MEMORANDUM

February 1, 2006

TO: Robert L. D. Colby, Acting Director
Herbert F. Brooks, Chief of Operations
Michael A. Macchiaroli, Associate Director
Thomas K. McGowan, Assistant Director
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 five weeks with senior risk managers at the CSEs and at Credit Suisse to review December market and credit risk packages.

There were several common themes in discussions with firms:

- **Non-investment grade corporate lending commitments were down across most CSE firms.** While the pipeline of future deals remains strong, unfunded commitments, typically provided by banks and securities firms as part of a financing for an acquisition, fell markedly as firms successfully syndicated high-yield loan commitments during December. The continued strong appetite for non-investment grade loans allowed the firms to reduce several outsized exposures generated in the previous few months. Risk managers, however, remain focused on the leveraged loan area, which has grown sharply and steadily over the past several years, and on the possible impact of a decline in investor demand for these corporate credit products.

- **New, and in many cases larger, limits are coming.** Firms are currently completing their annual budgeting processes, which include revisiting market risk, credit risk and balance sheet usage limits. Senior management considers risk appetite in the aggregate and conducts risk/return analyses to support the allocation of limits to specific product areas. Significant growth in the capital base during the past year is expected to lead to an overall increase in risk appetite, and thus limits, at most firms.

- **Firms reacted swiftly to news that a trader at Deutsche Bank had mismarked structured credit products, leading to a loss of approximately $53 million.** While the exact nature of the problem at Deutsche Bank remains unclear, the CSE firms immediately conducted their own reviews in response to the press reports regarding the loss at Deutsche Bank. While the amount of additional investigative work varied across firms, all firms undertook an examination of marks in the synthetic collateralized debt obligations ("CDO") books, with special attention being devoted to trades with Deutsche Bank. In all cases, risk managers and product controllers felt comfortable with the results. Nonetheless, everyone recognizes that price verification in much of this product space, particularly with respect to bespoke tranches of synthetic CDOs, is challenging given the level of model complexity and lack of transparency for certain model inputs such as base correlations. Like us, risk managers are extremely interested in better understanding the events at Deutsche Bank and the extent to which there are lessons regarding controls in the structured credit area that may be more broadly applicable across the industry.

- **Correlation risk is not just about corporate credit anymore.** Much of the innovation in corporate credit markets in recent years, which led to the establishment of active markets in corporate default correlation products, is now being replayed in the mortgage- and asset-backed space. Several firms have begun to structure CDOs comprised of residential and commercial mortgage assets, as well as other collateral such as credit card and auto loan receivables. In addition to accumulating cash collateral, firms source the exposure for these CDO structures through credit default swaps written on existing asset-backed securities. Like with corporate CDOs, credit tranching is performed to create securities designed to appeal to a variety of investors. To the extent that all of these tranches are not immediately distributed, the firm structuring the deal is exposed not only to losses from widening credit spreads, but to changes in the correlation of defaults of the underlying collateral for the deal. This risk is difficult to measure and hence to manage. Yet the development of ABS/MBS derivatives markets has also provided new opportunities to manage risks from other businesses within the firm, notably by hedging mortgage securitization pipelines. Complicating matters further, with the recent launch of a synthetic ABS index, the trading of standardized tranches is likely to develop soon in the MBS/ABS space, presenting new correlation trading opportunities (both in terms of market making and proprietary trading).

- **All eyes are on the Financial Accounting Standards Board ("FASB").** Under current accounting standards, the CSE firms are all required to defer recognition of some profit and loss ("P&L") on certain derivatives trades. Where certain inputs to the models used to price the contracts are unobservable, firms may not recognize first days gains from those trades under the post-Enron EITF 02-03. Some firms have unrecognized income (or deferrals) in excess of $1 billion. Following industry complaints that these deferrals are problematic, and impose a wedge between P&L and risk management, FASB is now revisiting EITF 02-03 with a proposed new standard that would increase the circumstances under which P&L could be recognized on the basis of a "mark to model". While the possible modification of EITF 02-03 is generally eagerly awaited, risk managers remained concerned about the transition rules that would apply to the current deferrals. Under some scenarios, the firms would never be able to record this economic profit into net income. Instead the deferrals would be eliminated through adjustments to the equity accounts on the balance sheet. However, traders are generally compensated based upon their contribution to net income. Risk managers have expressed concerns that this could provide incentives for traders to put on uneconomic trades for the sole purpose of creating transparency and releasing the deferrals. Such behavior would raise significant risk governance issues.

- **September 2001 risk factor changes "roll off" the time series used for VaR calculations.** Many firms that calculate a historical simulation based VaR using four years of data have noted the rolling off of the highly volatile September 2001 period from their time series of risk factor changes. Even holding positions constant, the rolling off of a volatile time period leads to less extreme observations in the tail of the portfolio loss distribution and thus generally results in a lower VaR. This type of change highlights the interpretation issues surrounding the use of VaR metrics.

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

Bear Stearns

- Mortgage and asset backed inventories across Bear Stearns' securitization businesses grew during December. In particular, the net market value of the ARMs desk's positions grew $1.53 billion to another new record of $13.9 billion. Additionally, there was a sharp increase in aged inventory in the mortgage and asset backed area, which grew $900 million to $3.6 billion. The risk manager noted that this December was a particularly slow month for moving product, but that reducing the level of aged inventory is risk management's biggest focus currently. He also explained that the Head of Mortgages has instituted a target for reducing aged inventory by 50% (from December levels). We will follow up on the firm's progress in this area at the next monthly meeting.

- Limited trading has commenced in CalBear, Bear Stearns' joint venture with Calpine. Currently, the activity has been limited to exchange traded contracts in both the natural gas and power space and the market risk, as measured by VaR, remains below its $1 million limit. We will continue to monitor the evolution of trading activity in this business and any developments in bankruptcy court that affect CalBear's contracts with Calpine.

Merrill Lynch

- Merrill is discontinuing its non-trading VaR disclosure effective with its 2005 10-K scheduled to be filed in the next several weeks. Risk from commercial loans, notes, and mortgages,

MEMORANDUM

April 6, 2006

TO: Robert L. D. Colby, Acting Director
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Division of Market Regulation

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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 five weeks with senior risk managers at the CSEs and at Credit Suisse to review February market and credit risk packages.

There were several common themes in discussions with firms:

- **Leveraged lending trends remain a top concern for risk managers.** The pipeline for new deals has slowed down in 2006 as the nature of the deals has changed. Risk managers are seeing more high profile, chunkier acquisitions instead of the flow of smaller deals that led to so much activity in 2005. The implication for risk management is that exposures are more concentrated. Risk managers also report seeing continued stretching of leverage levels, leading to riskier deals both for the banks providing the financing and for the acquisition targets which will be left with significantly higher debt service obligations going forward.
- **Problems are surfacing at subprime originators.** CSE firms purchase whole loans from third party originators with the intention of eventually securitizing them. Purchasers of whole loans are permitted to "put back" loans to the originator in the event of an early payment default, a premium recapture, or other loan defect.[1] This entails returning the defective loans to the originator either for replacement or credit. Two of the CSE firms report recent problems with put backs to subprime originators.[2] Both of these cases were associated with underwriting problems. While the amount at risk in these two particular instances is relatively small, senior management has been engaged in monitoring the situation. Given the large volumes of subprime mortgages in the securitization pipeline at any given time, a widespread

Bear –

[1] An early payment default occurs when a borrower misses the first couple of payments on a new mortgage. A premium recapture occurs when a mortgage is prepaid by the borrower shortly after purchase of the loan.

[2] For details, see the firm specific follow up section below.

problem with originators could have serious ramifications for this rapidly growing segment of the mortgage market.

- **Sometimes the firms are indeed in the storage, not the moving, business.** Private equity investments have been increasing at investment banks, as has appetite for what has been a very profitable activity. These investments are intended to be held for an extended period of time, in contrast to core trading positions, and the exposure can be north of $1 billion. Examples include Merrill Lynch's ownership interest in Debenhams, a UK department store, Lehman Brothers' partial ownership of the Ospraie and GLG hedge funds, and Goldman Sachs' investment in Sanyo Electric. Positions such as these pose risk management challenges for broker-dealers. Due to their illiquid nature, they are not easily risk managed using VaR and other market-risk oriented techniques. Several firms have moved in recent months to refine their disclosure of less liquid, longer-term investments. Further, capital treatment of the positions pose additional challenges.

- **Structured transactions are increasing in the commodities space.** Structured transactions are those that require some sort of repackaging of risks or cashflows before being brought to market. They generally involve large balance sheet commitments by CSE firms, which typically provide financing as part of the deal, and have a complex risk profile relative to more routine contracts. Many of the transactions expose the firms to the operational risk of assets such as power plants. These transactions have been very profitable for firms and thus they are seeking to increase their footprint in this business.

- **Firms are bullish on the BRICs.** The acronym "BRIC" refers to Brazil, Russia, India, and China, and was coined in a 2003 Goldman Sachs report predicting that these countries would collectively have the world's largest economy by 2050. Firms are especially bullish on Brazil, with one firm saying that some consider Brazil an Investment Grade country now. Proponents of this view argue that there has been a fundamental paradigm shift in emerging markets, with resulting longer term stability as evidenced by the fact that political crises no longer lead directly and inevitably to economic crises, as demonstrated by recent events. That said, as one risk manager stated, they believe in the fundamentals but have downside protection in case they are wrong. An additional concern is that a seemingly localized problem could spill over to other emerging markets (so-called "sympathy widenings"), such as occurred on a limited basis in Brazil and Turkey when Fitch put Iceland on negative outlook. In essence, geographic separation and lack of direct economic relationships may not always stop the spread of economic crises.

- **Equities risk taking is up across several firms due to long directional trades.** Firms have taken this view with differing amounts of downside protection. Some of the firms also report increases in exposure to vega (kappa), which measures sensitivity to market expectations concerning volatility in the future. Implied and realized equity volatility continue to trend downward, with risk managers continuing to express skepticism that these low levels are sustainable. Activity in equities has also increased due to block trades in Europe and Asia. There has been an increase in "baby blocks;" that is, block trades valued at less than $50 million that have thus far been easily sold by firms into the market. Activity in large blocks also continues with some deals more successful than others for the firms that have successfully bid for these transactions.

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

<u>Bear Stearns</u>

- Bear Stearns' <u>global head of market risk management resigned</u> prior to our monthly risk meeting. We will discuss transition/hiring plans for this position with the Chief Risk Officer and how these plans may alter the independent market risk management function at Bear Stearns.

- The Chief Risk Officer noted that the Credit Department is currently focusing a lot of attention on the timely request and collection of claims related to "put-back rights" Bear Stearns has with mortgage originators that sell Bear Stearns residential mortgages. During the month, Bear Stearns increased its reserves for this issue as the firm had a significant amount of loans in inventory with outstanding claims, with a disproportionate number involving a relatively small number of originators. This issue has received the attention of senior management and enhancements to the policies and procedures were recommended following a recent internal audit of this area. We will follow up on the corrective actions taken in this area, and any further difficulties.

- Bears Stearns has rolled out its initial potential exposure ("PE") model to capture credit risk exposures related to the Commodities product area. Further enhancements are expected in the near future. We will conduct a more thorough review of this model and planned enhancements as part of our ongoing PE validation project.

MEMORANDUM

June 7, 2006

TO: Robert L. D. Colby, Acting 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 five weeks with senior risk managers at the CSEs to review April market and credit risk packages.

There were several common themes in discussions with firms:

- **Risk managers remain focused on non-investment grade corporate lending activities, and provided varying accounts of commitment pipeline events.** In terms of both commitment requests and investor demand for bank debt, reports varied from observing things cooling off somewhat to activity being extremely hot during the month. Along the lines of the latter, one firm noted great success recently in syndicating exposures quickly and stated that, due to increased investor demand, new loans were closing at spread levels that were tighter than stated in the initial deal terms (i.e., "price flexed" downwards). Separately, while risk managers over the past year have continually observed corporate buy-outs occurring at increasingly aggressive leverage levels, one firm noted some recent success on the banks' part in pushing back against financial sponsors on deal terms.

- **As of April hedge funds are performing well and counterparty credit risk managers describe a fairly benign environment.** In addition, prime brokerage business unit personnel, who extend leverage to hedge funds in the form of margin and securities lending, appear to be spending relatively little time fielding requests for additional leverage. At the same time, however, there is increasing client demand for prime brokers to provide clearing and financing services on a broader range of financial products. In other words, hedge funds appear relatively less concerned with negotiating lower margin requirements on securities traditionally financed by their prime brokers, but are determined to consolidate more types of instruments into fewer clearance accounts. In addition to realizing *operational* efficiencies, this provides funds relief/offset from a margining perspective, especially between cash securities and OTC derivatives. Clearly as funds ask prime brokers to intermediate and provide leverage through more complex and less standardized instruments, credit, operational, and legal challenges arise.

- **Several firms active in the Residential Mortgage Backed Securities (RMBS) space experienced a slowdown in new deal issuance in certain sectors.** One firm described adjustable rate mortgage collateral turnover in April as being down considerably from the previous month. Another firm depicted a more broad and gradual trend downwards in RMBS activity. Meanwhile, reports indicate that pipelines remain strong in the commercial mortgage space, in terms of new loan origination as well as the pace of collateral securitization/distribution.

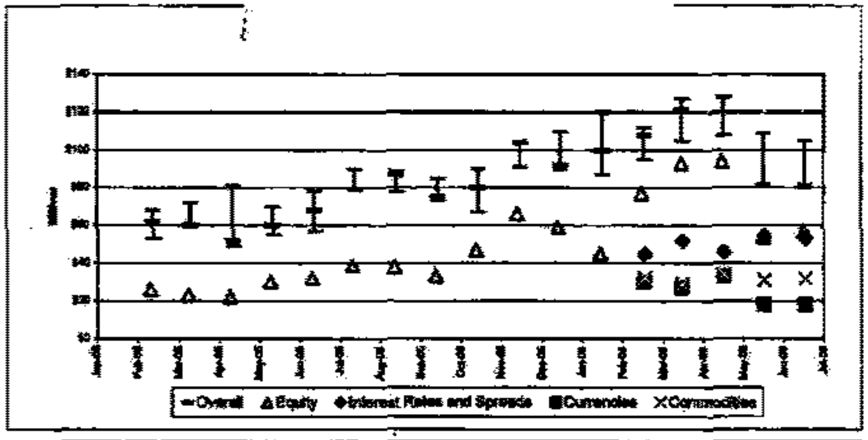
- **Large movements in the dollar and commodities prices led to increases in unsecured exposures to some counterparties, although no immediate credit concerns resulted.** With the dollar depreciating over 5% and crude oil and metals (especially copper) prices rising significantly, some derivatives contracts inevitably moved further into the CSE firms' favor. On the commodities side, one would expect dealers' counterparty exposure to increase as prices rise, as the producers and refiners often seek to forward sell their production. Further, it is common for dealers to trade without variation margining in place in this space (i.e., without the right to call for additional collateral following market moves), given the liquidity constraints of many commodities counterparties and historical market convention. However, the lack of such collateral agreements is often mitigated by the "right way" nature of the credit exposures generated - e.g., an oil exploration company owes the dealer money as the price of oil is rising.

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

Bear Stearns

- During the prior month, OPSRA heard of difficulties that some subprime mortgage originators were having in the U.S. This month, the risk manager stated that Bear Stearns' UK subprime mortgage originator subsidiary, Rooftop Mortgages Limited, had suffered losses on remaining BB notes and residual tranches from two securitizations of Rooftop collateral originated in April 2005. The mark-to-market losses resulted from the trust having a shortfall in cash due to extremely poor performance. Bear Stearns has moved to replace the current UK servicer of these loans. Rooftop currently has collateral accumulated (and growing) for the next deal. Given the performance of the earlier securitizations, the ability to bring the next deal to market will be severely challenged. We will follow up on any additional plans regarding changes to the underwriting standards at Rooftop as well as any further P&L resulting from remaining securities and accumulated loans.

- During the May risk meeting, the risk manager discussed the risk profile and the year-to-date performance of the risk arbitrage desk. He discussed the fact that the main trader had already exceeded last year's profit and thus was allowed to grow his positions. As of the end of April, the desk was long $1 billion which was the largest position seen since last fall. The risk manager noted that the desk incurred some material losses during the market volatility in May. We will follow up on the performance and risk management of this desk at the upcoming meeting.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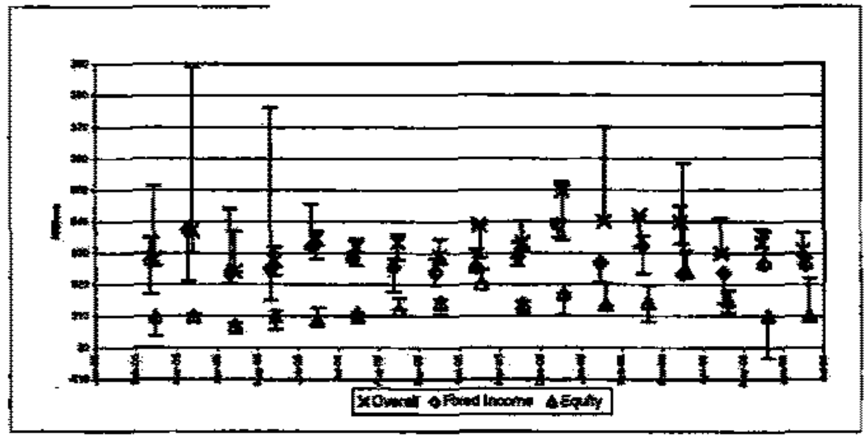
Commodities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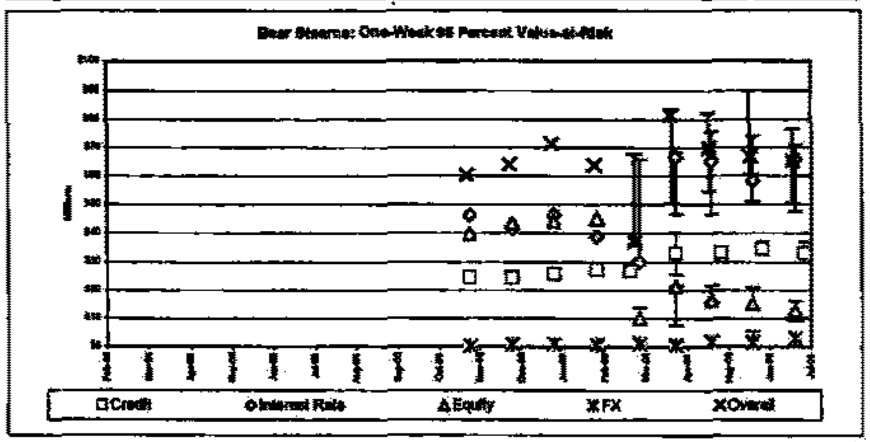
Bear Stearns: One-Week 95 Percent Value-at-Risk
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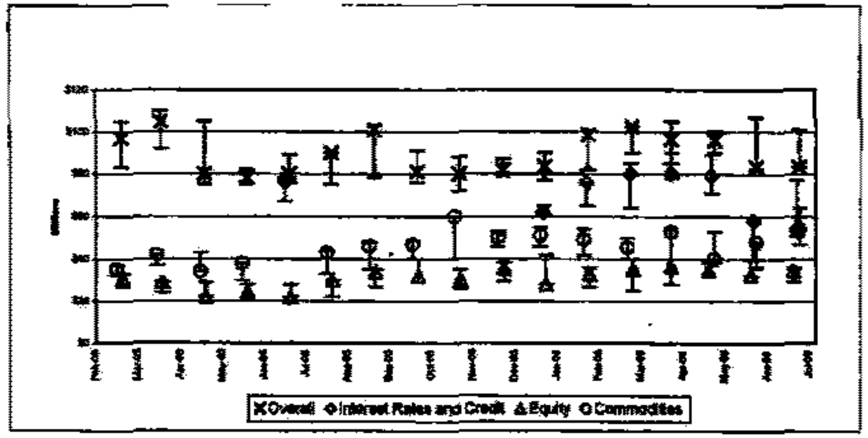
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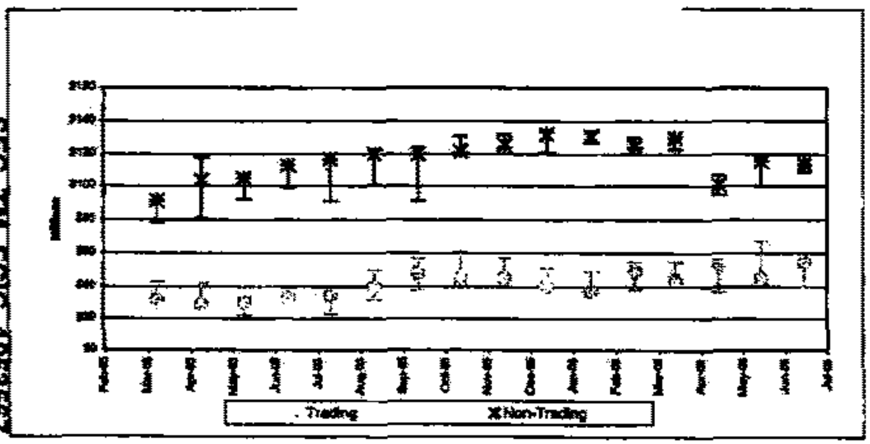
Trading
Non-Trading

MEMORANDUM

August 2, 2006

TO: Robert L. D. Colby, Acting Director
Herbert F. Brooks, Chief of Operations
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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 June market and credit risk packages.

There were several common themes in discussions with firms:

- **Corporate credit investors push back against "covenant-lite" agreements.** Last month, risk managers had highlighted the growth of "covenant-lite" deals in the leveraged lending space. In such deals, the lenders agree to a reduced set of covenants that provide less protection than has in the past been associated with bank loans and similar credit extensions. More recently, investor appetite for loans with these aggressive terms has diminished - meaning the banks that arranged the financing packages had difficulty in distributing certain covenant-lite loans to their institutional customers. In these cases, the banks either walked away from the deals or used their pricing flex to re-negotiate covenants, incorporating more traditional protections. As a result, as one chief risk officer stated, "covenant-lite deals are no longer getting done."

- **Credit risk management and loan portfolio managers remain focused on the risk of credit spreads widening in the bank loan area.** Credit spreads on bank loans, including leveraged lending facilities, remain at historically tight levels. Given the continued high level of exposures from the corporate lending pipelines at many of the CSE firms, some credit risk and loan portfolio managers have taken additional steps in risk managing these portfolios. Over the past couple of months some of the biggest players in this market have begun to more actively hedge commitments with index products, seeking protection from a general widening in credit spreads. In addition, at least one firm has recently implemented an additional scenario-based risk metric for determining the potential loss given a credit spread widening event. While CSE firms generally have scenarios that measure the impact of a Fall 1998 series of events on the lending portfolios, this firm has supplemented its standard analysis to consider a wider range of potential market events.

- **After a rocky start, hedge fund performance in June appears to have stabilized from the losses experienced in May.** Preliminary results show that performance in June was generally much better than during the previous month. The risk managers noted no significant issues related to outsized margin calls, missed margin calls, redemptions or rapid de-leveraging by their hedge fund clients. In fact, several risk managers noted that many hedge fund clients (from both the OTC derivative business as well as prime brokerage platform) are exhibiting considerable caution, and in some cases appear willing to sit on the sidelines for the time being despite in many cases being only flat for the year to date.

- **Market risk as measured by VaR has decreased across the CSE firms.** Most firms have shown moderate to significant drops in their Firmwide VaR numbers from the prior month. Risk managers have noted that many businesses have reduced positions as customer activity has shown signs of weakening. One risk manager noted that customer activity is dropping further in July, which may foreshadow further reductions in the risk profile of the CSE firms. The universal exception to this decrease in exposure has been the core mortgage securitization and leveraged lending businesses where exposures remain high.

- **Increased correlations and volatilities in equities markets impact VaR measurement.** While the absolute VaR for equities at many firms stands below levels during the late spring period when position taking was significantly higher, VaR measures have increased recently as firms have rolled forward the time series of market moves used in the modeling. The two biggest reasons for the increase relate to (1) the increase in volatility in the equity markets and (2) recent increases in correlations in equity markets, which result in the reduction of the diversification benefit inherent in a portfolio based risk measure.

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

Bear Stearns

- After a month characterized by high profitability and high turnover of inventory, the net market value of positions in Bear Steam's residential securitization pipelines increased almost $4 billion during June. The risk manager highlighted the lower turnover this month as well as a significant increase in aged inventory, a key metric in managing a securitization business that serves as a warning that production may be outstripping distribution. We will follow up with risk management on both the levels and aging of inventory in the securitization pipeline at the next monthly meeting.

- The problems at Rooftop Mortgages Limited, Bear Stearns' UK subprime mortgage originator, discussed two months ago, have continued. As a result of the continued poor performance of the two deals already in the market, Bear Stearns has decided not to bring another Rooftop deal to market for the time being and hopes to sell the current inventory of originated loans through bulk whole loan sales. We will continue to monitor this situation as the amount of loan inventory, including commitments, is approximately $1.5 billion.

- During the July meeting, the risk manager discussed plans to switch the firm's approach to marking bespoke Collateralized Debt Obligation ("CDO") tranches. The firm historically would mark bespoke tranches using index implied spreads. The decision had been made when many of the single name CDS were not as liquid as the indices. With the increase in liquidity and transparency in the single name CDS market, they have changed their approach and will now mark the bespoke CDO tranches using single name spreads from CDS as inputs into the pricing model. We will follow up on the implementation of this methodology change.

MEMORANDUM

October 6, 2006

TO: Erik R. Sirri, Director
Robert L. D. Colby, Deputy 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 August market and credit risk packages.

There were several common themes in discussions with firms:

- **The lessons of Amaranth for risk management remain unclear.** On September 18th, Amaranth, a hedge fund with approximately $9 billion in assets at the end of August, announced that it had sustained significant losses (in excess of $5 billion) on natural gas positions. Although all of the CSEs had multi-faceted trading relationships with Amaranth – including several which served as prime brokers for the fund – none have experienced any credit-related losses to date. In fact, the orderliness of the meltdown caused risk managers at all of the firms to query whether the events at Amaranth will be good or bad for risk management. On the one hand, credit risk managers recognize that they now have a recent event to reference when negotiating margin terms. On the other hand, some funds may cite the orderly unwinding of Amaranth's positions as an indication that the risks of concentrated positions are easily dealt with by the financial system, and no changes in practices are necessary. In short, the lessons of Amaranth are not obvious and are open to multiple interpretations.

- **Hedge fund exposures and crowded trades are a continued focus.** Distinct from Amaranth, credit risk managers at several firms described renewed senior management attention on the risks posed by hedge funds. Specifically, they cited concerns about "crowded trades", strategies pursued simultaneously by multiple market participants, as well as large credit exposures that might result from macro-economic shocks. In this vein, firms have begun developing their stress tests of hedge funds' positions to ascertain worst-case credit exposures under various scenarios. Changes include increased granularity of stresses, for example considering steepening and flattening of yield curves in addition to simple parallel shifts, and more sophisticated cross-asset and cross-risk factor exposure aggregation.

- **Markets are very benign – almost uncomfortably so.** Equity markets are up. Credit spreads are tight. Realized and implied volatilities are low across nearly all asset classes, from rates to foreign exchange to equities. Investor demand for leveraged loans, collateralized debt obligations, and mortgage- and asset-backed paper continues unabated. Investors have also returned to emerging markets after taking losses in May and June. Some risk managers commented that these very benign market conditions "feel a little like the Fall of 1998" prior to the implosion of Long Term Capital Management (LTCM). Market risk managers' focus on stress and scenario testing has increased, especially in the traded credit space where certain markets are less mature and/or less deep (e.g., distressed debt, leveraged and whole loans, structured credit, etc.), and emerging markets, especially local currency assets. In these markets, value-at-risk (VaR) measures by themselves may not adequately convey the risk, particularly if certain liquidity providers were to withdraw from the market. Notably, some risk managers have adjusted the credit risk shocks they use in stress and scenario testing from percentage terms to absolute level shocks, resulting in more severe predicted losses. They noted that in today's very tight credit spread environment, percentage shocks, even those based on 1998 LTCM, likely underestimate the potential severity of losses.

- **Commercial Mortgage Backed Securities (CMBS)-related activities are expanding.** Traditionally, the CSEs active in the commercial real estate loan space focused overwhelmingly on securitization – that is, originating and/or acquiring commercial loans, accumulating them into pools, structuring securities from those pools, and distributing those securities to investors. More recently, however, firms have begun to expand the scope of activities to include proprietary trading in CMBS derivatives and mezzanine debt, or even providing "bridge equity" for large commercial property deals. Bridge equity involves co-investing equity capital with a deal sponsor under the expectation that a potential co-investor, such as a pension fund or insurance company, will eventually eliminate the CSE firm's exposure by buying its equity stake.

- **In equities, many of the CSEs reduced their downside gamma protection.** Generally, the CSEs are long directional exposure to equities or "delta", which exposes them to declining equity prices. Traditionally, this has been mitigated by positive gamma provided by long options positions. Recently, many of the CSEs have been willing to run flatter gamma profiles, in part to lessen the time decay cost of holding options, known as theta bleed. Typically, this reduction in downside protection leads to higher measured risk. However, firms have simultaneously increased their long exposure to volatility, as measured by vega sensitivity, often through positions in variance swaps, which has mitigated increases in measured risk. Some risk managers have been careful to point out the differences between gamma protection and vega protection, noting that for certain market moves vega protection may be less effective as a hedge to directional risk.

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

Bear Stearns

- During our discussion of counterparty credit risk to hedge funds, the Chief Risk Officer explained that his group was currently working on a "stress margin call" analysis, whereby all the hedge fund portfolios are subjected to a set of stresses and the sum of all the margin calls (across products) are added up. These stresses are akin to those used by the firm internally for managing the market risks of its inventory positions. The goal of this new analysis is to provide senior management with a more robust view of concentrated or correlated credit risk to hedge fund counterparties by addressing some of the shortcomings of the potential credit exposure (PE) metrics currently used as the primary risk measurement tool. Namely, the PE techniques measure risk by counterparty and product silo, and often capture only "first order" risks (e.g., broad increases or decreases in interest rates, as opposed to changes in the shapes of yield curves). We will discuss these analyses in more detail as they are implemented.

- The Head of Market and Credit Risk for Europe and Asia discussed his recent experiment in London of migrating some of the risk management duties typically performed by market risk personnel to credit officers who have significant fundamental credit experience. His focus is on certain desks that arguably require both skill sets, such as the distressed debt business. Conversely, he also discussed the use of market risk personnel in the credit quantitative group. We will continue to follow this integration initiative.

- During the past month, the Mark-to-Market Committee asked for a complete review of the firm's mortgage residual positions. The net change to marks as a result of this review was not material. However, due to the magnitude of these positions, we have asked for a detailed briefing.

- Bear is reorganizing its activities in several ways. The firm's prime brokerage business is being rolled into the Equities Division, which will be co-headed by the previous heads of cash and structured equities trading. Also, the firm has consolidated proprietary trading, or principal investing, into a separate business unit within the trading division (i.e., there will be one proprietary trading head who reports directly to the firm's senior management). Finally, the firm's Operations and Technology divisions have been formally merged under the management of one individual (who is also responsible for front office Equity Analytics). We will follow up regarding the implications of this reorganization, such as how the prime brokerage and independent credit risk management functions will (or will not) be integrated. ReOrg

MEMORANDUM

November 7, 2006

TO: Erik R. Sirri, Director
Robert L. D. Colby, Deputy Director
Herbert F. Brooks, Chief of Operations
Michael A. Macchiaroli, Associate Director
Thomas K. McGowan, Assistant Director
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 September market and credit risk packages.

There were several common themes in discussions with firms:

- **Retained residual pieces of residential mortgage securitizations are growing.** Residuals consist of claims on excess cash flows from collateral relative to the payouts owed to different holders of the securitized products. They are the most volatile and risky portions of the securitization waterfall since their cash flows are subordinate to other tranches in the deal. Residuals are very sensitive to prepayments and credit losses. If the collateral performs differently than expected the value of the residuals is affected as cash flows are reduced or disappear entirely. Residuals can be classified into two types, each of which has elements of interest rate risk and credit risk. Net Interest Margin Security ("NIMS") are generally rated and concentrate the risk of prepayments and thus interest rate changes, while back-end residuals are unrated and represent concentrated exposure to the default risk in the pool of mortgages.

  Residual interests are generally the most difficult pieces of the capital structure for investment banks to sell, for instance because purchasers of other securitized product look for the organizing banks to hold these pieces of the capital structure as a profession of confidence in the deal, and because regulated entities are deterred by capital and other requirements from purchasing these securities. Generally, hedge funds have been active in purchasing residuals from investment banks, but there are some indications that residual volumes held at the CSE firms have risen recently. One firm reported their retained residuals increased because Amaranth had been their largest buyer of subprime residuals. Another reason for the increases in retained pieces is that some firms have been securitizing new products such as Option ARMs, and hedge funds as well as other investors have been wary to purchase the residuals until a performance history has been established. Market risk managers are closely monitoring the risk from retained residuals, and in one case are considering limiting growth of the securitization business until progress is made in reducing these positions.

- **CSE firms recognize the value of stress testing for internal risk management and are considering utilizing them to facilitate credit decisions for hedge funds.** Stress testing, or scenario analysis, entails revaluing a firm's current portfolio based on stressed market conditions. The market conditions can be based on either historical events, such as the 1987 Equity Market Crash, or hypothetical events, such as the possible impact from an Avian Flu outbreak. Stress tests increase the transparency of risks to senior management by answering the question "How much money could the firm really lose?" in very low probability events. Stress tests have long been an important complement to Value-at-Risk ("VaR") metrics for less liquid products where price movements under a stress event might look very different than those under the normal market conditions to which VaR is calibrated. CSE firms are increasingly interested in stress testing as a way to understand the counterparty risks related to individual hedge funds, typically by assessing the adequacy of collateral relative to risk through the application of strategy-specific scenarios. Credit risk managers differ across firms on the degree to which they would ultimately make margin decisions based on these analyses.

- **Insurance-linked products are a strong area of growth.** CSE firms are increasing exposure to insurance products in a number of different ways, including life settlements, variable annuities with life insurance components, and equity investments in reinsurers. Life settlements, in particular, pose unique risks. In a life settlement transaction, a firm purchases a life insurance policy that is no longer desired by the policyholder. The firm pays the policyholder something greater than the cash surrender value of the policy, and the policy is transferred to the firm who collects upon the death of the policyholder. A diversified pool of policies is created for ultimate securitization. Firms seek to get more medical information about the policyholders either through a review of medical records or medical exams, and thus make a more refined actuarial estimate of the remaining term of the policy. There are several new risk factors in this type of product, including reputation risk, insurance carrier risk, and actuarial risk, that need to be monitored by risk managers.

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

Bear Stearns

- Bear Stearns' corporate lending business has historically been the smallest and least concentrated of the five CSE firms. The firm has traditionally focused on smaller to mid-sized deals mostly in the United States. However, during September, the firm was a lead arranger in the firm's largest corporate lending commitment to date, which was to an investment grade pharmaceutical company for the acquisition of another pharmaceutical company. In addition, the firm discussed another possible commitment for a multi-billion dollar leveraged buyout. We will continue to monitor these outsized commitments as they work through the syndication process and will discuss with the Chief Risk Officer the dialogue with senior management regarding the approval of these outsized facilities and whether the recent deals represent a shift in the risk profile and risk appetite at Bear Stearns.

- On October 20th, Bear Stearns announced its acquisition of Encore Credit Corp.'s mortgage banking platform. ECC Capital Corporation will operate as a separate division of Bear Stearns Residential Mortgage Corp. This acquisition will substantially increase Bear's ability to originate subprime mortgages and is another step in the vertical integration of the residential mortgage business at Bear Stearns. While this is a small acquisition in dollar terms, it represents a significant increase in headcount for the firm on the order of 4 – 5%. We will continue to discuss with risk management the on-going integration of this business into the broader Bear Stearns Residential Mortgage Corporation.

MEMORANDUM

January 4, 2007

TO: Erik R. Sirri, Director
Robert L. D. Colby, Deputy 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.

MEMORANDUM

March 1, 2007

TO: Erik R. Sirri, Director
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Herbert F. Brooks, Chief of Operations
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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 January market and credit risk packages.

There were several common themes in discussions with firms:

- **Subprime mortgage market turmoil: the market risk story.** Rising delinquency and default rates for subprime mortgages and widening credit spreads in synthetic and cash securities markets have made headlines recently. The ABX BBB- index, which tracks the cost of buying protection on the lowest-rated tranche of a reference pool of subprime mortgages, began the month at 400 bps over LIBOR and ended January at almost 700 bps. It has since widened out to over 1000 bps. This widening has occurred primarily in the more recent vintages, which reflect mortgages originated in the last year amidst a declining housing market. Some risk managers noted that their firms act primarily as sellers of protection to their clients (often hedge funds) through derivatives referencing the index. This dynamic can make it difficult for dealers to hedge their positions without incurring significant basis risk, and some CSEs experienced trading losses as a result of the widening. However, spread widening has been mostly limited to the lower parts of the capital structure, with spreads in the AAA and AA tranches remaining tight (ending the month at 9 and 14 bps, respectively). The cash market has also been much less volatile, with BBB- subprime MBS trading in the upper 200s at the end of the month. One risk manager noted that CDO managers still have to buy product for their issuances, keeping demand high, and that the inability to short cash bonds keeps selling pressure to a minimum.

- **Subprime mortgage market turmoil: the credit risk story.** Many CSEs incur credit risk to subprime mortgage lenders through pre- and post-settlement exposures resulting from whole loan purchases and through warehouse lines. Much of the focus lately has been on post-settlement exposures, for example those generated when a CSE exercises its right to 'put back' a loan to the seller, often due to an early payment default or a breach of representations and warranties. The seller is required to buy this loan back at cost.

However, in the case of several recent defaults (e.g. Mortgage Lenders Network) the subprime lenders have been unable to fulfill their repurchase obligation, and the CSEs will sell the loans into the market as 'scratch-and-dent,' resulting in a loss. There has also been a good deal of focus on warehouse lines, where CSEs fund a mortgage originator's loan production on a secured basis in order to allow them to accumulate enough loans for a whole loan sale. While the mortgage collateral being financed is subject to a haircut, many of the CSEs have been taking a close look at their warehouse lines to subprime lenders, and in some cases have raised the haircuts or lowered the committed portion of those lines. In other cases, CSE firms have foreclosed on warehouse lines due to covenant breaches and have seized the underlying collateral.

- **Acquisition activity moves into regulated industries.** Typically, the strategy of the CSEs engaging in event-driven lending is to quickly sell down financing commitments, for example through loan syndication or debt offerings. Recent headline acquisitions suggest that financial sponsors may be pushing into more regulated industries such as gaming and energy. Deals involving companies in these industries often take longer to close because they must go through lengthy regulatory reviews, often at both the state and federal levels. The risk can therefore remain on firms' books for much longer than with the standard acquisition financing. One risk manager noted that with these large commitments, 'time is not your friend,' and it is unlikely that firms will be paid for this additional risk.

- **Covenant-lite deals continue to gain popularity.** While each risk manager might have a slightly different definition of covenant-lite, all agree that these deals continue to be pushed by financial sponsors and accepted by deal investors. In essence, a covenant-lite deal is one that has few or no financial covenants, such as leverage or interest coverage tests. This trend makes bank loans look very similar to bonds, which do not have financial covenants. One possible reason for the acceptance of these loans is that many of the newer bank loan investors (e.g. hedge funds) are accustomed to holding bonds, and do not demand the greater protections historically required by banks holding term loans and revolvers.

- **Emerging markets risk goes beyond the BRICs.** While firms have been active in the so-called BRICs (Brazil, Russia, India, and China) for some time, risk managers noted that exposure is growing in other emerging markets. From loans extended to Mongolian banks to large FX positions in the Egyptian pound and Hungarian forint, the CSEs have expanded broadly across the globe. Some risk managers speak of the new paradigm in emerging markets where the potential for market contagion is greatly reduced due to more sophisticated differentiation of countries by market participants, and cite the recent events in Ecuador, Venezuela, and Thailand, where county-specific events remained local phenomena, as evidence. Others are less optimistic, noting that they heard the same "paradigm shift" comments in 1997 and 1998, prior to the emerging markets disruption.

- **CSEs continue to grow their international operations.** Many of the CSEs are opening new branches in countries such as Brazil and South Korea. One CSE noted that half of its trading and securities revenue now comes from Europe and Asia, and that it believes the best growth opportunities are outside the US. In many cases, the firms have been actively trading these countries' bonds and FX for some time, but through off-shore, hard currency markets. As they open branches in the countries themselves, they plan on applying for (or have already received) licenses which will allow them to engage in on-shore, local currency and securities trading. While some CSEs already have regional trading limits in place, others are discussing how to formalize the allocation of risk limits not just by product but by region as well.

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

Bear Stearns

- Bear's mortgage business incurred significant market risk losses on second lien residential mortgage residuals. In January the firm marked down approximately $300 million of inventory by $58 million, following $25 million in mark-downs the previous month. The mark-downs are the result of deteriorating performance in the underlying loans (i.e., increased delinquency rates), as well as residual sales. While these losses are not material at the group level, or even at the level of the overall mortgage business, risk managers note that these events reflect a more rapid and severe deterioration in collateral performance than anticipated in ex ante models of stress events. Separately, Bear's second lien product is comprised primarily of Alt-A credit quality loans, while other CSE firms have reported losses primarily in the subprime space. We plan to discuss the firm's positions and performance in both the second lien and subprime residual products again next month. Alt-A

- We requested an update on Bear's Structured Funds Business (see OPSRA report dated June 26, 2006 for detailed business overview). The business, which primarily generates gap risk to baskets of hedge fund shares, has continued to grow steadily. The loan equivalent amount of the desk's position has reached $5.8 billion, and thus is approaching the current limit of $6.5 billion. Consequently, it has requested a limit increase to $10 billion. In addition, while the vast majority of transactions done to date reference relatively diversified baskets of hedge funds shares, risk managers note some trend in the market towards single fund underliers. We will continue to monitor this activity and discuss any shift in risk appetite, including willingness to enter into riskier trade structures, with risk managers.

- The risk manager for Europe and Asia reported there has recently been some increased trading activity with emerging market counterparties. While Bear's fingerprint in emerging markets is still quite small, the firm has recently established credit lines with financial institutions domiciled in countries such as in Kazakhstan, Russia and Mongolia. We will continue to monitor this nascent activity going forward.

- As discussed in previous months, risk management has been considering "re-engineering" the process for reporting market risk to the Executive Committee. A prototype risk report should be available for our review at the next monthly meeting. In addition, Bear has been in the process of refining its market risk limits framework (also mentioned in previous memos in the context of establishing firm-wide limits). We intend to discuss the new framework in more detail in the coming months.

MEMORANDUM

March 30, 2007

TO: Erik R. Sirri, Director
Robert L. D. Colby, Deputy Director
Herbert F. Brooks, Chief of Operations
Michael A. Macchiaroli, Associate Director
Thomas K. McGowan, Assistant Director
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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 February market and credit risk packages.

There were several common themes in discussions with firms:

- **The equity markets correction caused only mild pain.** The U.S. equity markets declined approximately 4% on February 27th. While many CSEs had significant long equity positions going into the sell off, some firms were able to substantially offset or avoid directional losses with gains resulting from positive optionality (i.e. gamma) in their portfolios as well as profits from intra-day trading activities. Other firms did experience trading losses, however, as discussed in further detail in the firm-specific bullets below.

- **Subprime mortgage market turmoil continued to cause credit risk concerns.** Subprime originators continued to fail, led by some of the largest players such as New Century. From a credit risk perspective, firms have continued to actively monitor their warehouse lines to subprime originators, in many cases changing the terms when covenants have been breached and ensuring that marks on the underlying collateral backing the loans are current. As a result, despite the shakeout of the subprime originators, the CSEs do not expect material losses from this business. In addition, the amount of early payment default ("EPD") claims outstanding at the CSE firms has remained relatively constant throughout the month, indicating that the underlying subprime collateral purchased or financed by the CSEs is not deteriorating further. More recently, some CSE firms issued notices of default to New Century regarding its warehouse lines. In some cases, the firms exercised their rights to foreclose on the collateral supporting these lines; in other cases New Century repaid the outstanding amount and moved its financing to another institution.

- **As of now, hedge funds appear to be weathering the turmoil in the subprime space.** While generally not their sole activity, many hedge funds are active players in the subprime mortgage market, both on the cash and synthetic, or derivatives, side. Some are active buyers of lower-rated tranches (and non-rated residuals) of subprime securitizations, and much of this activity is financed by CSEs and other institutions through repo contracts. Several risk managers noted that, given the movements in spreads in the subprime market this past month, there has been an increase in the amount and magnitude of margin calls to funds pursuing this strategy. However, CSE firms have not yet experienced any problems with hedge funds missing margin calls on these financing contracts. On the synthetic side, most of the hedge funds appeared to be buyers of protection on the ABX indices, and therefore experienced gains as subprime markets weakened and spreads on the indices widened.

- **The subprime mortgage market disruption has increased focus on price verification processes.** Business personnel, controllers, and risk managers have been focused on the marking of mortgage trading inventory. Particular attention has been paid to price verification around residuals as well as synthetic positions referencing mortgage collateral. Although much of the recent press has been focused on the ABX index spread and its sharp widening during the month, many CSE firms have a substantial book of either single-name credit default swaps on asset-backed securities ("CDS on ABS") or basket default swaps, which reference a customized group of single-name CDS on ABS. While the ABX index is relatively liquid and thus straightforward to mark daily, these other synthetic products tend to trade less frequently. As a result, the process of marking these positions places greater demands on controller resources in choppy markets given the relative lack of pricing transparency. We are completing a round of targeted discussions with controllers at all five firms to review the price verification procedures used in this area.

- **TXU- the new "largest LBO ever".** On February 26th, KKR and TPG, two leading private equity firms, announced their intent to acquire TXU for $45 billion, including the assumption of existing debt, in what would be the largest leveraged buyout ever (unseating the Equity Office Properties deal discussed in recent memos). As part of this deal, many of the CSE firms are both lead arrangers of the financing as well as bridge-equity providers. For some of the CSE firms, these new and larger commitments replace previously outsized commitments to TXU for a previously planned financing of 11 new coal power plants, which ran into environmental and political obstacles. Following the leveraged buyout, TXU plans to build just three of these plants in an attempt to appease various constituencies. However, it is likely that this deal will not close for some time given regulatory and other considerations, leaving firms exposed to a much longer period before syndication than typical leveraged buyouts to date. Given that syndication is the primary means to manage the risk of the leveraged lending "pipeline", this is a focus for risk managers.

- **Changes to risk factor time series have been pushing VaR levels around.** VaR methodologies require a mapping of market risk exposures to risk factors, such as interest rates or equity returns. The method of choice amongst the CSE firms for modeling risk factors is historical simulation, which involves the direct application of historical market moves to current positions. As a result, changes in VaR result not only from changes to market risk positions, but also from changes to the underlying historical time series used as these are updated with more recent data. At some firms, this effect is exacerbated by the decision of risk managers to place greater emphasis on more recent historical data (i.e. exponential weighting of data). This was the case in February, as VaR levels were pushed significantly higher at these firms due to the inclusion of the higher volatility exhibited in several markets during the past month. For example, one firm saw its mortgage VaR double during the month, despite actually reducing its exposures. On the other hand, another firm saw a drop in its VaR due to the roll-off of data from January 2003, a month with high market volatility.

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

Bear Stearns

- Bear's mortgage business incurred significant market risk losses on its residential mortgage inventory due to continued spread widening and collateral deterioration. The vast majority of markdowns occurred on second lien residential mortgage residuals (mostly based on Alt-A collateral but also including some subprime collateral as well). Losses for the first quarter on second lien inventory, which consists of loans intended to cover a purchaser's down payment and are often referred to as "piggyback" loans, totaled $168 million. However, there were also non-trivial markdowns against whole loans and first lien residential mortgage-backed securities in both subprime and Alt-A product. Although the business benefited from substantial protection purchased in the form of CDS on ABS, the mortgage business had its first monthly loss since Bear became a CSE.

- During this month's meeting we were informed that the head of Bear's independent Model Validation Group has resigned. In the past year, two of the group's model reviewers, who had concentrated on equity and credit derivatives models, have left the group. While the team has added two members dedicated to reviewing mortgage and other cash product models, the departure of the personnel focusing on derivatives is a concern. Bear was able to clear its backlog of derivative model reviews since becoming a CSE, but the recent departures could make reviews of the new models and re-reviews of existing models a challenge. We intend to closely monitor efforts to both hire new staff and review derivatives models going forward.