

Testimony of Terrence A. Duffy
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I am Terrence A. Duffy, executive chairman of CME Group Inc. Thank you Chairman Harkin and Ranking Member Chambliss for inviting us to testify today on these critical issues.

CME Group was formed by the 2007 merger of Chicago Mercantile Exchange Holdings Inc. and CBOT Holdings Inc. CME Group is now the parent of CME Inc., The Board of Trade of the City of Chicago Inc., NYMEX and COMEX (the "CME Group Exchanges"). The CME Group Exchanges are neutral market places. They serve the global risk management needs of our customers and producers and processors who rely on price discovery provided by our competitive markets to make important economic decisions. We do not profit from higher food or energy prices. Our Congressionally mandated role is to operate fair markets that foster price discovery and the hedging of economic risks in a transparent, efficient, self-regulated environment, overseen by the CFTC.

The CME Group Exchanges offer a comprehensive selection of benchmark products in all major asset classes, including futures and options based on interest rates, equity indexes, foreign exchange, agricultural commodities, energy, and alternative investment products such as weather and real estate. We also offer order routing, execution and clearing services to other exchanges as well as clearing services for certain contracts traded off-exchange. CME Group is traded on NASDAQ under the symbol "CME."

You asked us to discuss the role of financial derivatives in the current financial crisis. Obviously, financial derivatives cover a very broad swath of product types from collateralized obligations packaged as securities (including subprime mortgage obligations) to pure vanilla swaps that are unregulated versions of futures contracts. This broad question has been the topic of dozens of scholarly books and articles, not to mention innumerable class action and shareholder derivative law suits. There seems to be a consensus that the financial crisis is not a consequence of the instruments; it is a problem with distribution and trading of such contracts in the unregulated, over-the-counter market that has not employed sufficient disclosure and risk management techniques. Derivatives are a tool for managing a firm's finances. Like all tools, they are neither beneficial nor harmful in themselves. Those involved with derivatives as dealers, investors, bankers or corporate treasurers need to understand how the instruments work, how they fit into the organization's business plan, and what risks the use of derivatives pose to the organization.

It has been the lack of price transparency and the failure to properly measure and collateralize the risk of those instruments in the OTC markets that has had dire consequences. In stark contrast, trading of financial futures on regulated futures markets,

subject to the oversight of the Commodity Futures Trading Commission, has been a net positive to the economy, has caused no stress to the financial system and has easily endured the collapse of one and near collapse of two firms that were very active in our markets. This is a record of which this Committee, the CFTC and our industry can be justifiably proud.

When Lehman Brothers filed for bankruptcy last month, no futures customers lost a penny or suffered any interruption to its ability to trade. The massive proprietary positions of Lehman were liquidated or sold, with no loss to the clearing house and no disruption of the market. This tells us that our system works in times of immense stress to the financial system.

Fourteen years ago, on June 14, 1994, we testified before the Subcommittee on Environment, Credit, and Rural Development of the Committee on Agriculture of the House of Representatives on the topic of regulatory issues for OTC derivatives.¹ At that time, OTC swaps were in their infancy - the market had grown from approximately \$2 trillion in 1989 to less than \$8 trillion in 1994. We sounded a number of very clear warnings respecting the steps that would be necessary to assure that this rapidly growing market did not result in systemic problems to our economy.

“There are common themes in the recent stories, beyond the obvious ones of massive financial losses and attempts to shift the blame to others. . . In almost all cases of unexpected losses, properly linked to derivative instruments, three elements are present, to varying degrees: (1) the accuracy of pricing the instruments involved; (2) the assessment of risk before the fact; (3) and the rapidity with which small losses became huge.

“First, the initial pricing of exotic instruments, such as tranches of collateralized mortgage obligations (CMOs), is almost always done by proprietary computer programs. This is how Wall Street's "rocket scientists" earn their living. The theories behind these programs can be very complex, but they generally do not account for the effects of illiquidity or "irrational" behavior that can turn buyers into sellers with a simple change in sentiment.

“The unwillingness or inability to evaluate risk, before the fact, is another common theme in these stories of losses from derivatives. Once the losses mount, everyone involved is absolutely shocked that such an event could occur. But this reaction is neither believable nor excusable. Every one of these derivative positions can be stress tested before the market moves. For example, what would happen to the position if interest rates fell by 50 basis points, or rose by 100? The same computer models that price these instruments in today's market environment can simulate hundreds of different outcomes in a matter of seconds. It is absolutely imperative that users of derivatives ask these "what if" questions. They must also receive answers that make them completely comfortable with the investment objectives and the risks that they are assuming.

¹ Testimony of CME's then Chairman John F. Sandner

“The third common theme relates to how quickly small losses become huge. It is unfortunately a sad fact of human nature that when errors are made, the tendency is to try to buy time for the situation to reverse itself. If a corporate treasurer has taken a position and lost, there is a temptation to try to trade out of the problem. Risking the shareholders' wealth in an attempt to replace previous losses may be the only way to preserve one's job. For a fund manager, there is a perverse reality that there is little difference between losing 50 percent or 100 percent of the investors' capital, since either result would likely lead to being fired. If a second risky position pays off, there is the chance that everything will right itself. In the publicized cases, such subsequent trades seemed to make matters worse.

“At this point, I want to contrast the benefits of exchange trading of derivatives with trading them O-T-C. . . . For years, exchanges trading derivatives, such as futures and options, have used procedures that promote careful risk management. Every day the market determines and discloses settlement prices based on the forces of public supply and demand. These prices may not always fit the ideal predicted by a computer model, but they do reflect real market conditions. Using public prices every day avoids the pitfalls of internally derived price evaluations.

“In the realm of before the fact risk analysis, portfolios of exchange-traded products have all been stress tested using the exchange's performance bond programs that simulate extreme changes in both price and volatility. These programs are designed to ask the question, "What is the worst possible outcome one can reasonably expect?" They do not actively judge whether that event will occur or not, but instead look neutrally at all possible outcomes. Once the biggest risk is identified, the Exchange requires collateral in the form of performance bonds against the position.

“The Exchanges also have a long history of keeping small losses from growing by using daily marks to market and variation payments. If a position's value erodes, there is a daily call for cash. There is simply no opportunity to postpone judgment day with an exchange-traded derivative. Small losses must be met head on and evaluated. In the world of exchange-traded derivatives, it is rare that losses can be hidden from senior management, or that positions can be expanded in an attempt to recoup the losses already incurred from a bad strategy.”

Since at least the early '90s, CME has had a consistent philosophy respecting the regulation of OTC derivative trading and the superiority of regulated exchanges with central counterparty clearing. We have not sought to ban all OTC trading, we have urged that OTC trading be limited to truly sophisticated investors trading contracts that are too individualized or too thinly traded to be brought onto a trading platform for standardized products. We were right then and we are right now.

On September 26, 2007, I testified before the House Agriculture Subcommittee on General Farm Commodities and Risk Management and discussed our view of the success of the Commodity Futures Modernization Act and the amendments that we

believed were necessary to bring all trading of all standardized futures contracts under the control of the CFTC.

I do not intend to repeat that testimony, which was detailed and extensive. I will only note that we suggested that Congress look to “first principles,” which means the findings and purposes adopted by Congress to guide the Commission’s exercise of its jurisdiction. Section 5(b) of the Commodity Exchange Act charged the Commission with a duty to oversee “a system of effective self-regulation of trading facilities, clearing systems, market participants and market professionals” and to “deter and prevent price manipulation or any other disruptions to market integrity; to ensure the financial integrity of all transactions subject to this chapter and the avoidance of systemic risk; to protect all market participants from fraudulent or other abusive sales practices.”

We suggested that there is a growing conflict between these “purposes” and the statutory exemptions for unregulated markets that had been inserted into the CEA by various special interests. It is clear to us that all of the key purposes mandated by Congress in Section 5(b) are jeopardized if trading facilities for contracts in exempt commodities are permitted to coexist with regulated futures exchanges that list those same commodities.

Rather than looking back and trying to assess blame, we want to move forward and explain what CME Group is offering and planning to offer to alleviate the risks to the economy currently represented by the almost \$600 trillion in outstanding notional value of OTC swaps. We are in the process of offering a means to convert a significant proportion of outstanding OTC interest rate swaps into regulated exchange traded futures. If the dealers and their customers accept this program, we expect that standardization of these outstanding contracts and submission to our clearing system will permit a multilateral netting process that will reduce the outstanding exposure on the instruments submitted to our clearing system by a factor of at least five.

I want to particularly focus on our plans to play a role in the Credit Default Swap market. The CDS market has grown because credit derivatives permit dispersion and realignment of credit risks. These instruments are a tremendously valuable financial tool in the right hands and used properly. However, the individual and systemic risks created by the exponential growth of such contracts has not been properly managed - in some cases it appears not to have been understood by the managers who were highly compensated for promoting these instruments. The lack of transparent pricing, standardized contract terms, multilateral netting and all of the other advantages that flow from an integrated trading and central counterparty clearing system have compounded risk and uncertainty in this market. The gross notional exposure in that market is about \$55 trillion. It is estimated that portfolio compression by netting could reduce that exposure by a factor of ten.

There is a solution. The transparent price discovery and multilateral trading and clearing mechanisms that has been proposed by CME and Citadel Investment Group offers a systematic method to monitor and collateralize risk on a current basis reducing systemic risk and enhancing certainty and fairness for all participants. Our solution offers regulators the information and transparency they need to assess risks and prevent

market abuse. Our systematic multilateral netting and well-conceived collateralization standards will eliminate the risk of a death spiral when a jump to default of a major reference entity might otherwise create a cascade of failures and defaults.

Let me provide a few examples of the problems, and the solutions that our proposal offers:

- First, CDS markets are opaque: best price information is not readily available, as it is on an electronic trading facility. Efficient and accurate mark-to-market practices are hindered by the lack of transparency. Disagreements are common, leading to subjective and inconsistent marks and potentially incomplete disclosure to investors of unrealized losses on open positions. For example, earlier this year, Toronto Dominion Bank announced a \$94 million loss related to credit derivatives that had been incorrectly priced by a senior trader. In an exchange model, with transparent pricing and broad market data distribution, such errors are much less likely to occur.
- Second, risk assessment information is inadequate, and risk management procedures are inconsistent across the market. Precise information on gross and net exposures is not available. The true consequences of a default by one or more participants cannot be measured – exactly the sort of systemic risk brought to light by the Bear Stearns and AIG crises, which caused major disruptions in the market. As Bear Stearns and AIG faltered, credit spreads for most dealers widened, volatility increased and liquidity declined. Intervention became necessary.

Transparent market information combined with risk management protocols enforced by a neutral clearinghouse could have mitigated this outcome. Risk managers would have had accurate and timely information on their firms' positions, exposures and collateral requirements. Collateral to cover future risks would have been in place or positions would have been reduced. The clearinghouse and regulators would have seen and been able to manage concentration risks within a particular portfolio, and stress-test the consequences of a major default.

- Third, gross exposures for bilateral CDS transactions magnify systemic risk because a failure in the payment chain can spiral out of control.

Our proposal goes beyond the plans of dealer-owned clearing systems, which only address the needs of the inter-dealer market. As we understand it, non-dealers, who may account for nearly half of current trading volumes, would not directly benefit from trade novation. Excluded participants also would reap little benefit from the clearinghouse's guarantee of performance. Settlement risk would be mutualized for some, but not all, trades.

Our proposal, which is open to both dealers and their customers, offers scalable, efficient trading and clearing mechanisms to market participants and brings price

transparency to the entire market. Our systems include nearly instantaneous trade confirmation.

Our long experience is a tremendous asset in the fight against systemic risk in the CDS market. The CME Clearinghouse currently holds more than \$60 billion of collateral on deposit and routinely moves more than \$3 billion per day among market participants. We conduct real-time monitoring of market positions and aggregate risk exposures, twice-daily financial settlement cycles, advanced portfolio-based risk calculations, monitor large account positions and perform daily stress testing. Our clearinghouse has a proven ability to scale operations to meet the demands of new markets and unexpected volatility.

The CDS market requires product structures, rules and regulatory oversight that are suited to the needs of all participants. That may not occur if centrally traded and cleared credit products must be fitted within regulatory frameworks that were developed for different markets or to meet different policy goals. We are working with the New York Federal Reserve, the CFTC and the SEC to find a way quickly to bring our solution to market. We are encouraged that the regulators are highly motivated to contain the problem without delay and that cooperation among them will eliminate the jurisdictional and regulatory uncertainties that might otherwise delay a solution.

I thank the Committee for the opportunity to share CME Group's views, and I look forward to your questions.