The Commodities Futures Trading Commission (CFTC or Commission), a regulator of OTC derivatives in the United States, has mandated the initial implementation of “central clearing” of certain classes of Interest Rate Swaps and Credit Default Swaps. An OTC derivative trade is considered centrally cleared when it is cleared through a clearinghouse, instead of directly between two counterparties, and both counterparties effectively assume credit risk exposure to the clearinghouse. When trades are cleared through a clearinghouse, the counterparties are required to post initial margin and daily maintenance margin, and settle all future cashflows with the clearinghouse instead of each other.

**KEY HIGHLIGHTS**

» On December 13, 2012 the CFTC issued its final ruling on mandatory clearing of commonly traded OTC derivatives through an approved Derivatives Clearing Organization

» Four classes of Interest Rate Swaps and two classes of Credit Default Swaps will be subject to mandatory clearing

» Migrating from bilateral clearing to central clearing is expected to result in increased price transparency and minimize counterparty risk and systematic risks

» Mandatory central clearing will affect the Trading, Clearing, Collateral Management, and Risk Management of OTC derivatives

» Implementation schedule for mandatory central clearing:
  • March 11 2013 -- Category 1 Entities (Swap Dealers and Major Swap Participants)
  • June 10, 2013 -- Category 2 Entities (Private Funds, Commodity Pools, Employee Benefit Plan)
  • September 9, 2013 -- Category 3 Entities (Third Party Subaccounts)

» Additional Interest Rate Swaps and Credit Default Swaps are expected to require central clearing later this year

» Other OTC derivatives in Equity and FX markets are being considered for central clearing by regulators

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**RISK ADVISORS’ CAN ASSIST WITH:**

» Trading Procedures - Review of existing trading procedures and infrastructure to adapt to OTC clearing rules

» Technology Requirements - Assess technology requirements for interfaces with execution facilities, brokers and clearinghouses

» Counterparty Credit Risk - Assess counterparty credit risk and other impacts to trade economics

» Collateral Management - Analyze new collateral management requirements and procedures

» Reconciliation Protocols - Analyze reconciliation requirements with execution facilities, brokers and clearinghouses

**ABOUT RISK ADVISORS** - Risk Advisors Inc. is a New York based consultancy providing market risk management, asset allocation, and operational risk advisory services to asset managers and financial institutions. Using a systematic approach and technology-based solutions, we provide our clients with a practical roadmap to develop their investing and trading business.
On December 13, 2012 the CFTC issued its final rules that mapped out a staged implementation of the central clearing requirement for OTC derivatives through 2013. Regulators expect that central clearing of OTC derivatives will have considerable benefits, notably:

- Standardization of counterparty credit risk to the clearing house, thereby reducing systemic risks in the overall financial market
- Increased transparency for both regulators and market participants
- Reduction in operational costs over time by streamlining the collateral and margin management process

**SUMMARY OF CFTC’S FINAL RULING ON MANDATORY CENTRAL CLEARING – DECEMBER 13, 2012**

On December 13, 2012 the CFTC issued its final rules that mapped out a staged implementation of the central clearing requirement for OTC derivatives through 2013. Regulators expect that central clearing of OTC derivatives will have considerable benefits, notably:

- Standardization of counterparty credit risk to the clearing house, thereby reducing systemic risks in the overall financial market
- Increased transparency for both regulators and market participants
- Reduction in operational costs over time by streamlining the collateral and margin management process

**BILATERAL CLEARING OTC DERIVATIVES**

1. Party 1 (Customer) enters into a swap contract manually (phone, email) with Party 2 (Dealer).
2. Party 1 (Customer) posts initial Margin and Maintenance Margin to Party 2 (Dealer) as negotiated in the contract.

Each party assumes Counterparty Risk Exposure to the other.

**CENTRAL CLEARING OTC DERIVATIVES**

1. Party 1 (Customer) enters into a swap contract with Party 2 (Dealer). This can be done manually (phone, email) between the two parties, or through a Swap Execution Facility.
2. Trade is submitted to the DCO for ‘central clearing’ where Party 1 (Customer) assumes Counterparty Risk Exposure to DCO, and Party 2 (Dealer) assumes Counterparty Risk Exposure to DCO.
3. Party 1 and Party 2 both post Initial Margin and Maintenance Margin with the DCO.

**REGULATORY OVERVIEW**

The 2008 financial crisis sparked a debate among regulators, lawmakers, and market participants on regulations to improve the functioning of the capital markets and to reduce systemic-risk. Over-the-counter (OTC) derivatives were identified as a key area of systemic risk as they were lightly regulated and required little mandatory reporting to regulators.

In the US, with the passage of Dodd-Frank, the SEC was tasked with regulating “security-based swaps” and the CFTC with the vast number of all other “swaps”. “Security-based swaps” are broadly defined as a swap of any kind on a single underlying security (e.g. single-stock equity swaps) or underlying reference entity (e.g. single-name credit default swaps). (As of the time of writing, the SEC has not finalized its rulings on clearing of “security-based swaps”).

Throughout 2011 and 2012 the CFTC has been very active in proposing new rules and eliciting comment from market participants. This culminated in the adoption of a final rule on central clearing “Clearing Requirement Determination Under Section 2(h) of the CEA” on December 13, 2012. This document focuses on the final rulings made by the CFTC.
RULE-MAKING TIMELINE

2009
• Aftermath of financial crisis
• Debate on regulating OTC derivatives

2010
• Legal framework adopted
• OTC derivatives identified as key source of systemic risk

2011
• Initial rulemaking
• Regulators and market participants discuss proposed rules

2012
• Detailed rules proposed
• Market participants engage and comment
• Final rules

SEP 2009
G-20 nations agree to standardize OTC derivatives

JULY 2010
Dodd-Frank Act delegates OTC clearing rulemaking to CFTC

SEP 20, 2011
CFTC releases initial proposed rules and requests comments

AUG 7, 2012
CFTC releases detailed proposed rules and requests comments

DEC 13, 2012
CFTC releases final rules and regulations including:
- Implementation schedule
- List of cleared derivatives

SWAP EXECUTION FACILITIES (SEF) AND DERIVATIVE CLEARING ORGANIZATIONS (DCO)
The Commission has encouraged market participants to minimize the bilateral trading of swaps and standardize trading through a Swap Execution Facility (SEF) where possible. SEFs provide market transparency and standardized electronic trading. Although this initiative is still evolving, SEFs such as TradeWeb for Interest Rate Swaps and MarketAxess for Credit Default Swaps are currently operational.

To enable central clearing, the CFTC has reviewed and approved certain clearinghouses for this purpose. Approved clearinghouses are designated as Derivative Clearing Organizations (DCOs) and will be regulated by the Commission. The DCOs are required to submit the contract parameters for each of their cleared derivative products to the CFTC for consideration for mandatory clearing. The DCOs include LCH SwapClear, ICE Credit, ICE Europe, and the CME Group.

OTC DERIVATIVES SUBJECT TO MANDATORY CENTRAL CLEARING
The final rules on OTC central clearing adopted by the CFTC on December 13, 2012 mandates several sweeping changes to trading OTC derivatives. The rules affect the trading, clearing, collateral management, and risk management of certain types of OTC derivatives.

In its ruling, the CFTC decided to first focus on clearing OTC swaps that have a large market share, such as Interest Rate Swaps, and those that are capable of having a significant market impact, such as Credit Default Swaps (CDS). Interest Rate Swaps account for $500 trillion of the $650 trillion global OTC swaps market in notional dollars outstanding, and CDS’s account for $29 trillion in notional outstanding. Additionally, the CFTC also decided to focus on those derivatives that were already cleared widely through a central clearinghouse on a voluntary basis by market participants.

Based on the above considerations, Interest Rate Swaps and Credit Default Swaps were determined to be the best suited for the initial clearing requirement.

INTEREST RATE SWAPS (IRS)
The Commission determined that initially only the simplest interest rate swaps would be subject to mandatory central clearing. IRS with optionality, dual currencies, or conditional notional amounts are excluded from its initial clearing determination.
SPECIFICATIONS OF INTEREST RATE SWAP CLASSES SUBJECT TO MANDATORY CLEARING:

Interest Rate Swaps in four major currencies (USD, EUR, GBP, JPY), on major indices, and in four distinct classes:

1. **Fixed-to-Floating Swaps**
2. **Basis Swaps**
3. **Forward Rate Agreements**
4. **Overnight Index Swaps (OIS)**

AVAILABLE DCOS FOR INTEREST RATE SWAPS:

1. **LCH.Clearnet SwapClear (LCH):** Largest DCO for Interest Rate Swaps. Currently clears 50% of all OTC interest rate swaps (i.e. both bi-lateral and centrally cleared) globally. Of the centrally cleared interest rate swaps, LCH accounts for 95% of all cleared trades.¹
2. **CME Group (CME):** Started clearing Interest Rate Swaps in 2010 and clears fewer Interest Rate Swap classes.

### INTEREST RATE SWAPS MANDATORY CLEARING DETERMINATION SUMMARIZED

<table>
<thead>
<tr>
<th>INTEREST RATE SWAP CLASS</th>
<th>CURRENCY</th>
<th>FLOATING RATE INDEX</th>
<th>TERMINATION DATE RANGE</th>
<th>AVAILABLE DCOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. FIXED-TO-FLOATING SWAPS</td>
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<td>LIBOR USD</td>
<td>28 DAYS TO 50 YEARS</td>
<td>LCH, CME</td>
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<tr>
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<td>EUR</td>
<td>EURIBOR</td>
<td>28 DAYS TO 50 YEARS</td>
<td>LCH, CME</td>
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<td></td>
<td>GBP</td>
<td>LIBOR GBP</td>
<td>28 DAYS TO 50 YEARS</td>
<td>LCH, CME</td>
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<tr>
<td></td>
<td>JPY</td>
<td>LIBOR JPY</td>
<td>28 DAYS TO 30 YEARS</td>
<td>LCH, CME</td>
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<tr>
<td>2. BASIS SWAPS</td>
<td>USD</td>
<td>LIBOR USD</td>
<td>28 DAYS TO 50 YEARS</td>
<td>LCH, CME</td>
</tr>
<tr>
<td></td>
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<td>28 DAYS TO 50 YEARS</td>
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<td>LIBOR GBP</td>
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<td></td>
<td>JPY</td>
<td>LIBOR JPY</td>
<td>28 DAYS TO 30 YEARS</td>
<td>LCH, CME</td>
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<tr>
<td>3. FORWARD RATE AGREEMENTS</td>
<td>USD</td>
<td>LIBOR USD</td>
<td>3 DAYS TO 3 YEARS</td>
<td>LCH, CME</td>
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<td></td>
<td>EUR</td>
<td>EURIBOR</td>
<td>3 DAYS TO 3 YEARS</td>
<td>LCH, CME</td>
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<td></td>
<td>GBP</td>
<td>LIBOR GBP</td>
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<td>LCH, CME</td>
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<td>JPY</td>
<td>LIBOR JPY</td>
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<td>LCH, CME</td>
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<tr>
<td>4. OVERNIGHT INDEX SWAPS (OIS)</td>
<td>USD</td>
<td>FEDFUNDS</td>
<td>7 DAYS TO 2 YEARS</td>
<td>LCH, CME</td>
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<td></td>
<td>GBP</td>
<td>SONIA</td>
<td>7 DAYS TO 2 YEARS</td>
<td>LCH, CME</td>
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</table>

¹ LCH data
CREDIT DEFAULT SWAPS (CDS)

As with interest rate swaps, the CFTC decided to mandate clearing initially on only the simplest CDS trades referencing the major market indices. Single name CDS’s on a specific reference entity, even if they are available to clear through a DCO, are not required to centrally clear. Further, “tranched” CDS’s are also not required to centrally clear.

SPECIFICATIONS OF CREDIT DEFAULT SWAP CLASSES SUBJECT TO MANDATORY CLEARING:

The Commission identified two classes of CDS:

1. North American Untranched CDS Indices on the Markit CDX family of indices
2. European Untranched CDS Indices on the iTraxx Europe family of indices

The CFTC mandated certain indices and tenors for mandatory clearing, and selected the specific series where all newer series on that index / tenor combination would be subject to the clearing requirement. The Commission’s discussion acknowledges that volumes on the current “on-the-run” series will be significantly higher than an older “off-the-run” series. However, the Commission expects the volume on older series to be sufficient for the DCOs to support central clearing.

AVAILABLE DCOS FOR CREDIT DEFAULT SWAPS:

1. IntercontinentalExchange (ICE): Largest clearinghouse for CDS trades. ICE Clear Credit clears North American CDS; ICE Clear Europe clears European CDS.

Over time, the Commission plans to increase the derivative classes covered by including more CDS and Interest Rate Swaps, and adding other OTC swaps such as energy swaps and equity index swaps.

### CREDIT DEFAULT SWAP MANDATORY CLEARING DETERMINATION SUMMARIZED

<table>
<thead>
<tr>
<th>CDS CLASS (UNTRANCHED ONLY)</th>
<th>INDICES</th>
<th>TENOR</th>
<th>SERIES</th>
<th>AVAILABLE DCOS</th>
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<tbody>
<tr>
<td>1. NORTH AMERICAN UNTRANCHED CDS INDICES (MARKIT CDX FAMILY OF INDICES)</td>
<td>CDX.NA.IG</td>
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<td>SERIES 15 ONWARDS</td>
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<td>2. EUROPEAN UNTRANCHED CDS INDICES (ITRAXX EUROPE FAMILY OF INDICES)</td>
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<td>SERIES 10 ONWARDS</td>
<td>ICE EUROPE</td>
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IMPLEMENTATION CALENDAR FOR DIFFERENT CATEGORIES OF ENTITIES

The CFTC has decided to require compliance with these rules to be phased-in in three stages depending on the category of the trading entity. From December 13, 2012, the date of announcement of these rules, Category 1 Entities will have 90 days, Category 2 Entities will have 180 days, and Category 3 entities will have 270 days to implement clearing of specified IRS and CDS’s through approved DCOs. The “end-user” clearing exception applies to counterparties that are not financial entities. Trades by “end-users” are not subject to mandatory central clearing.

KEY BENEFITS OF CENTRAL CLEARING

1. **Standardizes Counterparty Credit Risk** – credit risk transfers to the DCO from the traded counterparty as the DCO assumes the risk of default non-payment and guarantees future cash flows.

2. **Reduces Operational and Trading Costs** – standardization of contracts leads to standardized trading and clearing procedures, and potentially reduces legal costs of reviewing bespoke contracts.

3. **Capital Efficiency** – standardizing margin and collateral requirements by the DCO, levels the playing field for buy-side firms and smaller entities with their swap dealers. Standard margin settlement process for all firms and netting and compression benefits has the potential to significantly reduce margin requirements.

4. **Consistent Valuation and Mark-to-Market** – consistent valuation methodology and frequent mark-to-market by an independent DCO instead of differing and potentially biased valuation methods by each swap dealer.

**» PRACTICE MANAGER – SANJAY BHARWANI**

Sanjay Bharwani is the founder and CEO of Risk Advisors Inc. where he focuses on the market risk and operational risks of OTC derivative trading strategies.

Prior to founding Risk Advisors, Mr. Bharwani was the Chief Information Officer at M. Safra & Co., a multi-strategy hedge fund focused on global macro and systematic trading strategies. Earlier in his career he focused on emerging markets debt at EXIS Consulting, a boutique capital markets advisory firm, and derivative valuations at Reval, a risk solutions provider.

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