

# Value of CCP Clearing Model

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A CME/Chicago Board of Trade/NYMEX Company

While the worst may arguably be over, the sub-prime mortgage crisis nonetheless dealt a severe blow to the global economy, the aftermath of which will be felt for some time. The crisis highlighted the fact that when the financial sector ceases to function properly, the entire economy shares the pain. Funding is a basic structural component of every balance sheet but the appetite for lending and investment abated sharply in the wake of the crisis with an obvious deleterious impact on global business conditions.

Over-the-counter (OTC) derivatives markets were particularly hard hit. The responsible and efficient operation of the OTC derivatives market serves a hedging and risk management function that permits institutions to lend and invest funds with confidence. But these markets were paralyzed by a fundamental lack of confidence in accepting counterparty credit risks.

Accordingly, the OTC derivatives market must adapt the way it does business and we believe that central counterparty clearing (CCP clearing) represents a major part of the solution. CME Group is uniquely postured to apply its CME ClearPort clearing system to good effect, combining responsible credit management policies with capital efficiencies. While the system has largely been deployed in the context of energy markets to date, we believe its utility is generalizable across other asset classes including interest rates, FX, credit and agricultural markets.

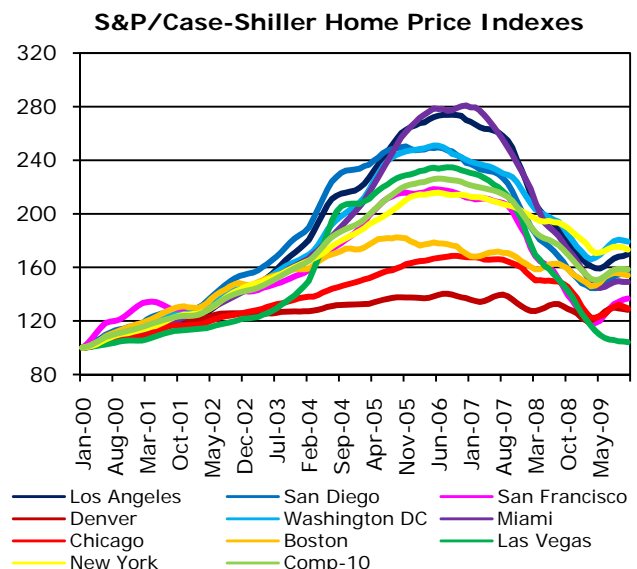
This article provides background on the origin of the recent financial crisis, the regulatory reaction and how the CME CCP clearing model can help market participants efficiently address price risks as well as counterparty credit risks in the context of the economically vital OTC derivatives markets.

**Financial Crisis** - The U.S. experienced solid growth between 2002 and 2007 when the so-called sub-prime mortgage crisis erupted. The financial crisis started on Main Street U.S.A. as many subprime borrowers took out Adjustable Rate Mortgages (ARMs) to purchase housing in the early to mid 2000s.

These purchases were regarded as "safe" because housing prices had risen steadily over the past few decades. Aggressive mortgage lending practices and Federal programs designed to promote the social ideal of "universal home ownership" allowed otherwise unqualified borrowers to enter the market and push home values into a "housing bubble."

But ARM rates are tied to short-term interest rates such as the target Fed Funds rate. Fed Funds were held at an extremely low rate of 1% in 2003-04 in the wake of the bursting of the "dot-com" bubble. But when the Federal Reserve (the "Fed") began to tighten in 2004, ARM borrowers became subject to much distress.

Mortgage borrowers became delinquent or defaulted on their obligations. Foreclosure rates soared, particularly amongst sub-prime ARM borrowers to levels that now approach 25%. The U.S. housing bubble burst by mid 2006 as home values plummeted with the S&P/Case-Shiller Home Price Composite Index of 10 U.S. cities down approximately 30% from its peak.



The contagion quickly spread from Main Street to Wall Street. Mortgage investors, often involved in complex, levered and generally illiquid structures including structured investment vehicles (SIVs) and collateralized depository obligations (CDOs) saw the value of these investments decline quickly.

Faced with the need to raise capital, many of these investors including levered asset managers turned to the equity markets as a source of liquidity. The result was a 37% decline in the value of the S&P 500 in 2008.

The entire economy became a casualty of the crisis as U.S. GDP fell 6.4% in the 1<sup>st</sup> quarter 2009. U.S. unemployment soared to 10.2% by October 2009. Since those low points, however, conditions have begun to improve with 4<sup>th</sup> quarter 2009 GDP at

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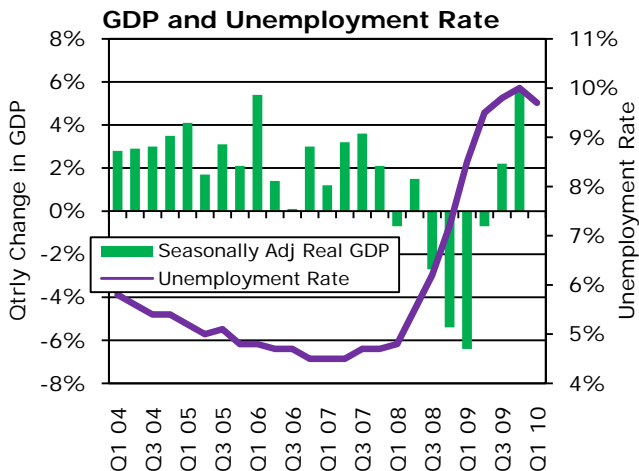
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5.7%. Unemployment remains high, but has backed off to 9.7%.

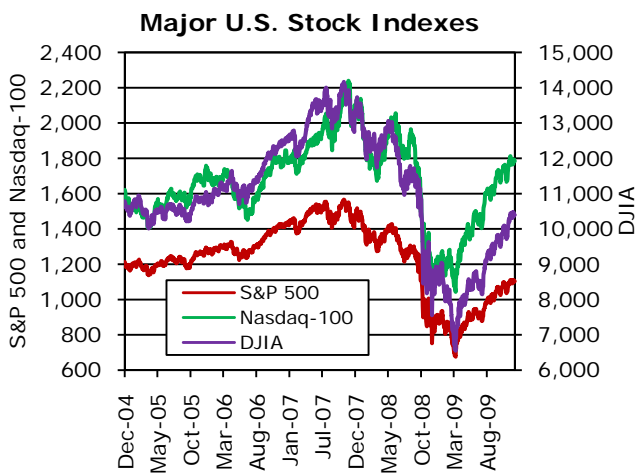


The Proposed Bill would enact sweeping reforms affecting the over-the-counter (“OTC”) derivatives markets and reverses the portion of the Commodity Futures Modernization Act (“CFMA”) of 2000 that had largely exempted OTC derivatives from significant regulatory oversight.

If passed, the broad provisions of the Proposed Bill would be supplemented by more specific and detailed regulations to be developed by the two primary agencies, the Commodity Futures Trading Commission (“CFTC”) and the Securities Exchange Commission (“SEC”). It remains unclear what will eventually emerge as the regulatory framework per which OTC derivatives will be regulated.

The Proposed Bill includes provisions regarding the clearing, trading and reporting of OTC transactions; as well as registration of OTC market participants as summarized below.

Stock markets are often regarded as a leading indicator of economic events and have been rallying impressively since the lows of spring 2009. Still, credit conditions remain challenging for many OTC market participants in the wake of the financial crisis.



**Regulatory Reaction** – These circumstances have attracted considerable regulatory scrutiny in the U.S. Specifically, the “Over-the-Counter Derivatives Markets Act of 2009” (the “Proposed Bill”) was passed by the U.S. House of Representatives in December 2009. The legislation is now under consideration in the Senate and subject to possible amendment.

- ✓ *Standard Swaps Must be Cleared* - Standardized non-security based swaps must be centrally cleared by a derivatives clearing organization registered with the CFTC while standardized security-based swaps must be centrally cleared by a clearing agency registered with the SEC, subject to certain exceptions. The Proposed Bill creates a legal presumption that a swap or security-based swap is standardized if it is accepted for clearing by any clearing organization or agency.
- ✓ *Regulator Established Margins* - Regulators are directed to impose capital and margin requirements for OTC derivatives on all derivatives dealers and major derivatives participants, with higher capital requirements for derivatives that are not centrally cleared.
- ✓ *Position Limits* – The Proposed Bill gives the CFTC and SEC rulemaking authority to prevent abuses in the OTC derivatives markets, including setting position limits and instituting reporting requirements for OTC derivatives that perform or affect a significant price discovery function.
- ✓ *Cleared Swaps Must be Traded* - All standardized swaps must be traded on a regulated exchange or alternative swap execution facility, unless no clearing organization or agency will accept the instrument for clearing or one of the counterparties is not a derivatives dealer or major derivatives participant and does not meet the eligibility requirements of any clearing

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organization or agency that clears the instrument.

- ✓ *Swap Trader Registration and Oversight* - The Proposed Bill creates a system of mandatory federal registration, supervision and regulation of all derivatives dealers, major derivatives participants and swap repositories to be created. It further subjects new categories of market participants to regulatory oversight, including "swap dealers" and "security-based swap dealers" (sometimes refer to collectively as "derivatives dealers") and "major swap participants" and "major security-based swap participants" (sometimes referred to collectively as "major derivatives participants"), with major derivatives participants being defined solely by the size of derivatives positions entered into or held.
- ✓ *Data Reporting* – The Proposed Bill requires large swap traders and large security-based swap traders to report to the SEC and CFTC information pertaining to swaps that have a significant price discovery function. The Proposed Bill further requires reporting of OTC derivatives not accepted for clearing to a registered swap repository or, if there is no repository that will accept the trade, directly to the CFTC or SEC or their designee; and require confidential sharing, upon request, of individual transaction and counterparty data with other regulators, including foreign financial supervisors. The CFTC and SEC or their designees must make publicly available the public aggregate data on swap and security-based swap trading volumes and positions. The Proposed Bill also requires reporting within 180 days of enactment of all outstanding OTC derivatives entered into prior to enactment.

The proverbial "devil is in the details" and there are many unanswered questions regarding the legislation at this time. However, it is noteworthy that the bill includes a mandate for CCP clearing to be applied to standardized OTC derivatives. As such, the legislators recognize the many benefits of CCP clearing facilities.

**Benefits of CCP Clearing** – Consistent with the broad intent of the pending legislation, CME Group is working to leverage our capabilities and assets to work with OTC market participants to design and offer cleared-only services that cater to the evolving demands of OTC markets under the CME ClearPort

brand name. The benefits of such centralized clearing are described as follows.

- ✓ *Financial Sureties* - The CME Clearing House acts as buyer to every seller; and, seller to every buyer. Thus, we provide for the separation of trading counterparties from credit counterparties. Further, the CME Clearing House provides for the most effective customer protection system in the world, segregating customer funds and positions from those of the bank or broker. Finally, and perhaps most importantly, central counterparty clearing guarantees the performance of every transaction, both on-exchange or over-the-counter, backed by an \$8 billion financial safeguard system.
- ✓ *Mark-to-Market* – CME Group clearing features a twice daily mark-to-market (MTM) regime with performance bond requirements adjusted as required based on volatility and market events. This effectively means that unrealized losses cannot accrue or go unnoticed, assuring confidence for market participants.
- ✓ *Transparency* – Transparent pricing and ready competition are major benefits of the exchange traded and CCP cleared model. These factors go far to facilitate tight bid/ask spreads and competitive markets. But we should qualify this to the extent that some nascent and highly customized products may function better with a more flexible model. Dealers are compensated by taking in the bid/offer spread and to the extent that spreads are overly compressed, dealer incentives to nurture markets through marketing activities or by developing innovative contract structures may prematurely be stifled, potentially jeopardizing the existence of the market.
- ✓ *Capital Efficiencies through Cross-Margining* – CME Group offers an extraordinarily wide array of products covering the interest rate, equity, currency, energy, agricultural, metals and alternative investment asset classes. Significant capital efficiencies in the form of reduced performance bond or margin requirements are implied by bringing correlating OTC and on-exchange products under one roof.
- ✓ *Automated Bookkeeping Processes* – Automated, rather than manual, processes ensure timely and accurate confirmation of transactions. This in turn contributes to a general reduction in trade processing costs.

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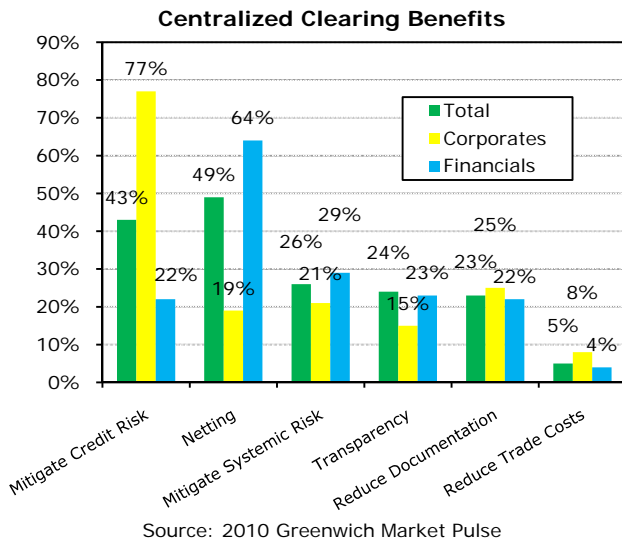
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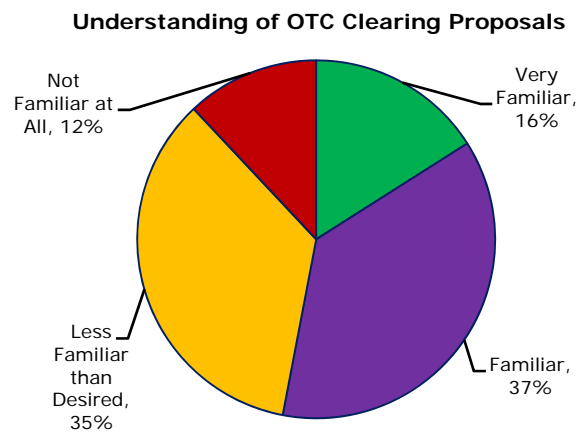
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Greenwich Associates recently published the results of a survey of 330 investors and corporate executives regarding their perceptions of CCP clearing as potentially applied to OTC derivatives. These investors were sampled from North America, Europe and Asia during January 2010.

further regarding the possible impact upon bid/offer spreads, 49% believed that spreads would tighten as a result of CCP clearing; 24% said spreads would remain stable; and, 27% said they could widen.

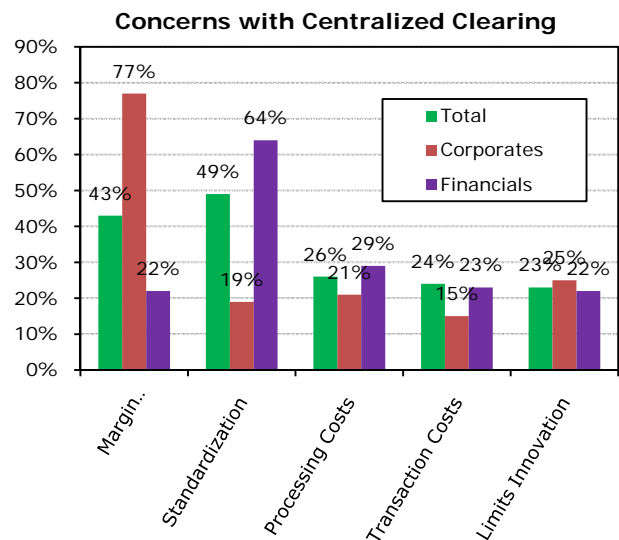
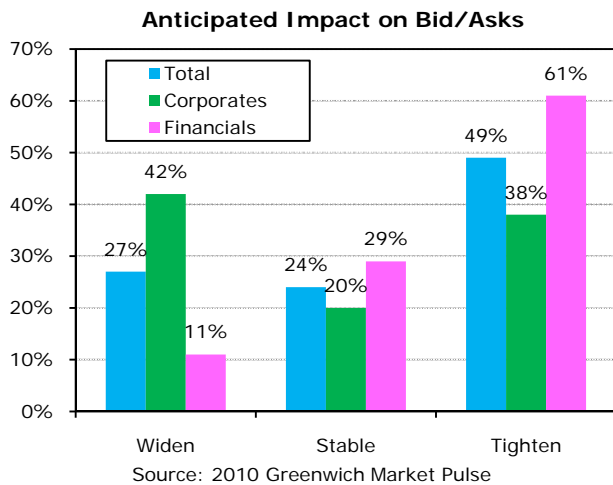


**Obstacles to Overcome** – Perhaps the most significant impediment to CCP clearing of OTC derivatives may be described as a lack of understanding. While 16% and 37% of the respondents were “very familiar” or “familiar” with OTC clearing proposals, some 35% were “less familiar than desired and another 12% were “not familiar at all.”



Survey participants cited the most important benefits of CCP clearing including ... (i) mitigating credit risks; (ii) netting of positions; (iii) mitigating systemic risks; (iv) transparency; (v) reduction of documentation including ISDA and CSA papers; and (vi) reducing transaction costs including the bid/offer spread as well as processing costs.

Concerns cited regarding CCP clearing proposals centered about margin requirements, standardization, processing and transaction costs and the effect upon innovation.



Only 5% of the total respondents cited reduction in transaction costs as one of the most important benefits implied by CCP clearing. But when queried

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The concerns regarding standardization and possible inhibition of innovation are closely related to the extent that the OTC derivatives market has innovated many customized products over the years that are closely tailored to customer demands. The pending legislation speaks of mandatory clearing of standardized OTC derivatives. The term "standardized" is interpreted as an instrument that a Clearing House ("CH") is capable of processing from an operational standpoint.

**CME ClearPort** – Clearing of OTC derivatives is not a novel concept. The CME ClearPort system has operated successfully since May 2002. In that relatively short period of time, volumes have steadily grown and were reported at 558,000 contracts on an average daily basis in 2009.

CME ClearPort should not be thought of as a trading platform or as a clearing service. Rather it is best understood as an internet-based gateway through which transactions executed bi-laterally in an OTC environment may be submitted (or novated) to the CME Clearing House for clearance and processing per a CCP clearing model with all the attendant benefits.

CME ClearPort has historically been applied, and is most widely known, in the context of energy markets. CME ClearPort currently provides traders an unparalleled flexibility to conduct their own transactions in a slate of literally hundreds of energy and metals contracts off-exchange, negotiate their own prices, and submit the transactions through the CME ClearPort gateway to the CME Clearing House. But moving forward, it will not be a service offered exclusively for energy traders. Rather, this service may be applied in a wide variety of asset classes including interest rates, foreign exchange, agricultural commodities, metals and others.

The needs and demands of each of these markets are all somewhat unique. CME ClearPort is sufficiently flexible to address the varied requirements of traders in many different asset classes. In some markets this may mean that a bi-laterally executed transaction is utilized to create a position that is subsequently carried and treated as a futures contract for regulatory and bookkeeping purposes. In other cases, it may mean that bi-laterally executed transaction may continue to be carried as an OTC derivative for regulatory purposes but still enjoy the financial sureties and processing efficiencies implied by centralized counterparty clearing.

## CME ClearPort Milestones

<b>1998</b>	Enron transforms into leading energy company
<b>2000</b>	Commodity Futures Modernization Act (CFMA) allows clearing of OTC derivatives by clearing organizations
<b>2001</b>	Enron files for bankruptcy, raising counterparty credit concerns in OTC energy derivatives
<b>2002</b>	NYMEX introduces ClearPort for off-exchange transactions
<b>2003</b>	Average daily volume (ADV) = 24,137
<b>2004</b>	Thirty-four (34) OTC contracts listed on ClearPort
<b>2006</b>	ClearPort revenues exceed \$100 million on ADV = 313,128
<b>2008</b>	CME Group acquired NYMEX and ClearPort, renames service CME ClearPort and begins process of extending services to markets in addition to energy
<b>2009</b>	Average daily volume = 558,000

In some instances, CME ClearPort may be used to conduit transactions into the Clearing House that can be transacted exclusively on a bi-lateral basis or on a "cleared-only" basis. In the case of more mature and highly standardized markets, CME ClearPort may be utilized to augment an actively traded contract such that bi-laterally negotiated and on-exchange contacts may ultimately reside in the same clearing system.

But the unifying feature of CME ClearPort is the coupling of an OTC-style, bi-lateral execution with futures-style, multi-lateral clearing services. CME ClearPort is the conduit or mechanism through which the value-added services of dealers may be coupled with the financial safeguards and capital efficiencies of a CCP clearing model.

*For more information, please contact ...*

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