Senior Supervisors Group

Observations on Management of Recent Credit Default Swap Credit Events

March 9, 2009

CANADA
Office of the Superintendent of Financial Institutions

FRANCE
Banking Commission

GERMANY
Federal Financial Supervisory Authority

JAPAN
Financial Services Agency

SWITZERLAND
Swiss Financial Market Supervisory Authority

UNITED KINGDOM
Financial Services Authority

UNITED STATES
Board of Governors of the Federal Reserve System

Federal Reserve Bank of New York

Office of the Comptroller of the Currency

Securities and Exchange Commission

SENIOR SUPERVISORS GROUP

March 9, 2009

Mr. Mario Draghi, Chairman
Financial Stability Forum
Bank for International Settlements
Centralbahnplatz 2
CH-4002 Basel
Switzerland

Dear Mr. Draghi:

I am pleased to send you the report of the Senior Supervisors Group, *Observations on Management of Recent Credit Default Swap Credit Events*. The report summarizes a review that the Senior Supervisors Group initiated in December 2008 to assess how firms manage their credit default swap activities and positions following a credit event. This review was conducted to support the priorities established by the Financial Stability Forum, including enhancing the infrastructure for over-the-counter derivatives markets and encouraging market participants to act promptly to ensure that the settlement, legal, and operational infrastructure underlying these markets is sound.

The observations in the report are based on discussions with senior management of selected institutions, including major dealers, buy-side firms, service providers, and an industry association. Overall, market participants confirmed the effectiveness of the existing auction-based settlement mechanism and support the effort to permanently incorporate the mechanism into standard credit derivatives documentation.

The prudential supervisors that have been involved in these initiatives will continue to monitor and assess the ongoing progress.

Sincerely,

William L. Rutledge
Chairman

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I. INTRODUCTION

In the second half of 2008, an unprecedented twelve credit events for credit default swaps (CDS) occurred, resulting in the termination of a large number of credit derivatives contracts. Managing the operational, liquidity, and credit risks of these events can pose challenges to financial market participants. A core element of addressing these challenges is the auction-based settlement mechanism, introduced by the industry in 2005, which enables net cash settlement of the affected contracts. The mechanism's effectiveness in turn depends upon full market consensus, adequate transparency, reliable supporting infrastructure, and dedicated resources of market participants. (Background information on CDS settlement following a credit event can be found in the appendix.)

In light of these events, the Senior Supervisors Group recently assessed how well firms manage their credit derivatives activities and positions following a credit event.[1] The review was conducted in support of the priorities published by the Financial Stability Forum, which include enhancing the infrastructure for over-the-counter derivatives markets and encouraging market participants to act promptly to ensure that the settlement, legal, and operational infrastructure underlying these markets is sound.[2]

To gain a perspective on the effectiveness of credit event management practices across the industry, the Senior Supervisors Group held discussions with senior members of twelve institutions, comprising four major dealers, four buy-side firms, three service providers, and one industry association. Each surveyed participant was interviewed on the credit, legal, and operational capabilities, challenges, and lessons learned from its management of recent credit events.

To assess the effectiveness of credit event management across a diverse range of events, the discussions focused on the credit events involving two U.S.-government-sponsored enterprises (Fannie Mae and Freddie Mac), a major primary dealer (Lehman Brothers Holdings Inc.), and a European bank (Landsbanki Islands hf).

[1] The Senior Supervisors Group comprises senior financial supervisors from seven countries, with supervisory agencies representing the Canadian Office of the Superintendent of Financial Institutions, the French Banking Commission, the German Federal Financial Supervisory Authority, the Japanese Financial Services Agency, the Swiss Financial Market Supervisory Authority, the U.K. Financial Services Authority, and, in the United States, the Office of the Comptroller of the Currency, the Securities and Exchange Commission, and the Federal Reserve.

[2] See the Financial Stability Forum's report of April 7, 2008, <http://www.fsforum.org/publications/r_0804.pdf>, and its Follow-up on Implementation report of October 10, 2008, <http://www.fsforum.org/press/pr_081009f.pdf>.

II. CONCLUSIONS

Overall, the review confirmed the effectiveness of the existing auction-based settlement mechanism. Surveyed participants reported that the recent credit events were managed in an orderly fashion, with no major operational disruptions or liquidity problems. Below is a summary of the review's main conclusions, which are designed to ensure that market participants continue to improve their processes to effect timely and orderly settlement of CDS contracts.

- Effective credit event management depends upon certainty and full participation. Thus, market participants' support of the International Swaps and Derivatives Association's (ISDA) publication of the auction supplement to its 2003 Credit Derivatives Definitions as well as publication of a "big bang" protocol will help to reduce uncertainty and make credit event management more operationally efficient.
- Access to accurate CDS counterparty exposure data is essential to efficient credit event processing. Therefore, having all CDS trade information in one centralized infrastructure will make it easier for firms to identify affected trades. It can also facilitate handling of various lifecycle events, such as settlement and credit event processing. To this end, firms are continuing to load existing CDS client trades into the Depository Trust & Clearing Corporation's (DTCC) Trade Information Warehouse (TIW), which will allow them to utilize its credit event processing platform, as well as conduct central settlement through CLS, to facilitate cash settlement of CDS trades and maximize the benefits of multilateral netting among counterparties.
- Engagement of all market participants in decision-making with regard to all phases of the credit event management process will help promote a broader market consensus and encourage more equitable market prices.
- Formalizing market-wide and internal procedures will reduce the operational risk associated with auctions and help market participants address unexpected developments. Additionally, periodic reevaluation and enhancement of the auction process may prove beneficial.
- Investment by firms in the necessary operational infrastructure and training resources for credit event management will assure efficiency, accuracy, and timeliness of CDS settlement.

All of these conclusions reinforce the current industry and regulatory initiatives for the over-the-counter derivatives markets. The prudential supervisors that have been involved in these initiatives will continue to monitor and assess the ongoing progress.

III. DISCUSSION OF KEY OBSERVATIONS

According to all surveyed participants, the credit events in the latter half of 2008 in general were managed in an orderly fashion, with no major operational disruptions. While many participants reported resource challenges and some buy-side firms stressed the need for greater fairness in the auction process, the participants agreed that recent significant improvements in CDS infrastructure, risk management, operations, legal capabilities of firms, and communication all contributed to a credit event management process that resulted in the successful settlement of CDS trades.

One quantifiable outcome as a result of credit event management is that even though the gross notional value of credit derivatives contracts written on Lehman Brothers was approximately $72 billion, the net cash flows were only a fraction of that amount—approximately $5.2 billion U.S. dollar equivalent in net funds was paid out.[3]

Overall, participants held a positive view of the mechanics of the auction process, and the participation rates in each of the four auctions exceeded 95 percent. Those client participants that chose to settle bilaterally outside the auction process reportedly did so to close out positions prior to the determined auction date or because they believed that the small number of affected CDS trades on their books did not warrant the resources necessary to participate in an auction.

All of the participants quickly identified affected trades on the same day (within minutes to a few hours), and their risk management and operational staffs collaborated to monitor and manage credit derivatives positions and related counterparty exposures. All participants indicated that they were monitoring these high-risk names, even before a credit event had been declared.

The majority of participants elected to cash-settle affected CDS transactions. However, two buy-side firms submitted physical settlement requests during the Lehman Brothers auction, because they were uncertain about the recovery rate for Lehman Brothers debt—particularly in light of the Fannie Mae and Freddie Mac auctions, in which there were unexpected outcomes in the final prices of the underlying debt.[4]

All participants, including the service providers, reported that all phases of the auctions were conducted within the scheduled timeframes. In addition, information at the conclusion of each phase of an auction, as well as the final results at the close of an auction, was announced in a timely manner on the Creditex and Markit websites.

Participants did not observe any differences between the CDS auctions and credit event processes in the United States and Europe, although varying levels of experience and knowledge were observed among credit event management staffs. Participants indicated that most of the expertise in credit event management was in the United States. Two participants noted that they were working to expand such expertise in Europe.

A. Hardwiring of the Auction Process into Standard Credit Derivatives Definitions

In 2008, market participants announced plans to incorporate the auction protocol permanently by means of an auction supplement to the ISDA 2003 Credit Derivatives Definitions.[5] At the same time, ISDA plans to publish a "big bang" protocol that will provide market participants with an operationally efficient means to amend their existing CDS trades to utilize the auction mechanism in connection with future credit events.

Market participants, by signing, agree to adhere to the auction and settlement process stipulated in the published supplement and protocol. However, the target date for incorporating the supplement into the ISDA definitions has been delayed from December 2008 to early April 2009 because of the large number of credit events in 2008.

The orderly and equitable management of credit events depends upon market consensus on the various decisions and determinations made throughout the process. At any point, disputes among participants may arise, such as over the determination of which obligations are eligible for delivery in the final settlement. Survey participants reported that ISDA is

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[3] For information on the Lehman Brothers and other recent credit events, see *@DTCC News*, November 2008, <http://www.dtcc.com/news/newsletters/dtcc/2008/nov/index.php>.

[4] In the Fannie Mae and Freddie Mac auctions, the recovery rate for the subordinate debt ended higher than the rate for the senior debt—a first in CDS auction history. This outcome was attributable to an open buy interest from protection sellers because Fannie Mae's and Freddie Mac's subordinated debt bonds are still performing and provide a natural hedge for naked protection sellers, thus pushing recovery rates close to par. Final recovery rates for Fannie Mae and Freddie Mac senior debt were 91.51 percent and 94 percent, respectively, while the recovery rates on subordinated debt were near par, at 99.9 percent and 98 percent, respectively.

[5] See the July and October 2008 industry commitment letters to regulators, <http://www.newyorkfed.org/newsevents/otc_derivative.html>. This priority is also in line with statements made by the President's Working Group and the Financial Stability Forum in March and April 2008, respectively.

leading an effort to develop a standard mechanism to resolve such disputes. Some firms noted that a dispute resolution mechanism that is viewed as opaque, ambiguous, or biased may discourage participation in the auction process and ultimately may dissuade some participants from accepting the final hardwiring into the credit derivatives definitions. In particular, some buy-side firms noted that the committee resolving disputes should also account for the buy-side perspective. These firms cited the manner in which deliverable obligations were determined for the Fannie Mae and Freddie Mac credit events as examples of decision-making without sufficient buy-side input.

B. Structure of the Auction Process

Overall, while the auction process was viewed as effective in achieving an orderly settlement of CDS trades of a defaulting reference entity, some firms cited the need for a more equitable auction process and adjustments to the auction structure. In this regard, some buy-side firms expressed a desire for more direct participation in the auctions;[6] they also suggested using an independent third party to accept client orders during the auctions to eliminate any information asymmetry between dealers and buy-side firms as well as to prevent a dealer from potentially using its knowledge of positions to skew the results.

Dealers expressed a differing view, indicating that the auctions were designed to enable them to fulfill their role as market-makers and liquidity providers. They noted that the auction structure includes reasonable checks and balances to address some of the concerns of the buy-side firms.

The concept of direct participation by buy-side firms was not universally endorsed by the buy-side firms surveyed, as some noted that as a practical matter many customers are prohibited from directly participating in the making of two-sided markets for tax, business, regulatory, or other reasons. In addition, a few buy-side firms indicated that it would be operationally difficult and costly to introduce an independent third party because dealers must act as intermediaries in credit events.

Major dealers and some buy-side firms indicated that having an additional layer of complexity is not worth the return at this point in the hardwiring process. They did agree that engaging a wide range of market participants in the hardwiring design and gaining their confidence in the auction process will help build broad support for hardwiring.

[6] Currently, only dealer firms can submit bids, offers, physical settlement requests, and limit orders on behalf of buy-side firms.

C. Centralized Infrastructure and Standardized Procedures

The management of multiple credit events in a short time period gave market participants considerable operational experience under conditions of stress. As a result, participants reported gaining useful insight into the most difficult challenges, which allowed them to suggest concrete improvements to the process.

Participants noted that leveraging existing critical infrastructure for credit event processing enables a firm to quickly identify and assess its counterparties, the affected trade populations, and risk positions; it also enables the market as a whole to determine a settlement price and carry out efficient cash settlement in an orderly manner.

For example, DTCC's credit event processing service enabled firms to manage the large number of affected CDS trades during the recent events. Moreover, DTCC offered an additional capability to process tranche trades, starting with the Washington Mutual credit event in October 2008. All surveyed participants indicated that without the DTCC service and the TIW, the process would have been manual and burdensome and they could not have completed timely processing.

Having CDS trades in the TIW platform allowed market participants to quickly identify their affected trade populations and the counterparties to be notified. The major dealers reported that most of their interdealer trades were backloaded into the TIW in early-to-mid-2007, and they are continuing to backload dealer-to-client trades. In addition, a few buy-side firms have backloaded a significant volume of outstanding trades into the TIW. However, while the population of existing interdealer trades has been backloaded into the TIW, a proportion of existing client trades and trades that are not sufficiently standardized remains outstanding. Some survey participants noted that backloading more CDS trades into the TIW would broaden its operational benefits.

All firms observed that market-wide adherence to well-established and standardized procedures, as well as a centralized flow of information, greatly reduced uncertainty. One standardized process, implemented after several credit event auctions, was the publication on ISDA's website of counterparty identifier codes for the Uniform Settlement

Agreement. Market participants viewed this as a helpful change because it enabled them to easily identify their counterparties by legal entity and see whether their counterparties were signatories on the agreement for credit event notification.

The settlement process has also become more standardized through the processing of some cash payments through CLS. CLS typically facilitates coordinated cash settlement of CDS coupon payments, receiving payment information directly from the TIW. CLS offers multilateral netting among all member participants, which further streamlines the settlement process. The major dealers found the automated process between DTCC and CLS to be seamless and efficient, and it eliminated the manual process of bilaterally settling payments. Currently, only dealer firms are member participants, but DTCC will expand its services to end-users in 2009 to increase the benefits of multilateral netting among counterparties. In addition, CLS and DTCC will further shorten the time required to flow credit event payment information between each other and to participants, so that they can become aware of projected payments and proactively manage them.

CDS market service providers reported that their system capacities continued to meet the operational demands of credit event processing and settlement arising from the recent events. They noted that the workflow did not differ from that of a typical day, but they did experience higher volumes and larger payment amounts.

The recent credit events also helped clarify the process among the various industry groups for discussing and resolving credit event management issues. This has resulted in certain ad hoc groups—such as the Credit Steering Committee and legal working groups—coalescing, identifying key responsibilities, and meeting more often to discuss relevant topics and industry initiatives, such as standardizing CDS, improving operational efficiency, and enhancing the market infrastructure.

Timely and open communication, externally among market participants and internally within firms, was seen as instrumental to the orderly management of credit events. In particular, participants cited the need to respond swiftly and coordinate with others when problems arise. During the CDS auction for Lehman Brothers, dealers quickly realized that they would not have enough time to enter the large number of limit orders. In response, ISDA convened a conference call within minutes of the second phase of the auction, and dealers decided to extend the auction a half-hour. This action was cited as an example of the benefits of efficient, standardized communication among market participants, who may have to coordinate and resolve problems under critical time pressures. The market service providers and industry associations were recognized for playing key roles in facilitating centralized communication during the process.

D. Staffing Constraints for Credit Event Management

Firms reported limited operational staff to address the occurrence of multiple contemporaneous credit events. Service providers also cited the importance of firms' preparedness, and observed that dealer staff in the United States required more training and guidance during the auction process than did European traders.

Upon determination of a credit event, dealer firms must appoint a trader to act on behalf of both the dealer and its various clients. Between credit event determination and the actual auction date, service providers train the appointed traders to use the auction trading platform, familiarize traders with the auction rules and procedures, and ensure that dealer systems are operationally compatible.

Service providers noted that each time a credit event occurred for a different sector of CDS trades, the appointed traders would change, since firms wanted to use traders with expertise in the sector. Of the twelve credit events that occurred last year, only three were European. However, service providers reported that European traders' familiarity with the trading platform, due to the greater take-up of electronic trading in Europe, made a large difference in terms of trader preparedness. In the United States, where trades are still voice-brokered, traders required more time to learn the platform.

Some surveyed firms observed that the rapid succession of multiple credit events in the second half of 2008 provided their staffs with the critical knowledge, skill, and experience to manage simultaneous events. They felt that the live experiences broadened their understanding of CDS settlement and helped them to identify areas of improvement.

APPENDIX: BACKGROUND ON CDS SETTLEMENT

Following a credit event, CDS trades can be physically settled or cash-settled. In physical settlement, the CDS protection buyer transfers ownership of the actual debt obligation to the CDS protection seller in exchange for the notional amount of the contract. However, this transaction could result in valuation distortions in which the aggregate notional amount of CDS written on a particular entity is significantly larger than the amount of the entity's actual debt obligations in the market, what is known as a short squeeze. In cash settlement, the parties agree upon the price for the deliverable bonds and settle their claims on a net cash basis. Achieving agreement on valuation after a default, however, is challenging. To address the challenge, in 2005 the industry developed an auction mechanism to establish a fair price for assets in default, thereby enabling net cash settlement of affected contracts. Regulators have cited cash settlement through universal use of the auction mechanism as preferable to bilateral physical settlement because the auction mechanism reduces the risk of price distortions and allows for CDS contracts to settle in a timely manner.

Management of a CDS credit event involves a number of steps, from declaration of a credit event to settlement of payments. Notification of a credit event triggers the termination of CDS contracts and requires the settlement of CDS trades among sellers and buyers. To determine whether a credit event has occurred, and whether an auction has to be conducted, ISDA holds an open conference call with market participants to vote and reach consensus on the contracts to be terminated and on whether the amount of affected transactions is large enough to warrant an auction.

Once a credit event is determined, market participants must identify their affected positions and protection buyers and sellers must notify their counterparties of the terminations through the use of an official credit event notification. ISDA has established a more efficient way to manage the credit event notification process by publishing a standard notice known as the Uniform Settlement Agreement, which obviates the need for participants to engage in multiple bilateral credit event notifications. This notice represents multilateral agreement among market participants, whereby signatories agree that a credit event has occurred and that they will settle the affected CDS contracts accordingly.

The next step is to establish the auction terms and a standard protocol to which market participants must adhere to effect cash settlement. Since 2005, firms have participated in a series of ad hoc auctions to establish a fair market price used for final cash settlement of CDS. ISDA coordinates the effort to publish the ad hoc protocol and to establish the auction terms, including the list of obligations eligible for delivery. Currently, market participants are not required to adhere to this protocol, and can choose to settle their contracts bilaterally outside the auction process. However, permanently incorporating—hardwiring—the auction mechanism into the ISDA's 2003 Credit Derivatives Definitions would mandate that all counterparties participate in the auction process, promoting more certain, fair, and orderly settlement.[7]

The auction itself is carried out by Creditex and Markit, which provide the operations and technology platform. Once the auction terms and date are set by ISDA, each dealer assigns a trader to participate in the auction on the firm's own behalf and on behalf of its clients. The auction is a two-phase process with strict timelines for market participants to submit bids, offers, physical settlement requests, and limit orders.[8] Creditex and Markit publish the final price for market participants.

CDS protection buyers and sellers use the final price to calculate the amounts due to or from their counterparties. Currently, for participants that are customers of the DTCC Deriv/SERV TIW and choose to use its credit event processing service, DTCC calculates all payouts and receivables and bilaterally nets the amounts by counterparty and currency. For participants that are members of CLS, DTCC provides the netted payment instructions to CLS for central settlement. Market participants that do not use Deriv/SERV settle payments bilaterally through their settlement agents.

[7] Unless counterparties specify otherwise in their CDS confirmation for customized trades.

[8] The auction methodology is discussed in the Credit Event Auctions Primer, available at <http://www.creditfixings.com>.