

Masters of Risk

Can regulators and technology be the solution?

You can't change the past, but to protect the future, NASDAQ OMX's Brian O'Malley argues, the financial services industry needs to partner with the regulators to evaluate what went wrong, which market mechanisms worked and which did not. Best practices risk management controls, O'Malley argues, must be put in place, and followed.



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The current financial crisis could be described as a disaster waiting to happen. At too many institutions the basic tenets of good long term risk management were being ignored in favour of short term profits. A lack of transparency meant many investment bank boards and executives did not fully understand the risk their firms were assuming with complex new instruments. As a result, they were not able to properly assess the return they were getting for them.

At the same time, trillions of dollars worth of risky OTC contracts were being traded and cleared bilaterally around the globe without proper risk management controls, and the regulators have been accused of being asleep at the wheel.

Opinions vary, but most observers agree on one thing. If regulated exchanges and clearing houses, with proven risk management practices, had a role in the OTC derivatives markets, the crisis would not have been as severe. Therefore, these organizations must be part of the solution.

Exchanges and clearing houses assume and manage counterparty and clearing risk. The members put up capital, and collateral is collected from the counterparties in the form of initial margin. The exchange measures and manages intra-day risk. When market volatility increases, a variation margin call is made. The positions of firms that cannot meet the margin call are liquidated. When the circumstances require it, the exchange can tap into the shared capital and the

clearing corporation's capital.

This system worked extremely well, even during the worst days of 2008. So the question is: should OTC contracts be migrated to exchange trading and central counterparty clearing?

There are precedents for central counterparty clearing in the OTC markets. CLS Bank operates the largest multi-currency cash settlement system, eliminating settlement risk for over half the world's foreign exchange payment instructions. In the US, fixed-income marketplace, Fixed Income Clearing Corporation, processes more than US\$3.7 trillion each day in US Government and mortgage-backed securities transactions.

expensive or complicated.

The NASDAQ OMX solution was to allow the client to send an order book to all its customers in a single encrypted message. Users have a decryption key that determines which view of the order book they are permitted to see. The client has been using this technology in Europe to help handle pre-trade risk in securities lending.

Despite these examples, some Wall Street firms are resistant to the idea of trading OTC instruments on exchanges and clearing them centrally. They argue that OTC contracts are far more flexible than standardized, exchange-traded contracts. Bilateral trading allows them to retain anonymity. OTCs can be traded

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For the last few years, the London Clearing House has operated a clearing facility for interest rate swaps. The International Derivatives Clearing Group (IDCG) recently started clearing and settling US dollar interest rate swap futures, and Liffe's Bclear, which already clears OTC equity derivatives, started clearing credit default swaps (CDSs).

Role of risk-mitigating technologies

Creative use of technology can also play a big role in mitigating risk. For example, a large NASDAQ OMX technology client is leveraging technology to minimize pre-trade risk. Its customers wanted a system that could automatically validate a counterparty's collateral and filter out bids and offers from unacceptable trading firms. In practice, this meant, traders could only see bids and offers from firms with whom they had open credit lines. Considering the number of versions of the order book that need to be sent out, the challenge was to create a system that was robust but not overly

electronically or by voice, and typically the larger the deal, the more likely it is to be executed over the phone. Moreover, many OTC instruments are off balance sheet products. If they are centrally cleared, they would have to put up collateral, such as treasury bills, to meet margin calls, and these would be would be an on-balance-sheet item.

An on-balance-sheet item is an asset or liability that a firm formally owns or is legally responsible for. These items also are recorded as a profit or loss on the firm's income statement. Futures, forwards and derivatives typically are not included on the balance sheet, and therefore they do not affect the firm's liquidity and capital resources. The issue of off vs. on balance sheet items needs to be included in future risk management discussions.

The OTC market makers also have a vested interest in maintaining the status quo because the lack of transparency and price discovery works in their favor. Migrating these products to exchange trading and central counterparty clearing could reduce their revenue.

Introduced in November 2008, the Derivative Trading Integrity Act amends

Top 10 best practices in risk management

The financial crisis would not have been as severe – or possibly could have been averted - if the best practices in risk management had been followed. Many key tenets were ignored in the interest of short-term gains. Going forward, here are the top 10 practices that, if followed, can help prevent future meltdowns.

1. Recognize and manage the natural tension between P&L and risk mitigation; ensure there is a vibrant dialogue and balance.
2. Be prepared to walk away from a deal or a product.
3. Start at the top; ensure oversight and engagement of independent directors.
4. Make individuals accountable, not committees; every risk has an owner.
5. Look around the corner and anticipate risk even if the light is bad.
6. If it is too good to be true from a margin perspective, it is, and doesn't include the risk cost.
7. Empower the internal audit department; ensure that the staff is capable and can think like business people.
8. Engineer smart controls that are automated and woven into the systems and operations; challenge the control status quo as often as you do the business delivery.
9. Leverage the experts in assessing risk and controls, know what you don't know.
10. Maintain transparency for the risk inventory, risk appetite and monitoring of the risk appetite.

Quick FIX

In the future, technology and messaging standards will play a key role in enabling the trading, clearing and settlement of OTC instruments. The FIX Protocol has become the de-facto messaging standard for pre-trade and trade communication globally within the equity markets, and is now experiencing rapid expansion into the post-trade space, supporting straight through processing (STP) from Indication-of-Interest (IOI) to Allocations and Confirmations. From this foundation, the protocol is gathering increased momentum, as it continues to expand across the foreign exchange, fixed income and derivative markets.

However, FIX is typically used to trade standardized, exchange-listed products. The current standard for structured products is fpML, which is supported by the International Swaps and Derivative Association. Some sort of collaboration between the two formats may be the likely scenario for the trading of OTC products in the future.

the Commodity Exchange Act to eliminate the distinction between “excluded” and “exempt” commodities and regulated, exchange-traded commodities, so futures contracts for all commodities would be treated the same. It also eliminates the statutory exclusion of swap transactions, and ends the U.S. Commodity Futures Trading Commission’s authority to exempt these transactions from being traded on

a regulated board of trade. In effect, this means that all futures contracts must be traded on a designated contract market or a derivatives transaction execution facility. In addition, all swaps contracts fall under the definition of futures contracts and function basically in the same manner as futures contracts. While it is far from certain that this or a similar bill will pass, clearly the topic will be hotly debated.

At this stage, it is unclear how the OTC market will look in the future, but change is inevitable. The financial crisis highlighted the need for the type of real-time risk management that is an integral part of regulated exchanges and clearinghouses. These organizations can provide transparency where it does not exist today, mitigate counterparty and operational risk and reduce trading costs through the use of efficient technology.

At the same time, the basics of risk management haven’t changed. It is simply the application that has become sloppy. The financial institutions that remained in good shape through the financial crisis were the ones that maintained their risk management discipline and spread their risk around. A back to basics approach, when it comes to risk management, can be just the right medicine for an ailing financial services industry.

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