Recent turmoil in financial markets has driven an increased focus on the management of counterparty and systemic risk. Competition remains an important factor in the development of the innovative risk management and clearing solutions that are now helping to bring global counterparty and systemic risk in check. Competition tends to drive innovation, reduce prices and improve service. However, clearing houses, market participants and regulators alike need to be vigilant in guarding against the drive of competitors to compete on less rigorous, but commercially attractive, risk management standards.

IntercontinentalExchange (ICE) has strong roots in the development and growth of over-the-counter (OTC) markets through a focus on automation and clearing, and a desire to compete with incumbent exchanges. In 2000, ICE introduced standardized OTC energy contracts on a central trading platform, bringing transparency and liquidity to previously opaque, fragmented markets. Risk management took another step forward in 2002, when ICE’s introduction of cleared OTC contracts brought daily mark-to-market, margining and risk mutualization to these bilateral markets for the first time. Since then, energy markets have experienced healthy growth within a cleared, transparent environment.

In 2008, ICE Clear Europe, London’s first new derivatives clearing house in over a century, launched and brought more capacity for risk management in futures and OTC markets. Earlier this year, ICE Trust began operations as a dedicated U.S. credit default swaps (CDS) clearing house, followed by the introduction of ICE’s CDS clearing business in Europe. The adoption of clearing as a discipline within risk management practices has clearly accelerated in recent years due to the security offered by the cleared model, particularly within OTC markets.

While ICE has been a catalyst for these developments, the derivatives sector has been the principal beneficiary. By tailoring clearing solutions to the needs of each market, and in accordance with the requirements of regional regulators, competition has served the cause of risk management and market stability. ICE’s CDS clearing solutions in the U.S. and Europe are an important case study in how such competition contributes to the development of innovative risk management solutions.

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CREDIT DERIVATIVES
With its acquisitions of Creditex Group and The Clearing Corporation, and the development of CDS clearing, ICE has assembled industry-leading credit derivatives infrastructure and domain knowledge across trade execution, processing and clearing. Through contributions to clearing, portfolio compression, credit event and delta neutral auctions, re-couponing and trade automation, ICE is helping to lead in the next stage of CDS market development.

To date, ICE has cleared over $2.5 trillion (€1.7 trillion) in notional value. These clearing flows are backed by well over $2 billion in cash in guaranty funds — the largest default fund dedicated to a single product among clearing houses globally.

ICE approached the credit derivatives sector to facilitate clearing within the existing market infrastructure; instead of requiring the market to accommodate its clearing solution, ICE built its solution around the CDS market. This encompassed existing CDS products and the existing workflow and market structure of the CDS markets, including the use of:
- DTCC/Trade Information Warehouse
- Net settlement system via CLS
- ISDA master agreements
- Open execution model

In developing its offering, ICE consulted with all key stakeholders: clients, dealers, ISDA, SIFMA, MFA, regulators and policy makers. Timelines, strategies and product offerings were developed in consultation with these parties and in the context of the rigors of managing the risks of a new cleared asset class.

In addition to bringing a competitive solution to market on the basis of existing customer and market needs, ICE’s clearing solution also introduced a CDS-specific risk management model, a dedicated risk pool and reliable pricing. Importantly, the basis of this approach is the up-front allocation of prudent collateral to mitigate potential counter-cyclical systemic risk.
1) **Rigorous Risk Management:** Instead of using an off-the-shelf industry methodology, ICE’s model is tailored to the CDS marketplace. A normal distribution is not the correct statistical model for CDS. Because risks are highly asymmetric between buyers and sellers of protection, ICE employs a “fat tail” risk management model. Indeed, ICE’s model was in production testing during Lehman’s collapse last year, and was able to incorporate Lehman’s data in real time. The clearing model demonstrated that it could successfully risk manage actual positions in a default environment.

2) **Dedicated Risk Pool:** Along with risk-based, forward-looking margin, there is a mutualized risk pool called the guaranty fund. The margin and the guaranty fund calculations are forward-looking using a five-day risk scenario. ICE’s risk pool calculation is based on the simultaneous defaults of its two largest clearing members in deteriorating market conditions. Covering the largest losses in such a default scenario reflects a prudent approach that is a critical measure of any clearing model.

3) **Reliable Pricing:** No single data service was available to provide sufficiently high quality prices for ICE to offer the level of risk management required for the range of products the credit industry wished to clear. Therefore, ICE developed a pricing algorithm with input from the industry that was designed to ensure accurate mark-to-market of all cleared contracts. On a daily basis, ICE conducts a modified auction process, with input prices executable on certain random days. ICE collects that data at the end of day, and then uses it to create a closing price for each instrument for which there is open interest.

**INDIRECT ACCESS**
ICE has developed a robust framework to protect customer positions and collateral in the event of a clearing member default. These customer protections, combined with ICE’s rigorous risk model and the largest clearing house guaranty fund across any product, offer unparalleled security for buy-side market participants. In addition, ICE’s offering includes trade date clearing, which enables positions to be cleared on the same day the trade occurs, significantly reducing the time that a firm has counterparty exposure to its dealer. Trade date clearing potentially reduces the need for ISDA documentation between buy-side firms and dealers. Instead, a buy-side firm may trade with any dealer who is a clearing member and may clear the trade at ICE through its derivative clearing member (DCM). This process consolidates a buy-side firm’s counterparty risk to the DCMs, who are participants in the clearing house’s risk management framework.

**SUMMARY**
The CDS markets are a vital part of the global credit markets, and ICE’s investment in the restructuring and growth of these markets is an acknowledgement of their significance. CDS clearing is helping strengthen these markets by bringing increased transparency, standardization and security.

ICE is dedicated to working with the financial industry and its regulators to offer innovative risk mitigation solutions. ICE recognizes the importance of ensuring its clearing houses maintain appropriate risk standards, which deliver the systemic risk mitigation all parties desire. As clearing is applied to additional financial products, ICE will continue to work with the industry to ensure that all providers of clearing services operate at similarly high standards.

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