



GLOBAL riskupdate



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Keynes' 'Animal Spirits' in the financial markets

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OTC Clearing Evaluation of the EMIR and Dodd-Frank Regulations and their Impact on IT

Michel Dorval is a global market specialist at Misys. In this first article concerning OTC Clearing, he goes more in detail about the differences between bilateral and central clearing, the different stakeholders and associated workflow.

The financial crisis of 2008 occurred in part due to the lack of transparency in the trading and processing of OTC derivatives. It highlighted a number of weaknesses within the over-the-counter (OTC) derivative markets; most notably shortcomings in the management of counterparty credit risk.

In the ensuing G-20 summit, world leaders reacted with an agreement that all standard OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central clearing counterparties (CCPs).

Before delving into the details of the new proposals for OTC Clearing, this white paper introduces the different stakeholders involved (the affirmation platform and trade repository, for example) and the workflow required, before comparing CCP with the more commonly used bilateral clearing.

Bilateral clearing, which occurs where the trade is negotiated directly between the buyer and the seller, will be replaced by a CCP that benefits both parties in the transaction. This CCP will intervene between the two counterparties to manage the risk that could arise if one counterparty is unable to make a payment when it is due.

While the purpose of implementing OTC clearing is to reduce systemic risk, various misguided clearing regulations can also potentially have the opposite effect by creating a single point of failure and a concentration of risk.

Currently, implementations of the new regulation are moving slowly, with progress at various stages in different countries.

This article gives a general overview of the OTC rules by comparing the European rules (EMIR) with the US regulatory changes (Dodd-Frank Act) on the basis of scope, time-line, exception and reporting requirements.



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It excludes the Asian regulators because they have been slower to rule on implementing OTC Clearing.

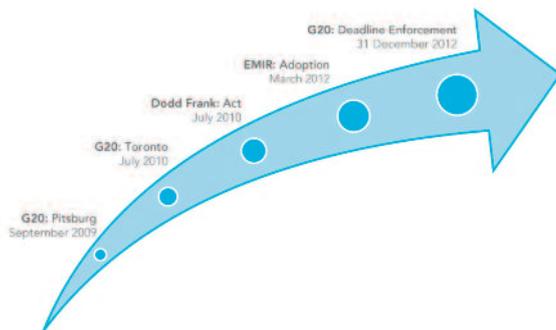
The final part of this article looks in more detail at the analysis that must be done by the different players (banks, clearing members, trade repositories and so on) when choosing a business system to meet their requirements. Connectivity, a flexible calculation engine, configurable rule-based workflows and specialized reporting are crucial prerequisites for compliance with the OTC clearing framework.

From Bilateral to Central Clearing

The credit crunch in 2008 revealed the impact that OTC derivatives could have on global financial stability: ineffective counterparty risk management; a lack of transparency; and the systemic risk incurred when one counterparty default cascaded into defaults for other parties, so transforming the US Sub-prime problems into a global financial crisis.

In September 2009, at the G-20 Pittsburgh Summit, the leaders of the world’s 19 biggest economies reacted by agreeing that “all standard 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.” This agreement has been filtered into the Dodd-Frank Act in the US (July 2010) and the European Market Infrastructure Regulation (EMIR), which was accepted at the end of March 2012. The following chart (figure 1) sets out the time-line.

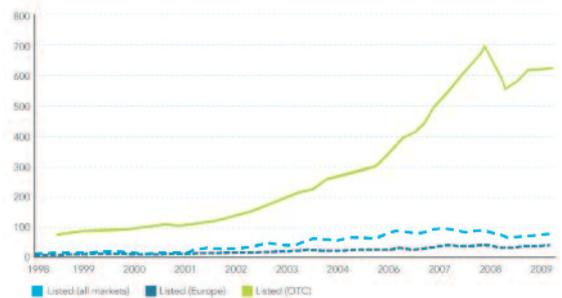
Figure 1: OTC reform timeline



Before we go into more detail about these two legislative milestones, we should provide some information on derivatives and the way they are cleared. OTC derivative contracts are not traded on an exchange such as the CME, but are instead privately negotiated between two counterparties (for example a bank and a manufacturer).

OTC derivatives account for almost 95% of the derivatives markets, as shown in the following chart (figure 2).

Figure 2: OTC derivatives volumes



Source: Bank for International Settlements (BIS)

The OTC derivatives market comprises a wide variety of product types across several asset classes (interest rates, credit, equity, foreign exchange and commodities) with widely differing characteristics and levels of standardization. OTC derivatives are used in a variety of ways, including hedging, investing and for speculative purposes.

The derivatives contract between two counterparties is a contractual relationship which may last from a few days to several decades, and may involve counterparty credit risk as each builds up claims against the other.

The counterparty risk can be managed over time through clearing. This may be performed bilaterally, in which case it is usually governed by an ISDA master agreement, or via central clearing where a Central Clearing Counterparty (CCP) stands between the two sides. This will be described in more detail in the next paragraph.

Bilateral Clearing

Bilateral clearing is commonly used for OTC derivatives; it involves collateral being used as insurance against excessive credit exposure. As shown in the diagram below, this means that the trade is negotiated privately between the dealer and the client (e.g. A and B), with all life-cycle event-processing the responsibility of these two parties.

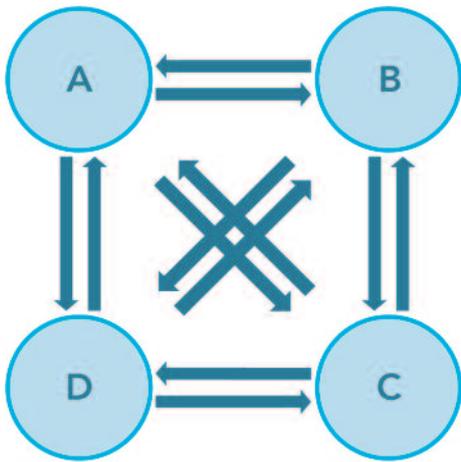
This clearly results in a web of counterparty exposures between the different participants (A, B, C and D) with complex collateral movements and the risk of a potential domino effect if one dealer (e.g. C) defaults.

Collateral is managed through use of an ISDA Credit Support Annex (CSA) which has been mutually agreed. The majority of bilateral collateral agreements only provide for the exchange of variation margin, not an initial margin that covers the potential cost of replacing the contract in case of default by the original counterparty.

OTC derivatives still require a considerable amount of manual intervention during the process, from initial agreement through to confirmation of the transaction. This leads to high levels of operational risk. The lack of transparency with bilateral clearing also brings risk; OTC derivatives are privately negotiated so information concerning the contract is usually only available to the contracting parties.

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Figure 3: Bilateral clearing

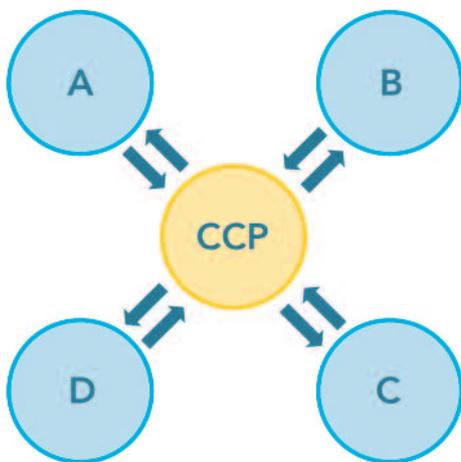


Central Clearing

To mitigate the disadvantages of bilateral clearing described above, the concept of the central counterparty has emerged to facilitate the clearing of OTC derivative trades, where the trade is negotiated between dealer and client, then handed over to the CCP for clearing.

As shown in the diagram (figure 4), a CCP is an entity that sits between two counterparties to a transaction (A and B, for example), becoming the buyer to every seller and the seller to every buyer. A CCP’s main purpose is to manage the risk that could arise if one counterparty is unable to make the required payments when they are due; in other words, they default on the deal.

Figure 4: Central clearing model



To overcome the weaknesses of bilateral clearing the following three pillars have been proposed by the regulator:

- **Straight-through processing (STP):** use of electronic means to ensure the timely confirmation of the OTC derivative terms
- **Clearing via CCPs to mitigate counterparty risk:**

stringent rules for CCPs, mandatory CCP clearing for standardized contracts and risk mitigation standards for ‘not cleared’ contracts, like collateral

- **Execution and reporting to the trade repository to increase transparency:** detailed information on OTC derivative contracts, accessible to supervisory authorities. These trade repositories publish aggregate positions by class of derivatives to all market participants.

These components will be examined in greater detail in the following chapters.

“Standardised “ OTC Derivatives

Stakeholders

In the case of standardized OTC derivatives, various stakeholders have a role to play:

- Central Counterparty (CCP)
- Affirmation Platform (AP)
- Trade Repository (TR)
- Clearing Members (CM)
- Swap Execution Facility (SEF)

Central Counterparty (CCP)

As stated earlier, the CCP is involved in every trade between two participants that is being ‘intermediated’ by the clearing house; in effect the clearing house becomes the counterparty for both the original trade participants.

There are currently about a dozen CCPs, clearing OTC derivatives based on interest rates, credit, equity and commodities. The CCP can be owned by participants or monitored by the regulator, and may differ on factors like margin requirements, infrastructure or the type of products cleared. In the US , major players like CME Clearing and Clearinghouse have emerged; while important European CCPs include LCH. Clearnet and Eurex clearing.

Affirmation Platform (AP)

An Affirmation Platform in the OTC clearing model provides post-trade execution functionality such as trade matching, affirmation, confirmation and trade reconciliation. In addition, these platforms enable trades to be sent to other stakeholders such as CMs, the CCP and to Trade Repositories, as necessary.

MarkitServ is a company that supports all major OTC derivatives products and trade life-cycle events, although there are also niche players like Icelink that focus on a specific asset class – CDS , in Icelink’s case.

Trade Repository (TR)

As the financial crisis highlighted the problems caused by insufficient transparency in the trading and processing of OTC derivatives, regulators initiated the trade repository, with a two-fold objective:

- Enhance market transparency for regulators and the investing public;
- Reduce systemic risk by ensuring regulators can see a firm’s underlying position and exposure from a central vantage point.

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The role of a trade repository is to provide a centralized, record-keeping facility to collect OTC derivatives' transactional data. Both cleared and non-cleared trades must be reported to the TR no later than the working day following the execution, clearing or modification of contracts. TriOptima is an example of a TR.

Clearing Members (CM)

CCPs have strict membership rules, which include setting initial capital requirements to become part of a clearing house. As not all clients can be members of a CCP, CMs act as an intermediary between buyers and the CCP for all post-trade functions, including daily margin management.

Most of the largest swap dealers in the market today are clearing members of the major swap clearing houses mentioned in the CCP section above. Goldman Sachs, JP Morgan and Deutsche Bank are examples of CMs.

Trading venue

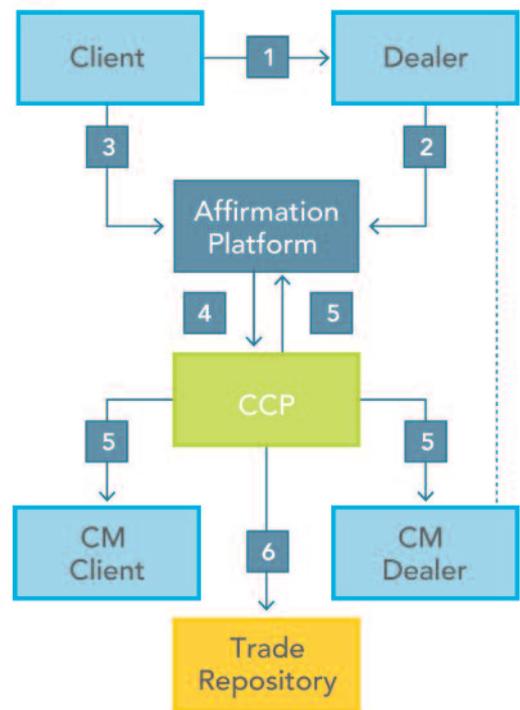
In accordance with the regulations, all standardized instruments must be traded electronically. In Europe a trading venue can be a regulated market (the London Stock Exchange, for example); a multilateral trading facility (MTF), such as BATS/Chi-X); or an organized trading facility (OTF) – a new kind of trading venue that was introduced in MiFID II).

In the US, the swap execution facility (SEF) provides the required platform for buyers and dealers to trade OTC cleared swaps electronically. At present there are no approved SEF s in the OTC space; however US regulators are reviewing proposals from various SEF candidates, while finalizing the standards and rules of acceptance to be used in the OTC Clearing model.

Workflow

The following diagram displays (figure 5) the trade workflow mechanics operating between client, dealer, affirmation platform, CCP, clearing members and trade repository.

Figure 5: Trade workflow



- 1 Dealer and client agree to trade.
- 2 Dealer sends the trade for affirmation to the AP.
- 3 Client selects CM and CCP and affirms the instrument.
- 4 AP sends the matched trade between dealer and client to the CCP.
- 5 CCP performs eligibility controls. CCP sends cleared notification back to the AP. CCP sends a clearing confirmation to CM.
- 6 Matched trade is sent to the trade repository.

What about “non-standardized” OTC derivatives?

Non-standardized OTC derivatives will also have to be reported to trade repositories. They will additionally be subject to sound risk management procedures and frameworks to measure, monitor and mitigate operational risk and counterparty credit risk.

This means that participants need to guarantee portfolio reconciliation and the daily mark-to-market (MtM) value of outstanding contracts, daily valuations of margins and have the appropriate level of capital to cover any risk not covered by the exchange of collateral, to be able to absorb any unexpected losses.

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