#### **MEMORANDUM**

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**Division of Market Regulation** 

THROUGH: Matthew J. Eichner, Assistant Director

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RE: Risk Management Reviews of Consolidated Supervised Entities

Office of Prudential Supervision and Risk Analysis ("OPSRA") staff met over the past four weeks with senior risk managers at the CSEs to review November market and credit risk packages.

There were several common themes in discussions with firms:

• Some subprime mortgage originators are struggling. Third party originators sell loans to the CSEs for eventual securitization. CSE firms also provide financing to these originators via "warehouse lending", facilities secured by the mortgage loans being amassed for securitization. In early December two subprime originators, Ownit Mortgage Solutions and Sebring Capital, ceased operations. Following these failures rumors surfaced that another originator, Mortgage Lenders Network, was facing a liquidity crisis and would likely shut down as well. More generally, there is a broad recognition that, with the refinancing and real estate booms over, the business model of many of the smaller subprime originators is no longer viable. Whereas the prime mortgage market is dominated by relatively few, large originators, the subprime market is comprised of hundreds of thinly capitalized firms, many of which are relatively new entrants. Many of these players are now being squeezed in terms of their profit margins as loan investors are requiring higher risk premia, meaning that market prices for loans are lower. Risk managers expect to see further failures and consolidation of the sector in 2007.

Several CSE firms have potential credit exposure to subprime originators that have failed or are in distress through warehouse lending facilities. None of these exposures are material at the group level; and while none have produced material credit losses to date, the firms could find themselves in the position of having to sell significant amounts of seized collateral under adverse market conditions, or having to work out of such a position gradually over time. CSE firms also bear credit risk to the mortgage originators stemming from loan "put back" rights. These provisions allow a purchaser to return defected loans within a set period after origination, for instance due to early payment default or prepayment. To the extent that

originators are unable to repurchase the defective loans or substitute other collateral, there is potential for a credit loss.

- In addition, many pools of subprime loans are performing poorly. Risk managers note that a broader deterioration in underwriting standards may have occurred across the industry, citing increased early payment default and delinquency rates for subprime loan pools. Similarly, Fitch downgraded approximately 100 subprime deals, a record number, during the fourth quarter of 2006, citing large increases in delinquency rates year-over-year. While performance can vary widely by deal and originator, indications are that performance has been the worst for the more recent (2006) deals. Furthermore, concerns have not been limited to product purchased from third parties. Several of the CSEs have pursued models of vertical integration and thus also originate loans through wholly-owned subsidiaries. One firm has reported high early payment default rates at its subprime subsidiary, leading to losses on product subsequently put back to the CSE.
- November events highlight the importance of effectively managing basis risks in the mortgage securitization businesses. Following the failures of Ownit and Sebring, spreads referencing the BBB ABX, a derivative index linked to the performance of generic subprime mortgage collateral, widened rapidly. This was after a gradual spread widening that had already occurred throughout November. ABX spreads increased from around 250 basis points in the beginning of November to the 350 to 390 basis point range in early December. Interestingly, spreads on cash securities did not move nearly as much as the derivative indices over this period. Furthermore, there was reportedly much variation in how spreads behaved for different cash deals, suggesting investors were differentiating between loans from different originators. Given that the CSE mortgage businesses now actively hedge their securitization pipelines using mortgage derivatives, understanding these basis risks is very important for risk management. For instance, it has become common for mortgage desks to hedge residual (or equity) tranches from previous securitizations by buying protection on the BBB ABX index. Following the November-December market events, this appeared to be a "brilliant" strategy. However, some risk managers are unsure of how this cash-CDS basis may behave in the future, and whether traders are sufficiently skeptical.
- Firms increased their equities risk, driven largely by block deals and less gamma/vega hedging. Virtually all of the CSE firms noted there was strong block activity in November, and directional (delta) equities exposure as well as equities value-at-risk (VaR) increased significantly at most. In two cases this equities risk was a main driver of intra-month limit excessions at the firm-wide level. Several firms also had difficulty distributing one particularly large block transaction and were left holding a concentrated exposure that must now be worked out of over a longer than anticipated horizon. Separately, as equity realized and implied volatilities have remained low for some time, it has been increasingly expensive for traders to maintain their long gamma and vega risk profiles, which serve as hedges against large equity market declines. Consequently, decreases in positive vega and gamma positions contributed to the increase in equities risk at several firms, as the businesses appear less willing to pay the "theta bleed" associated with such protection.
- Investors' demand for commercial and leveraged loan products remained strong. November was another active month in terms of leveraged (corporate) and commercial real estate lending, as deals continue to be successfully completed in the U.S. and abroad. Also, commitments in excess of \$30 billion were made to finance a noteworthy deal in November. The financing package is for a private equity firm's acquisition of Equity Office Properties (EOP), the U.S.'s largest public REIT. Two of the three lead arrangers of the deal are CSE firms. The debt is secured by a large, geographically diversified number of commercial properties. Nonetheless, the lenders are faced with distributing a larger amount of real estate-backed debt than has ever been created from a single deal. While the firms feel confident that there is ample investor demand to absorb the risk, there remains some concern that the transaction could contribute to a supply glut in the market.

- Emerging markets risk was up. Emerging markets have performed well in recent months and market risk was up significantly at numerous firms due to proprietary positioning as well as the facilitation of customer transactions. In addition, risk managers at several firms have identified emerging market activities as a likely growth area. Along these lines, firms have begun hiring more staff to focus on these markets and have been establishing local offices to engage in onshore trading in countries such as Korea, Brazil, and Russia.
- CSE firms continued to invest in hedge funds. One firm took a large minority stake in two third party funds in November. Another provided a large amount of seed capital and trading infrastructure to a sizeable trading team from a recently closed fund, in order to establish a "turnkey" fund within its asset management business. Separately, a senior manager within a CSE trading division recently began making proprietary investments in third party funds. Risk managers suggest that similar activities could potentially grow in the future.

We also expect to discuss the following firm-specific issues during the next round of meetings:

### Bear Stearns

• Bear is in the process of instituting a high level (aggregate) market risk limits framework, based on VaR as well as Scenario metrics. While risk managers have used aggregate market risk analytics for some time, historically limits have only been set at lower business unit levels. While the initial limit levels are sufficiently high that they will not constrain the businesses, this change places more focus on understanding risks that span across desks. We will follow up regarding implementation progress and intend to place more emphasis on aggregate risk measures during our discussions with market risk managers.

## Goldman Sachs

- The market risk manager again emphasized the current internal focus on growing activities in various emerging market countries such as Russia. He also discussed the importance of the firm's ability to effectively manage its overall growth going forward, citing the recent GS Bank and re-insurance initiatives as additional examples. Consequently, we plan to review Goldman's new product process in 2007, which has seemingly become an increasingly important control and management tool.
- Goldman has entered into an arrangement in which it will provide \$1 billion in seed capital to a former team of Amaranth credit traders in order to establish a "turnkey hedge fund" within its asset management business, GSAM. The risk manager noted there could be appetite for more of this type of activity going forward, and explained the firm is currently thinking about limits and capital treatment. We intend to follow-up regarding how this new initiative fits into the current GSAM hedge fund management strategy, and will discuss any planned growth as necessary.

#### Lehman Brothers

 Risk managers have been closely monitoring the performance of Lehman's two mortgage subsidiaries, Aurora Loan Services and BNC, during this housing market downturn and subsequent challenging origination environment. The subsidiaries originate Alt-A and subprime mortgages, and Aurora also acts as a primary and a master servicer. During the first week of February, we will visit these subsidiaries to discuss their origination platforms and servicing programs.

### Merrill Lynch

- In efforts to continue to grow its corporate and institutional lending business, Merrill
  committed to provide several large loan commitments to entities operating under state or
  federal regulations, one in excess of \$11 billion. These deals tend to take 12-18 months to
  close before entering the market due to pending regulatory issues. We will continue to
  monitor these deals as they move toward closing at which time the firm expects to have
  decreased substantially its exposure through syndication.
- On December 7th, Ownit Mortgage Solutions, a sub-prime mortgage lender that Merrill had \$100 million equity stake in, announced that it has ceased operations. Prior to the announcement, Merrill had terminated a \$2.5 billion asset based lending facility due to a breach in liquidity covenants and seized the \$649 million in loan assets that were collateralizing the \$637 million funded loan amount. Separately, Merrill had recently purchased \$500 million of Ownit mortgages through a competitive bid. As Merrill now holds substantial amounts of Ownit-originated mortgages, and has lost its entire equity stake in the company, we will continue to monitor the overall exposure and work out.
- Merrill 95% 1-day trading value at risk ("VaR") reached a record high due to a concentrated position. Merrill participated in a large Spanish bank block deal and became stuck with an outsized position that it was unable to fully distribute it. We will continue to monitor this position.

# Morgan Stanley

- Credit risk managers have become somewhat uncomfortable with the business models of some of the subprime originators, particularly with their ability to manage the business through a downturn in origination and credit quality. During the month, risk managers stress tested the collateral of its largest warehouse lines to subprime originators. While they were comfortable with the level of collateralization, there are plans for further work on this topic.
- While financial sponsors or leveraged buyout funds have traditionally been almost exclusively focused on North American and European companies, the Chief Credit Officer made the observation that sponsors have recently raised capital to focus on buyouts in Asia. He expects that this could be the beginning of a significant change in Asia, where the bank loan space has traditionally been more of a "buy and hold" strategy dominated by the indigenous banks.









