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SPEECH

Reforming the OTC Derivatives Market

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It is a great pleasure to have the opportunity to speak here. Today I will focus on two related aspects of the regulatory reform agenda that are complex and global in nature.

First, I will discuss the efforts underway to reform the over-the-counter (OTC) derivatives markets. This includes creating strong incentives to standardize trades and clear those trades through central counterparties (CCPs) and improving disclosure and transparency through mandatory reporting of all OTC derivative trades to trade repositories.

Second, I will discuss the global program to establish tougher standards for the regulation and oversight of financial market infrastructures (FMI)—focusing particularly on CCPs for over-the-counter derivatives.

Over the past two years, two important standard setting bodies—the Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO) have been developing a new package of standards called, *Principles for Financial Market Infrastructures*. The aim is to strengthen the resiliency and robustness of FMIs that are systemically important and are the backbone of the global financial system. I anticipate that the approval process will be completed and the finalized Principles document will be issued and broadly distributed sometime next month.

As always, what I have to say here reflects my own views and not necessarily those of the Federal Open Market Committee or the Federal Reserve System. Also, I speak for myself rather than for CPSS and IOSCO.

Turning to my first topic, the financial crisis exposed many shortcomings with respect to the OTC derivatives market. For example, the use of OTC derivatives referencing private-label mortgage-backed securities that held poor quality subprime and alt-A mortgages multiplied the amount of gains and losses in the financial system. There were not only the losses on the actual mortgages, but also on the CDS that were linked to these mortgages through the OTC derivatives market. This increased the stress on the system when the referenced subprime and alt-A mortgages began to perform poorly.

Moreover, the structural characteristics of the over-the-counter derivatives market itself amplified the shocks created by the housing bust in several ways. First, the collateral calls generated by sharp movements in the mark-to-market value of the OTC derivative trades drained liquidity buffers and provoked the fire sales of assets. These fire sales increased volatility and provoked still greater margin calls. This dynamic was one reason why the market prices of these assets overshot to the downside—that is they fell more than needed simply to reflect the increase in expected credit losses. In other words, the illiquidity risk premiums embedded into the prices of these assets became very large.

Second, the bilateral nature of the OTC derivatives market—between the two parties to the contract—be it dealer and customer or dealer and dealer—created its own set of difficulties. When counterparties became concerned about the health of a particular dealer, they often moved their trades—via novation—to other dealers. They did this to protect themselves should the dealer subsequently fail. But this process was difficult to carry out quickly and in size. The cumbersome nature of the process disturbed market liquidity and function. It also tended to drain off the liquidity from the troubled dealers because these dealers often used the counterparty cash collateral to fund their own operations. When customers moved their business, the collateral balances departed with them and this worsened the funding crunch on the troubled dealers.

Third, when a large counterparty, Lehman Brothers, filed for bankruptcy, it could no longer meet its obligations. The claims of Lehman's customers, including those open OTC derivatives positions in which Lehman owed them money, were frozen. The lack of adequate segregation of the customers' assets from the Lehman estate and the inability to move the outstanding obligations to other dealers—which we refer to as the lack of portability—created large problems for Lehman's counterparties. Often Lehman's clients were in the position that one side of a trade executed with Lehman was frozen, but the offsetting side remained open and exposed to volatile financial markets. This asymmetry contributed to the sharp increase in market volatility, the dramatic reduction in market liquidity, and the impairment in market function following the Lehman failure. Fear that this could happen again if another firm failed, encouraged flight from other dealers perceived by market participants to be relatively weak that might have large potential exposures.

Of course, as if this were not bad enough, the opaqueness of the OTC derivatives market made the situation much worse. No one had a clear insight into the financial health of their counterparties. Although each market participant could calculate its bilateral exposures to a particular dealer and the particular dealer could understand its own exposure to each of its own counterparties, this didn't answer the broader question: how exposed were the clients and dealers to others in the financial system through their derivatives trades and other open positions? Because there was no easy way to know who was in difficulty or not, the incentives were all on the side of assuming the worse—closing out open trades, hoarding liquidity, and retreating to the sidelines. The crisis had made it crystal clear that the regulatory regime had not kept pace with the rapid growth of the global OTC derivatives market.

In assessing the shortcomings of the OTC derivatives market after the crisis, a global consensus has been reached. Although I will be over-simplifying in the interest of time, I view the following aspects of reform as the most important. First, there have to be strong incentives in the system—such as capital requirements on banks and securities dealers—to provide an impetus for dealers to standardize OTC derivatives trades whenever practical. The goal is fewer bespoke trades and more standardized trades. Second, the G20 leaders agreed that all standardized OTC derivative trades should be mandatorily cleared through CCPs by the end of 2012. Third, records for all OTC derivative trades—including bilateral bespoke trades—must be reported to trade repositories. The data as part of this reporting requirement would include key trade attributes and a legal entity identifier so that aggregate exposures could be readily calculated. Fourth, the two standard-setting bodies mentioned earlier—CPSS and IOSCO—would strengthen and broaden the principles for financial market infrastructures. Fifth, these Principles would be adopted globally, strengthening the resilience of the financial system.

The logic behind these five elements of reform goes like this:

Standardizing trades improves transparency and price discovery. This mitigates the opaqueness that helped to generate the illiquidity and loss of market function evident during the crisis.

Requiring that such trades be cleared through CCPs is designed to reduce the aggregate amount of risk in the system. That is because the gross exposures can be netted down when all the dealers clear through one common central clearing party. In a CCP framework, the bilateral exposures of each dealer to one another are replaced by a single set of claims to and from the CCP. The idea is that because some dealers are likely to be long some trades to one dealer and short some trades to other dealers, passing both sets of trades through a single CCP can reduce the aggregate amount of risk in the system. This would occur as the long trades are netted out against the short trades, leaving only the remaining smaller net exposure of the dealer to the CCP.

Inserting a CCP in between two counterparties to a trade can also help reduce the "run risk" faced by a potentially troubled dealer. As we saw during the crisis, market participants often abruptly pull their trades away from a dealer that they perceive to be weak, which in turn can have the self-fulfilling effect of magnifying market or liquidity pressures on the dealer. If, however, trades with the dealer are cleared through a CCP, direct exposures to the dealer are eliminated and replaced by exposures to the CCP itself. This risk shifting can reduce the incentives to suddenly halt trading with a dealer, for example, due to uncertainty about the dealer's financial condition or future prospects.

Mandatory reporting of trades to trade repositories is designed to ensure that the details of each contract are preserved and available to the regulatory authorities.

Finally, the fact that CCPs will be central to the system dramatically increases their importance. In essence, global CCPs will be systemically important. Thus, for the system to be safer it is not sufficient to ensure that trades are standardized and that they are mandated to be cleared through CCPs, but also it is necessary that CCPs be "bullet proof." They have to have the ability to perform and meet their obligations regardless of the degree of stress in the financial system and even if one or more of their participants were to fail in a disorderly manner. Hence, there is a compelling need for tougher principles that are broadly enforced.

In addition, to ensure that this all works as well in practice as in theory, the Financial Stability Board, CPSS and IOSCO, and other regulatory authorities have emphasized the importance of four safeguards to ensure that mandatory, standardized clearing through CCPs will make the financial system more robust and resilient.

The first safeguard is that the oversight of global CCPs needs to be cooperative—involving the securities regulators and central banks in the country in which the CCP operates (the home country) and the countries for which the CCP may be systemically important. Global CCPs are likely to be established—some are already up and running—that will clear different types of OTC derivatives such as interest rate swaps, credit default swaps, or commodity-based swaps that are traded around the world, both solely within one country or on a cross-border basis.

Many regulators have important stakes in ensuring that a global CCP can meet its obligations. In addition to regulators of the country in which the CCP is headquartered, these include foreign regulators. These regulators may be interested parties for many reasons. For example, their currencies may be used in settling the obligations of the CCP, they may have counterparties to the CCP that are headquartered or do significant amounts of business in their country, or they may have FMIs that are linked to the CCP.

I want to emphasize that effective cooperative oversight is essential. Otherwise, the risk is that the system will become overly fragmented, with a proliferation of national CCPs. In this case, many of the risk-reducing benefits from CCPs could be lost or

severely attenuated. That is because fewer offsetting positions would likely be cleared through any particular CCP and this would reduce the scope for reducing large gross exposures into much smaller net positions.

The second safeguard is to ensure fair, open and safe access to global FMIs around the world. It is important, for example, that global CCPs have rules that are not exclusionary or that unnecessarily entrench the position of whatever dealer, firm, or FMI is currently dominant in the market.

The third safeguard is to establish rules to ensure that, if a major market participant were to fail, a CCP can liquefy its collateral quickly so that it can meet its obligations in a timely way. But this also needs to be done in a way that would not disrupt financial markets or the CCP's participants. As I will discuss shortly, although there may be a potential role for central banks here, CCPs, at a minimum, must have their own liquidity resources as the first line of defense.

Fourth, there needs to be a viable resolution regime for CCPs. This is needed to ensure that the CCP either can be recapitalized and recover or, if necessary, wound down in an orderly way without disrupting the provision of essential market services. Also, a resolution regime is necessary to ensure that a central bank that might lend to a CCP in extremis will be repaid.

To help ensure that these safeguards are met, a major part of the reform effort is to establish a strong set of principles for financial market infrastructures. These principles must embody the four safeguards and ensure that the infrastructure can withstand any stresses that could plausibly occur.

The process of developing such a set of principles began about two years ago and is now nearing completion.

So why the new principles and what do they embody? During the crisis, financial market infrastructures performed very well. In fact, FMIs were actually a source of strength. They enabled market participants to settle obligations when they came due in a timely way. Also, their robustness gave confidence to market participants that they could continue to trade, knowing that the transactions would almost certainly be settled and cleared without difficulty.

Despite this excellent record of performance during a period of unprecedented stress, there still is room for improvement. First, future stresses could be more severe or might come in different forms. This could expose vulnerabilities in FMIs that have, up to now, not been visible. Also, extraordinary interventions in the crisis to backstop market function or rescue key financial intermediaries may have prevented the stress level from reaching the point where FMIs couldn't perform their functions. Because there can be no assurance that such interventions will necessarily occur in the future, it is important that the stability of the FMI architecture not depend on timely extraordinary interventions.

Second, under the new regime of central clearing for standardized OTC derivatives trades, the role of FMIs will become even more important in the future. Moreover, the new regime will lead to the development of new types of FMIs. CCPs for OTC derivatives will become widespread—and trade repositories will be established. Principles are needed to underpin these new institutional arrangements.

Third, for FMIs to be resilient they would undoubtedly need to have some ability to access central bank services, including the lender of last resort function. But, if FMIs had access to such services, this would create moral hazard. The best way to address this conundrum is to hold the FMIs to tougher global standards.

Fourth, a stronger and better system of FMI governance and oversight can help to ensure that those systems that support a global market are subject to consistent standards regardless of the jurisdiction where they operate. Relying solely on a patchwork of differing national standards in a global world would not work well. It would encourage business to migrate to the lowest standard. Without establishing a global floor, there would otherwise be a "race for the bottom."

These are the major reasons why CPSS and IOSCO took on the task of strengthening and broadening the standards for FMIs.

There are two major goals of this effort. The first goal is to strengthen the current standards by: 1) raising the bar for existing standards such as for governance, credit risk, liquidity risk, collateral and margin requirements; 2) including requirements for new areas such as segregation and portability, general business risk, links, tiering and disclosure; and 3) extending coverage to include trade repositories.

As proposed in the consultation document, the Principles will significantly strengthen existing requirements for an FMI's governance and financial resources. One way the Principles do this is by requiring FMIs to take a more comprehensive and proactive view of the roles they play, the risks they face, and their potential to support the stability of the broader financial system. In particular, as markets become even more interconnected, FMIs must approach their governance and risk management more holistically, in a manner consistent with their growing importance to the global markets and the stakeholders that they serve.

Regarding an FMI's financial standards, it is important that they be prepared to handle even greater potential disruptions and more extreme market conditions. For example, while an FMI must cover its largest current credit exposure to any single participant under pre-crisis standards, the Principles would require an FMI to collateralize its current credit exposures to all of its participants. Furthermore, for CCPs that face potential future credit exposures from the open contracts that they guarantee, the Principles impose rigorous stress testing and strengthened margin and default fund requirements. These requirements are to

guard against a wide range of possible stress scenarios in extreme but plausible market conditions.

The Principles also raise the bar for an FMI's management of liquidity risk to ensure that systemically important payment obligations can be settled on time. For instance, when sizing its potential liquidity needs in the event of a participant default, an FMI should have sufficient liquid resources to cover not only the shortfall caused by the default of the individual legal entity that settles directly through the FMI, but also the shortfall that could arise from the failure of all affiliates of the direct participant. In addition, FMIs will need to address how potential uncovered liquidity shortfalls or credit losses would be allocated, and how the FMI would replenish any financial resources it uses in a stress event so that it can continue to operate in a safe and sound manner.

The Principles also introduce a number of new requirements. Some of these address shortcomings that were observed during the crisis. For example, the Principles require CCPs to have segregation and portability arrangements that protect customer positions and collateral. An FMI will also be required to manage the risks it bears from and poses to, not only its participants and their customers, but also to other entities with which it does business such as linked FMIs, settlement banks, custody banks, and liquidity providers. Furthermore, the Principles will require FMIs to establish a dedicated financial cushion that could absorb unanticipated general business losses. This is to ensure that an FMI can continue to provide its critical services. The Principles also require that FMIs have plans for their recapitalization or orderly wind down, if that were to prove to be necessary.

Finally, the coverage of the international standards has been expanded to trade repositories as a new category of FMI, to further complement the G-20 OTC derivatives initiative for mandatory trade reporting. The Principles that address trade repositories focus on their transparency and the disclosure of market data. This reflects the important and unique role they will play in disseminating information both to regulators and to the market more broadly.

The second major goal is to promote consistent global enforcement of the standards. Toward this end, the Principles unify and harmonize three existing sets of standards—*Core Principles for Systemically Important Payment Systems; Recommendations for Securities Settlement Systems;* and *Recommendations for Central Counterparties*.

As part of this effort, the Principles strengthen the "responsibilities of authorities." This includes a new framework for cooperation among financial authorities. It calls for central banks, market regulators, and other relevant authorities to cooperate with each other, both domestically and internationally, and to support each other in fulfilling their respective mandates to promote the safety and efficiency of FMIs. This builds upon existing frameworks that have already been used successfully by CPSS and IOSCO for effective cooperation in the oversight of global institutions. Such cooperation can facilitate more comprehensive oversight, improve efficiency and effectiveness, reduce or eliminate any gaps in regulation, supervision, and oversight, and minimize potential duplication of effort and burden on both the FMIs and the cooperating authorities.

Toward the goal of consistent global enforcement, the Principles are considered to be minimum requirements. In contrast, the three old sets of guidance were weaker, being recommendations rather than requirements. As recommendations, they could be ignored. In contrast, as the Principles make clear, countries that are members of CPSS and IOSCO are to apply the principles to "the fullest extent possible." This means that regulation and legal frameworks are to be adjusted as needed in order to accommodate the standards.

To ensure that this happens, CPSS and IOSCO are also developing disclosure and assessment regimes. The purpose is to facilitate a consistent set of disclosures by the different FMIs and a consistent set of assessment methodologies that can be used by the relevant international institutions, namely the International Money Fund and the World Bank, and by the relevant national authorities of the FMIs domiciled in their jurisdictions.

When the Principles are published next month, CPSS and IOSCO will also issue a disclosure regime proposal and an assessment regime proposal. These will be put forward for a 60-day consultation period to give the market participants, FMIs, and regulators an opportunity to comment.

Also, once the Principles are rolled out and countries start to implement the legal and regulatory changes necessary to put the Principles into practice, it is anticipated that CPSS and IOSCO will undertake a monitoring effort to see how it is going. The focus will be on evaluating how quickly and broadly the Principles are being embedded in national legal and regulatory frameworks.

The Principles are important in supporting the G20 strategy of mandatory clearing of standardized OTC derivatives trades and in ensuring that the four safeguards discussed earlier for global CCPs and other FMIs are implemented.

As I mentioned earlier, the new Principles lay out the responsibilities of authorities for cooperative oversight. Cooperation can take a variety of forms, including formal arrangements that are organized under memoranda of understandings, specific protocols or other documentation for the exchange of critical information, and informal arrangements for regular and ad hoc communications. Much work is currently underway to establish various forms of effective cooperation, particularly for individual CCPs and trade repositories that are becoming globally important. However, as the work toward meeting the G-20 commitments continues, much more work is needed to design and implement such arrangements for the relevant FMIs.

In terms of the issue of access, explicit requirements for FMIs are embedded in the Principles. The Principles establish a

framework that covers access by direct participants, indirect participants—i.e., those who trade indirectly through a direct participant, and access and links between FMIs.

In terms of the lender of last resort issue, the Principles strengthen the requirements for FMIs in terms of such aspects of financial strength such as capital and liquidity, and operational and business risk. This implies that enforcement of the Principles should significantly mitigate any moral hazard issue that could arise if an FMI were able to obtain credit from a central bank.

On resolution, the Principles contain explicit requirements to ensure that all systemically important FMIs have viable recovery plans and, if circumstances ever warrant, could be wound down in an orderly fashion without the disruption of the provision of key services. The Principles' provisions for an FMI's recovery and orderly wind down will inform upcoming work by CPSS-IOSCO on the potential role and attributes of official regimes for the resolution of FMIs. This work is underway and should be completed later this year.

I'm pleased to see what has already been accomplished. But let's be clear, when the Principles are published that won't be the end. To quote Winston Churchill, it will only be "the end of the beginning". Thereafter, the resolution, disclosure and assessment frameworks will need to be finalized later this year. The CPSS and IOSCO members will have to adopt the new Principles into their regulatory and legal frameworks, with a target date of year-end. The new Principles will then be put into effect next year, with FMIs expected to observe the new Principles as shortly thereafter as is feasible. This is obviously an ambitious schedule, but one that is fully consistent with the G20 leaders' mandate.

Finally, we should recognize that the global financial system is a complex one that is continuously evolving and that we are introducing many significant changes into that system. We have to recognize that there may be trade-offs between some of our objectives, and that the system may evolve in ways that we do not expect. There may be unintended consequences. Maybe the major dealers will not standardize as many trades as is desirable or, perhaps, CCPs will develop in too fragmented a manner so that the netting of risk doesn't occur to the extent potentially feasible. Or the development of global CCPs could have unanticipated negative consequences for market structure, competition and/or efficiency.

We must be open-minded about the potential need for mid-course corrections. We will need to ensure that the incentives are right to get the greatest amount of risk reduced in the most efficient manner. Currently, for example, we are evaluating how the changes in terms of the Basel capital and liquidity standards for banks will interact with the changes in the OTC derivatives regime in terms of influencing the incentives for standardizing OTC trades and mandatory clearing through CCPs. But we shouldn't kid ourselves—we'll be off in our forecast. Thus, we must be ready to make adjustments as this process unfolds and we learn more.

As long as regulators, FMIs, and market participants make the effort, we should be able to make the financial system much safer, resilient, and transparent. The changes in train, if properly executed, should, over time, significantly reduce the shortcomings in the OTC derivatives market that exacerbated the financial crisis. Properly enacted and implemented, net exposures should be smaller because of the netting that occurs through the CCP process. Transparency into counterparty risk should be greatly improved via disclosure requirements and the ability to aggregate trade information in trade repositories, and end user trading positions should be much better protected by segregation and portability requirements and a more robust financial market infrastructure. Although there is still much to do as part of this process, I'm optimistic that we are on the right road. We just need to continue to push ahead and not forget the lessons learned from the financial crisis.

Thank you for your kind attention. I would be happy to take a few questions.

EXTERNAL LINKS