APPENDIX D

Risk Management Challenges Facing Institutional Fiduciaries

A. Introduction

The largest single class of "buy side" institutional investors consists of the thousands of institutions that have fiduciary responsibilities for investing other people's money. These institutional investors take many forms, including insurance companies, defined benefit and defined contribution corporate and public pension plans, endowments and foundations. While many of these institutions are large and well known, there are thousands of smaller such institutions, all of which manage investment portfolios either directly or through chosen agents.

Regardless of whether they choose to manage their assets directly or to select agents to perform that task, all of these institutions are fiduciaries and must conduct their affairs, including risk management activities, accordingly. With a significant increased use of derivatives-based strategies, exercising required due diligence by fiduciaries has been made more complex, but oversight responsibilities have not been lessened. Reinforcing these standards to certain fiduciaries in 1996, the US Department of Labor issued its view on pension plan fiduciaries investing in derivatives, stating that as fiduciaries they are required to "undertake the same type of analysis that they would in making any other investment decision" and secure "sufficient information to allow an independent analysis of the credit risk and market risk being undertaken by the plan in making the investment in the particular derivative." The US Department of Labor also communicated that the fiduciaries of plans that invest in pooled funds should obtain sufficient information to determine the pooled fund's investment strategies with regard to the use of derivatives and assess the appropriateness of such funds for the plans in light of that information.

As a result of the growing acceptance and use of more complex derivative-based strategies and in part driven by the reach-for-return-phenomenon, the investment strategies and portfolio practices of many of these institutions — large and small — have changed substantially in recent years. Common practices have evolved from an environment where market risks were easily identified and measured, based on direct exposures to various asset classes, to an environment involving new asset

classes and more complex derivative overlays that are more difficult to explicitly measure and manage. Fiduciaries have been dedicating ever larger proportions of assets to investments that are alternatives to the traditional “stocks” and “bonds” asset classes. This includes greater allocations to hedge funds, commodities, absolute return funds, private equity, and complex products, such as collateralized debt obligations (CDOs), synthetic CDOs and credit default swaps (CDS). While these alternative strategies provide fiduciaries with added flexibility, increased diversification and the potential for higher returns, they also alter in a very fundamental manner the risk management burden associated with their oversight responsibilities as fiduciaries.

While the following discussion focuses primarily on the changing investment practices of large fiduciaries, it should be recognized that even relatively small institutions commonly allocate a material percentage of their assets to various classes of alternative investments in addition to having direct or indirect exposure to complex instruments.

B. Changing Investment Strategies

Hedge funds, proprietary trading desks and speculators have long used derivatives to manage their portfolios cheaply, quickly and discreetly. Institutional fiduciaries are now increasingly putting derivatives (e.g., interest rate, currency, equities, credit and inflation related) to use in their portfolios as they endeavor to increase the opportunity set to generate higher risk-adjusted returns.

It has become almost routine for large fiduciaries to make at least some of their asset allocation changes through the futures markets by “going long” to increase exposure to an asset class, and “going short” to reduce such exposure. It is increasingly common to use “portable alpha” strategies that maximize the returns available through security selection while also achieving an asset allocation (beta or market exposure) that meets desired return and risk goals through use of derivative overlays.

Some of the larger fiduciaries are also using derivatives to gain direct and indirect exposure to the credit markets through the use of credit derivatives such as single-name, index-based and correlation credit default swap products. These instruments are growing in use and pose unique risks in terms of valuation and risk aggregation as was clearly evident in the recent idiosyncratic credit spread widening.

Additionally, the use of inflation linked-swaps has increased many fold, and with the emphasis on matching real liabilities with real assets increasing globally, the potential for further growth of these instruments is substantial.

More recently, pension funds and insurance companies have begun to incorporate explicit liability hedging strategies in their risk management arsenal to manage the duration and higher order asset-liability gap risk. For example, pension funds and insurance companies, in managing an asset-liability mismatch, will create duration sensitivity in their asset portfolios to match that of their liabilities by entering into various interest rate swaps and swaption contracts. While this active asset-liability gap management reduces the duration mismatch between assets and liabilities, it also results in market exposures which may vary significantly from the exposures implied by the physical asset holdings alone. As managing the funded or economic surplus status becomes an increasingly important objective for many of these institutional investors, the use of derivatives overlays is expected to become more common.

C. New Risks and Risk Management Demands

Today's derivatives activities integrally link the world of equities, debt, loans, credit, commodities, interest rate and currencies. Some derivatives are traded on regulated futures and options exchanges while others are traded in over-the-counter ("OTC") markets that are almost entirely unregulated. A major concern of fiduciaries in this evolving investment paradigm is the ability of the derivatives markets to allow investors, banks or other intermediaries to substantially leverage risk-taking relative to its capital. This condition can lead to systemic risks, especially in the largely unregulated OTC markets where strong linkages exist between derivatives and the underlying financial and commodity markets.

A good example of changing risk management demands is the increasing indirect exposure that many fiduciary investors now have to a narrow group of prime brokers. In the traditional pension fund model, the physical assets are held by a bank custodian, frequently a trustee for the pension fund. These assets are held in a trust governed by a trust agreement typically negotiated between the bank and the pension plan sponsor. However, in a hedge fund arrangement (such as the increasingly prevalent long/short funds) no such protection exists. Fund agreements, including financing, lending, margining and custodial arrangements, are negotiated

between the prime broker and the hedge fund manager who, in many cases, is not a fiduciary to the plan.

As pension funds increase their investments in long/short hedge funds, which in turn hold fund assets with one or more prime brokers, the pension fund assumes numerous additional risks. These additional risks are not easily reflected in typical stress/scenario testing and make the "roll-up" of market exposures at the pension plan level extremely difficult, if not impossible, to analyze.

This growing use and popularity of derivatives and long/short strategies, hedge funds and absolute return funds suggests that risk management demands related to these new strategies may be growing more rapidly than the risk management capabilities of many institutional fiduciaries. In addition, while these investors may be focusing on controlling their diversified market exposures, they may be taking on more concentrated counterparty exposure. As a result, the risk management requirements of both large and small fiduciaries have evolved from a primary focus on market risks to one requiring the management of a host of related exposures which include market, operational, valuation, liquidity, credit/counterparty, fiduciary and compliance risks.

CRMPG II recommends that fiduciaries taking on the new and/or additional risks associated with "alternative" investments and complex products continue to conduct and, as applicable, enhance the due diligence and monitoring practices relating to their investments and investment managers. Fiduciaries should have the ability to: (a) monitor indirect investments, including derivative positions and/or risk characteristics, on a timely basis to ensure their investment managers are not taking risks beyond represented levels in terms of allowable investment exposures, leverage, etc.; (b) aggregate risk across their entire pool of assets in order to understand portfolio level implications; and (c) determine whether their investment managers are adhering to a stated investment strategy or style.

It is further recommended that investment managers and fiduciaries work together along with industry groups to form a consensus on generally accepted techniques for supplying risk characteristics on a bilateral basis to provide "sufficient information to allow an independent analysis of credit and market risk being undertaken by" institutional investors, as required by ERISA. The result of such efforts should be to enable fiduciary investors to measure and monitor aggregate risk exposures in a manner that is consistent with their responsibilities as fiduciaries.

D. Risk Management Practices: Institutional Solutions for Fiduciaries

Given the growing acceptance of derivative products in general, coupled with the significant market size of OTC derivative products and their limited market transparency, large and small fiduciaries will increasingly need and will look to rely on "institutional solutions" to assist them in meeting their risk management requirements. By "institutional solutions," we mean regulatory guidelines and policies, public disclosures, accounting disclosures, self-imposed industry standards and widely accepted best practices that collectively enhance market discipline and standards that assist these fiduciaries in meeting their responsibilities.

More specifically, such "institutional solutions" can take the form of: (a) new or amended public regulatory or accounting pronouncements and disclosures; (b) consistent and routine application and incorporation of existing best practices and standards for financial intermediaries and end-users, such as hedge funds; (c) expanded market and credit transparency from financial intermediaries (including prime broker operations), hedge funds and other market participants; and (d) new and/or expanded reporting of market and credit exposures from industry/trade groups. Fiduciaries of all sizes, but especially smaller entities, rely on these institutional solutions to provide transparency, protections and market restraints as they may not be capable of or have sufficient resources to exercise the in-depth due diligence to independently assess these new and complex risks.

There is a growing sentiment among institutional fiduciaries that "creative collaboration" on "institutional solutions" among financial intermediaries, hedge funds and public regulatory authorities is the best and fastest course for providing institutional investors with the more comprehensive due diligence and monitoring capabilities they need in today's institutional marketplace. Of particular concern to fiduciaries is their capacity to understand the array of overall market and counterparty exposures linked to direct and indirect derivatives activity as well as that of complex products and their ability to judge the creditworthiness of major banks, broker-dealers and market intermediaries, particularly the banks and broker-dealers that house the prime brokers that generate this direct and indirect credit exposure for these fiduciaries.

As discussed in Section III of this Report, one of the most formidable barriers standing in the way of the ability of fiduciaries and other market participants to better understand the risk profile of their direct and indirect derivative exposures, including

that of its counterparties, arises from concerns on both sides associated with the disclosure of proprietary information associated with particular trades and portfolios. For obvious reasons, this concern on the part of market participants is very real. Having said that, there are a number of Recommendations and suggested best practices contained elsewhere in this Report (see Attachment I, which proposes institutional solutions that should be viewed favorably by fiduciary investors.)

In addition, there are other actions which should be taken by financial market participants and others to further the cause of transparency, risk management, market discipline and financial stability. These additional actions in the form of guiding principles include the following:

- Encourage the clear disclosure in public financial statements of the use of "short cut" accounting treatment for hedging, including principles-based qualitative descriptions of the methods used to determine hedge effectiveness.
- Encourage the adoption by financial intermediaries and associated internal control organizations for the purpose of best practices, as applicable, the recommendations of the *Final Report of the Multidisciplinary Working Group on Enhanced Disclosure* published in April 2001; *Enhancing Public Confidence in Financial Reporting* published in 2004 by the Group of Thirty; and relevant related Recommendations and Guiding Principles in Sections III, IV and V of this Report.
- Encourage the adoption by hedge fund managers for the purpose of best practices the *2003 Sound Practices for Hedge Fund Managers* report published by the Managed Funds Association and relevant related Recommendations and Guiding Principles in Sections III, IV and V of this Report.
- Enhance the accounting and risk management discussion, including counterparty exposures, in the Management Discussion and Analysis sections of 10K or equivalent reporting and annual report filings in order to improve qualitative and quantitative reporting for stronger credit and overall risk management evaluation.
- Enhance the overall market transparency of derivatives transactions and/or risk characteristics. The goal would be assisted by:

  - Encouraging industry and trade groups (e.g., Managed Funds Association, Alternative Investment Management Association) to issue surveys (on derivative uses, exposures/levels, counterparty types, etc.) to augment the information published by regulatory agencies;
  - Encouraging more frequent and comprehensive surveys and derivative reporting from organizations currently issuing related information such as the reporting produced by the International Swaps and Derivatives Association, the Bank for International Settlements, the US Office of the Comptroller of the Currency and the British Banker's Association; and
  - Encouraging financial intermediaries to be receptive to informal discussions with fiduciary investors regarding their risk profiles and risk management practices, particularly as they apply to prime brokerage operations.

- Encourage OTC market participants to take steps, including the broadening and deepening of the use of bi-lateral facilities, to increase the efficiency of the settlement, clearing and collaterization processes, especially for high volume products. (See Section IV of this Report for related Recommendations and Guiding Principles).
- Encourage financial intermediaries and institutional fiduciaries (and their trade groups) to create a central clearance house with a dedicated website, to catalogue and make available at a single resource all reports and surveys regarding risk management practices and related statistics that might be helpful to risk management practices for fiduciaries.

In addition to the above guiding principles, both large and small fiduciary investors are strongly encouraged to adopt the best practices described in the *Risk Standards for Institutional Investment Managers and Institutional Investors* developed by the Risk Standards Working Group in 1996. These risk standards provides comprehensive guidelines which are applicable to a wide range of market participants. This 1996 document continues to be a baseline for good risk measurement and risk management practices; however, efforts should be undertaken by industry groups to update these standards to reflect the evolution of market developments since its issuance.

Attachment I

Report Section	Category
Risk Management and Risk-Related Disclosure Practices	
2005 Recommendation # 1 2005 Recommendation # 2	Information Sharing
2005 Recommendation # 3 2005 Guiding Principle # 4 2005 Recommendation # 5a 2005 Recommendation # 5b 2005 Recommendation # 5c 2005 Recommendation # 6 2005 Guiding Principle # 7 2005 Guiding Principle # 8	Managing Credit and Market Risk
2005 Recommendation # 9	Prime Brokerage
Financial Infrastructure: Documentation and Related Policies and Practices	
2005 Guiding Principle # 10 2005 Recommendation # 11	Documentation Policy and Procedures
2005 Recommendation # 12 2005 Guiding Principle # 13 2005 Guiding Principle # 14 2005 Recommendation # 15	Operational Efficiency and Integrity
2005 Guiding Principle # 16a 2005 Guiding Principle # 16b 2005 Guiding Principle # 16c 2005 Guiding Principle # 16d 2005 Guiding Principle # 16e 2005 Guiding Principle # 16f 2005 Guiding Principle # 16g 2005 Guiding Principle # 17 2005 Guiding Principle # 18	Netting, Close-out and Related Issues
2005 Recommendation # 19 2005 Guiding Principle # 20 2005 Recommendation # 21 2005 Recommendation # 22	Credit Derivatives

Report Section	Category
Complex Financial Products: Risk Management, Risk Distribution and Transparency	
2005 Guiding Principle # 23	Over-riding Guiding Principle
2005 Guiding Principle # 24 2005 Guiding Principle # 25 2005 Guiding Principle # 26 2005 Guiding Principle # 27	Governance-Related Guiding Principles
2005 Guiding Principle # 28 2005 Guiding Principle # 29 2005 Guiding Principle # 30 2005 Guiding Principle # 31 2005 Guiding Principle # 32 2005 Guiding Principle # 33 2005 Guiding Principle # 34	Intermediary/Client Relationship
2005 Recommendation # 35 2005 Recommendation # 36 2005 Guiding Principle # 37 2005 Guiding Principle # 38	Risk Management and Monitoring
2005 Guiding Principle # 39 2005 Guiding Principle # 40	Enhanced Transparency
Emerging Issues	
2005 Guiding Principle # 43a 2005 Guiding Principle # 43b 2005 Guiding Principle # 43c 2005 Guiding Principle # 43d 2005 Guiding Principle # 43e 2005 Guiding Principle # 43f 2005 Guiding Principle # 43g	Conflict Management