

MEMORANDUM

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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 June market and credit risk packages.

There were several common themes in discussions with firms:

- **Managing leveraged lending exposure is a top priority at CSE firms.** Risk managers indicated that due to the rapidly deteriorating sentiment in the leveraged lending market—where credit spreads continue to widen out, deals are becoming more difficult to get done, and affordable hedging options are not as readily available—firms have significantly increased the amount of time and resources spent on monitoring and managing deals. CSE firms pointed to a number of factors contributing to the rapid slowdown in the market including increased pushback by investors on features such as covenant-lite and payment-in-kind ("PIK"), lower tolerance for leverage by investors, and waning demand for collateralized loan obligation ("CLOs") products.

Firms noted that deals containing covenant-lite and PIK-toggle features are not getting done. But firms were able to successfully syndicate some "hung" deals after re-instating traditional covenants and removing PIK toggle features. In addition, some risk managers also pointed out that the market's tolerance for leverage was down by at least 1/2x to 1x at the time of our meetings. As a result, CSE firms are left with tough decisions on what to do with these larger than anticipated exposures that they are unable to syndicate. For the most part, options include either syndicating senior pieces of the deal at lower profit margins and holding lower rated portions; or funding the entire deal and delaying syndication in the hopes that current conditions represent just a temporary slowdown in investor appetite. In some cases, firms also face strategic decisions about whether to remain part of a syndicate, or to break ranks with other institutions and act alone. Most firms indicated that the weeks after Labor Day will be a key time in distinguishing between a temporary lull and a more fundamental shift in market dynamics.

Compounding the problems associated with slowing leveraged lending pipelines is the fact that it is becoming more difficult for firms to hedge their exposures as spreads in the most appropriate hedging instruments have widened appreciably, and in some cases to the point where market liquidity has effectively disappeared. Some risk managers stated that firms are focusing primarily on "worrisome" positions, but that the cost of hedging has become in many cases prohibitive.

- **Demand for collateralized loan obligations ("CLOs") has diminished significantly.** Last month, risk managers noted that increased turbulence in the sub-prime market caused investors to turn toward securitized products tied to the loan market for yield. During the last part of June and into July, significant widening in credit spreads caused investor interest in CLO products to decline substantially. As a result, the investment banks have reviewed their activities in this space. Some institutions have made the decision to reduce their activities and exposures in this area by shutting down CLO warehouses and by winding down CLO accumulations. But others have sought merely to become more selective, believing that the large spreads (and hence low prices) in this space offer certain opportunities.
- **Risk managers remain focused on mortgage market deterioration.** Risk managers pointed out that mitigating sub-prime exposure is much more difficult now than it was in February when the sub-prime market first experienced broad distress. In February, CSE firms were net-short the relevant spreads, and experienced good performance from short hedges that offset losses on long positions in mortgages and related instruments. The current market turbulence, however, has made it difficult for firms to maintain their net-short positions—primarily because everyone wants to buy protection while fewer institutions are willing to sell protection. As hedges expire, they are frequently not reestablished.

With respect to the financing of mortgage products, firms reported an increase in both margin calls and disputes around collateral marks. At least one firm noted that they had put together a committee specifically for the purpose of dealing with collateral disputes, and all firms reported that there has been greater diligence around price verification driven by the fear that firms may end up owning the collateral. Some of the disputes are the result of process or system related issues where counterparties have stale prices either because of price verification processes that only update prices monthly, which is insufficient in today's mortgage environment. In other cases, marks are up-to-date marks but, due to systems constraints, do not flow into the collateral management systems.

- **Exposures to emerging markets continue to rise**

Exposure to emerging markets has increased at a number of institutions over the past six months. Activities in this space have continued to grow, even as certain other businesses (see above) have faced significant reversals. Risk managers are now focusing on the growing risks in emerging markets, and the potential for recent events in the credit markets to have an impact here as well. Several risk managers noted that when traders have been urged to reduce risk, they responded by hedging corporate names with default swaps written on sovereigns. While reducing measured risk (particularly as it is captured in VaR models), this strategy can leave significant exposure to the corporate-sovereign basis.

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

Bear Stearns

- Bear Stearns' goal in providing a secured lending facility (repo) to the BSAM "High Grade" fund was to allow for an orderly liquidation to preserve the remaining equity in the fund. This goal proved unattainable. As of the monthly meeting, the High Grade fund had lost approximately 91% of its equity. The net repo facility that Bear provided High Grade was

down to \$1.345 billion. However, with the continued decrease in the value of the collateral, most of the over-collateralization of the loan eroded and, based on June month-end marks, the value of the collateral was very close to the amount of the loan. Subsequent to the meeting, the fund was unable to meet margin calls and Bear Stearns effectively took the collateral onto its own balance sheet while putting in place agreements that allow fund investors to enjoy some of the upside should (contrary to expectations) the value of the collateral rise. At present, there is a real possibility the firm may not recover the full loan amount. Current plans are to sell these assets in an orderly fashion, which in practice can be done under current market conditions at a rate of only several hundred million each week.

- The Hedge Fund Credit team within Global Credit Risk recently conducted an extensive review of the counterparties to which it provides financing for lower rated and equity tranches of asset-backed Collateralized Debt Obligations ("CDOs"), Collateralized Loan Obligations ("CLOs") and residual tranches of MBS. While the amount of financing in this space is not trivial, the amount of loans to those counterparties currently experiencing distress is small and, at this point, over-collateralized. However, more of these funds are expected to face liquidity pressures in the coming weeks. The firm expected to liquidate one counterparty already under stress by the end of the month. We will follow up with the firm to see if these problems remain contained to a small subset of counterparties.
- While Bear Stearns was not involved in any of the recent high profile leveraged lending deals that got "hung" during June, the firm does have a few significant deals in the pipeline that, given current spread levels, they expect to distribute only by taking losses. However, expectations are that these losses will be fully offset by the advisory and commitment fees on the related deals. These deals, while very large in size, do contain covenants and do not have deferred amortization features such as PIK/toggle provisions, likely making them easier to distribute than those deals "hung" in June which were either covenant-lite and/or included PIK/toggle provisions. We will follow-up on the firm's ability to distribute these outsized commitments.

Goldman Sachs

- The head mortgage trader seeks to remain (net) short, but the desk is battling to do so as "everyone wants to buy protection right now". Furthermore, there is some indication that price and liquidity pressures are spilling over into the prime and Alt A sectors (with one possible explanation being that market participants are selling prime products to raise cash). Meanwhile, the corporate markets have started to show signs of stress, as spreads widened significantly and leveraged lending desks throughout the Street experienced difficulty in distributing commitments related to several large buyout deals. While Goldman has incurred mark-to-market losses on its credit origination business, thus far aggregate losses have not exceeded the fees earned and offsetting gains on macro spread widening hedges. We will continue to monitor closely the ability of both the mortgage and credit origination businesses to manage their respective risk profiles, and will discuss the P/L of these businesses with risk managers next month.
- Several hedge fund counterparties were experiencing significant difficulties (e.g., were not meeting margin calls fully or were disputing position marks). Furthermore, credit risk managers thought it likely that additional troubled funds would surface. Next month we will receive an update of Goldman's hedge fund counterparty risk profile, and discuss any noteworthy or problematic exposures.
- For some time, Goldman has born significant counterparty credit exposure to the Coffeyville refinery, resulting from a 5-year crack spread hedge. In June, the refinery flooded and spilled over 70,000 gallons of oil into the surrounding town of Coffeyville, Kansas. As a result, the plant's refinery capabilities are inoperative until later this summer, and it is unclear as to how much the business interruption insurance will pay out, as there is a 45-day deductible

specified with some ambiguity. Goldman currently has over \$200 million in current exposure to Coffeyville and has agreed to delay some contractual payments until the refinery is again operational. Meanwhile, Goldman is seeking guarantees from the private equity sponsors (one of whom is Goldman Sachs PIA) that own the plant. Given the counterparty's continued liquidity constraints, we will continue to follow this situation in the coming months.

Lehman Brothers

- Lehman's acquisition of Eagle Energy closed on June 26, bringing 224 active clients with \$317 million of current credit exposure and \$848 million of potential credit exposure from short dated gas trades. Commodities VaR (95%, 1 day) also increased from \$6.5 million to \$8.4 million. We will continue to monitor both credit and market exposures in commodities as well as the risk management resources devoted to this area.
- Lehman continues to have significant exposure to leveraged loans. While deals are currently getting tighter with pricing and flex, the question remains about what will happen to deals that have already been committed but not yet syndicated. TXU (\$5.3 billion Lehman commitment) and First Data (\$3.4 billion Lehman commitment) are both scheduled for syndication in the fall. We will follow the developments in this area closely.
- Firmwide VaR ended the month at \$90.9 million (95%, 1 day), over the \$85 million limit. Both Fixed Income and Equity VaRs were below their respective limits, and the increase in firmwide VaR was due to a reduction in the diversification benefit. However, Risk Appetite, a more holistic measure of risk, has not breached its limit. Senior management at Lehman is aware that VaR is over the limit, and continues to monitor multiple measures of risk.

Merrill Lynch

- Merrill has had to restructure a couple of larger transactions. By re-instating the traditional covenants and removing the PIK toggles, Merrill successfully distributed into the market its share of the \$2.4 billion in financing to Asurion without eating through its fees. Merrill is similarly restructuring its \$1.8 billion Alliance Boots commitment due to initial investor reactions and plans to syndicate in August. Credit Risk Management also noted they are closely watching the upcoming First Data transaction, a KKR lead deal. KKR currently has three "hung" leveraged lending commitments and has been unmoving on re-instating traditional covenants and removing PIK toggles. With Merrill's record high levels in its leveraged lending pipeline and the current uncertainty in investors' appetite, we will continue to monitor this area closely.
- Merrill Lynch has plans to reorganize its major proprietary trading group, the Global Strategic Risk Group (SRG), into a standalone fund under Global Investment Management (GIM) within Global Wealth Management (GWM). The new structure allows other investors to participate and the generation of more fees. Merrill will provide \$1 billion of seed capital into the fund, with stop loss measures in place to limit losses, and will also act as prime broker for the fund. A restricted number of Market Risk Management personnel will have access to the fund's positions in order to compute its VaR and other risk metrics. The estimated impact of removing SRG's positions from Merrill Lynch's holding company VaR would be a \$5 million decrease. In a similar fashion, Merrill is formulating plans to establish real estate funds in Asia and Europe in the next 3-6 months.
- Firmwide VaR (95%, 1 day) declined from the \$90 million average range in mid-May to \$65 million. Interest rate VaR was halved over the month as the U.S. dollar proprietary position declined. Credit VaR also declined significantly as management cut positions to monetize gains and took shorter positions on more volatile indices which hedged Merrill's long client side positions.

Morgan Stanley

- After several months of discussion and deliberation about the possible move from a 99% potential exposure ("PE") metric to an expected positive exposure metric ("EPE") for limiting counterparty credit risk, the firm decided to instead move to a 95% confidence interval PE metric for internal risk limit and monitoring purposes. Currently, both the firm's VaR and PE metrics used for internal risk management are set at the 95% confidence level.
- The Chief Risk Officer and Co-Chief Credit Officer briefed us on the firm's recent deliberations regarding its leveraged lending pipeline. With the recent widening in spreads on leveraged loans and the market's pull back from certain deals, particularly those involving covenant-lite and/or Payment-in-kind ("PIK") amortization features, the CRO asked for a "bottoms-up" deal-by-deal review of the firm's pipeline. As part of this review the Credit Department re-rated all of its pipeline positions which resulted in no changes to internal credit ratings. In addition, the business subjected each of its commitments that had problematic features to a set of scenarios ("base case", "worst case", etc) to ascertain what losses the firm may take if all these commitments got hung requiring Morgan Stanley to fund the commitments. The CRO plans to continue running this deal-by-deal scenario analysis for the foreseeable future. As of the date of the monthly meeting, the firm had a couple of "hung" leveraged lending commitments, which the firm funded but were not currently taking to market given the lack of demand. We will continue to follow this area very closely.