Sometimes Too Great a Notional: Measuring the “Systemic Significance” of OTC Credit Derivatives

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The collapse of the world’s financial markets has resulted in intense examination of how to restructure and reform regulation for banking, securities, insurance, and other parts of the financial services industry. Various regulatory proposals are already being circulated in academic and public policy circles. Governments around the world are considering reforms. The conversation and decisions surrounding these proposals will fundamentally impact how financial services is structured and conducted across the globe throughout the 21st century.

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The Thorny and Multifaceted Issue of OTC Derivatives Regulation and the Obama Administration Proposals

Emilios Avgouleas†

Regulating financial innovation has never been an easy affair given the tradeoffs involved. Yet the global financial crisis has brought this issue into sharp focus. As a result, the regulation of OTC derivatives has dominated the global regulatory reform agenda since the Lehman Brothers’ catastrophe and the AIG debacle. Lack of transparency in OTC markets and the complexity of relevant instruments has become an issue of fundamental importance, due to their systemic implications. The unrestrained use of credit derivatives, especially of credit default swaps, increased both the interconnectedness of the different segments of the global financial network and the system’s fragility. To counter the systemic ramifications of OTC derivatives trading, the U.S. Treasury and the EU Commission have issued legislative proposals pertaining to standardization of OTC derivatives and the establishment of central counterparty facilities that would make possible the move from bilateral to multilateral trading. Both measures are intended to enhance transparency in OTC derivatives markets and increase the resilience of the financial system.

This issue of Lombard Street focuses on the regulation of OTC derivatives with contributions from leading experts from the legal practice and academia. The contributors to the issue highlight the role of credit derivatives in the global financial crisis [Blair and Gerding, Avgouleas] and the inherent tension between financial innovation and regulation (Glass, Curtin, Avgouleas). They provide a critical analysis of the relevant U.S. Treasury proposals [Blair and Gerding, Curtin, Glass]. Blair and Gerding, Glass, and Curtin debate in a thought-provoking manner the potential impact of the Treasury proposals in enhancing the transparency of OTC derivatives markets and buttressing systemic stability. They also explain the obstacles to the implementation of these proposals. In this context, Blair and Gerding, Curtin, and Glass provide a number of practical recommendations for the restructuring of credit derivatives regulation. Finally, Glass discusses the rulemaking role of ISDA and Avgouleas explains the case for bringing relevant ISDA committees under international public interest oversight.

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Sometimes Too Great a Notional: Measuring the “Systemic Significance” of OTC Credit Derivatives

Margaret M. Blair† and Erik F. Gerding††

The Obama Administration’s Financial Reform Proposal rightly places regulating systemic risk at the center of reform efforts. It proposes giving the Federal Reserve power to regulate any large financial institution that has “systemic significance,” no matter whether that institution is currently regulated as a bank, insurance company, or some other regulated entity, or is largely unregulated.¹ But the Administration’s proposal fails to address two major problems satisfactorily. First, what are the criteria for determining which financial institutions are systemically significant? The Administration’s proposal vaguely describes “systemically significant” institutions as “any financial firm whose combination of size, leverage, and interconnectedness could pose a threat to financial stability if it failed.” To implement this, it proposes complex tests like the so called “stress tests” that the Administration applied to large banks this spring. Yet, such tests are difficult to administer, opaque, and therefore add uncertainty to financial markets.

The second problem is how will reforms address the counterparty risk and systemic risk posed by over-the-counter (OTC) derivatives generally and credit derivatives particularly? The Treasury Department’s initial May 13th proposal for regulating OTC derivatives appeared to encourage derivative trading activity to move to exchanges, where transparency, market pricing, and clearing services provided by the exchange can mitigate counterparty risk. But this part of the proposal contains an enormous loophole: it only seeks to encourage “standardized” derivative contracts to trade on exchanges.² Most derivative contracts are highly customized, however, and thus cannot be traded on an exchange. Meanwhile, the proposal fails to articulate incentives for derivative counterparties or dealers to standardize derivatives so they could be traded on an exchange. Derivatives such as “credit default swaps” (CDS), the financial instruments that

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were heavily implicated in last fall’s credit crisis, would remain outside of exchanges.³ In August, the Administration sent legislative language to Congress on OTC derivatives that improved upon its earlier proposal. This language would give the Securities and Exchange Commission (SEC) and Commodity Futures Trading Commission (CFTC) a mandate to promulgate regulations requiring that counterparties to OTC derivatives maintain regulatory capital or post collateral to cover their obligations.⁴ Although these regulations would play a valuable role for the reasons explained in this article, financial institutions promise to oppose fiercely this type of legislation and regulations.

We propose the following simple rules that would simultaneously help identify systemically risky institutions and discourage use of OTC derivatives:

The Federal Reserve (or other systemic risk regulator) should require that financial institutions publicly disclose detailed information on the size, counterparties, and closing dates of credit derivatives in their portfolio on a regular and frequent basis, such as at the close of business each business day. This information would include disclosure on the *notional* value of the institution’s credit derivative contracts. The notional value of credit derivatives provides a gauge of the maximum amount that the seller of the derivative might have to pay to the buyer if the underlying credit instrument defaults. Although the notional value is not a good indicator of the market value of a derivative (because it is unlikely that each contract in the portfolio would have to be settled for the full notional amount), the notional value of all the derivative contracts in an institution’s portfolio is a powerful indicator of the systemic risk posed by that institution’s investments because it is the maximum amount the institution could owe to (or be owed by) other financial institutions in an extreme event such as the credit freeze that hit financial markets last fall.

The government should use this regular disclosure on derivatives to identify which financial institutions are “systemically significant.” Any institution with a portfolio of credit derivatives whose notional value exceeds a certain amount, say $1 trillion,⁵ for a certain number of days would be regulated for several subsequent years as a “Tier 1 Financial Holding Company” (Tier 1 FHC) under the Administration’s proposal.

³ Journalist reports have suggested that this exception comes in the face of lobbying by a coalition of large financial institutions that constitute the major OTC derivative dealers. These dealers fear that moving derivative contracts to more transparent exchanges will prevent them from charging the additional fees they can earn on more opaque prices OTC derivatives. Morgenson, Gretchen and Don Van Natta, Jr., 2009 “In Crisis, Banks Dig In for Fight Against Rules,” N.Y. Times, May 31, 2009, at A1.


⁵ We offer this threshold number for discussion purposes. To place this number in context, we estimate that five financial institutions – JP Morgan, Bank of America, Goldman Sachs, Morgan Stanley, and Citigroup – each would have exceeded a notional threshold of just under $3 trillion in credit derivatives as of the end of their first quarter in 2009. According to a July 22, 2009 report from Fitch Ratings, these five firms accounted for 96% of all exposures from credit derivatives at the end of the first
Finally, exchange-traded derivatives should not count in the notional value threshold for systemic significance. This would create a strong incentive, otherwise missing from the current Administration’s reform agenda, for derivative counterparties to move their OTC contracts to exchanges.

These policies provide the marketplace with a better gauge of the risks posed by an institution’s credit derivative portfolio. The incentive to move OTC derivatives to exchange trading further enhances the transparency of risk. To the extent that potential counterparties understand how much risk an institution has already taken on, they should be able to apply “market discipline” that will help prevent institutions from getting themselves into overly risky positions again. Moreover, these policies promote government transparency to help ensure that decisions of the regulatory authority about which institutions pose systemic risk will be economically and legally principled.

Our proposals focus on credit derivatives because these contracts play a significant role in systemic risk. In this article, we first explain how derivatives generally may contribute to systemic risk. Then we examine how the complex nature of credit derivatives, including credit default swaps, frustrate the accurate pricing of risk. We then outline how credit derivatives helped to increase market-wide leverage and thereby overstimulate financial markets through the “shadow banking system” in the years leading up to the current financial crisis. Next, the article explains how exchange trading, and not just centralized clearing, is a vital tool for mitigating systemic risk. The article then elaborates on the details of our proposal and explains why notional value is an important metric. Finally, we outline some other key pieces to the regulatory reform puzzle with respect to credit derivatives.

**Systemic Risk and the Problem of Opacity in Derivatives**

The phrase “systemic risk” – so important in the context of the current financial crisis – has been used to mean different things. We define “systemic risk” as the possibility of significant losses across entire financial markets at the same time. Owing to its market-wide scope, systemic risk cannot be readily mitigated through diversification. Kaufman and Scott describe two ways in which systemic risk can manifest itself. First, systemic risk describes the risk of a failure of one institution leading to the domino failure of other firms that are creditors or counterparties of that institution. Second, systemic risk may describe the risk of multiple firms failing simultaneously for a common reason. When numerous financial institutions quarter of 2009 with 100 large companies surveyed. This study found that only 17 firms, all financial institutions, reported any credit derivative exposure at quarter end. The total notional value of credit derivatives for these 17 firms was approximately $36.3 trillion, and the total gross fair value of all credit derivatives for these firms was just over $4 trillion. Fitch Ratings, 2009, Derivatives: a Closer Look at What New Disclosures in the U.S. Reveal, (July 22, 2009).
have similar portfolios, risk exposures, and trading strategies, the possibility is increased that an external shock can threaten the simultaneous failure of multiple institutions.⁶

The opacity of OTC derivatives exacerbates both of these manifestations of systemic risk. For example, parties to a derivative contract face counterparty risk, or the risk that the other party to the contract will default on its obligations. Any one financial institution may be party to multiple derivative contracts, and thus the insolvency of that institution (or any default on an array of its derivative contracts) may threaten the solvency of its counterparties. The failure of parties to reveal their positions in a timely way makes it impossible for potential counterparties to gauge how much risk a given institution is bearing.

The trading, and re-hedging, of existing derivative contracts further complicates the problem. A party to a derivative contract (Party A) cannot adequately assess its counterparty risk in a derivative contract with Party B if Party B can offload some of its risk on the contract to Party C through assignment of the risk to C, or subsequent hedging of the contract with new derivatives. Party C can in turn offload part of its risk through the same devices. Frequent off-loading of risk to other parties means that Party A needs to worry not only about the creditworthiness of Party B, but also the creditworthiness of subsequent risk transferees. Party A may not even be aware of those subsequent risk transfers, let alone of the identities of the transferees. This hidden “interconnectedness” created by OTC derivatives can translate counterparty risk into systemic uncertainty.

Derivatives may also exacerbate systematic risk when multiple financial institutions have derivative portfolios with similar risk profiles. For example, numerous firms in the current financial crisis faced similar exposures to rising interest rates, falling housing prices, and defaults on mortgage-back securities (MBSs) or collateralized debt obligations (CDOs). This similarity prompted firms that suffered losses as the crisis began to conduct fire sales of similar assets simultaneously, which sent markets into a tailspin and created a liquidity crisis. Yet addressing excessive “homogeneity” of risk profiles presents an anti-coordination game: no party can effectively ensure that its risk profile does not dangerously mirror the risk profiles of many other institutions in the marketplace without timely disclosure of the derivative portfolios of other institutions.⁷

**Credit Derivatives: Further Problems with Pricing Risk**

Credit default swaps (CDSs) highlight additional problems with pricing risk. In a typical CDS, Bank D, who has purchased some risky “X bonds,” may want to mitigate the risk of those bonds defaulting. Bank D then

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enters into a “swap” with Institution E in which it pays E a premium in exchange for E agreeing to pay D the value of the X bonds should they default. D has essentially purchased an insurance contract (except that, thanks to the craft of lawyers, CDSs are not regulated as insurance). E could then pass on its obligations to other parties, often without D’s knowledge. Or E could decide to hedge its risk of having to pay D by entering into a second CDS with another counterparty F. F could then hedge with yet another CDS with G.

At the same time, the X bonds may pay out based on the performance of other securities (for example, a pool of different assets, including mortgage-backed securities), which in turn may be backed by other assets (for example a pool of mortgages). This can create a long chain (or more accurately a tangled web) that stretches from the original underlying cash-producing assets (like mortgages) all the way to CDSs that hedge other CDSs. As many scholars have noted, information on credit quality of the original underlying assets is progressively lost or destroyed the further one goes in the chain from the underlying assets. For example, the transfer of risk may dull the incentives of parties to accurately assess credit risk and transmit that assessment to transferees, as in the case of mortgage originators who originated low documentation loans.

The chain of risk transfers also poses subtler and more technical challenges to pricing CDSs accurately. As Coval, Jurek, and Stafford have demonstrated, small errors in modeling the risk of underlying assets (like mortgages) are compounded at each subsequent stage of those assets being securitized or hedged. So a small error in modeling the risk of a pool of mortgages at the beginning of the chain may lead to a severe error in pricing the risk of a CDS at the end of the chain. Correctly pricing a CDS for risk may be further frustrated when there is a high correlation among losses on the underlying assets. In most other forms of insurance, say fire insurance, losses on insured assets are not highly correlated across the class of assets, and thus mistakes in estimating loss on one asset is likely to be offset by other assets not suffering losses. Losses on pools of mortgages, bonds, and other financial instruments, by contrast, may be highly correlated, and correlations may increase unpredictably.

Credit Derivatives, Leverage, and the Shadow Banking System

Thus far we have examined how the price of credit default swaps and other credit derivatives may fail to capture systemic risk. But these derivative contracts also tend to create and increase risk by making it easy

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for nonbank financial institutions to take on too much debt, thereby overstimulating financial markets and precipitating financial crises. The current crisis provides a stark example. To see why, one needs to understand the important role that credit derivatives played in what has come to be known as the “shadow banking system.”

The phrase “shadow banking system” describes how the securitization process has allowed investors in capital markets to perform many of the same lending functions traditionally provided only by banks. The shadow banking system is a network of financial institutions that uses issuances of securities in the capital markets and a chain of intermediaries to finance loans to disparate borrowers. When they lend to their customers, banks perform the same inherently risky credit function by accepting demand deposits (short-term liabilities from the point of view of the bank), and making long-term business and consumer loans. By contrast with bank lending, the “lending” that occurs in the shadow banking system is less regulated and less transparent. In addition, the funds that investors invest in asset-backed securities are not protected by federal deposit insurance.

Here is how the shadow banking system works: A mortgage lending firm such as Joe’s Mortgage Co. (JMC) negotiates to provide mortgages for several hundred homebuyers. As soon as each mortgage is closed, JMC sells the mortgage to some other financial institution such as Major Giant Mortgage Assurance Inc. (MGMA, or “Maggie Mae”) so that JMC gets its funds back and can turn around and lend to more homebuyers. Maggie Mae, in turn, “securitizes” the mortgages. To do this, Maggie creates a new shell business entity (a “special purpose entity,” which we will call MaggieSPE). Maggie bundles together hundreds or thousands of mortgages and puts them into MaggieSPE, which in turn sells bonds that are backed by the mortgages to institutional investors. And voila! By this alchemy, Maggie transforms the payments on the mortgages into securities.

This section discusses credit derivatives that are used to hedge an underlying risk. As explained below, by allowing one party to offload credit risk from asset-backed securities, such credit derivatives enable that party to make additional investments in those securities.

Other credit derivatives may represent pure speculation in that neither party to the contract is using the agreement to mitigate preexisting risk. Other scholars have noted that this purely speculative use of derivatives is a zero sum game that provides no insurance benefit but instead resembles pure gambling. Stout, Lynn A., 1999, “Why the Law Hates Speculators: Regulation and Private Ordering in the Market for OTC Derivatives,” Duke Law Journal, 48, 701.

Different classes of securities are usually issued in securitizations so that senior classes can be marketed to institutional investors who are often restricted by regulation to investing in investment grade debt. To ensure that these senior classes receive an investment grade rating from a credit rating agency, the designers of securitizations use several tools. Most notably, the senior classes of securities enjoy a priority right to payments on the underlying assets compared to more junior classes. This makes senior classes less risky and junior classes more risky. Senior classes of security may also benefit from credit support devices such as guarantees or bond insurance.
MaggieSPE then uses the funds it raises this way to pay off Maggie so that the process can start over again. Maggie can use the cash to purchase more loans for new securitizations, and this additional cash funds additional lending to consumers and other borrowers. Greater demand by investors for asset-backed securities can thus fuel greater consumer lending. This securitization process effectively channels money from institutional investors in capital markets to loans to borrowers. By holding securities, institutional investors enjoy a greater liquidity than banks, which hold loans funded by customer deposits. Those banks must negotiate the mismatch that occurs with having short-term liabilities (deposits from their customers) but long-term assets (mortgages and other loans).

The shadow banking system effectively skirts the stringent banking laws that would apply if the money was being loaned directly by bank depositary institutions. These banking laws are designed to protect against banks taking on excessive risk from non-performing loans. Significant defaults on bank loans could threaten not only the bank’s solvency and depositors, but other banks in the financial system as well. The shadow banking system does not eliminate the risk of loans defaulting, but instead spreads that risk to multiple parties, and gets it away from the watchful eye of regulators.

An investor who purchases asset-backed securities may be worried about defaults on underlying loans leading to defaults on their securities. This investor can purchase a CDS from some other institution to hedge this risk. In the months and years leading up to the current financial crisis, numerous financial institutions borrowed ever more money to invest ever more funds in risky securities that were based on bundled mortgages or consumer loans or business loans. These institutions were operating with very high effective “leverage” ratios (the ratio of debt to equity or debt to total assets), because this magnifies earnings in good times. They were able to do this because they were lightly regulated (or completely unregulated in the case of hedge funds), and, in any case, they thought they were protected by the CDS. But they were not protected, and, as has become clear, leverage magnified losses when housing prices began falling and mortgage default rates started rising.

Meanwhile, the counterparty to the swap might commit very little money upfront to cover the risk it assumes.\(^\text{13}\) This represents pure leverage in the sense that the CDS issuer takes on a large potential liability in exchange for very little money up front. This leverage allows more money to be loaned earlier in the chain. By hedging part of their risk, investors purchased more asset-backed securities, which provided more money to lenders such as JMC, who then loaned more money at lower interest rates to borrowers of mortgages, credit cards, and other loans. This orgy of borrowing in the system, helped drive asset prices higher. Thus by increasing leverage in the shadow banking system, credit derivatives helped ease credit,

\(^{13}\) AIG played the role of counterparty to hundreds of billions of dollars of CDS. Although AIG is a regulated U.S. insurance company, its CDS business was largely conducted by lightly regulated offshore entities, which made it possible for AIG to engage in CDS trades without setting aside sufficient capital to cover widespread losses, such as happened in 2007 and 2008.
increase the effective money supply, and fuel booming housing and securities markets. This increased apparent household wealth, further encouraging consumption and investment in risky assets.

Credit Derivatives and the Current Crisis

In this way, credit derivatives played an important role in stimulating the housing and securitization booms at the heart of the current crisis. In the current crisis, credit derivatives and other elements of the shadow banking system also formed parts of a vicious feedback loop that sowed the seeds of their own initial success and ultimate destruction. Lenders issued increasingly risky loans with more exotic features such as adjustable rates and zero down payments. But these mortgages had a binary nature; borrowers could only afford to repay these mortgages once their interest rate reset after a low teaser period by refinancing or selling the property. These exit options for borrowers, however, depended on housing prices continuing to increase. Prices did in fact continue to increase thanks to the growing supply of credit provided by the shadow banking system. Until they didn’t. When housing prices stagnated, this feedback loop in the leverage machine suddenly whirled into reverse. Unable to pay mortgages at the reset rate, mortgage borrowers began defaulting on their mortgages. This translated into defaults on mortgage-backed securities and similar instruments, which caused losses for credit protection sellers in credit default swaps. These losses on securities and derivatives caused credit in the shadow banking system to dry up suddenly and catastrophically, further worsening defaults on mortgages.

Economists regard this vicious feedback loop as the de-leveraging stage in the leverage cycle. The feedback loops of leveraging and de-leveraging affected financial markets in sudden, nonlinear, and unexpected ways. This nonlinearity, combined with the fact that the credit derivatives and shadow banking system lacked transparency, prevented market participants and regulators from anticipating risk adequately. The risks created by credit derivatives in the shadow banking system then triggered the forms of systemic risk mentioned above. Severe losses threatened the solvency of several financial institutions that were credit protection sellers – Bear Stearns, Lehman Brothers, and AIG – which in turn threatened the solvency of many of their derivative counterparties. Moreover, many financial institutions faced similar exposures to the same underlying risks of widespread mortgage defaults.

The Benefits of Exchange Trading and Clearing

Since many of the systemic risks posed by credit derivatives stem from their opacity, greater transparency can mitigate systemic risk by providing regulators and the marketplace more information on the risks that financial institutions assume through derivatives. One means to greater transparency is through the constant price discovery that occurs when derivatives are traded on an exchange. Exchange trading means that errors in the initial pricing of derivatives can be remedied by constant repricing. This price discovery
sends clear signals of the risk involved in derivatives not only to the counterparties, but to all other institutions in the market place as well. OTC derivatives, which are not traded at all, or are only traded in occasional private transactions, do not benefit from this transparent pricing and repricing.

With respect to OTC derivatives, the Administration’s financial reform proposal focuses on developing central clearing of OTC derivatives and not on creating incentives to move OTC derivatives to exchanges. Clearing, however, addresses only some of the potential sources for systemic risk outlined above. For example, clearing does mitigate counterparty risk by inserting a clearing company as a middleman, or central counterparty, to all derivative contracts. The clearing company then must periodically assess the counterparty risk of each institution (or “member”) whose contracts it clears. If the risk increases, the clearing company may require a trading institution to post additional collateral or “margin.” The clearing company thus centralizes counterparty risk.

But centralizing counterparty risk only mitigates systemic risk if a clearing company’s margin requirements are sufficient and sufficiently up-to-date. Without an exchange-generated market price, these margin requirements may need to rely on complex financial modeling to measure risk.

Our Proposal
We believe that reliance on complex financial models rather than exchange prices, as in the current reform proposals, is suboptimal. Reliance on complex, opaque models to price derivatives or measure risk has proven seriously flawed in the current crisis. This was partially due to the fact that financial models failed to measure risk adequately. The complexities in measuring risk in the credit default swap market discussed above gives but a flavor of such “model risk.” Moreover, models can be gamed by self-interested actors in financial institutions looking to earn extra profits, increase compensation, and evade risk management controls.

Why Notional Value is a Useful Metric for Systemic Risk
Our proposal addresses this problem by requiring financial institutions to continuously disclose the notional value of the credit derivatives they hold. This disclosure would give the marketplace valuable information about the maximum risk posed by the institution’s credit derivative portfolio. It would also provide regulators with a clear metric to determine when a derivative portfolio is systemically significant. Furthermore, seeing the total notional amount of credit derivatives will give regulators, particularly the Federal Reserve, a sense of how much credit the derivatives market may be pumping into the shadow banking system.

Financial institutions required to reveal their positions will undoubtedly complain that notional value is the wrong metric because the parties to a credit derivative are rarely called upon to pay the notional amount. But it is precisely in those (hopefully) rare situations when an institution is called upon to pay the notional
amount that systemic risk is most problematic. In September 2008, for example, the CDS that AIG had sold to its counterparties obligated it to pay hundreds of billions of dollars in notional value to its counterparties once the underlying assets began to default. The Bush Administration apparently feared that if AIG had been allowed to default, this could have triggered default by dozens of other financial institutions. While, arguably, notional values overestimate the risk posed by OTC credit derivatives, in the situation of a systemic meltdown, the notional amount owed by firms on their credit derivatives becomes highly relevant. Moreover, without an exchange generated price, regulators lack better options.

Transparency for Regulators Too
The current crisis also demonstrates how ill-equipped regulators are to audit financial institution risk models or to develop their own models. Regulator measurements of OTC derivative risk in the current crisis has been the opposite of transparent, as witnessed by the still perplexing decision of federal regulators to bail out Bear Stearns and AIG while allowing Lehman Brothers to fail. The Administration’s proposal for how regulators would measure the systemic risk of OTC derivatives seems to call for more of the opaque stress tests that the Treasury Department conducted on banks earlier this spring.

Reliance on opaque models—whether developed by financial institutions or regulators – creates great uncertainty in the marketplace. Reliance on models also undermines another policy objective in the Administration’s proposal – coordinating international regulation. Regulatory cooperation depends on national regulators building collective trust that each of them is regulating their home country banks effectively and evenhandedly. Reliance on complex, opaque models to measure systemic risk is antithetical to building that trust. Opaque regulations raise the specter of a national regulator allowing its home country institutions secretly to take on extra risk and reap additional profit.

A requirement that financial institutions report the notional amount of the credit derivatives they hold does not solve all of these problems but it at least provides a simple, transparent metric for systemic risk that is relevant precisely when it is needed most.

Encouraging Exchange Trading
Again, our proposal would exempt exchange-traded credit derivatives from calculations of whether a firm’s derivatives portfolio reaches a threshold of systemic significance. This would create an incentive for firms to move credit derivatives to exchanges. As noted above, exchange trading would mitigate counterparty risk and promote transparency. It would also address the liquidity risk that arises when firms with derivative instruments cannot readily find new counterparties to unwind their positions.

Many financial firms have contended that the customized nature of credit derivatives makes them unsuited for exchange-trading and that rules that would curb non-exchange traded derivatives would deprive market participants of the benefits of highly customized financial instruments. We find these arguments
overstated for several reasons. First, if many asset-backed securities can be traded on exchanges and alternative trading systems, it would seem that standardized credit derivatives related to these same securities could trade alongside them. Second, bond insurance policies issued by so-called monoline insurance firms serve as a ready substitute for OTC credit derivatives. Imposing costs on the use of OTC derivatives would encourage greater use of regulated insurance products.

What Still Needs to Be Done

Of course, notional value is of little use in determining whether a financial institution is “systemically significant” if the threshold is set too low for when the total notional value of a firm’s portfolio raises systemic risk concerns. We propose a trigger of $1 trillion for discussion purposes. If the notional value of an institution’s credit derivative portfolio would exceed this threshold for several days, then the institution would be regulated as a Tier 1 Financial Holding Company and would lose this status only after its notional value drops below that threshold for a set period of time. Likewise, moving OTC derivatives to exchanges or clearing companies means that regulators must pay close attention to the rules of those exchanges or clearing companies. Otherwise, regulatory reform will only succeed in centralizing and concentrating systemic risk. Thus operating rules must be developed for such exchanges or clearing firms.

In the long run, systemic risk regulation must also require detailed disclosure about the derivative portfolios of each systemically significant institution, each firm’s risk management policies, and the models it uses to set those policies and price derivatives. The Financial Accounting Standards Board has already made initial steps towards these goals. But the various forms of systemic risk posed by credit derivatives demand still more nuanced disclosure. For example, we would like to see disclosure of whether an institution faces concentrations of exposures to specific risks, and the methodologies that the institution uses to value derivatives and model their risk.

15 FASB’s new Statement 161(Issued March 19, 2008), which requires quarterly disclosure of notional value and other information on derivatives, represents a vast improvement on previous accounting rules on derivative disclosure. But its requirements give firms considerable discretion in the format for reporting derivatives exposures, frustrating comparisons among firms. It also does not require enough detail from firms with respect to the models they use to calculate the “fair value” of derivatives. Understanding these models and their assumptions is critical for understanding the true risk that a firm faces from its derivatives. Finally, derivatives disclosure would benefit from requirements that firms provide a sensitivity analysis of how their portfolio value and risk exposure would change under different scenarios, such as an x% change in interest rates.

16 This might include required disclosure on a firm’s exposure to particular

- types of instruments covered by credit derivatives;
- sponsors of asset-backed securities;
- lenders whose loans are being securitized; or
- counterparties to derivative contracts.
In the short run, however, disclosure of a few key simple metrics helps the market police both systemically risky financial institutions and the systemic risk regulators.