactions will be much higher than the average ticket fee or per million notional fee. Pension funds that are institutionally managed may look to benefit from more attractive pricing schemes that their representative manager has managed to secure with the FCM and then have their trades allocated as part of a bunched order.

The legal documentation that comes with the FCM relationship can be onerous. Funds have to complete:

- An FCM Futures Agreement
- KYC documentation
- An FIA-ISDA Cleared Derivatives Addendum
- An FIA-ISDA Cleared Derivatives Execution Agreement.

These documents can take weeks to finalize, even months, depending on the stringency of the FCM legal team.

In these early days, middleware selection may not seem to be as important as selecting an FCM but the choice is quite important, and will become more so in the coming year as systems advance and Swap Execution Facility (SEF) trading begins at the end of the year. At this time, all leading software providers in OTC Order Management Systems (OMS), affirmation platforms, Front-to-Back, and risk management systems have a “Day 1” offering that is robust enough to handle the swaps trade workflow across pre-trade, execution and post-trade. Exhibit 2 provides a list of the major providers in each category.

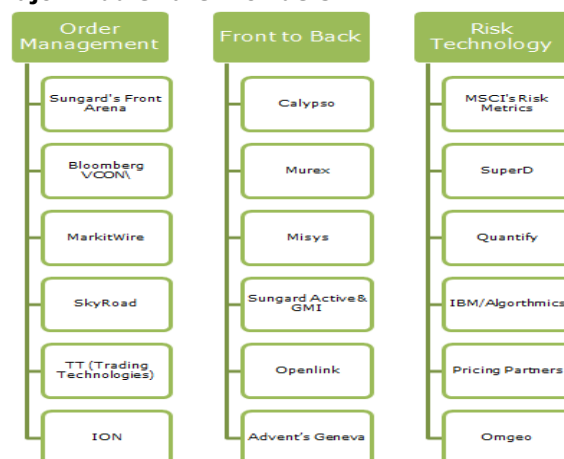
Competition in Clearing

Once onboarded to the FCM, funds are typically given full choice of DCO. In rates, the two predominate choices are CME and LCH. Clearnet’s SwapClear service. Self-managed funds will want to use the DCO that provides the best breadth of products and currencies. Depth of liquidity (open interest), Initial Margin (IM) rates, the clearinghouse fee schedule, as well as the ability to realize margin offsets will also factor into the selection process. Test accounts will then be set up at the DCO so that the clearinghouse, via the FCM, will be able to test how the fund receives messages related to the trading lifecycle and its associated margin requirements. Physical connectivity tests usually take 1-2 weeks.

Category III will be different from the other two implementation dates in terms of clearing volumes. While the quantity of transactions from this group may be less frequent, their full impact will be felt incrementally over time, and the size of their transactions cannot be ignored. The majority of transactions are in rates, with 57% of all swaps held in IRS, compared to 35% in credit and 8% in other types, according to data published in a July 2013 report by Northern Trust entitled “Capital Requirements for Pension Funds in the Wake of Dodd-Frank” (Exhibit 3).

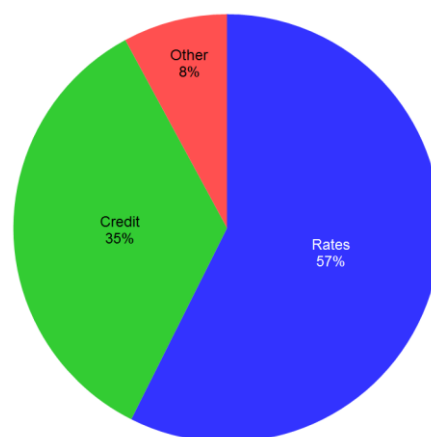
While LCH Swapclear dominates in dealer clearing of OTC rates, Category III will have a significant impact on the competitive DCO landscape. Interdealer clearing business is incredibly sticky, meaning open interest steadily increases. As a result, LCH Swapclear continues to enjoy a dominant market share in global rates clearing. The level of cumulative open interest at LCH Swapclear dwarfs its competitors, given its long history in the space.

Exhibit 2
Major Middleware Providers



Source: TABB Group

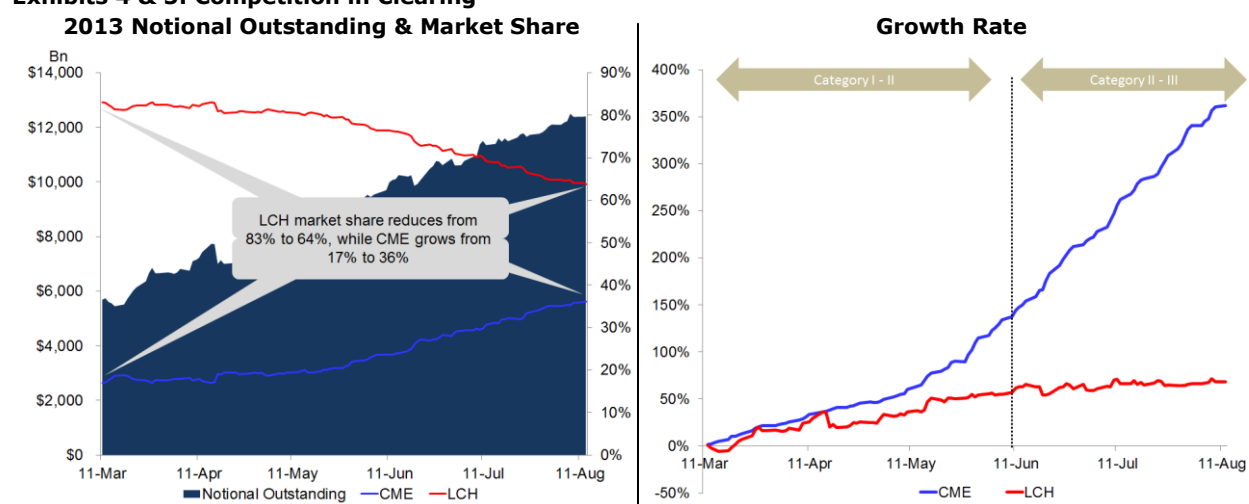
Exhibit 3
Swaps Held by Pension Funds



Source: Northern Trust

That said, client clearing has been on the increase since the first DFA deadline of March 11 and, by the end of August, the total market stood at \$12.4 trillion in notional outstanding terms, a growth rate of 127%. The CME has been particularly successful in attracting client clearing volumes, increasing its share of the overall market to 36% from 17% six months ago, totaling \$5.1 trillion. Meanwhile, LCH SwapClear's market share has decreased to 64% from 83% over the same period, totaling \$8.2 trillion (Exhibit 4). When we look at their respective growth rates, the CME's exceeds 370%, compared to 68% at LCH (Exhibit 5). Meanwhile SwapClear's US domiciled service, which it launched in June to attract US business, has experienced weak volumes, with just \$2.9 billion in notional outstanding as of end of August 2013. SwapClear's US domiciled service may need to become more seasoned to gain traction.

Exhibits 4 & 5: Competition in Clearing



Source: TABB Group, CME, LCH.Clearnet

Category III will enhance the trajectory in transaction growth and volume in US OTC rates client clearing, leading to a critical mass of liquidity in US DCOs. Overall, we estimate that pension funds account for 15% of the \$250 trillion global OTC rates market, up to US\$37 trillion in USD notional. Pension funds seeking protection under US, instead of international, bankruptcy laws may be more predisposed to a US clearinghouse that can demonstrate robust volume.

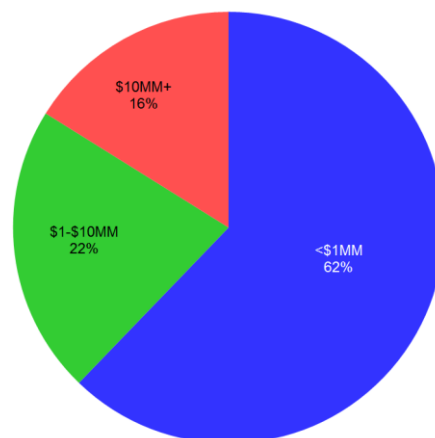
Counting the Cost

Pension funds have no shortage of collateral, such as high-grade government debt or corporate bonds, to meet their initial margin requirements under the centrally-cleared model. According to Northern Trust, the average initial margin requirement per pension fund (out of a sample set of 217 funds) was \$5.3 million which represents just 1.53% of gross notional held by those funds. Only 16% of the funds had initial margin requirements larger than \$10 million (Exhibit 6). In short, pension funds will easily meet the initial margin requirement that comes with clearing.

Variation margin, which is the daily mark-to-market changes of the rates portfolio, is a bigger challenge, however. Pension funds now must post variation margin to the DCOs instead of their bilateral counterparts. Because DCOs tend to use short term instruments to build their yield curves for swaps valuation purposes, pension funds may have to change the manner in which they construct their own valuation yield curves, which have traditionally been designed to match the long term nature of their own swaps portfolio.

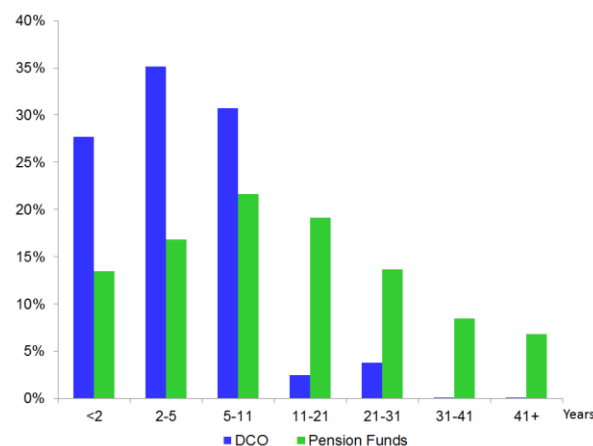
This difference in valuation techniques could account for millions of dollars that has to be pledged to the DCO vs. a bilateral counterparty in variation margin. Further, variation margin, unlike IM, must be pledged in cash. If pension funds continue trading long-dated interest rate swaps, they will therefore have to have plenty of ample cash on hand to cover any interest rate shifts that could trigger a wider than expected variation margin call by the DCO. Generally speaking, it will be interesting to see how easily DCOs absorb this fresh concentration of long term contracts from the pension fund community into their workflow, given that they are more used to clearing shorter term contracts. The average rate swaps contract maturity for pension funds is 16.2 years with many OTC swaps extending to more than 40 years in maturity. In contrast, the current open interest of contracts maturing between 11 and 21 years on DCOs is just over 2% (Exhibit 7).

Exhibit 6
Pension Fund Required IM Breakdown



Source: Northern Trust, TABB Group

Exhibit 7
Maturity Concentration – DCO vs. Pension Fund



Source: Northern Trust, TABB Group

Pledge Allegiance

There are lingering concerns about the availability of pledged collateral. In February, the US Department of Labor (DOL) clarified a long-standing concern in the industry over whether FCMs and DCOs would be able to close positions and liquidate collateral in the event of a default by a fund governed under the Employee Retirement Income Security Act (ERISA). There had been concerns that margin posted by ERISA funds might be considered plan assets under the Act and would therefore not be eligible for liquidation. For several months, this issue meant FCMs refused to onboard ERISA funds for clearing. The DOL clarification delivered significant relief to the industry.

However, it now appears that a clause under Basel III might have a similar effect on public pension funds, leading to higher capital charges under proposed collateral treatment rules. Under a Federal Reserve interpretation of the Basel III clause:

*For banking organizations other than insured depository institutions, the proposal required the deduction of a net pension fund asset in calculating common equity tier 1 capital. A banking organization was permitted to make such deduction net of any associated DTLs (Differed Tax Liabilities). This deduction would be required where a defined benefit pension fund is over-funded due to the high level of uncertainty **regarding the ability of the banking organization to realize value from such assets.***

In order for an FCM to apply collateral against the exposure that a client creates, therefore, it needs to demonstrate that it has the first right of claim to collateral that is posted by the public pension fund. Under many US state laws the state itself will have the first right of claim to collateral pledged by the pension fund for the trading of swaps. A third-party legal opinion is therefore needed to demonstrate that pledged collateral can be utilized to fully offset the exposure, especially in the case of default. Without it, the FCM, or other related entities, may be forced under Basel III to pass on higher capital charges to public pensions. These higher capital charges could be as high as 20-30 basis points of notional per swap transaction, resulting in significantly higher additional IM requirements per transaction.

Public pension funds are actively selecting their DCO with lower margins in order to ameliorate the costs associated with swap clearing. It is important to highlight that extra costs because of Basel III serve as a disincentive for pension funds to use derivatives to manage and hedge risk. There may yet be corrective action from the Bank for International Settlements (BIS) to relieve this community from punitive capital costs under Basel III, but there is little chance that this will come before the mandate.

Conclusion

Up to now, everyone has been relaxing, enjoying the summer vacation, secure in the belief that the majority of pension and ERISA funds have been onboarded in the ramp up to Category I & II clearing. Yet the Category III deadline is a milestone that FCMs and DCOs should not take lightly. No one is exactly sure how these significant market players will be onboarded and transacted due to an inter-play of multiple factors. Pension funds represent a significant volume of dealer-to-customer IRS volumes. The notional amounts are meaningful to DCOs as they compete for market share.

But roadblocks stand in the way of smooth onboarding. Regulatory uncertainty is playing a role. Lawyers have to step up and provide opinions about collateral ownership. Alternatively, regulators need to become aware of the additional burdens they are placing on a sector central to national economic welfare. A positive example is the DOL ruling that removed the potential fiduciary duties from pension fund related entities. However, FCMs and other associated entities are still not sure if they have the first claim to collateral to realize offsets under Basel III. In short, industry alertness is paramount as we reach this final stage of the DFA clearing mandate.

About

TABB Group

TABB Group is a financial markets research and strategic advisory firm focused exclusively on capital markets. Founded in 2003 and based on the methodology of first-person knowledge, TABB Group analyzes and quantifies the investing value chain, from the fiduciary and investment manager, to the broker, exchange, and custodian. Our goal is to help senior business leaders gain a truer understanding of financial markets issues and trends so they can better grow their businesses. TABB Group members are regularly cited in the press and speak at industry conferences. For more information about TABB Group, visit www.tabbgroup.com.

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Will Rhode is a principal and director of fixed income research at TABB Group, as well as a respected thought leader in market structure reform and financial technology. Rhode has authored more than twenty research reports, including: "Swap Portfolios in Transit: Terminate, Compact, Rebalance & Back-load"; "Real-Time Clearing: The New Race to Zero"; "Corporate Bond Market Transformation: Dealers, Platforms, Investors"; "US Buy-Side Swaps Trading 2012 – I Can See Clearing Now"; "Corporate Bond Trading: Building Networks, Realizing Liquidity"; "European Credit & Rates Dealers 2011: Capital, Clearing & Central Limit Order Books"; "Breaking Down the UK Equity Market: Executable Liquidity, Dark Trading, High Frequency and Swaps"; "European Derivatives 2010: The Buy-Side Perspective on Equity Options, Futures and Swaps"; and "The Alternative Emerging Market: Equity Swaps and Synthetic Prime." He also co-authored "Real-Time Corporate Bond Pricing: Panacea or Pipedream?"

Joining TABB in 2010, Rhode has over 15 years of capital markets industry experience with deep expertise in OTC derivatives, fixed income trading and financial services technology. He has presented at a wide range of industry conferences and is quoted regularly in the financial media as well as providing live commentary for broadcast media. In addition to research, Will has also worked as a novelist and has had three books published and translated into five languages by major international publishing houses. He holds a Bachelor of Arts degree in Political Science from the University of Newcastle-upon-Tyne, England



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