MANAGED FUNDS ASSOCIATION

MFA's 2005 Sound Practices for Hedge Fund Managers

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The Association for investment professionals in hedge funds, managed futures and other alternative investments.

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INTRODUCTION

Managed Funds Association ("MFA") is pleased to publish *MFA's 2005 Sound Practices for Hedge Fund Managers* (the "*2005 Sound Practices*") for the benefit of its members and the Hedge Fund[†] industry as a whole.

The *2005 Sound Practices* builds upon the sound practices that first were published for the Hedge Fund industry in February 2000 and subsequently revised in 2003. The original sound practices were produced in response to a 1999 recommendation by the President's Working Group on Financial Markets that hedge funds establish a set of sound practices for their risk management and internal controls. These sound practices were updated and expanded in 2003 by MFA (the "*2003 Sound Practices*") as a response to industry developments. Since then, MFA's recommendations have been widely acknowledged by Hedge Fund Managers[†], as well as investors and regulators, as a highly useful resource. Recognizing the valuable guidance provided by the *2003 Sound Practices*, and in light of the growth of the Hedge Fund industry, MFA has undertaken to update and re-publish its document so that it continues to provide useful and timely guidance to Hedge Fund Managers and other industry participants.

In the *2005 Sound Practices*, MFA has updated and expanded on topics of importance to the industry, including internal trading controls, responsibilities to investors, valuation, risk controls, regulatory controls, transactional practices, and business continuity and disaster recovery. MFA has also added two new appendices to provide a checklist of items that Hedge Fund Managers may wish to consider in developing their own compliance policies and procedures and code of ethics. With the publication of this document, MFA continues its mission of making its recommendations applicable to a broad range of Hedge Fund Managers, taking into account evolving management practices in the industry.

Moreover, MFA is mindful that a number of U.S. and international regulatory agencies have examined the ramifications of the growth of the Hedge Fund industry since the publication of the *2003 Sound Practices*. These agencies have acknowledged the importance of this industry to the global financial marketplace, but have also recommended certain practices and regulatory changes for Hedge Funds or Hedge Fund Managers. For instance, in October 2004 the U.S. Securities and Exchange Commission ("SEC") adopted a new rule that will require certain Hedge Fund Managers to register as investment advisers under the Investment Advisers Act of 1940 (the "Advisers Act"). Cognizant of these developments, MFA believes that its recommendations for and by the industry will contribute meaningfully to the internal soundness of individual Hedge Funds and to the soundness of the financial markets in which they participate.

[†] The terms "Hedge Fund" and "Hedge Fund Manager" are defined below in this Introduction. Other capitalized terms and certain technical words and phrases used in this document that are not defined in the text itself are defined in the glossary in Appendix VI.

About Managed Funds Association

MFA has approximately 1,000 members who manage a significant portion of the over $1 trillion in assets under management for Hedge Fund products globally. Since its inception in 1991, MFA has provided leadership to the Hedge Fund, managed futures and fund of funds industry in government relations, communications, media relations and education. For example, in response to the enactment of the USA PATRIOT Act of 2001, MFA published its *Preliminary Guidance for Hedge Funds and Hedge Fund Managers on Developing Anti-Money Laundering Programs* (March 2002), which is attached hereto as Appendix III. Most recently, MFA has provided needed practical guidance about Hedge Fund Managers and industry practices to the SEC following adoption of the new rule relating to registration of certain Hedge Fund Managers, mentioned above. MFA also maintains a library of Hedge Fund industry materials, many of which are accessible on its website at *www.mfainfo.org*. These industry materials include: MFA publications; MFA comment letters on proposed legislation and regulations; MFA press releases; speeches by MFA leaders and government regulators; copies of relevant legislation and regulations; relevant Congressional testimony; as well as government, academic and other Hedge Fund industry papers and reports.

Objectives of the Recommendations

Strengthen Business Practices of the Hedge Fund Industry. The recommendations contained in the *2005 Sound Practices* (the "Recommendations") are intended to provide a framework of internal policies, practices and controls for Hedge Fund Managers from a "peer to peer" perspective. This document does not attempt to address the unique and distinct issues that a manager of a "fund of Hedge Funds" may confront in business operations. Rather, this document is directed to Hedge Fund Managers that operate "single-manager" Hedge Funds. MFA believes the Recommendations will enhance the ability of Hedge Fund Managers to manage operations, satisfy their responsibilities to investors, comply with applicable regulations, and address unexpected market events. MFA is hopeful that Hedge Fund Managers, by evaluating the Recommendations and applying those that are relevant to their particular business models, will continue to strengthen their own business practices and, in doing so, enhance investor protection while contributing to market soundness.

As the Hedge Fund industry and global financial markets continue to evolve, MFA anticipates that the Recommendations will be further adapted and refined. As noted below, the Recommendations are not intended to be static, "one size fits all" prescriptive requirements applicable to all Hedge Fund Managers. The Recommendations were drafted in the context of industry oversight and MFA believes that they go beyond the requirements imposed by law or regulation. The Recommendations have been developed and updated by MFA in the belief that the most effective form of industry oversight is self-evaluation combined with the development of strong practices and internal controls.

One Size Does Not Fit All. In evaluating the Recommendations, the reader should recognize that the strategies, investment approaches, organizational structures, and amount of assets managed by individual Hedge Fund Managers will vary greatly. The variations in organizational structures can be attributed partly to differences in size and partly to the different strategies used by Hedge Fund Managers, which are distinguishable in terms of their complexity, product focus and the breadth of markets covered. The particular combination of these factors plays a large part in determining the operational requirements of a Hedge Fund Manager. For example, the infrastructure needs of a Hedge Fund Manager managing several diversified global macro-funds with several billion dollars in net assets will be significantly greater than those of a Hedge Fund Manager that principally trades U.S. equities for a fund of modest size. While some Hedge Fund Managers may have different personnel performing the various practices described in the Recommendations, the personnel of other Hedge Fund Managers may appropriately perform multiple roles.

Individualized Assessment and Application of Recommendations

The Recommendations are not necessarily the only means of achieving sound practices, and they should not be viewed as prescriptive requirements to be rigidly applied by all Hedge Fund Managers. Likewise, while MFA has endeavored to provide Recommendations with enough specificity to provide meaningful guidance, it is impossible to provide Recommendations that are suited to all Hedge Fund Managers or to address all the considerations that should be taken into account in determining whether and how to apply these Recommendations. Rather, each Hedge Fund Manager should assess the Recommendations based on the size, nature and complexity of its organization, its strategies and resources, as well as the objectives of the Hedge Funds it manages, and develop and apply them as appropriate. Hedge Fund Managers that choose to do so may use the *2005 Sound Practices* as a tool to conduct periodic self-assessments as to the effectiveness of their implementation of the Recommendations applicable to their organizations.

In evaluating the relevance of the Recommendations and the ability to implement them, Hedge Fund Managers should recognize that, while some Recommendations can be implemented easily or unilaterally, others may require substantial planning and significant budgetary commitments, involve internal systems changes and infrastructure development, or negotiation with and cooperation by third parties. Certain Recommendations may not be relevant or appropriate to all Hedge Fund Managers, especially considering their diverse nature and structures and the individualized cost/benefit analyses required to apply the Recommendations. Consequently, the Recommendations should not be construed as definitive, as a statement of what is legally required or customary, or as bases for either auditing or examining the operations of Hedge Fund Managers. Rather, these Recommendations serve primarily to educate Hedge Fund Managers, as well as Hedge Fund investors and those who monitor the industry.

No Substitute for Legal or Other Professional Advice

The Recommendations are not intended to serve as, or be a substitute for, professional advice. Rather, as noted above, the Recommendations are specifically intended to provide Hedge Fund Managers with a general description of aspirational management and business practices to consider as they develop their operations and business model. As such, the Recommendations do not seek to cover the specific legal requirements with which Hedge Fund Managers must comply, nor are they exhaustive or all-inclusive. Hedge Fund Managers should consult with their professional legal, accounting and tax advisors in determining the applicability of the Recommendations to their business operations and appropriate methods for their implementation.

General Considerations Relating to Hedge Funds

Hedge Fund Defined; Other Defined Terms. The term "Hedge Fund" is used to describe a wide range of investment vehicles, which can vary substantially in terms of size, strategy, business model and organizational structure, among other characteristics. Although there is no statutory or regulatory definition of a Hedge Fund, for purposes of this document, the term "Hedge Fund" refers to a fund that meets the following definition:

> A privately offered, pooled investment vehicle that is not widely available to the public and the assets of which are managed by a professional investment management firm (referred to in this document as a "Hedge Fund Manager").

The term Hedge Fund, as used in these Recommendations, is not intended to capture private equity, venture capital or real estate funds.

When the term "Hedge Fund Manager" is used in this document, it is assumed that the relevant Recommendation would be applied, as deemed appropriate, to each of the Hedge Funds it manages.

The Nature of Hedge Funds; Trading Strategies. In assessing the appropriateness of the Recommendations for risk management and internal controls, it is important to distinguish the needs of Hedge Fund Managers from those of credit providers, such as banks and other financial institutions that seek to eliminate or minimize the risks of their businesses through hedging and other risk management methods. Hedge Fund Managers are in the business of seeking and assuming calculated risks and do so in order to achieve the returns desired by their Hedge Fund investors.

> ***"Hedge funds have become major contributors to the flexibility of our financial system. That development proved essential to our ability to absorb so many economic shocks in recent years. Hedge funds seek out the abnormal rates of profit often found where markets are otherwise inefficient. Taking positions in volume, as hedge funds do, tends to eliminate the abnormal profits and the inefficiencies by aligning prices across markets and provides liquidity to markets". –*** Oral Testimony of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System at a Hearing before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, 108th Congress, 2nd Session, entitled, "Oversight on the Monetary Policy Report to Congress Pursuant to the Full Employment and Balanced Growth Act of 1978," July 20, 2004.

By participating in the market as risk seekers, Hedge Fund Managers provide needed liquidity to financial markets, which helps to reduce systemic risk. In this sense, Hedge Funds often act as "risk absorbers" in markets by serving as ready counterparties to those wishing to hedge risk, even when markets are volatile, and, in doing so, reduce pressure on market prices while increasing liquidity. In addition, Hedge Fund Managers, through their trading based on extensive research, bring price information to the markets that translates into market price efficiencies. Without Hedge Fund Managers' research and commitment of capital, the markets might well have potentially wider price spreads, pricing inefficiencies and illiquidity. Hedge Funds can provide Hedge Fund investors with valuable portfolio diversification, given that the performance of many Hedge Fund investments can exhibit low correlation to that of traditional investments, such as stocks and bonds. Perhaps most importantly, by standing ready to lose capital, Hedge Funds act as a buffer for other market participants in absorbing "shocks".

Relationship of Hedge Funds and Hedge Fund Managers. The Recommendations assume that a Hedge Fund is a legal entity governed by a managing member, general partner, board of directors, trustee or similar individual or entity with the legal authority and responsibility to direct and oversee the activities of the Hedge Fund. In addition, the Recommendations assume that the assets of each Hedge Fund are managed by a Hedge Fund Manager and that the Hedge Fund Manager is itself governed by a management committee or other body, or by selected persons, with the authority and responsibility to direct and oversee the Hedge Fund Manager's activities. Throughout this document, for convenience, we refer to the entity or persons that provide such oversight as a Hedge Fund Manager's "governing body" and the organizational documents, such as the limited partnership agreement or articles of formation, as the "governing documents".

A Hedge Fund Manager is typically compensated in part based on the performance of the Hedge Fund and often is a significant Hedge Fund investor in the Hedge Funds it manages. This structure creates a strong unity of interests between a Hedge Fund's other investors and the Hedge Fund Manager. The relationship between a Hedge Fund and the Hedge Fund's investors are governed by agreements which may include an offering memorandum, private placement agreement, subscription agreement, or similar contracts. Throughout this document, for convenience, we refer to these agreements as the "offering documents".

In some cases, the Hedge Fund Manager conducts all material aspects of the Hedge Fund's management. For example, many Hedge Funds in the United States are organized as limited partnerships in which the Hedge Fund Manager, or an affiliate, manages the Hedge Fund as general partner in addition to being the investment manager.

It is important to recognize that the nature and structure of Hedge Funds and their relationships with Hedge Fund Managers vary substantially and that these assumptions may not apply to all Hedge Funds or Hedge Fund Managers. Consequently, in determining the applicability of the Recommendations to its organization, a Hedge Fund Manager should interpret and adapt the Recommendations based upon its particular structure and relationship with the Hedge Fund or Hedge Funds it manages, taking into account the assumptions upon which the Recommendations are based.

Organization of the Recommendations

The Recommendations are divided into seven major sections, as follows:

- The first section addresses the key management policies and internal trading controls to be established by a Hedge Fund Manager;

- The second section addresses responsibilities to investors and proposes practices intended to assist Hedge Funds in fulfilling these responsibilities;

- The third section proposes practices designed to promote sound valuation practices;

- The fourth section proposes practices for risk measurement and monitoring to ensure that the risk policies of a Hedge Fund Manager are observed;

- The fifth section addresses regulatory controls and compliance issues;

- The sixth section proposes transactional practices, including recommendations for documentation policies, best execution practices and soft dollar arrangements, which aim to help govern the relationship between a Hedge Fund Manager and its market counterparties; and

- The seventh section proposes recommendations that seek to improve a Hedge Fund Manager's business continuity and disaster recovery planning.

In addition, there are six appendices to the Recommendations, summarized as follows:

- Appendix I discusses concepts relating to risk management techniques and is intended to be read together with Section IV to aid Hedge Fund Managers in developing sound risk management procedures and measurement methodologies;

- Appendix II lists many of the U.S. regulatory filings that may be applicable to Hedge Fund Managers. While the treatment in Appendix II is not exhaustive, it is intended to provide a starting point for Hedge Fund Managers in identifying applicable filing requirements and developing policies to comply with such requirements;

- Appendix III is a copy of *MFA's Preliminary Guidance for Hedge Funds and Hedge Fund Managers on Developing Anti-Money Laundering Programs*, published in 2002;

- Appendix IV provides a menu of items that Hedge Fund Managers may wish to consider in developing compliance policies and procedures. It is not intended to be prescriptive, nor is it intended to cover each consideration that may be relevant for a particular Hedge Fund Manager;

- Appendix V provides a menu of items that Hedge Fund Managers may wish to consider in developing codes of ethics. As with Appendix IV, Appendix V is not intended to be prescriptive nor is it intended to cover each consideration that may be relevant for a particular Hedge Fund Manager; and

- Appendix VI provides a glossary of terms used throughout the *2005 Sound Practices*.

MFA'S 2005 SOUND PRACTICES FOR HEDGE FUND MANAGERS

RECOMMENDATIONS

I. MANAGEMENT AND INTERNAL TRADING CONTROLS

A Hedge Fund Manager should establish for each Hedge Fund, the investment objectives and risk parameters applicable to such Hedge Fund and the trading parameters and risk limits designed to achieve these objectives. Suitably qualified personnel should be retained and adequate systems established (either internally or through outsourcing) to put in place appropriate controls and review processes that permit the Hedge Fund Manager to monitor trading activities and operations, as well as risk levels, effectively. If third-party service providers perform key business functions (such as net asset value calculation or risk monitoring), they also should be subject to appropriate controls and review processes.

1.1 A Hedge Fund Manager should establish management policies and practices commensurate with the size, nature and complexity of the Hedge Fund Manager's trading activities and the Hedge Funds it manages.

Management policies should be established for trading activities, valuation, risk analysis, compliance and other key areas as appropriate (see specific recommendations in the sections that follow). A Hedge Fund Manager should adopt an organizational structure that facilitates effective monitoring of compliance with management policies. Policies and practices should be reviewed and updated as appropriate (*e.g.*, when changes in structure or strategy are adopted, when extraordinary market events occur or when new applicable regulations are adopted).

1.2 A Hedge Fund Manager should determine the investment, risk and trading policies to be observed with respect to each Hedge Fund it manages based on the specific investment objectives of the Hedge Fund.

A Hedge Fund Manager should allocate capital and risk (among, for example, portfolio managers, strategies and/or asset classes, as applicable) based on a Hedge Fund's performance objectives and targeted risk profile. Allocations should be reexamined periodically and adjusted as appropriate. In addition, appropriate trading parameters and risk limits should be established consistent with these allocations. These principles are developed more fully in Section IV—Risk Monitoring.

1.3 A Hedge Fund Manager should impose appropriate controls over its portfolio management and trading activities to ensure that these activities are undertaken on a basis consistent with allocated investment and trading parameters.

A Hedge Fund Manager's senior management should analyze and evaluate trading activities by regularly reviewing the performance of each Hedge Fund's portfolio and the associated risk levels. Internal reporting should provide the

Hedge Fund Manager with information regarding the performance and risk levels of the different investment strategies employed and should identify deviations from trading parameters and risk limits.

1.4 A Hedge Fund Manager should determine the allocation of capital among portfolio managers and should establish policies for monitoring their performance.

All portfolio managers, including external portfolio managers, should be subject to controls and review processes commensurate with the amount of assets managed, form of allocation and trading strategy. Where capital is invested with an external portfolio manager in a managed account, applicable trading restrictions and limits, reporting requirements and termination provisions should be clearly defined in written management agreements. The performance of all portfolio managers should be monitored on a periodic basis as appropriate, depending on the form of the allocation (*e.g.*, monthly performance review of a passive investment in a Hedge Fund versus more frequent review of a significant managed account investment).

1.5 A Hedge Fund Manager should carefully select any "mission-critical", third-party service providers that perform key business functions for itself or any Hedge Fund it manages based upon their experience with Hedge Fund operations (*e.g.*, those related to prime brokerage, risk monitoring, valuation or business continuity/disaster recovery functions) and consistently monitor their performance.

The roles, responsibilities and liability of key third-party service providers should be clearly defined in written service agreements. The performance of mission-critical service providers should be periodically evaluated. "Mission-critical service providers" are those required by the Hedge Fund Manager to ensure prompt and accurate processing of transactions and to meet regulatory reporting requirements.

II. RESPONSIBILITIES TO INVESTORS

A Hedge Fund Manager should work together with the Hedge Fund so that Hedge Fund investors are provided with information regarding the Hedge Fund's investment objectives and strategies, as well as periodic summary performance information, in order to enhance the ability of Hedge Fund investors to understand and evaluate for themselves an investment in the Hedge Fund.

2.1 A Hedge Fund Manager should create a management environment that recognizes its responsibility to act in the interest of the Hedge Fund and its investors as set forth in the investment management agreement and offering documents.

A Hedge Fund Manager is retained by a Hedge Fund to act as its investment manager, and, consequently, a Hedge Fund Manager has a responsibility to act in the interest of the Hedge Fund and its investors in accordance with its investment management agreement with the Hedge Fund, the offering documents and applicable law. A Hedge Fund Manager should therefore take steps to ensure that it manages the Hedge Fund's assets in accordance with its investment management agreement with the Hedge Fund as well as the offering documents.

2.2 A Hedge Fund's prospective and existing investors should be provided with information regarding the Hedge Fund's investment objectives, the strategies to be employed, the range of permissible investments and the risk factors that are material to a Hedge Fund's business in order to enhance the ability of investors to understand and evaluate for themselves an investment in the Hedge Fund.

Informative disclosure regarding a Hedge Fund's investment objectives and strategies will enhance the ability of investors to form appropriate expectations as to the Hedge Fund's performance and therefore facilitate a good match between investor and investment product. A Hedge Fund Manager should therefore seek to ensure that appropriate disclosures are prepared for dissemination to Hedge Fund investors on a timely basis (without compromising proprietary information regarding the Hedge Fund's positions). Where there are changes in objectives or strategies, a Hedge Fund Manager should evaluate, and consider consulting its legal counsel, to determine whether given the circumstances of the change, disclosure is necessary and whether consent should be obtained from Hedge Fund investors. Given that there is substantial breadth of objectives or strategies employed by and disclosed to investors in connection with a number of Hedge Fund strategies, for example in multi-strategy Hedge Funds, it is possible that many Hedge Fund Managers may fairly determine, after evaluating the circumstances, that no disclosure is required. See Recommendation 2.4 below for a further discussion of material risk factors that a Hedge Fund should consider disclosing to Hedge Fund investors.

2.3 A Hedge Fund Manager should assess whether its operations or particular circumstances may present potential conflicts of interest and seek to ensure that any conflicts of interest that may be material are appropriately disclosed and that controls are in place to address them.

Possible conflicts that may need to be disclosed include:

- Relationships with brokers or service providers;
- Conflicts generated by fee structures;
- Use of Soft Dollar Arrangements; and
- Other conflicts that may arise in the context of "side-by-side" management of multiple accounts, such as allocation of investment opportunities among Hedge Funds or accounts managed by the Hedge Fund Manager.

2.4 A Hedge Fund Manager should work with its legal counsel to identify risks to be disclosed to make sure these disclosures are adequate.

Examples of the types of risks that a Hedge Fund Manager should consider disclosing are:

- Lack of assurance as to performance;
- Risks specifically associated with a particular strategy or types of investment instruments;
- Risk associated with limited liquidity;
- Risks associated with the use of leverage and margin;
- Risks associated with the loss of key management personnel; and
- Potential conflicts associated with any performance fee or use of affiliated brokers.

2.5 A Hedge Fund Manager should prepare periodically certain base-line performance and other relevant information for distribution to the Hedge Fund based upon relevant characteristics of the Hedge Fund.

Possible disclosures include:

- Performance measures, such as quarterly or monthly net asset value calculations and periodic profit and loss statements; and

- Capital measures, such as assets under management in the Hedge Fund in which the Hedge Fund investor is invested, net changes to capital based on new subscriptions less redemptions and the effect of profit and loss on total capital.

2.6 Appropriate disclosures should be made about any agreement between a Hedge Fund and Hedge Fund investors that varies the material terms of the arrangements with certain Hedge Fund investors, for example through use of "side letters", unless the ability to vary such terms is disclosed to Hedge Fund investors in connection with their investment in the Hedge Fund.

2.7 Appropriately qualified external auditors should be engaged to audit annual financial statements with respect to any Hedge Fund with external investors. Annual audited financial statements for the Hedge Fund should be delivered to Hedge Fund investors in a timely manner.

III. VALUATION POLICIES AND PROCEDURES

A Hedge Fund Manager should determine policies for the manner and frequency of computing net asset value, or "NAV", based upon GAAP (as defined below) and its management agreement with each Hedge Fund and seek to ensure that material aspects of those policies are appropriately disclosed to Hedge Fund investors. A Hedge Fund Manager, in consultation with the governing body of the Hedge Fund it manages, should establish valuation policies and procedures that are fair, consistent and verifiable, recognizing that Hedge Fund investors may both subscribe to and redeem interests in the Hedge Fund in reliance on the values derived from such policies and procedures. A Hedge Fund Manager should also develop policies for the manner and frequency of computing portfolio valuation for purposes of internal risk monitoring of the portfolio.

Fair Value

3.1 A Hedge Fund Manager's valuation policies and procedures should incorporate the concept of "fair value".

For NAV purposes, a Hedge Fund Manager generally should value investments according to applicable generally accepted accounting principles (GAAP), recognizing that Hedge Fund investors will both buy and sell shares of a Hedge Fund on the basis of NAV and that the Hedge Fund's financial statements should reflect NAV. Calculation of NAV should take into account not only the value of the financial instruments in the portfolio (sometimes referred to as "trading P&L"), but also accruals of interest, dividends and other receivables and fees, expenses and other payables.

For companies such as Hedge Funds, GAAP typically requires the use of "fair value" in determining the value of an investment or instrument. However, if there are circumstances where a Hedge Fund Manager believes that the application of fair value would not produce an accurate or fair valuation for a given instrument, it may employ alternative means to value an instrument as permitted by agreement. A Hedge Fund Manager may appropriately develop policies for making fair-value determinations that take into consideration market sector trends and company fundamentals.

Fair, Consistent and Verifiable

3.2 A Hedge Fund Manager's valuation policies and procedures should be fair, consistent and verifiable.

A Hedge Fund Manager should either calculate or verify the accuracy of prices independent of the trading function to the extent practicable. To that end, a Hedge Fund Manager should seek to rely on price quotes from external sources whenever practicable and cost-effective to do so and establish policies for determining the value of assets for which appropriate external price quotes are not reasonably available (as discussed further below under *Pricing Sources*). In addition, a Hedge Fund Manager should fully document the process it uses to determine whether to implement recommendations of a pricing service, as well as circumstances in which it determines to override a pricing service's recommendation.

The valuation of portfolio positions for NAV purposes may be used to determine the prices at which Hedge Fund investors subscribe to or redeem from a Hedge Fund. Accordingly, a Hedge Fund Manager should seek to utilize valuation practices so that the Hedge Fund is consistent and fair to both subscribing and redeeming Hedge Fund investors, to the extent practicable, and makes appropriate disclosures of circumstances in which practices may necessarily deviate from this standard in a material way.

Pricing Policies and Procedures

3.3 A Hedge Fund Manager should establish pricing policies and procedures that assure that NAV is marked at fair value.

The existence of written pricing policies and procedures is a critical element of the control structure surrounding a Hedge Fund Manager's pricing of portfolio investment instruments. These policies should be established by senior management, based upon a thorough review and understanding of the totality of the Hedge Fund Manager's business structure (*e.g.*, range and complexity of instruments traded, stipulations contained in the Hedge Fund's governing or offering documents, liquidity terms offered to Hedge Fund investors, etc.). The pricing policies and procedures should explicitly authorize that, in circumstances where a Hedge Fund Manager believes that the application of such policies would not produce an accurate or fair price for a given instrument, senior management may use alternative procedures to price an instrument. In addition, these policies should be reviewed with the Hedge Fund's governing body (if different than senior management) and its independent or external auditors. Once pricing policies and procedures are set (and updated from time to time, as needed), a Hedge Fund Manager should adhere to them as much as practicable.

Hedge Fund Managers should develop practices and/or systems for capturing pricing data for their positions from independent sources on a daily basis where practicable. Procedures for periodically verifying the accuracy of pricing data should also be adopted, and material discrepancies between price sources should be investigated. Where an instrument is not traded actively or where obtaining price information requires significant effort, weekly (or less frequent) pricing may be appropriate depending on the nature and the size of the position. For positions traded over-the-counter or derivative instruments, where the only external source of fair value may be quotes from relevant market-makers (the number of which, based on the liquidity of the position, may be very limited), the number of quotes sought by Hedge Fund Manager to gain comfort with the fair value should also be considered. This may also lead to model pricing (as discussed below in Recommendation 3.4).

Where market prices do not exist or are not indicative of fair value, a Hedge Fund Manager should clearly establish the valuation methods to be used for NAV purposes. In valuing certain instruments, for example, Hedge Fund Managers may appropriately seek the input of their portfolio management team in the valuation process in order to take advantage of the portfolio manager's expertise.

Pricing Sources

3.4 A Hedge Fund Manager should choose reliable and recognized pricing sources to the extent practicable.

In general, where market prices for an instrument are readily available from organized exchanges for markets or recognized data vendors, a Hedge Fund Manager should use such market prices to compute NAV. In such circumstances, fair value can be based on the official closing price of an exchange or other relevant market price as published by a recognized data vendor for that market.

Where market prices for an instrument are not readily available from such sources, a Hedge Fund Manager should determine the methods to be used in obtaining values from alternative sources, with reliability, stability and independence being among the main criteria. For example, Hedge Fund Managers should seek to obtain reliable quotes, when available, for certain over-the-counter derivative instruments and structured or distressed securities from well-established, recognized pricing services, or use appropriate valuation models developed by third-party pricing services or recognized industry standard models using third-party inputs.

The range of instruments that may require alternate sources include OTC options (particularly exotic options), complex derivatives, mortgage-backed and asset-backed securities, as well as other instruments of a similar nature. However, if these are unavailable, either because the transactions are "one of a kind" or not actively traded, the only market for these instruments may be with the counterparty to the transaction itself. Such instruments could be valued either by obtaining a quote or estimate from the counterparty or based on a pricing model, or any combination thereof. Where a pricing model is used, a Hedge Fund Manager should make sure that it is in a position to explain and support the model parameters used in determining the valuation.

Valuation of Instruments

3.5 A Hedge Fund Manager should establish policies for determining valuations associated with instruments that may have multiple "official" settlement prices.

Certain instruments held in Hedge Fund portfolios may have more than one official price that can be used for valuation purposes. One example of this is securities traded on multiple exchanges, including dual-listed securities, those that trade across multiple time zones, and certain over-the-counter derivatives. In determining which settlement price to use in these instances, a Hedge Fund Manager should seek to use GAAP as a guideline where practicable, bearing in mind the primary objective of using the price that best reflects the correct fair market value. Among the alternatives available are the use of the most recent price or the price that derives from the greatest source of liquidity.

3.6 A Hedge Fund Manager should evaluate the use of alternative methods for valuing illiquid, or otherwise hard-to-value, securities or other investment instruments.

A Hedge Fund Manager may appropriately use alternative approaches for valuing illiquid, or otherwise hard-to-value, securities or other investment instruments. Among the various approaches to the valuation of illiquid and hard-to-value investment instruments that may be available to Hedge Fund Managers is the use of "side-pockets", if their use has been disclosed in the Hedge Fund's offering documents or governing documents. Under side-pocket methodology, investment instruments that are removed from the valuation process that applies to the rest of the portfolio—for example, due to illiquidity or similar issues—are held either at cost or at fair value (depending on the Hedge Fund Manager's valuation policies) until either a liquidation or other valuation-generating event occurs (*e.g.*, acquisition of a private company). Under one variation among a number of possible side-pocket methodologies, only those investors that hold a position in the Hedge Fund at the time that the transaction designated for the side-pocket is executed are typically permitted to participate in the subsequent profit and loss when the position is eventually disposed or there is an event that makes it become a marketable security (*e.g.*, an initial public offering). Hedge Fund Managers should bear in mind that issues associated with management fees and high water marks, among other things, may impact valuation and the use of side pockets.

Price Validation

3.7 A Hedge Fund Manager should establish practices for verifying the accuracy of prices obtained from data vendors, dealers or other sources.

For certain actively traded instruments, it may be appropriate to establish multiple feeds from data vendors in order to compare and verify their prices. With respect to less liquid instruments, dealer quotes, prices generated by models or other estimation methods used should be checked periodically against realized prices as appropriate to gauge their accuracy. Diligence should be performed to determine if the external pricing agent has been consistent in providing quality service to a Hedge Fund.

Frequency of NAV Determinations

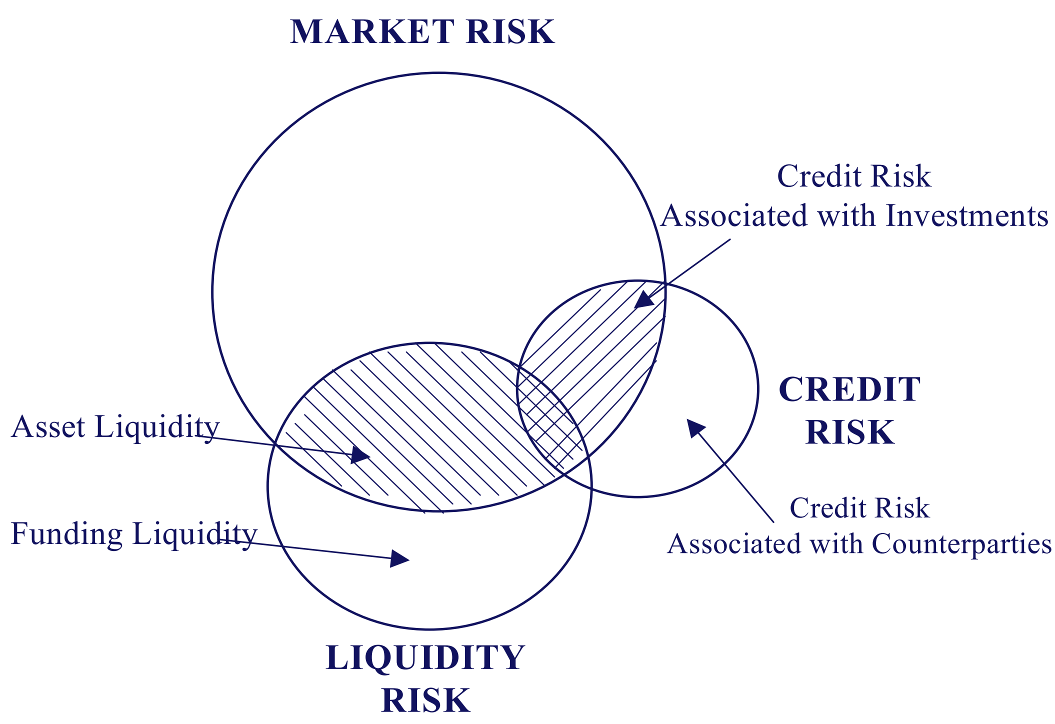
3.8 A Hedge Fund Manager should establish policies for the frequency of determining a Hedge Fund's NAV.

A Hedge Fund's official NAV, which reflects all fee and expense accruals in addition to trading profit and loss, is typically determined on an established periodic basis and may be used for purposes of pricing Hedge Fund investor subscriptions and redemptions. Separately, a Hedge Fund Manager may also prepare an estimated or indicative NAV more frequently, based upon estimates of accrued fees and expenses and trading profit and loss that may be used for internal risk monitoring purposes or for other internal purposes. A Hedge Fund Manager should establish policies and procedures that set forth whether these indicative NAV calculations will be used for risk monitoring purposes or other internal purposes, and whether they may be disclosed (*e.g.*, upon request or through a website posting). See Recommendation 4.13 for additional guidance.

IV. RISK MONITORING

Current market practice is to focus on three categories of risk that are measurable – "market risk," "credit risk" and "liquidity risk" (both funding and asset liquidity risk). Market risk relates to losses that could be incurred due to changes in market factors (*i.e.*, prices, volatilities, and correlations). Credit risk relates to losses that could be incurred due to declines in the creditworthiness of entities in which the Hedge Fund invests or with which the Hedge Fund deals as a counterparty (including sovereign risk). Funding liquidity risk relates to losses that could be incurred when declines in a Hedge Fund's capital due to redemptions or other sources of funding or liquidity reduce the ability of the Hedge Fund to fund its investments. It differs from asset liquidity risk (a form of market risk), which is defined as the potential exposure to loss associated with the inability to execute transactions – particularly on the liquidation side – at prevailing prices. In addition, a Hedge Fund Manager should seek to assess "operational risk" depending on its particular circumstances.

While current market practice is to treat the risks separately, it is crucial for Hedge Fund Managers to recognize and evaluate the overlap that exists between and among market, credit and liquidity risks. This overlap is illustrated in the following diagram (recognizing that the relative risks will be different for different strategies).



For a more detailed discussion of the concepts and limitations referenced in the Recommendations in this section, please see Appendix I, "Risk Monitoring". This appendix seeks to elaborate on certain of the issues; however, an exhaustive treatment of the topic is beyond the scope of this document.

Structure of Risk Monitoring Function

4.1 A Hedge Fund Manager should establish a Risk Monitoring Function, either internally or in reliance upon external resources. The Risk Monitoring Function should be responsible for the review of objective risk data and analysis of a Hedge Fund's performance, current risk position, the sources of its risk and resulting exposures to changes in market conditions.

The Risk Monitoring Function should report directly to senior management and possess sufficient expertise to understand a Hedge Fund's trading strategies and the nature and risks of its investments. To the extent appropriate, risk analysis with respect to a particular investment strategy or portfolio should be performed independently of portfolio management personnel responsible for that strategy or portfolio, so that trading activities and operations may be effectively supervised and compliance with trading parameters and risk limits can be controlled.

Alternatively, a Hedge Fund Manager might seek to ensure the objectivity of risk analysis by providing for an appropriate level of checks and balances with respect to risk monitoring. To the extent appropriate, the Risk Monitoring Function should produce regular risk reports that present risk measures and appropriate breakdowns by category of risk for review by appropriate members of senior management. The Risk Monitoring Function, in consultation with relevant portfolio management personnel, should conduct routine backtests of their risk measures to ensure that their systems capture all reasonably anticipated significant exposures and that the output is consistent with the assumptions of the models.

Market Risk

Encompasses interest rate risk, foreign exchange rate risk, equity price risk, and commodity price risk, as well as asset liquidity risk.

4.2 A Hedge Fund Manager should evaluate market risk, not only for each Hedge Fund portfolio in aggregate, but also for relevant subcomponents of a portfolio (*e.g.*, by strategy, by asset class, by type of instruments used, by geographic region or by industry sector), as appropriate. In addition, the market risk assumed by each individual portfolio manager should be determined. A Hedge Fund Manager should employ a consistent framework for measuring the risk of loss for a portfolio (and relevant subcomponents of the portfolio), such as a "Value-at-Risk" (or VAR) model. While the choice of model should be left to each Hedge Fund Manager, the Hedge Fund Manager should be aware of the structural limitations of the model selected and actively manage these limitations, including the impact of any model breakdown.

Consistent with disclosure made to Hedge Fund investors, the Hedge Fund Manager should determine the appropriate overall level of market risk for a particular Hedge Fund or strategy at time intervals appropriate for the size and complexity of such Hedge Fund or strategy. This overall level of market risk should then be appropriately allocated, among, for example, individual portfolio managers, investment strategies or asset classes. Once the market risk allocation is determined, portfolio managers should choose the market-specific risks to be assumed by the Hedge Fund consistent with the Hedge Fund Manager's risk allocation and policies and then develop a process for monitoring the risk. A sound market risk monitoring process should incorporate the confidence level(s) and holding period(s) deemed appropriate depending on the markets traded and the risks assumed. The holding period(s) should take into account the time necessary to liquidate and/or neutralize positions in the portfolio.

The role of the Risk Monitoring Function is to: (1) identify and quantify the factors affecting the risk and return of the Hedge Fund's investments, both within individual portfolios and across the entire range of activities of the Hedge Fund Manager, (2) monitor the risk controls established by senior management, and (3) disseminate the resulting risk information to senior management and portfolio managers, as appropriate. The factors affecting risk (*e.g.*, market rates and prices, credit spreads, volatilities, correlation) should be incorporated into the risk monitoring process and, where appropriate, be included in the market risk model.

Positions managed as separate accounts by external portfolio managers on behalf of the Hedge Fund Manager should be incorporated in the routine risk assessment of the overall portfolio. Passive investments in funds managed by external portfolio managers should be monitored as appropriate.

Hedge Fund Managers should recognize that market risk measures such as VAR do not give a complete picture of risk in that they assess the risk of "standard" market movements rather than extreme events. Hedge Fund Managers should therefore complement risk modeling with relevant stress tests and backtesting, as discussed below.

4.3 A Hedge Fund Manager should perform "stress tests" to determine how potential changes in market conditions could impact the value of a Hedge Fund's portfolio, as well as to consider liquidity analyses based on legal or contractual relationships.

A Hedge Fund Manager should perform stress tests to assess the impact of large market moves, taking into account relevant non-linearities in the relationship between portfolio value and the size of the market move. In addition, in performing stress tests or liquidity analyses, a Hedge Fund Manager may consider, for example, contractual rights of counterparties to terminate or otherwise unwind trading relationships or increase margin/collateral requirements upon the occurrence of certain events (such as declines in NAV).

A Hedge Fund Manager also should consider conducting "scenario analyses" to benchmark the risk of a Hedge Fund's current portfolio against various scenarios of market behavior (historical or prospective) that are relevant to the Hedge Fund Manager's trading activities (*e.g.*, the October 1987 stock market event, the Asian financial crisis of 1997, the stock market declines after March 2000 (bursting of the "dot-com" bubble)).

4.4 A Hedge Fund Manager should "backtest" its market risk models.

For internal control purposes, the Risk Monitoring Function should perform backtesting of its market risk models (*e.g.*, VAR). It should compare the distribution of observed changes in the value of a Hedge Fund's portfolio to the distribution of changes in value generated by its market risk model.

If the frequency of changes in the value of the portfolio exceeds the frequency generated by the market risk model (a statistical expectation based on the confidence level of the market risk model), such deviation should be scrutinized to determine its source. If, after investigation, the Hedge Fund Manager determines that the market risk model is not producing accurate information, or is leading its users to draw inappropriate inferences, a Hedge Fund Manager should seek to modify it.

Funding Liquidity Risk

Funding liquidity is critical to a Hedge Fund Manager's ability to continue trading in times of stress. Funding liquidity analysis should take into account the investment strategies employed, the terms governing the rights of Hedge Fund investors to redeem their interests and the liquidity of assets (*e.g.*, all things being equal, the longer the expected period necessary to liquidate assets, the greater the potential funding requirements) and the funding arrangements negotiated with counterparties such as prime brokers. Adequate funding liquidity gives a Hedge Fund Manager the ability to continue a trading strategy without being forced to liquidate assets when market losses occur.

4.5 Cash should be actively managed.

A Hedge Fund Manager should evaluate the effectiveness of the cash management process and establish policies for investing a Hedge Fund's excess cash, if any, based on established risk parameters and taking into account the credit risk presented by the party with whom cash is invested. In establishing cash management policies, a Hedge Fund Manager should consider cash flow needs based on the risk and funding profile of the portfolio and investor subscription and redemption windows.

4.6 A Hedge Fund Manager should employ appropriate liquidity measures in order to gauge, on an ongoing basis, whether a Hedge Fund is maintaining adequate liquidity. Liquidity should be assessed relative to the size of the Hedge Fund and the risk of its portfolio and investment strategies.

A discussion of possible liquidity measures is included in Appendix I.

4.7 A Hedge Fund Manager should evaluate the stability of sources of liquidity and plan for funding needs accordingly, including a contingency plan in periods of stress.

Hedge Fund Managers should assess their cash and borrowing capacity under the worst historical drawdown and stressed market conditions, taking into account potential investor redemptions and contractual arrangements that affect a Hedge Fund's liquidity (*e.g.*, notice periods for reduction of credit lines by counterparties).

Hedge Fund Managers should periodically forecast their liquidity requirements and potential changes in liquidity measures.

Hedge Fund Managers should perform scenario tests to determine the impact of potential changes in market conditions on a Hedge Fund's liquidity. Among these scenario tests, Hedge Fund Managers should consider including the potential response to a creditor experiencing a liquidity problem during times of market stress (*e.g.*, reluctance to release collateral), as well as a unilateral decision on the part of credit providers to increase haircuts and collateral requirements.

Hedge Fund Managers should take into account in their liquidity planning redemption "windows" or other rights of Hedge Fund investors to redeem their interests. Hedge Fund Managers should also take into account the relationship between a Hedge Fund's performance and redemptions and between a Hedge Fund's performance and the availability of credit lines.

4.8 In an effort to enhance the stability of financing and trading relationships, a Hedge Fund Manager should engage in constructive dialogue with a Hedge Fund's credit providers and counterparties to determine the extent of financial and risk information to be provided.

The extent of disclosure to be provided should be mutually agreed with such parties depending on their requirements and the extent and nature of the relationship.

A counterparty's credit department should be required to provide assurances that financial and other confidential information furnished by the Hedge Fund Manager will only be used for credit evaluation purposes and will not be made available to any member of a counterparty's trading desk or department. These assurances could be confirmed by the counterparty's credit department in a written confidentiality agreement or by providing a copy of its confidentiality policies.

Counterparty Credit Risk

4.9 A Hedge Fund Manager should understand and manage a Hedge Fund's exposure to potential defaults by trading counterparties.

A Hedge Fund Manager should identify acceptable counterparties based on an analysis of creditworthiness and set appropriate risk limits. Where a judgment call with respect to a particular counterparty is necessary, a Hedge Fund Manager's senior management should determine whether the counterparty's creditworthiness is acceptable (*e.g.*, based on an analysis of the costs and benefits of dealing with the counterparty to the extent practicable).

Once a trading relationship with a counterparty is established, a Hedge Fund Manager should ensure that the counterparty's creditworthiness is appropriately monitored. A Hedge Fund Manager should also seek to establish appropriate collateral arrangements with the counterparty (see Recommendation 6.4) and establish the ability to make, if possible, and to respond to collateral calls.

Leverage

A Hedge Fund Manager should recognize that, although leverage is not an independent source of risk, leverage is important because of the magnifying effect it can have on market risk, credit risk and liquidity risk. Recognizing the impact that leverage can have on a portfolio's exposure to market risk, credit risk, and liquidity risk, a Hedge Fund Manager should assess the degree to which a Hedge Fund is able to modify its risk-based leverage in periods of stress or increased market risk.

4.10 Hedge Fund Managers should pay careful attention to leverage, whether such leverage is measured in terms of financial statement-based leverage or risk-based leverage.

The best means of ensuring that utilization of leverage is appropriate for each individual Hedge Fund is for its Hedge Fund Manager to manage its own leverage associated with its strategies, using appropriate risk monitoring measures or implementation of its strategies. Special attention should be paid to the manner in which leverage impacts the ability of the Hedge Fund Manager to manage the risks to which the portfolio is subject. Note that a Hedge Fund's exposure in the event of losses depends not merely on the amount of its leverage, but on the contractual and other measures it takes to address the consequences to a Hedge Fund in the event of significant losses.

4.11 A Hedge Fund Manager should develop and monitor several measures of leverage, recognizing that leverage, appropriately defined, can magnify the effect of changes in market, credit or liquidity risk factors on the value of the portfolio and can adversely impact a Hedge Fund's liquidity.

A Hedge Fund Manager should recognize that leverage is not an independent source of risk; rather, it is a factor that influences the rapidity with which changes in market risk, credit risk or liquidity risk factors impact the value of a Hedge Fund's portfolio. A Hedge Fund Manager should seek to assess leverage while taking into account the limitations inherent in different leverage measures, as noted below and discussed in further detail in Appendix I.

Risk-Based Leverage

A Hedge Fund Manager should track a Hedge Fund's leverage using "risk-based leverage" measures reflecting the relationship between the riskiness of a Hedge Fund's portfolio and the capacity of the Hedge Fund to absorb the impact of that risk. Risk-based leverage measures that could perform this function are described in Appendix I. Some of the liquidity measures discussed in Appendix I can also be viewed as risk-based leverage measures.

The Hedge Fund Manager should be aware of limitations of the models used and should guard against placing too much reliance on mathematical measures of leverage alone. For example, market risk measures such as VAR are incomplete measures of market risk because they focus on "standard" market movements rather than extreme events. Consequently, the Hedge Fund Manager should consider assessing the impact of extreme events by comparing a market risk measure derived from analysis of extreme event scenarios (or stress tests) to the Hedge Fund's capital. In addition, it is essential that the Hedge Fund Manager use judgment based on business experience in calculating and assessing quantitative measures of leverage.

A crucial factor influencing the Hedge Fund's ability to absorb the impact of extreme market events is the degree to which the Hedge Fund can modify its risk-based leverage, especially during periods of market stress. A Hedge Fund Manager should therefore assess its ability to reduce risk-based leverage by modifying (upward or downward) traditional leverage or by reducing the level of risk that is being accepted (*e.g.*, by changing strategy or the types of assets being held in the portfolio).

Financial Statement-Based Leverage

A Hedge Fund Manager may consider tracking certain traditional financial statement-based measures of leverage as part of its financial reporting or in connection with the analysis and interpretation of certain risk-based leverage measures or funding liquidity. However, a Hedge Fund Manager should recognize that although such measures can provide useful information if they are understood fully and interpreted correctly, they have a number of weaknesses, particularly as stand-alone measures of leverage, as discussed in greater detail in Appendix I.

Operational Risk

4.12 Hedge Fund Managers should seek to limit a Hedge Fund's exposure to potential operational risks, including reconciliation errors, data entry errors, fraud, system failures and errors in valuation or risk measurement models.

Hedge Fund Managers should consider the following measures, among others, to limit or mitigate operational risk, the implementation of which can be performed through any number of support areas within a Hedge Fund Manager:

- Random, periodic spot checks of all relevant activities;
- Monitoring of risk, either internally with an appropriate level of checks and balances to ensure objectivity of risk analysis, or through reliance on external service providers;
- Maintenance of a single, centralized position data set (to avoid the errors inherent in maintaining multiple or regionalized data sets);

- Establishment of adequate internal controls and review, including appropriate segregation of duties, controls over incoming and outgoing cash flows and balances with counterparties, daily confirmation of trades and positions, etc.; and

- Reviewing the operational risk – including legal compliance, and transactional policies – issues that are covered in the Recommendations of Sections V and VI.

Risk Monitoring Valuation

4.13 A Hedge Fund Manager should establish policies for determining when risk monitoring valuation methods may differ from NAV for operational or risk analysis reasons.

Portfolio values used to calculate NAV should also be used for risk monitoring valuation unless the Hedge Fund Manager has determined that operational or risk analysis reasons may justify a different approach. For example, in order to examine potential effects on the portfolio of changes in market conditions, the Hedge Fund Manager may permit the Risk Monitoring Function to use alternative values or make adjustments to the position values calculated in accordance with GAAP for NAV purposes. Similarly, in volatile markets, a Hedge Fund Manager may wish to discount prices for risk analysis purposes if the Risk Monitoring Function does not believe that quoted bids or offers are prices at which a trade could actually be executed. See Recommendation 3.8 for additional guidance.

V. REGULATORY CONTROLS

A Hedge Fund Manager should seek to actively monitor and manage its regulatory responsibilities to ensure compliance with all applicable rules and regulations through management of internal and external resources and development of documentation and compliance policies and procedures. Qualified personnel should be assigned oversight responsibilities to facilitate the internal monitoring function.

5.1 A Hedge Fund Manager should create a management environment that provides for compliance with all rules and regulations applicable to its business operations.

Hedge Fund Managers are required to comply with a wide variety of rules and regulations and furnish significant information and reports to regulators in connection with their trading activities. See Appendix II for a list of some of the filing requirements and other regulations applicable to Hedge Fund Managers in the United States.

A Hedge Fund Manager should take steps, in reliance upon its internal and external resources (including prime brokers, administrators, attorneys and accountants), to ensure that its personnel are cognizant of and comply with the rules and regulations applicable to its business operations, as well as those of the Hedge Funds it manages. For example, a Hedge Fund Manager should seek to ensure compliance with rules and regulations applicable to private offerings and sales practices, anti-money laundering, soft dollar practices, insider trading and market manipulation, among others. In the case of Hedge Fund Managers required to register with the SEC as investment advisers, the applicable rules and regulations also include a variety of substantive requirements imposed by the Advisers Act that include, among other things, disclosure, custody controls, cash solicitation procedures, disciplinary and financial condition disclosure and proxy voting, as well as potential examination by the SEC.

5.2 A Hedge Fund Manager should identify all actual and potential required U.S. and international regulatory filings and clearly allocate responsibility for such filings to appropriate personnel or service providers who will supervise and ensure timely compliance with applicable regulations and filing requirements.

5.3 A Hedge Fund Manager should appoint a member of its personnel, or consider hiring a new member of its firm, who would be responsible for developing and monitoring the Hedge Fund Manager's and Hedge Fund's compliance with all applicable rules and regulations.

The criteria for selecting this key member of a Hedge Fund Manager's personnel should include: the person's seniority within the firm; knowledge of trading strategies and business operations for each of the Hedge Funds managed by the firm; and familiarity with legal requirements, including securities law requirements.

For Hedge Fund Managers that are registered investment advisers, the designation of a chief compliance officer to administer its policies and procedures is required by the Advisers Act. In the release adopting the final rule relating to compliance programs, the SEC indicated that an adviser's chief compliance officer should be competent and knowledgeable regarding the Advisers Act and empowered with full authority to enforce the policies. The SEC also indicated that the officer should have a position of sufficient seniority and authority within the organization to compel others to adhere to the compliance policies and procedures.

5.4 Taking into account the size and complexity of the Hedge Fund Manager's operations, a Hedge Fund Manager, whether registered with the SEC or not, should establish written compliance policies that address, at a minimum where applicable, trading rules and restrictions, confidentiality requirements, policies designed to ensure compliance with applicable securities, commodities and related laws (*e.g.*, prohibitions on insider trading and other forms of market manipulation, measures to prevent the flow of non-public information from one function to another, personal trading policies), portfolio management processes (including allocation procedures), proprietary trading of the adviser, disclosure controls, safeguarding assets, creating and maintaining records, valuation and fee assessment processes, safeguarding privacy and business continuity plans.

Compliance policies should be regularly reviewed and updated and internal controls should be established to monitor compliance with such policies. Hedge Fund Managers should develop a procedure to ensure that employees understand and accept such policies, such as requiring periodic verifications, which Hedge Fund Managers may put in the form of a written attestation of the relevant employee's understanding and acceptance of the policies, or in such other form as the Hedge Fund Manager determines is appropriate for its business.

While many service providers offer model or "off the shelf" compliance policy documents, a Hedge Fund Manager and its personnel responsible for monitoring such policy should craft a written document that is tailored to the business of the Hedge Fund Manager and the Hedge Funds it operates. Utilizing off the shelf compliance policies may result in a Hedge Fund Manager unwittingly obligating itself to comply with policies for which it does not have the infrastructure or policies that are inapplicable to its business operations. Likewise, off the shelf compliance policies that are not well-tailored may result in the omission of certain procedures that should be applied to a Hedge Fund's business in order to institute an effective compliance program.

While not intended to be exhaustive, the checklist available in this document at Appendix IV contains possible components of compliance policies and procedures that Hedge Fund Managers developing such policies and procedures may wish to consider.

Information about the regulations governing compliance policies and procedures required to be adopted by registered investment advisers is available at the SEC's website: *www.sec.gov/rules/final/ia-2204.htm*.

5.5 A Hedge Fund Manager should develop a written code of ethics, specifically targeted for its business operations, that sets standards of professional conduct for its personnel consistent with the Hedge Fund Manager's fiduciary duties and other applicable law or that address, where applicable, standards of conduct for covered persons, protection of material nonpublic information, requirements to comply with federal securities laws, report personal securities transactions, review of those reports and report violations of the code of ethics to a designated person.

A professional code of conduct, or code of ethics, should set forth guidelines and expectations for conduct of a Hedge Fund Manager's personnel. Hedge Fund Managers should develop a procedure to ensure that employees understand and accept the code, such as requiring periodic verifications, which Hedge Fund Managers may put in the form of a written attestation of the relevant employee's understanding and acceptance of the code (as required of SEC-registered Hedge Fund Managers), or in such other form as the Hedge Fund Manager determines is appropriate for its business.

While many service providers offer model or off the shelf codes of ethics, a Hedge Fund Manager and its responsible personnel should craft a code of ethics that is tailored to the business of the Hedge Fund Manager and the Hedge Funds it operates. Utilizing an off the shelf code of ethics may result in a Hedge Fund Manager failing to identify and adequately address the conflicts of interest that are unique to its business.

In deciding whether the code of ethics should be included within the Hedge Fund Manager's policies and procedures, Hedge Fund Managers should bear in mind that Hedge Fund Managers registered under the Advisers Act are required to describe their code of ethics on Form ADV Part II and to furnish Hedge Fund investors with a copy of the code of ethics upon request. Information about the regulations governing codes of ethics required to be adopted by registered investment advisers is available at *http://www.sec.gov/rules/final/ia-2256.htm*.

While not intended to be exhaustive, the checklist available in this document at Appendix V contains possible components of a code of ethics that Hedge Fund Managers developing a code may wish to consider.

5.6 A Hedge Fund Manager should be aware of the anti-money laundering regulations to which it and the Hedge Funds it manages are subject and ensure that appropriate investor identification procedures are performed where required.

Hedge Fund Managers may wish to consult MFA's *Preliminary Guidance for Hedge Funds and Hedge Fund Managers on Developing Anti-Money Laundering Programs*, attached as Appendix III, for practical guidance in this evolving area.

5.7 A Hedge Fund Manager should develop document retention policies and procedures that include the retention of certain electronic mail ("e-mail") and the creation and retention of required books and records related to business operations.

These policies and procedures should be designed to ensure the retention of accurate and complete records and may include, as appropriate, maintenance of original copies of all records, including certain of those created in e-mail, protection against electronic destruction, development of searchable indices of stored data and records, and policies relating to access to records. A Hedge Fund Manager should also establish a policy relating to the length of time records are required to be retained that is appropriate for its organizational structure and business activities. A Hedge Fund Manager should consult with third party vendors to procure software that can perform these tasks.

For Hedge Fund Managers that are registered investment advisers, the rule relating to books and records, which has been interpreted to include email retention, is detailed as to the types of records required to be maintained. The types of records generally relate to business accounting matters, such as accounting ledgers, bank statements and bills, or to the Hedge Fund Manager's fiduciary role, such as written agreements with investors, performance history and recommendations distributed to a certain number of persons. The length of time records are required to be retained by SEC-registered Hedge Fund Managers is generally five years.

VI. TRANSACTIONAL PRACTICES

A Hedge Fund Manager should pursue a consistent and methodical approach to documenting transactions with counterparties in order to enhance the legal certainty of its positions. In addition, to the extent applicable, a Hedge Fund Manager should seek to obtain best execution and establish guidelines for using Soft Dollar Arrangements, if applicable.

Documentation Policies and Controls

6.1 A Hedge Fund Manager should establish transaction execution and documentation management practices that seek to ensure timely execution of necessary transaction documents and enforceability of transactions.

To the extent practicable, a Hedge Fund Manager may wish to implement the following practices:

- Require that all trading counterparties be approved prior to executing any transactions and verify counterparty authorizations;
- Establish documentation requirements for all trading (including confirmation requirements and documentation of master agreements as appropriate); and
- Ensure that appropriate security interests are created and perfected when collateral is received as part of a transaction.

6.2 A Hedge Fund Manager should track the status of documentation and the negotiation of key provisions and terms such as termination events and events of default (including use of a database if needed) to seek to ensure consistency and standardization across Hedge Funds and counterparties to the extent appropriate and feasible.

6.3 A Hedge Fund Manager should seek consistent bilateral terms with counterparties to the extent appropriate and feasible in order to enhance stability during periods of market stress or declining asset levels.

For example, a Hedge Fund Manager may seek to negotiate standardized events of default and other termination or collateral events to achieve consistency in documentation with different counterparties to the extent appropriate and feasible. A Hedge Fund Manager may also endeavor to avoid including provisions that permit counterparties to terminate or make demands for collateral solely at their discretion or based upon subjective determinations.

6.4 A Hedge Fund Manager should seek to negotiate bilateral collateral agreements that require each party to furnish collateral, taking into account the relative creditworthiness of the parties.

To the extent feasible, a Hedge Fund Manager should seek to establish collateral arrangements either internally or through reliance on external resources that permit the Hedge Fund Manager to effectively and regularly make calls for deliveries and returns of collateral from counterparties when permitted.

6.5 A Hedge Fund Manager should have appropriate documentation and approval processes for retaining external traders as well as administrators, prime brokers or other third-party service providers.

Best Execution

6.6 In selecting both "clearing" and "executing" brokers on behalf of a Hedge Fund, the Hedge Fund Manager should consider, among other thing:

For clearing brokers:

- The operational expertise of the clearing broker in providing clearing and custody services for the products traded by the Hedge Fund Manager;
- The clearing brokerage fees;
- The commission rate or spread involved when the clearing broker executes transactions;
- The clearing broker's responsiveness to the Hedge Fund Manager;
- The ability of the clearing broker to maintain the confidentiality of all proprietary position information provided;
- The clearing broker's financial responsibility; and
- The clearing broker's credit worthiness.

For executing brokers:

- The executing broker's expertise in providing timely execution services for the products traded by the Hedge Fund Manager;
- The ability of the executing broker to execute transactions of size in both liquid and illiquid markets at competitive market prices without disrupting the market for the security traded;

- The ability of the executing broker to maintain the confidentiality of all proprietary position information provided;

- The executing broker's execution fees;

- The range of services offered by the executing broker, including the range of markets and products covered, quality of research services provided and recommendations made by the executing broker;

- The quality and timeliness of market information provided by the executing broker;

- The execution broker's financial responsibility; and

- The execution broker's credit worthiness.

Because it is difficult to determine how to make a best execution determination in the context of various structured and derivative products, Hedge Fund Managers, in evaluating counterparties, should consider additional factors that they deem relevant, including, but not limited to:

- The range of derivative products offered by the counterparty;

- The operational expertise of the counterparty in providing confirmation, documentation, timely settlement and on-going operational support for the derivative products entered into by the Hedge Fund Manager;

- The terms and appropriate documentation of the derivative transactions products by the counterparty;

- The counterparty's financial responsibility;

- The availability of the particular derivative product; and

- The counterparty's credit worthiness.

6.7 Hedge Fund Managers should periodically examine the performance of the brokers executing transactions on behalf of a Hedge Fund to assess whether it continues to provide best execution. Hedge Fund Managers should include in its recordkeeping policies documentation of evaluations of the execution quality of the brokers.

Soft Dollar Arrangements

6.8 A Hedge Fund Manager should evaluate the types of products and services that are the subject of Soft Dollar Arrangements, including, as appropriate, the extent to which products or services have research functions or are developed by a third party and provided by a broker and should develop policies relating to the use of these arrangements.

If applicable to its business model, a Hedge Fund Manager should develop policies related to Soft Dollar Arrangements, including the proper allocation of products or services with mixed uses (*i.e.*, computer hardware that assists an adviser in research functions and in non-research functions) so that non-research services are paid for out of the Manager's own funds and the proper allocation of "step-out" arrangements. Step-out arrangements can assist a Hedge Fund Manager in obtaining best execution by allowing it to use the broker that provides best execution to execute the trade and to pay commissions to other brokers from which it receives research or services through Soft Dollar Arrangements. Policies may vary depending on a Hedge Fund Manager's customized advisory arrangements.

Policies should include procedures and documentation requirements for third-party arrangements. These may include, depending on the nature of the Hedge Fund Manager's business, policies regarding step-out arrangements, and proprietary arrangements, addressing, as appropriate, approved broker-dealers and products/services, reliance on the Section 28(e) of the Securities Exchange Act of 1934, as amended, safe harbor (described below) ("Section 28(e)"), personnel authorized to approve the product/service and agreements or commitments regarding commission quotas or thresholds. Policies should also address retention of correspondence, including, if applicable, emails related to directed brokerage and step-out arrangements and records of and the value, quantity, purpose and ratios of each product/service.

6.9 A Hedge Fund Manager should fully disclose that it may engage in Soft Dollar Arrangements prior to engaging in such arrangements and should clearly disclose its policies with respect to such arrangements, including:

1. Whether it may use the products and services provided by a broker pursuant to Soft Dollar Arrangements to benefit Hedge Funds other than those whose trades generated the relevant brokerage commissions or fees; and

2. The types of products and services that may be received through Soft Dollar Arrangements in an appropriate level of detail.

6.10 If a Hedge Fund Manager relies on the safe harbor provided by Section 28(e), which protects the adviser from even a claim of breach of fiduciary duty solely because the adviser causes an account managed by the Hedge Fund Manager to pay for Soft Dollar Arrangements, the Hedge Fund Manager should evaluate with its advisers how to do the following:

1. Make a good faith determination that the amount of commission is reasonable in relation to the value of the brokerage and research services provided by the broker-dealer, in light of the terms of the particular transaction or the Hedge Fund Manager's overall responsibilities with respect to its discretionary accounts;

2. Disclose Hedge Fund Manager's policies and procedures relating to such Soft Dollar Arrangements; and

3. Determine whether the brokerage and research services are covered within the safe harbor (as set forth in Section 28(e)(3)). In an interpretive release relating to this prong, the SEC indicated that "the focus should be on whether the product or service provides lawful and appropriate assistance to the money manager in the carrying out of his responsibilities".

6.11 If a Hedge Fund Manager does not rely on the safe harbor provided by Section 28(e) in its use of Soft Dollar Arrangements, the Hedge Fund Manager should evaluate with its advisors how to do the following:

1. Assuming that the services are not covered within the Section 28(e) safe harbor, the Hedge Fund Manager should utilize those services that are determined to provide lawful and appropriate assistance to the Hedge Fund Manager in carrying out its responsibilities to Hedge Fund investors;

2. Make a good faith determination that the amount of commission, under the Soft Dollar Arrangement, is reasonable in relation to the value of the services provided by the broker-dealer, in light of the terms of the particular transaction or the Hedge Fund Manager's overall responsibilities with respect to its Hedge Funds; and

3. Disclose the Hedge Fund Manager's policies and procedures relating to such Soft Dollar Arrangements.

VII. BUSINESS CONTINUITY AND DISASTER RECOVERY

While the need to establish a functional business continuity and disaster recovery plan is not unique to Hedge Fund Managers, they have a responsibility to the Hedge Funds they manage to have plans in place in the event of a disaster. The inability to carry out routine trading and risk monitoring functions (even on a very short-term basis) as a result of a disruption could result in large financial losses.

7.1 Personnel of the Hedge Fund Manager should be actively engaged in developing a comprehensive business continuity and disaster recovery ("BC/DR") plan.

In developing a BC/DR plan, a Hedge Fund Manager not only has to consider the impact a local or national disaster would have on business operations, but also other types of events such as the loss of a key principal.

While outside service providers and regulatory agencies may provide templates for BC/DR plans, senior management should work with personnel responsible for information technology, the treasury, accounting, trading and operations to develop a plan that is specifically drafted for the business realities of the Hedge Fund Manager and the Hedge Funds it operates.

7.2 A Hedge Fund Manager should establish a BC/DR plan that provides contingencies in the event of the death or incapacity of its founder or one of its principals.

This would include plans to address any "Key Man" provisions that exist in partnership arrangements, as well as policies and procedures to promptly disclose such an event. In drafting a BC/DR plan, Hedge Fund Managers with "Key Man" provisions that give investors withdrawal rights should also consider the impact of the potential withdrawals by investors on business operations.

7.3 A Hedge Fund Manager should establish a BC/DR plan that includes practices to ensure, to the greatest extent practicable, that appropriate personnel will have the ability to monitor a Hedge Fund's existing portfolio positions and execute transactions where necessary in the event of a market emergency or other severe market disruption.

The most important element in a BC/DR plan is the identification and replication of "mission critical systems", which are those required by the Hedge Fund Manager to ensure prompt and accurate processing of securities transactions and to meet regulatory reporting requirements.

The basic elements to consider in developing a BC/DR plan include, among other things:

- Financial assessments and operations;

- Means of communications between and among managers, employees and Hedge Fund investors;

- The physical location of the parties;

- The ability to evaluate the impact of an event on you and your counterparties;

- Regulatory and reporting needs; and

- Mechanisms to ensure the safety of the Hedge Fund's assets and keep them preserved until they can be redeemed to ensure the orderly liquidation of the Hedge Fund assets in the case where the Hedge Fund Manager's business cannot continue.

A Hedge Fund Manager should review the components of their BC/DR plans to ensure they are consistent with the mandates of any regulatory agencies to which they are subject.

7.4 A Hedge Fund Manager should establish a written BC/DR plan that outlines practices to be followed in an emergency or significant market disruption.

Hedge Fund Managers should consider addressing the following items in a written BC/DR plan as appropriate for its operations:

- Developing a communication plan to contact essential parties (*e.g.*, senior management, portfolio managers, risk managers, brokers and trading counterparties, vendors and disaster recovery specialists);

- Backing-up or copying essential documents and data and storing the information offsite in hard-copy or electronic format;

- Establishing those back-up facilities or the ability to continue to do business in a location which is in a separate geographic area from the Hedge Fund Manager's primary facilities for the purposes of diversity; and

- Considering the impact of business interruptions encountered by third parties and identifying ways to minimize that impact.

7.5 A Hedge Fund Manager, as part of its BC/DR plan, should have offsite contingency plans for its information technology ("IT") that considers geography, accessibility of records, security, environment and cost.

Additionally, a Hedge Fund Manager should consider whether its alternate site should be "Cold," "Warm," "Hot," or "Mirrored". A "cold site" has adequate space and no IT or office automation equipment, whereas a "warm site" is often used for another function which is displaced temporarily to accommodate the disrupted system. A "hot site" is configured with all system hardware, infrastructure, and support personnel, and the "mirrored site" is the most comprehensive as it has fully redundant infrastructure, systems and data. A Hedge Fund Manager should consider one of these types of alternate sites in accordance with its size and budgetary constraints.

A Hedge Fund Manager, to the extent that its own personnel are not trained in providing redundant IT and other services, should consider working with outside consultants in order to determine its needs and the available technologies and services designed to meet these needs as part of its BC/DR plan.

7.6 A Hedge Fund Manager should consider the role or impact of mission-critical third-party service providers and vendors in establishing their BC/DR plan.

7.7 A Hedge Fund Manager should establish contingency plans for responding to the failure of a third party administrator, credit provider or other mission-critical party that would affect the market, credit, or liquidity risk of a Hedge Fund.

Contingency planning should address responses to a failure of a third party on a Hedge Fund Manager's ability to conduct operations, including transfers to back-up clearing systems and off-site retention storage, prime brokers, credit providers and other service providers and back-up providers.

7.8 A Hedge Fund Manager should test and update its BC/DR plan periodically, generally at least once per year, to help ensure that all of its personnel know their roles and that its technology is sufficient during an event contemplated by the BC/DR plan.

7.9 A Hedge Fund Manager should be aware of resources available from the Federal and local governments to gather information about threat dissemination services that are targeted to the financial services sector and that provide information regarding threats to physical and cyber security.

To the extent that the federal, state, and local governments offer threat alert services, a Hedge Fund Manager should investigate subscribing to these services as part of its business continuity and disaster recovery program. One such service is the Financial Services/Information Sharing Alert Center (or "FS/ISAC", website: *www.fsisac.com*).

APPENDIX I

RISK MONITORING PRACTICES FOR HEDGE FUND MANAGERS

The objective of this appendix is to elaborate upon the discussion of risk monitoring practices contained in Section IV of the Recommendations. In so doing, this appendix describes the general array of risk management techniques and methodologies currently available, in addition to addressing the specific techniques and methodologies that should be considered as part of sound risk monitoring practices for Hedge Fund Managers. The latter discussion includes further explanations of valuation, liquidity and leverage from the perspective of Hedge Fund Managers.

This appendix begins by providing an overview of the risks faced by a Hedge Fund Manager in Section 1.[1] The descriptions of the practices for monitoring market risk (Section 2), funding liquidity risk (Section 3) and leverage (Section 4) form the core of this appendix and address the following key issues:

- ***Risk monitoring techniques.*** This appendix will discuss generally certain techniques that are often used in financial markets for monitoring market risk – VAR, scenario analyses and stress tests, and backtesting.

- ***The importance of analyzing funding liquidity risk.*** While the measures for monitoring funding liquidity described in this appendix are used in other industries, Hedge Fund Managers should focus significant attention on funding liquidity given the impact it can have on the viability of a Hedge Fund.

- ***Leverage in the context of Hedge Funds.*** While leverage is not unique to Hedge Funds, the market risk inherent in a Hedge Fund, coupled with the constraints imposed by funding liquidity, make the amplifying effect of leverage of particular concern to a Hedge Fund Manager. This appendix describes a group of static leverage measures, both financial statement-based and risk-based leverage measures. Also described in this appendix are dynamic leverage measures that can provide additional information to the Hedge Fund Manager.

This appendix concludes with a description of practices for monitoring counterparty credit risk (Section 5). Because Hedge Funds generally deal with counterparties having high credit quality, the credit risk of counterparties may be of less concern to Hedge Fund Managers than the other sources of risk but should nonetheless by appropriately monitored.

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[1] Valuation policies and practices are discussed in Section III of the Recommendations. While not explicitly part of the Risk Monitoring Function, proper valuation practices are crucial to effective risk monitoring.

1. Overview: The Risks Faced by a Hedge Fund Manager

Effective risk management requires that the Hedge Fund Manager recognize and understand the source of the returns the Hedge Fund is earning (*i.e.*, the risks to which the Hedge Fund is exposed). Consequently, one of the primary responsibilities of the Risk Monitoring Function is to identify and quantify the sources of risk.

While observers often distinguish four broad types of risk – market risk, credit risk, liquidity risk and operational risk[2] – it is important to recognize that these risks are interrelated. Indeed, Hedge Fund Managers should recognize that "market risk" incorporates elements of credit risk and liquidity risk. Defined most narrowly, market risk focuses on the impact of changes in the prices of (or rates for) securities and derivatives, the volatilities of those prices, and the correlations between pairs of prices on the value of the portfolio. However, elements of liquidity risk and credit risk have a similar focus; for example:

- Changes in liquidity impact on the value of a security or derivative. This element of liquidity risk is sometimes referred to as asset or "market" liquidity risk.

- Changes in the creditworthiness of an entity impact on the value of a security or derivative issued by or indexed to that entity.

Because these three risks all focus explicitly on changes in the *value* of an asset or the portfolio, Hedge Fund Managers should integrate the monitoring and management of them (*i.e.*, view them as a group, rather than individually). Hence, in Section 2 of this appendix, "market risk" will encompass the credit risk associated with assets held in the portfolio and asset (or market) liquidity risk, as well as the more commonly cited market risk factors: interest rate risk, foreign exchange rate risk, equity price risk and commodity price risk.

In addition to having an impact on the value of securities or derivatives held by the Hedge Fund, changes in funding liquidity can impact on the Hedge Fund Managers' ability to finance its positions. Section 3 will indicate why this risk is of greater concern to Hedge Fund Managers than to other entities and will describe the techniques that should be used by Hedge Fund Managers to monitor funding liquidity risk.

The Hedge Fund Manager should also consider "leverage". However, leverage is not an independent source of risk; rather, it is a factor that influences the rapidity with which changes in market risk, credit risk or liquidity risk factors change the value of the portfolio. Indeed, it is essential to consider what leverage means – or does not mean – in the context of a Hedge Fund:

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[2] "Sovereign risk" may be viewed either as "credit risk," if the potential loss is related to the financial solvency of the sovereign, or as "market risk," if the potential loss is related to policy decisions made by the sovereign that change the market value of positions (*e.g.*, currency controls). "Legal risk," other than those covered by the preceding discussion of "sovereign risk," would be included as "operational risk".

- ***A single leverage number may not contain very much information.*** As will be illustrated in this appendix, a risk-reducing transaction can increase some leverage measures while decreasing others.

- ***The liquidity or price volatility of the position being leveraged is relevant to assessing effective leverage.*** The leverage employed by a Hedge Fund that holds one-year Treasury bills with ten-to-one leverage may be of less concern than that employed by a Hedge Fund levered two-to-one with respect to the S&P 500 Index.

- ***A Hedge Fund's capacity to absorb losses — its "funding liquidity" — is relevant to assessing its effective leverage.*** Leverage should be measured relative to a Hedge Fund's capacity to absorb losses. A Hedge Fund that has a relatively high level of financial statement-based leverage may pose a smaller risk than a less levered Hedge Fund with low cash positions, limited borrowing capacity, or Hedge Fund investors that can withdraw their funds on short notice.

- ***"Other Factors" may also be relevant to the assessment of Hedge Fund's effective leverage.*** These may include such considerations as the level of position concentration in the Hedge Fund portfolio, overall market volatility and correlation conditions, and other "situation specific" considerations.

Stylized Portfolios

In Sections 2, 3 and 4, a collection of stylized portfolios and balance sheets are used to illustrate and compare the measures of market risk, funding liquidity risk and leverage that are discussed in the Recommendations and this appendix. As described below, these simple portfolios are composed of various combinations of three hypothetical securities (which are denoted as Asset 1, Asset 2 and Asset 3) and two derivative contracts. Two of the securities are lower risk assets, with annualized volatility of 30% and 25%, respectively. The third asset is a higher risk asset with annual volatility of 60%. The two derivatives are simple futures contracts on the two low risk securities; therefore they have the same volatility as those securities.

Each portfolio is part of a simple balance sheet. It is assumed that $100 of investor equity funds each strategy. To calculate all of the various risk measures, the stylized balance sheets also indicate a cash position, a futures margin position, and a liability account that reflects any financing transactions. The required futures margin is 10% in cash, which is not counted as liquidity. In addition, up to 50% of Asset 1, 2 or 3 can be borrowed, and 50% of the proceeds from a short sale are available to finance investments.

For each portfolio various measures of market risk, liquidity and leverage have been calculated. Note that not all the risk measures are relevant for every portfolio.

- Portfolios 1 and 2 illustrate positions with identical market risk but different investments to implement the strategy. Portfolio 1 is an un-leveraged investment in Asset 1 while Portfolio 2 uses the futures contract on Asset 1 to implement the same strategy.

- Portfolios 3 and 4 are leveraged versions of Portfolios 1 and 2. The use of balance sheet leverage (Portfolio 1) or additional derivatives contracts (Portfolio 2) has the effect of increasing the market risk of both portfolios.

- Like Portfolios 3 and 4, Portfolio 5 is more risky than Portfolios 1 and 2; but, instead of employing traditional leverage, the additional risk arises because the manager switches from a lower-risk strategy (invest in Asset 1) to a higher-risk investment strategy (invest in Asset 3).

- Portfolios 6 and 7 use long and short investments to illustrate the effect of a type of hedging by being long in one asset and short in another, that is positively correlated with the first. In Portfolio 6 the strategy is implemented in the cash market, while Portfolio 7 achieves identical market risk using a combination of cash and futures. As discussed later, these portfolios illustrate the complexity that can appear as the portfolio increases in size — although Portfolios 6 and 7 are generally less risky than Portfolios 3 and 4, there are conditions under which they can become significantly more risky.

- Portfolios 8 and 9 are used to illustrate the effect of matched book assets — either in the futures market or the cash market —on traditional leverage and liquidity measures. Portfolios 8 and 9 represent the same net positions as Portfolios 1 and 2; but the positions are established by combining a short position in Asset 1 or futures on Asset 1 (*i.e.*, -20) with long positions in the same asset (*i.e.*, 100), rather than only long positions (*i.e.*, 80).

TABLE 1
Stylized Portfolios

	Unlevered Cash versus Futures		Levered Cash versus Futures		Unlevered High Risk	Long/Short Strategy Cash versus Futures		Unlevered Strategy with Matched Book Assets	
	Cash Only	Futures Only	Levered Cash	Futures	High Risk Cash	Long/Short Cash	Long/Short Mixed	Hedged Cash	Hedged Futures
Portfolio	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
Summary Balance Sheet									
Capital	100	100	100	100	100	100	100	100	100
Borrowing (outright or repo)	0	0	30				30		
Investments									
Cash Market Transactions									
Asset 1	80		120			120	120	100, -20	
Asset 2						-60			
Asset 3					80				
Derivatives Market Transactions									
Futures on Asset 1		80		120					100, -20
Futures on Asset 2							-60		
Cash	20	92	10	88	20	10	4	10	88
Futures Margin	0	8	0	12	0	0	6	0	12

As noted above, for Hedge Fund Managers, changes in credit quality that affect the value of the portfolio through a change in the price of securities owned are incorporated into "market risk". However, Hedge Fund Managers are also exposed to counterparty credit risk. Changes in the credit quality of counterparties can impose costs on the Hedge Fund either in the form of an increase in expected losses due to counterparty failure to perform or by forcing the Hedge Fund Manager to find alternative counterparties.

Operational risks faced by Hedge Fund Managers are much the same as those faced by other financial institutions – data entry errors, fraud, reconciliation errors, system failures and errors in valuation or risk measurement models. The appropriate techniques and practices to deal with these risks are, likewise, the same techniques and practices used by other entities. As noted in the Recommendations, these include random spot checks, maintenance of a single, centralized data set, contingency plans for responding to failures in the Hedge Fund Manager's systems or for responding to the failure of a third party service provider.

2. Market Risk

Encompassing the credit risk associated with securities and derivatives in the portfolio and asset liquidity risk, as well as interest rate risk, foreign exchange rate risk, equity price risk, and commodity price risk.

A Hedge Fund Manager should employ a consistent framework for measuring the risk of loss for a portfolio (and relevant subcomponents of the portfolio). In order that the Hedge Fund Manager be able to manage the risks that the Hedge Fund faces, the Risk Monitoring Function needs to produce some useful measures and analyses of risk. While the choice of framework or model for measuring risk should be left to each Hedge Fund Manager, the Hedge Fund Manager should be aware of the structural limitations of the model selected and actively manage these limitations, including the impact of any model breakdown.

For example, measuring the degree to which the portfolio is diversified (*e.g.*, the percentages of the portfolio allocated to different asset classes or to different geographical regions) may be useful, but it is important for the Hedge Fund Manager to recognize and understand the correlations between positions. For complex portfolios, many summary measures of market risk do not reflect such correlations.

One model that is intended to provide a summary market risk measure that incorporates correlations between positions is VAR. VAR measures the maximum change in the value of the portfolio that would be expected at a specified confidence level over a specified holding period. For example, if the 95% confidence level, one-day VAR for a portfolio is $500,000, one would expect to gain or lose more than $500,000 in only 5 of every 100 trading days on average. One of the roles of the Risk Monitoring Function is to identify the factors affecting the risk and return of the Hedge Fund's investments, both within individual portfolios and across the entire range of activities of the Hedge Fund Manager. Those factors should be incorporated into the risk monitoring process and, where appropriate, be included in the market risk model. Factors that are commonly incorporated in a market risk model include:

- Prices for equities and/or equity indices;
- Level and shape of the interest rate term structure in relevant currencies;
- Foreign exchange rates;

- Commodity prices;
- Credit spreads;
- Nonlinearities (particularly for instruments with elements of optionality);
- Volatilities; and
- Correlation.

The Risk Monitoring Function may also consider incorporating "asset liquidity" (*i.e.*, the potential exposure to loss attributable to changes in the liquidity of the market in which the asset is traded) as an additional factor. Measures of asset liquidity that may be considered include:

- The number of days that would be required to liquidate and/or neutralize the position in question; and
- The value that would be lost if the asset in question were to be liquidated and/or neutralized completely within such period.

Parameter Selection

In order to calculate a VAR measure, a number of parameters should be input; these parameters describe the positions in the portfolio and the underlying markets. In addition, users of VAR should select across three methodologies that have become standard forms of VAR over the past several years:

- ***Variance/Covariance***. Under this method, which is probably the most widely used VAR methodology, the program draws volatility (variance) and correlation (covariance) information from data histories, for each position in the portfolio, and calculates the volatility estimate under the assumption that the returns for the overall portfolio will assume a normal distribution. It is the least process intensive and perhaps the easiest of the VAR methodologies.
- ***Historical Volatility***. Under this approach, the VAR portfolio actually is repriced each day over the data history, a daily P/L calculation is derived and ranked in ascending order. The risk estimate is then set at the level consistent with the confidence interval selected for the analysis. Historical volatility is very process intensive, but is considered by many to be the most effective form of VAR.
- ***Monte Carlo Simulation***. Under the Monte Carlo approach, the portfolio is repriced across large numbers of random observations that are consistent with the volatility history of the underlying instruments. Like historical VAR, these observations are then ranked in ascending order, and the risk estimate is set at a level consisted with the applicable confidence interval. Historical Monte Carlo VAR is typically only used for very complex portfolios, featuring abundant nonlinearities.

Each method, if applied accurately and in a manner consistent with the risk and capital allocation policies of the Hedge Fund, can be an effective, if imperfect, means of estimating exposure.

In addition to the selection of VAR methodology, for a given portfolio, the parameters most likely to have a significant impact on the VAR value are the time horizon or holding period (the period of time that would be necessary for the portfolio to be liquidated or neutralized), the confidence level (the probability that the change in the value of the portfolio would exceed the VAR), and the variance-covariance data (which reflects the volatility of the individual market factors and the correlation between pairs of factors). These parameters are explained further below.

Time Horizon

The time horizon or holding period used in the VAR calculation is intended to reflect the time period necessary to liquidate (or neutralize) the positions in the portfolio. In practice, if the Hedge Fund has positions in thinly traded or illiquid instruments, it is difficult to determine the correct liquidation/neutralization period for the portfolio. Consequently, good practice is to use standard holding periods (*e.g.*, one day, three days, 5 days, and 10 days in the base-case VAR calculation and then employ stress tests to determine the degree of holding period risk in the portfolio).

Confidence Level

There is no mathematical formula that defines the appropriate confidence level; the appropriate confidence level is determined by the business circumstances of the entity. Different types of businesses should and do use different confidence levels. The appropriate confidence level for a specific Hedge Fund will be a business decision that is determined by the specific circumstances of the Hedge Fund; and senior management of the Hedge Fund Manager should be actively involved in this determination.

Variance-Covariance Data[3]

While the measure of the riskiness of individual market factors (*i.e.*, the variances of the market factors) is important, the question of the degree of correlation (*i.e.*, covariance) between pairs of market factors is critical, because correlation has such a large impact on the VAR calculation. A number of VAR models use historic correlations. However, since historic correlations are unstable (especially during periods of market stress), the Hedge Fund Manager should employ scenario analyses and stress testing (see below) to ascertain the impact of inaccurate correlation assumptions.

Beyond a Single VAR Number

Scenario Analysis, Stress Testing and Backtesting

Hedge Fund Managers should recognize that a single VAR number is not sufficient to capture all risks faced by the Hedge Fund and that successful risk management requires the Risk Monitoring Function to analyze both the sensitivity of the VAR to alternative market conditions and the reliability of the VAR calculations.

Scenario Analysis

By their nature, VAR calculations are based on "typical" market days. Periods of market stress or crisis – the very times of greatest concern – will not be well represented in the data for a typical period; so the resulting VAR number will underestimate the risks of severe markets. To address this limitation, the Hedge Fund Manager should perform scenario analyses regularly, to assess the VAR for the current portfolio in periods of market stress.

In creating scenario analyses, a Hedge Fund Manager should use both historical stress periods (*e.g.*, October 19, 1987 when the equity markets "crashed", the Asian financial crisis of 1997, and the stock market declines after March 2000 (bursting of the "dot-com" bubble)).

Stress Testing

Hedge Fund Managers should stress test the VAR number by changing the parameters of the VAR model. Stress tests permit the Hedge Fund Manager to see what will happen to the VAR number if the actual values of market factors (*i.e.*, prices, rates, volatilities, etc.) differ from the values used as inputs in the base-case VAR calculation.

Among the potential changes in market conditions that should be considered in stress testing are:

- Changes in prices,
- Changes in interest rate term structures, and

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3 Parameter selection is only applicable for Variance/Covariance matrix.

- Changes in correlations between prices.

If the portfolio contains options or instruments with options characteristics, additional changes that should be considered as part of stress testing are:

- Changes in volatilities, and

- Changes in nonlinearities (*e.g.*, convexity or gamma).

Hedge Fund Managers also should consider including the effects of changes in the liquidity of various assets in their stress testing. For example, Hedge Fund Managers could examine the effects of changing the holding period. A horizon of several days may reveal strings of losses (or gains) that, while individually consistent with the one-day predicted distributions, in total add up to a significant deviation from the market risk model's predicted distribution.

Rather than changing the holding period to reflect the illiquidity of securities or derivatives, the Hedge Fund Manager could gauge the impact of illiquidity by inputting changes for the appropriate market risk factors that are reflective of multiple-day market price movements (as opposed to single day changes).

If specific asset liquidity factors are incorporated in the market risk model (see above), these asset liquidity factors can be "stressed" to examine the impact of (1) changes in the value that could be lost if the position in question were to be liquidated and/or neutralized completely during the standard holding period, or (2) changes in the number of days required to liquidate and/or neutralize the position in question.

Of particular concern to Hedge Fund Managers are "breakdowns" in the correlations reflected in current market data. In times of market crisis, the correlations between asset prices or rates can change dramatically and unexpectedly, with the result that positions that were thought to be diversifying – or even hedging – end up compounding risk. While it remains difficult to hedge correlation risk, stress tests to evaluate the impact of correlation changes permit the Hedge Fund Manager to help ensure that, when the Hedge Fund Manager selects the assets to be included in the portfolio, the Hedge Fund is accepting the desired level of correlation risk (and is being compensated for bearing that risk).

Illustrative Risk Measures

Table 2 contains several illustrative VAR measures for each of the nine stylized portfolios introduced earlier:

- Standard VAR – A 95% One-Day VAR is calculated using the historical volatilities for the assets and assuming the correlation between Assets is 0.3.

- Stressed VAR 1 – The 95% One-Day VAR is recalculated increasing the volatility of each asset by 50% (*i.e.*, to 45% for Asset 1, to 37.5% for Asset 2 and to 90% for Asset 3) and increasing the correlation between all assets to 0.9.

- Stressed VAR 2 – The 95% One-Day VAR is recalculated again increasing the volatilities by 50% as above, but decreasing the correlation between assets to zero.

TABLE 2
Markets of Market Risk

	Unlevered Cash versus Futures		Levered Cash versus Futures		Unlevered High Risk	Long/Short Strategy Cash versus Futures		Unlevered Strategy with Matched Book Assets	
	Cash Only	Futures Only	Levered Cash	Futures	High Risk Cash	Long/Short Cash	Long/Short Mixed	Hedged Cash	Hedged Futures
Portfolio	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
Summary Balance Sheet									
Capital	100	100	100	100	100	100	100	100	100
Borrowing (outright or repo)	0	0	30				30		
Investments									
Cash Market Transactions									
Asset 1	80		120			120	120	100, -20	
Asset 2						-60			
Asset 3					80				
Derivatives Market Transactions									
Futures on Asset 1		80		120					100, -20
Futures on Asset 2							-60		
Cash	20	92	10	88	20	10	4	10	88
Futures Margin	0	8	0	12	0	0	6	0	12
Risk Measures									
Standard VAR (asset Correlation = 0.3)	2.50	2.50	3.76	3.76	5.01	3.61	3.61	2.50	2.50
Stressed VAR 1 (Vol+50%; Asset Correlation = .90)	3.76	3.76	5.64	5.64	7.51	3.67	3.67	3.76	3.76
Stressed VAR 2 (Vol +50%; Asset Correlation = 0)	3.76	3.76	5.64	5.64	7.51	6.10	6.10	3.76	3.76
Sharpe Ratio	1.05	1.05	1.05	1.05	1.32	0.69	0.69	1.05	1.05

Table 2 provides confirmation of some general propositions regarding the VAR measures:

- Identical positions have the same VAR regardless of whether they are implemented in the cash market (*e.g.*, Portfolio 1) or the futures market (*e.g.*, Portfolio 2). Identical in this case refers to the fact that the cash and futures positions represent the price risk associated with the same asset and in the same amount. (As discussed below, other risk measures, such as liquidity, are not identical.)

- VAR can be increased via traditional balance sheet leverage or the use of additional derivatives contracts. Portfolios 3 and 4 illustrate the effect of leverage on the first two portfolios.

- VAR can be increased by choosing higher risk assets, regardless of leverage, as illustrated in Portfolio 5.

- A hedge is not always a hedge. The "hedge" established via Portfolios 6 and 7 presumes that Assets 1 and 2 are positively correlated. Under normal conditions (*i.e.*, when correlation equals 0.3 in this example) the tendency of Asset 1 and Asset 2 to move together results in the VAR of Portfolio 6 being similar to the VAR of Portfolio 3 even though the total position size is larger. When the correlation gets more positive (Stressed VAR 1), the hedge is better, and VAR stays relatively unchanged even though overall volatility in the market has increased by 50%. But, when the correlation gets less positive (Stressed VAR 2), the hedge is much less effective and the combined effect of higher volatility and lower correlation results in a significantly larger VAR. As was the case with the earlier portfolios, the use of futures or cash market investments does not change the market risk measure, as evidenced by the identical VAR of Portfolios 6 and 7.

Back Testing

Perhaps even more important than analyzing the sensitivity of the VAR number is "back testing" the VAR to see how it performed. By comparing actual changes in the value of the portfolio to the changes generated by the VAR calculation, the Hedge Fund Manager can gain insight into whether the VAR model is accurately measuring a Hedge Fund's risk.

In back testing, one expects that the portfolio will lose more than the VAR from time to time. For example, a 95% one-day VAR should be exceeded 5 days in every 100 trading days on average. When the actual changes in the value of the portfolio exceed VAR, the Hedge Fund Manager should determine the source of the discrepancy (*i.e.*, whether the VAR measure is flawed or whether this loss is simply one which was expected given the confidence level employed). Other potential sources of deviations include:

- A change in the composition of the portfolio between calculation and observation;

- Pricing models under/overstated obtainable prices;

- A change in the underlying market, including changes in the volatility, correlation, or liquidity of the factors used in the market risk model; and

- Model(s) did not adequately capture sources of risk.

Relating Earnings and Risk

It was noted at the outset that effective risk management requires the Hedge Fund Manager to recognize and understand the risks the Hedge Fund faces. That, in turn, requires the Hedge Fund Manager to understand the various sources of the Hedge Fund's earnings, both the size of the earnings and their volatility.

One way that Hedge Fund Managers can accomplish this attribution is by decomposing the daily value changes by market factors. The objective is to determine if the actual changes were what would have been predicted, given the now known changes in the market factors. If the observed change in the value of the portfolio differs significantly from the change that would be expected, given the composition of the portfolio and the observed changes in the market factors, the differences should be reconciled.

Such a source-of-return and source-of-risk attribution process sets the stage for linking performance measurement with risk measurement. The Sharpe Ratio is widely used by investors to measure a portfolio's risk-adjusted performance over a specific period.[4] The numerator of the Sharpe Ratio is a measure of portfolio return during the period; the denominator is a measure of the risk incurred in achieving the return. (For example, over the past decade the Sharpe Ratio for the S&P 500 has been approximately 1.2.) Investors prefer higher Sharpe Ratios, since a higher Sharpe ratio indicates that the portfolio earned superior returns relative to the level of risk incurred.

There are a number of ways in which return and risk could be calculated. Below is the Sharpe Ratio for an arbitrary portfolio – designated as Portfolio j – calculated using the most common conventions for measuring return and risk. The numerator is the return earned on the portfolio (R_j) in excess of the risk-free rate of return (R_f) (*i.e.*, the interest rate earned on risk-free securities such as U.S. Treasury securities) over the same period. The denominator – the risk incurred – is measured as the standard deviation of the portfolio's daily return (σ_j).

$$(\text{Sharpe Ratio})_j = \frac{R_j - R_f}{\sigma_j}$$

While VAR and the Sharpe Ratio contain some similar information, the two measures are different tools, designed for different purposes. VAR is primarily a risk measurement tool. The Sharpe Ratio is a summary measure, combining both risk and return information. Moreover, while VAR is a risk measure and the denominator of the Sharpe Ratio contains a risk measure, these two risk measures are quite different. The risk measure used in the denominator of the Sharpe Ratio is a historical measure; it characterizes the *actual* volatility of the return over some historical period. In contrast, VAR is intended to be a *prospective* measure of risk.

Funding Liquidity Risk

While other entities face funding liquidity risk, this risk is a more central concern to Hedge Fund Managers than others, because funding liquidity problems can rapidly increase a Hedge Fund's risk of failure. As is described in the following box, a lack of funding liquidity can contribute to a crisis situation for the Hedge Fund.

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4 The Sharpe Ratio is attributed to William F. Sharpe, who described a measure of "return to variability" for use in comparing investment performance.

Liquidity Crisis Cycle

Hedge Fund Managers should be concerned about a confluence of risks (*i.e.*, market or credit risk events affecting illiquid positions that are leveraged). Such a confluence of events could require the Hedge Fund to liquidate positions into a market that cascades in price because of a high volume of liquidation orders. Such a situation could be decomposed into three stages:

1. A loss that acts as the triggering event.

2. A need to liquidate positions in a disorderly manner to raise cash, because of this loss. The liquidation may be required either because the Hedge Fund should post margin with its counterparties or because of redemptions by investors due to the loss.

3. A further drop in the Hedge Fund's net asset value as the market reacts to actions by the Hedge Fund. Obviously, attempts by the Hedge Fund to sell in too great a quantity or too quickly for the market liquidity to bear can cause a further drop in prices, precipitating a further decline in the Hedge Fund's net asset value, and leading in turn to yet a further need to liquidate to satisfy margin calls or redemptions. This downward spiral can be exacerbated if other market participants have information about the Hedge Fund's positions.

The point of no return comes when the effect of liquidation has a greater impact on the value of the remaining Hedge Fund position than the amount of cash raised from the liquidation. If this happens, the Hedge Fund is caught in an accelerating, downward spiral; and eventually it will not be able to satisfy the demands of its creditors or investors. Once the losses move beyond a critical point, it becomes a self-sustaining crisis that feeds off of the need for liquidity, a need imposed by the demands of the Hedge Fund's creditors and investors.

Because of its importance, Hedge Fund Managers should focus significant attention and resources on measuring and managing funding liquidity risk. There exist a range of measures Hedge Fund Managers can use to track funding liquidity risk. Hedge Fund Managers should monitor the liquidity available in the Hedge Fund by tracking its cash position (*i.e.*, cash and short-term securities issued by high-credit-quality entities) and its borrowing capacity (*e.g.*, access to borrowings under margin rules or credit lines).

Beyond measures of available liquidity, Hedge Fund Managers should also monitor measures of relative liquidity. Hedge Fund Managers should relate the measures of liquidity (Cash or Cash + Borrowing Capacity) to the need for that liquidity. The following measures are indicators of a Hedge Fund's potential need for liquidity:

- ***Equity or NAV.*** Generally, a larger Hedge Fund will require greater levels of liquidity. However, a Hedge Fund's need for liquidity during periods of market stress is determined not only by the size of the portfolio but also by the characteristics of the assets it holds (in addition to a Hedge Fund's need to fund redemptions). Consequently, Hedge Fund Managers need to have measures of potential liquidity needs that reflect the riskiness of the portfolio.

- ***Worst Historical Drawdown.*** This indicator provides a measure of risk and of the amount of liquidity the Hedge Fund has required in the past. This measure is, however, a backward-looking measure of risk and may not be indicative of the Hedge Fund's current exposure.

- ***VAR.*** As has been argued earlier, VAR is currently the most widely used prospective measure of market risk. Consequently, tracking the ratio of Cash or Cash + Borrowing Capacity to VAR provides the Hedge Fund Manager with an indication of whether the Hedge Fund's liquidity relative to its need for liquidity is rising or falling.

Illustrative Liquidity Measures

Table 3 contains the results of calculating five of the liquidity measures discussed in this section for each of the nine stylized portfolios.

Available liquidity is measured by cash that is not committed as margin, and by cash plus the "borrowing capacity" of the assets. For the three cash market assets, it is assumed that 50% of the value of a long position can be borrowed (*i.e.*, assume current Regulation T margin requirements if the three assets were equities). For simplicity, short positions in the assets are assumed to have a 50% margin requirement, in effect, allowing 50% of short trades to be used to fund long positions, or for cash.

Several features of funding liquidity risk measurement are evidenced by the stylized portfolios.

- Other things equal, futures (and derivatives in general) require the Hedge Fund Manager to use significantly less cash (at origination) than would an equivalent position established via a cash market transaction. This is evidenced by Portfolios 1 and 2. (However, not reflected in these numbers is the interrelation of market risk, funding liquidity risk and leveraging. While the cash position uses more cash at origination than does the futures position, if the value of the underlying asset were to change dramatically, the resulting margin call on the futures position could have a significant impact on the Hedge Fund's cash position.)

- For the same amount of initial capital, the use of leverage (*e.g.*, Portfolios 3 and 4) both consumes borrowing capacity and increases VAR; so, measures of available liquidity and relative measures indicate that liquidity declines.

- Use of leverage in the cash market decreases available cash faster than the identical strategy implemented with futures. The increase in traditional balance sheet leverage (*i.e.*, use of margin to buy assets) in Portfolio 3 sharply reduces both absolute and relative measures of liquidity since either cash or borrowing capacity is consumed in the process. The identical economic leverage is obtained using futures in Portfolio 4, but the decrease in liquidity is less pronounced. (The caveat about future cash requirements for futures positions that was raised in the first point applies here as well.)

- Use of a relative liquidity measure (*e.g.*, VAR/(Cash +Borrowing Capacity)) captures the impact of investing in higher risk assets while holding the amount invested constant.

Portfolio 5 shows that while absolute liquidity is the same as for Portfolio 1, liquidity relative to VAR has decreased (*i.e.*, VAR is a higher percentage of available cash).

- Portfolios 6 and 7 illustrate once again that identical market risk portfolios present different funding liquidity risk profiles. Portfolio 7, which uses futures to short Asset 2 while borrowing against Asset 1 is less liquid than Portfolio 6 which shorts Asset 2 in the cash market. The difference is simply that short positions in futures (and derivatives in general) do not generate cash.

TABLE 3
Measures of Liquidity

	Unlevered Cash versus Futures		Levered Cash versus Futures		Unlevered High Risk	Long/Short Strategy Cash versus Futures		Unlevered Strategy with Matched Book Assets	
	Cash Only	Futures Only	Levered Cash	Futures	High Risk Cash	Long/Short Cash	Long/Short Mixed	Hedged Cash	Hedged Futures
Portfolio	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
Summary Balance Sheet									
Capital	100	100	100	100	100	100	100	100	100
Borrowing (outright or repo)	0	0	30				30		
Investments									
Cash Market Transactions									
Asset 1	80		120			120	120	100, -20	
Asset 2						-60			
Asset 3					80				
Derivatives Market Transactions									
Futures on Asset 1		80		120					100, -20
Futures on Asset 2							-60		
Cash	20	92	10	88	20	10	4	10	88
Futures Margin	0	8	0	12	0	0	6	0	12
Standard VAR (asset Correlation = 0.3)	2.50	2.50	3.76	3.76	5.01	3.61	3.61	2.50	2.50
Liquidity Measures									
Measures of Available Liquidity									
Cash	20	92	10	88	20	10	4	10	88
Cash + Borrowing Capacity	60	92	40	88	60	70	34	60	88
Relative Measures									
Cash/Equity	20%	92%	10%	88%	20%	10%	4%	10%	88%
(Cash + Borrowing Capacity)/Equity	60%	92%	40%	88%	60%	70%	34%	60%	88%
VAR/(Cash + Borrowing Capacity)	4.2%	2.7%	9.4%	4.3%	8.3%	9.0%	10.6%	4.2%	2.8%

Additional insight about funding liquidity can be gained by looking at the variability in the relative liquidity measure over time. A relative liquidity measure that varies over time is evidence consistent with "effective liquidity" (*i.e.*, the assets are liquid and the manager is willing to take advantage of that liquidity).

Beyond simply monitoring liquidity, Hedge Fund Managers should manage liquidity in several dimensions. Foremost is the use of the Hedge Fund Manager's experience and judgment to maintain liquidity levels that are adequate given the risk of loss and/or the likelihood of investor redemptions. Also, Hedge Fund Managers should strengthen lines of communication with their credit providers, providing them with summary measures of the Hedge Fund's risk and liquidity consistent with the nature of the relationship. Hedge Fund Managers should actively manage (or monitor) the cash in margin accounts. Similarly, Managers should negotiate haircuts, the speed at which prime brokers can dictate an increase in margin rates and two-way collateral agreements, where appropriate, to further reduce the likelihood of running out of liquidity.

3. Leverage

As the Recommendations made clear, leverage is not a concept that can be uniquely defined, nor is it an independently useful measure of risk. Nevertheless, leverage is important to Hedge Fund Managers because of the impact it can have on the three major quantifiable sources of risk: market risk, credit risk, and liquidity risk.

That leverage is not a uniquely defined concept is evidenced by the variety of "leverage" measures used in banking and finance. These measures, which are described in more detail below, may be financial statement-based (also referred to as "asset-based"), risk-based, or investor-based. The financial statement-based measures attempt to capture the traditional notion of leverage as "investing borrowed funds". Using borrowed money (or its equivalent) enables an investor to increase the assets controlled for a given level of equity capital. Financial statement-based measures of leverage relate some measure of asset value to equity. Both returns and risk, relative to equity, are magnified through the use of traditional, financial statement-based leverage. The risk-based measures of leverage capture another aspect associated with leverage, namely, the risk of insolvency due to changes in the value of the portfolio. The risk-based measures relate a measure of a Hedge Fund's market risk to its equity (or liquidity). Although useful in this capacity, as described below, risk-based leverage measures do not convey any information about the role borrowed money plays in the risk of insolvency. Investor-based leverage measures the extent to which dollars entering a hedge fund are themselves levered.

No single measure captures all of the elements that market participants, regulators, or market observers attribute to the concept of leverage. Indeed, examples will be presented in which a risk-reducing transaction increases some leverage measures while decreasing others. This leads to the observation that leverage is not an independently useful concept, but should be evaluated in the context of the quantifiable exposures of market, credit and liquidity.

While continuing to track and use financial statement-based measures of leverage, Hedge Fund Managers should focus their attention on measures of leverage that relate the riskiness of the portfolio to the capacity of the Hedge Fund to absorb that risk (*i.e.*, the measures should include elements of market risk (including the credit risk associated with assets in the portfolio) and funding liquidity risk). Hedge Fund Managers should focus on such measures because traditional financial statement-based leverage by itself does not necessarily convey risk of insolvency. To say that one Hedge Fund is levered 2-to-1 while another is not levered does not necessarily mean that the levered Hedge Fund is more risky or more likely to encounter liquidity problems. If the levered Hedge Fund is invested in government securities while the Hedge Fund that is not levered is invested in equities, financial statement-based leverage would lead to erroneous conclusions about the riskiness of the two Funds. In this sense, financial statement-based measures of leverage are arguably deficient since they convey the least information about the nature and risk of the assets in a portfolio.

Risk-based measures (see below) present a measure of market risk (usually VAR) relative to a measure of the resources available to absorb risk (cash or equity). However, in doing so, risk-based measures effectively condense several dimensions of risk into a single number. The result of this compression is that some of the detail is lost; the specific effect of leverage is intertwined with dimensions of market, credit and liquidity risk. To illustrate, consider two Funds with identical risk-based leverage. One Hedge Fund employs 2-to-1 accounting leverage while investing in "low risk" strategies (*e.g.*, long/short strategies) using borrowed funds, while the other Hedge Fund uses no accounting leverage but employs "high risk" strategies (*e.g.*, macro directional) and large cash reserves. One is "high risk" and "high cash" and the other is "low risk" and "low cash/high borrowing," yet each achieves the same risk-based leverage. This comparison highlights the second reason why leverage measures are not independently useful: more comprehensive measures blend the effect of multiple risk dimensions. To assess the contribution of leverage requires additional information.

Financial Statement-Based Leverage Measures

There exist a number of financial statement-based measures of leverage. In addition to the pragmatic recognition that counterparties and credit providers routinely request these measures, a more compelling rationale for calculating these measures is that they can contribute to an understanding of leverage measures that incorporate risk. This is particularly true when accounting and risk-based leverage are tracked over time.

Certain accounting measures can also provide information regarding how much direct or indirect credit in the form of repurchase agreements, short sales, or derivatives are employed by a Hedge Fund. However, it should be recognized that even these financial statement-based measures have serious weaknesses, discussed below, particularly as stand-alone measures of leverage.

The most widely used and generally accepted financial statement-based measures of leverage are those that relate items from a Hedge Fund's balance sheet:

- **"Gross Balance Sheet Assets to Equity": On-Balance-Sheet Assets / Equity**

  This straightforward measure is easily calculated from published financial statements; however, it fails to incorporate two important elements of a Hedge Fund's effective leverage.

  - The risk reducing effect of on-balance-sheet hedges is not recognized. Adding a hedge to the balance sheet increases assets and thereby increases this leverage measure, even though the transaction may substantially offset the risk of another asset.
  - The full notional amount of derivative instruments is not required to be recorded on the balance sheet. To the extent the full notional amount is not recorded, this measure may understate the Hedge Fund's true economic risk.

- **"Net Balance Sheet Assets to Equity": (On-Balance-Sheet Assets – Matched Book Assets) / Equity**

  While this measure requires more detailed information about the positions in a Hedge Fund's portfolio, it does provide a partial solution to the shortcomings of the Gross Balance Sheet Assets to Equity measure by including offsets and direct hedges as reflected in matched book assets. However, important elements of the Hedge Fund's effective leverage are still not incorporated:

- This measure does not reflect portfolio correlation or less direct hedges that fall outside the definition of matched book assets; and
- This measure does not incorporate off-balance-sheet instruments.

Other financial statement-based measures have been proposed to capture off-balance-sheet transactions (*e.g.*, forward contracts, swaps and other derivatives). For example:

Risk-Based Leverage Measures

Risk-based leverage measures reflect the relation between the riskiness of a Hedge Fund's portfolio and the capacity of the Hedge Fund to absorb the impact of that risk. While not the only measure that could be used, the Hedge Fund's equity provides a useful measure of "capacity". There are, however, different measures of market risk that could be used as the "riskiness" measure:

- **(Volatility in Value of Portfolio) / Equity**

  This is a measure of actual performance volatility over a given horizon relative to equity. While useful, it is subject to criticism. Since it is a retrospective measure, it is less useful if the composition of the portfolio changes or if future market conditions are not like historical conditions. Moreover, it does not isolate the effect of financing on the risk of the Hedge Fund since it includes financed assets.

- **VAR / Equity**

  This measure gives a picture of the Hedge Fund's capacity to absorb "typical" market movements. The criticism of such a measure is that it does not reflect the risk of the Hedge Fund's portfolio in extreme markets.

- **(Scenario-Derived Market Risk Measure) / Equity**

  To assess the impact of extreme events, the leverage measure could be calculated using a market risk measure derived from analysis of extreme event scenarios (or stress tests). This measure gives senior management information about the Hedge Fund's ability to absorb extreme market events.

Illustrative Leverage Measures

Table 4 contains the results of calculating all of the financial statement-based leverage measures and two of the risk-based leverage measures discussed in this section. Note that "Net balance sheet leverage" and "Net accounting leverage" are only relevant for Portfolios 8 and 9, because these portfolios are the only ones in which the long and short positions can be netted under accounting rules.

Leverage can be interpreted in several ways: as the use of borrowed money to fund larger asset positions than would otherwise be achievable, and as the use of economic leverage to increase effect of a given change in market prices on the value of Hedge Fund's equity.

The illustrative portfolios demonstrate several common features of financial statement-based and risk-based leverage.

- The most common leverage measure, Gross Balance Sheet Leverage (or assets/equity) is not indicative of the types of assets employed or the amount of risk assumed. In the illustration, Gross Balance Sheet Leverage is the same in Portfolios 1, 2, 4, 5 and 9 even though the risk and investment strategy differ significantly across portfolios. Similarly, while the amount of risk assumed in Portfolio 8 is identical to the risk assumed in Portfolio 1, the levels of Gross Balance Sheet Leverage differ.

- The purpose of the Net Balance Sheet Leverage measure is to adjust for matched book assets. Comparison of Net Balance Sheet Leverage with Gross Balance Sheet Leverage for Portfolio 8 shows an instance where this occurs.

- Gross Accounting Leverage, which sums assets, liabilities, and futures is not informative about investment strategy (cash versus futures) or the market risk of the portfolio. Note that the riskiest portfolio as measured by VAR, Portfolio 5, has the lowest accounting leverage. Similarly, Portfolios 1 and 2 are low risk, yet Gross Accounting Leverage varies by 80% between them.

- That Net Accounting Leverage adjusts for matched book assets and derivatives that hedge on-balance-sheet positions is seen by comparing Gross Accounting Leverage with Net Accounting Leverage for Portfolios 8 and 9. Note that this measure does not capture the use of a futures position to offset an identical futures position (*i.e.*, the matched futures in Portfolio 9). The risk-based leverage measures come closer to capturing the nature of the risks as reflected in the specific strategies. (Note Portfolios 1, 2, 8 and 9.) However, they too miss certain aspects of the risk picture. For example, Portfolios 3 and 4 have the same VAR/Equity, but the cash market strategy employed in Portfolio 3 uses more cash and borrowing capacity, and is therefore riskier from a liquidity standpoint (VAR is 9.4% of liquidity in Portfolio 3 compared to only 4.3% of liquidity in Portfolio 4).

- Stress and scenario analysis are essential elements of liquidity and leverage analyses. The long/short strategy employed in Portfolios 6 and 7 is similar in risk-based leverage to Portfolios 3 and 4 until one looks at the stress scenarios. Because of the reliance on correlation, the leverage of Portfolios 6 and 7 is potentially much larger in a period of market stress.

TABLE 4
Measures of Leverage

	Unlevered Cash versus Futures		Levered Cash versus Futures		Unlevered High Risk	Long/Short Strategy Cash versus Futures		Unlevered Strategy with Matched Book Assets	
	Cash Only	Futures Only	Levered Cash	Futures	High Risk Cash	Long/Short Cash	Long/Short Mixed	Hedged Cash	Hedged Futures
Portfolio	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	9
Summary Balance Sheet									
Capital	100	100	100	100	100	100	100	100	100
Borrowing (outright or repo)	0	0	30				30		
Investments									
Cash Market Transactions									
Asset 1	80		120			120	120	100 , -20	
Asset 2						-60			
Asset 3					80				
Derivatives Market Transactions									
Futures on Asset 1		80		120					100 , -20
Futures on Asset 2							-60		
Cash	20	92	10	88	20	10	4	10	88
Futures Margin	0	8	0	12	0	0	6	0	12
Standard VAR (asset Correlation =0.3)	2.50	2.50	3.76	3.76	5.01	3.61	3.61	2.50	2.50
Leverage Measures									
Accounting-Based Measures									
Gross Balance Sheet Leverage	1	1	1.3	1	1	1.6	1.3	1.2	1
Net Balance Sheet Leverage								1	1
Gross Accounting Leverage	1	1.8	1.6	2.2	1	2.2	1	1.4	2.2
Net Accounting Leverage								1.2	2.2
Risk-Based Measures									
VAR/Capital	2.50%	2.50%	3.76%	3.76%	5.01%	3.61%	3.61%	2.50%	2.50%
Stress 1 VAR/Capital	3.76%	3.76%	5.64%	5.64%	7.51%	3.67%	3.67%	3.76%	3.76%
Stress 2 VAR/Capital	3.76%	3.76%	5.64%	5.64%	7.51%	6.10%	6.10%	3.76%	3.76%

While the preceding leverage measures are the ones most commonly used by Hedge Fund Managers, other measures may be used to analyze leverage. Indeed, because of the interrelation between market risk, funding liquidity risk and leverage, measures of funding liquidity risk described in Section 4 – particularly Cash + Borrowing Capacity relative to VAR – also provide the Hedge Fund Manager with insights about a Hedge Fund's leverage.

Dynamic Measures of Leverage

A crucial factor influencing a Hedge Fund's ability to absorb the impact of extreme market events is the degree to which a Hedge Fund can modify its risk-based leverage, especially during periods of market stress.

Treating equity as constant, there are two ways a Hedge Fund Manager could reduce risk-based leverage:

1. If a Hedge Fund Manager wishes to continue an existing investment strategy, risk-based leverage could be reduced by reducing traditional leverage resulting from either on- or off-balance-sheet transactions; and

2. A Hedge Fund Manager could reduce risk-based leverage by reducing the level of risk that is being accepted (*e.g.*, by changing strategy or the types of assets being held in the portfolio). To track the degree to which the Hedge Fund is able to modify its risk-based

leverage, the Hedge Fund Manager should track variations in the Hedge Fund's market risk measure (*e.g.*, VAR) over time.

The following two measures could be used to track the relationship over time between measures of market risk and actions taken by the Hedge Fund Manager to adjust leverage. Both of these measures consider a short time interval (1 day, 2 days,…, 1 week); and, both assume that equity is constant.

- **Changes in Portfolio Market Risk**

  A decline in a portfolio's market risk measure (e.g., VAR) in a period following an increase in that market risk measure in the preceding period could be evidence of the Hedge Fund Manager's ability to de-lever the portfolio during a period of market stress. (The market risk measure could be VAR or the observed volatility of the value of the portfolio during the relevant period.)

- **Relationship between a Change in Market Risk and a Subsequent Change in Cash + Borrowing Capacity**

  All other things equal, if a Hedge Fund Manager is able to reduce the portfolio's financial statement-based leverage, the result would be an increase in cash or in borrowing capacity. Therefore, an increase in Cash + Borrowing Capacity in a period following an increase in the market risk measure for the portfolio (e.g., VAR) could be evidence of the Hedge Fund Manager's reacting to market stress by reducing leverage.

4. Counterparty Credit Risk

Hedge Fund Managers enter into transactions with a variety of counterparties including banks, securities firms, exchanges, and other financial institutions. The risk of loss to the Hedge Fund as a result of the failure of a counterparty to perform as expected constitutes counterparty credit risk.

Credit risk is present to some extent in almost any dealing with a third party, including the settlement of securities and derivatives transactions, repurchase agreements, collateral arrangements, and margin accounts. It is also present in open derivatives positions where the exposure of one counterparty to another will change over the life of the contract as the contract's value fluctuates. Hedge Fund Managers should be aware of, and track, concentrations of credit risk with particular counterparties, and where applicable, different regions of the world.

One of the factors that should be considered in determining how willing a Hedge Fund Manager should be to enter into a transaction with a specific counterparty is the loss that its Hedge Fund would suffer were the counterparty to default. That, in turn, depends on the magnitude of the Hedge Fund's exposure to the counterparty and the likelihood of default (*i.e.*, the counterparty's creditworthiness).

An assessment of exposure to a particular counterparty should include analysis of the following elements of exposure:

- ***Current replacement cost.*** The amount the Hedge Fund would lose if its counterparty were to become insolvent immediately and the Hedge Fund Manager had to replace the contract in the market.

- ***Potential exposure.*** A probabilistic assessment of the additional exposure that could result if the counterparty does not default immediately but instead defaults at some date in the future. Potential exposure is particularly applicable to derivatives transactions where exposure is reciprocal and likely to change substantially before the contract expires.

- ***The probability of loss.*** The likelihood of a default by the counterparty over the relevant time horizon. This is a function of the counterparty's current credit quality, the length of the transaction, and possibly the nature of the transaction itself.

- ***Risk mitigation and documentation.*** The extent to which collateral, netting provisions or other credit enhancement reduces the magnitude of the exposure to a counterparty. Hedge Fund Managers can greatly reduce their credit exposure to counterparties by negotiating bilateral netting and collateral provisions in their documentation and establishing document management processes to ensure transactions are documented consistently and in a timely manner.

APPENDIX II

U.S. REGULATORY FILINGS BY HEDGE FUND MANAGERS

Listed below are regulatory filings (excluding tax-related, broker-dealer and state "blue sky" filings) that Hedge Fund Managers may be required to file in the United States, organized by particular regulatory agency, depending on either their trading activity or their status as a regulated entity. The filings made to particular regulators by individual Hedge Fund Managers will vary depending on the type and volume of trading in which they engage, their business model and the jurisdictions in which they operate. For example, like other market participants and institutional investors, Hedge Fund Managers are required to make certain regulatory filings in the U.S. if the size of the positions they hold in certain markets reaches "reportable" levels. In addition, some Hedge Fund Managers are regulated entities in the U.S. or are otherwise subject to a regulatory regime, and, like other similarly situated entities, are required to make certain filings in that capacity. This appendix lists filings required in the U.S. where the above circumstances apply to a Hedge Fund Manager. MFA notes that this appendix includes the requirement to file Form ADV with U.S. Securities and Exchange Commission under the Advisers Act, but does not address the requirements applicable to registered investment advisers pursuant to filing that form. Hedge Fund Managers may also be subject to regulatory reporting and filing requirements in the foreign jurisdictions in which they conduct their business; however, this document does not address these types of filings.

Federal Reserve

Treasury Securities Position and Foreign Exchange Transaction Reporting

1. *Large Position Reporting* — Report of positions in specific Treasury security issues that exceed the large position threshold specified by the U.S. Treasury Department (minimum $2 billion).

   Reports are filed in response to notices issued by the U.S. Department of the Treasury if such threshold is met.

   Reports are filed with the Federal Reserve Bank of New York and are not public.

2. *Form FC-1* — Report of weekly, consolidated data on the foreign exchange contracts and positions of major market participants.

   Reports to be filed throughout the calendar year by each foreign exchange market participant that had more than $50 billion equivalent in foreign exchange contracts on the last business day of any calendar quarter during the previous year.

   The report is filed with the appropriate Federal Reserve Bank acting as agent for the U.S. Department of the Treasury and is confidential.

3. *Form FC-2* — Report of monthly, consolidated data on the foreign exchange contracts and foreign currency denominated assets and liabilities of major market participants.

Reports to be filed throughout the calendar year by each foreign exchange market participant that had more than $50 billion equivalent in foreign exchange contracts on the last business day of any calendar quarter during the previous year.

The report is filed with the appropriate Federal Reserve Bank acting as agent for the U.S. Department of the Treasury and is confidential.

4. *Form FC-3* — Report of quarterly, consolidated data on the foreign exchange contracts and foreign currency denominated assets and liabilities of major market participants.

Reports to be filed throughout the calendar year by each foreign exchange market participant which had more than $5 billion equivalent in foreign exchange contracts on the last business day of any calendar quarter during the previous year and which does not file Form FC-2.

The report is filed with the appropriate Federal Reserve Bank acting as agent for the U.S. Department of the Treasury and is confidential.

Treasury Auction Filings

5. *Treasury Auction* — Treasury security reports filed as necessary. Confirmations must be filed by any customer who is awarded a par amount of $500 million or more in U.S. government securities in a Treasury auction. The confirmation must include its reportable net long position, if any.

The confirmation is filed with the Federal Reserve Bank to which the bid was submitted and is not public.

Treasury International Capital Forms

6. *Forms CQ-1 and CQ-2* — Forms filed by U.S. persons who have claims on, or financial liabilities to, foreigners, have balances on deposit with foreign banks (in the U.S. or abroad) or otherwise engage in transactions in securities or other financial assets with foreigners. Forms CQ-1 ("Financial Liabilities to, and Claims on, Foreigner Residents") and CQ-2 ("Commercial Liabilities to, and Claims on, Foreigner Residents") are quarterly reports, which collect data on financial and commercial liabilities to, and claims on, unaffiliated foreigners held by non-banking enterprises in the United States, which must be filed when the consolidated total of such liabilities is $25 million or more

during that period.

The forms are filed with the Federal Reserve Bank of New York and are non-public except for aggregate information.

7. *Form S* — Form filed by any U.S. person who purchases or sells $2 million or more of long-term marketable domestic and foreign securities in a month in direct transactions with foreign persons.

The form is filed with the Federal Reserve Bank of New York and is non-public except as to aggregate information**.**

Securities and Exchange Commission ("SEC")

Sale of Securities by an Issuer Exempt from Registration under Reg. D or 4(6)

8. *Form D* — Notice of sale filed after securities, such as interests in a private hedge fund, are sold in reliance on a Regulation D private placement exemption or a Section 4(6) exemption from the registration provisions of the 1933 Act. The form is filed with the SEC and relevant states and is publicly available.

Secondary Sale of Restricted and Control Securities Under Rule 144

9. *Form 144* — Form filed as notice of the proposed sale of restricted securities or securities held by an affiliate of the issuer in reliance on Rule 144 when the amount to be sold during any three month period exceeds 500 shares or units or has an aggregate sales price in excess of $10,000. The form is filed with the SEC and the principal national securities exchange, if any, on which such security is traded and is publicly available.

Ownership of Equity Securities Publicly Traded in the United States

10. *Schedule 13D* — Disclosure report for any investor, including a hedge fund and its fund manager, who is considered beneficially to own more than 5% of a class of equity securities publicly traded in the U.S. The report identifies the source and amount of the funds used for the acquisition and the purpose of the acquisition.

This reporting requirement is triggered by direct or indirect acquisition of more than 5% of beneficial ownership of a class of equity securities publicly traded in the U.S. Amendments must be filed promptly for material ownership changes. Some investors may instead report on short-form Schedule 13G if they are eligible. See Item 11. Schedule 13G below.

The report is filed with the SEC and is publicly available.

11. *Schedule 13G* Short-form disclosure report for any passive investor, including a hedge fund and its fund manager, who would otherwise have to file a Schedule 13D but who owns less than 20% of the subject securities (or is in certain U.S.-regulated investment businesses) and has not been purchased for the purpose of influencing control.

This reporting requirement is triggered by direct or indirect acquisition of beneficial ownership of more than 5% of a class of equity securities publicly traded in the U.S. Amendments must be filed annually if there are any changes, and either monthly (for U.S.-regulated investment businesses) or promptly (for other passive investors) if ownership changes by more than 5% of the class.

The report is filed with the SEC and is publicly available.

12. *Forms 3, 4 and 5* Every director, officer or owner of more than 10% of a class of equity securities of a domestic public company must file a statement of ownership. The initial filing is on Form 3 and changes are reported on Form 4. The Annual Statement of beneficial ownership of securities is on Form 5. The statements contain information on the reporting person's relationship to the company and on purchases and sales of the equity securities.

Form 3 reporting is triggered by acquisition of more than 10% of the equity securities of a domestic public company, the reporting person becoming a director or officer, or the equity securities becoming publicly traded, as the case may be. Form 4 reporting is triggered by any open market purchase, sale, or an exercise of options of those reporting under Form 3. Form 5 reporting is required annually for those insiders who have had exempt transactions and have not reported them previously on a Form 4.

The statements are filed with the SEC and are publicly available.

Registered and Unregistered Institutional Investment Managers

13. *Form 13F* Quarterly position report for registered and unregistered institutional investment managers (*i.e.*, any person, other than a natural person, investing in or buying and selling securities for its own account, and any person exercising investment discretion with respect to the account of any other person) with investment discretion over $100 million or more in equity securities publicly traded in the U.S. Reports contain position information about the equity securities under the discretion of the fund manager, and the type of voting

authority exercised by the fund manager.

The reporting requirement is triggered by an institutional investment manager holding equity securities having an aggregate fair market value of at least $100 million on the last trading day of a calendar year and requires a report as of the end of that year and each of the next three quarters.

The reports are filed with the SEC and are publicly available.

Material Associated Persons of Registered Broker-Dealers

14. *Form 17-H*

Material Associated Persons (MAP) reports, filed by registered broker-dealers. Some Hedge Fund Managers are affiliated with registered broker-dealers. MAPs generally include material affiliates and parents and may therefore include an affiliated Hedge Fund Manager or the related hedge fund. Broker-dealers must report (1) organizational chart of the broker-dealer, (2) risk management policies of the broker-dealer, (3) material legal proceedings and (4) additional financial information including aggregate positions, borrowing and off-balance sheet risk for each MAP.

The reporting requirement is triggered by status as broker or dealer registered under Section 15 of the Exchange Act.

This report is filed with the SEC quarterly and cumulatively at year-end and is not public.

There are also a variety of filings with the SEC and the securities self-regulatory organizations that must be made by registered broker-dealers and their employees who are associated persons.

Investment Adviser Registration Under the Advisers Act

15. *Form ADV* — Starting on February 1, 2006, Hedge Fund Managers that have at least 15 "clients," as defined under Investment Advisers Act Rule 203(b)(3)-2, must file a Form ADV. This Form is divided into two parts. The information submitted in Part I is filed electronically with the National Association of Securities Dealers Investment Adviser Registration Depository ("IARD") and includes information about the investment adviser's education, business, the persons who own the adviser and whether they have been sanctioned for violating securities or other laws. The information in Part II is geared primarily toward the adviser's clients. Part II contains information relating to the business practices, fees, investment strategies and conflicts of interest the investment adviser may have with its clients. Part II is not submitted to the SEC but is deemed to be filed so long as a copy is maintained in the adviser's files and is subject to review by the SEC. Part II is required to be updated annually, within 90 days of the adviser's fiscal year end, and whenever it becomes materially inaccurate.

Commodity Futures Trading Commission ("CFTC") and National Futures Association ("NFA")

Commodity Trading Advisors ("CTAs") and Commodity Pool Operators ("CPOs")

16. *Commodity Pool Operator and Commodity Trading Advisor Registration; Available Exemptions* — An individual or entity that operates or solicits funds for a commodity pool, which would include a Hedge Fund Manager for a Hedge Fund that trades futures or options on futures, may be required to register as a Commodity Pool Operator, unless it qualifies for an exemption from registration. An exemption from registration is available if the pool is (i) sold only to accredited investors, "knowledgeable employees" or certain qualified eligible persons and (ii) engaged in limited trading of commodity interests (as measured by certain portfolio tests) (Rule 4.13(a)(3)). There is also an exemption from registration for operators of pools that admit only highly sophisticated participants which include (i) natural persons who are qualified purchasers, knowledgeable employees or non-U.S. persons and (ii) entities that are qualified eligible persons or accredited investors (Rule 4.13(a)(4)).

An individual or entity that, for compensation or profit, advises others (directly or indirectly) as to the value of or advisability of buying or selling futures contracts or options on futures generally must register as a Commodity Trading Advisor unless it qualifies for the statutory exemption in Section 4m(1) of the Commodity

Exchange Act or the exemption provided in Rule 4.14(a)(8). Providing advice indirectly includes having the authority to allocate the assets of a fund or account to another CTA to trade. A CTA may avail itself of the § 4m(1) exemption if the CTA has provided futures trading advice to 15 or fewer persons (legal organizations being deemed a single person) in the past 12 months and does not generally hold itself out to the public as a CTA. Rule 4.14(a)(8) permits a CTA to claim exemption from registration if its futures trading advice is incidental to its securities advice and is given only to certain limited categories of clients, including pools operated under Rule 4.13(a)(3) or 4.13(a)(4). These exemptions are available to Hedge Fund Managers, whether or not registered with the SEC or a state authority.

The documents required for registration as a Commodity Pool Operator or Commodity Trading Advisor are: a completed Form 7-R (which provides CPO or CTA information), a completed Form 8-R (which provides biographical data) and fingerprint card, for each principal (defined to include executive officers, directors and 10% owners), branch office manager and associated person (defined to include persons soliciting fund interests or accounts or supervising persons so engaged), and proof of passage of the "Series 3" exam for each associated person and proof of passage of the "Series 3" and futures branch office manager exams for each branch office manager.

A person seeking to rely on either the Rule 4.13(a)(3) or 4.13(a)(4) CPO registration exemption must furnish to each prospective participant in the relevant pool: (i) a statement that the person is exempt from registration with the CFTC as a CPO and that, unlike a registered CPO, it is not required to deliver a disclosure document and a certified annual report to participants in the pool; and (ii) a description of the criteria pursuant to which it qualifies for the exemption from registration. A person seeking to rely on any of the CPO registration exemptions must file with NFA a notice claiming the relevant exemption and providing certain information specified in the relevant Rule. These disclosures and filings must be made no later than the time at which a subscription agreement for the relevant pool is delivered to a prospective participant in such pool.

Rule 4.13 requires that a person that has claimed exemption from CPO registration thereunder must: (i) keep all books and records prepared in connection with its activities as a CPO for five years from the date of preparation (and maintain such books in a readily accessible place for the first two years of such period); and (ii) ensure that annual reports to pool participants (if provided) are prepared in accordance with generally accepted accounting principles consistently applied (and, if certified, certified in accordance with Rule 1.16).

A person relying on the Rule 4.14(a)(8) exemption from CTA registration must keep all books and records prepared in connection with its activities as a CTA for five years from the date of preparation (and maintain such books in a readily accessible place for the first two years of such period). There are also additional requirements with respect to the notice that a CTA must file with NFA to claim its relief.

Applications for registration are filed with and approved by NFA under authority granted to it by the CFTC and the registration documents are generally public except for fingerprint cards, although confidentiality may be requested for certain information relating to the principals.

17. *Form 3-R* — Form used to report any changes to information contained in the basic registration Form 7-R. The requirement to file this form is triggered by changes in the information provided in Form 7-R. The form is filed with NFA and is public, though confidentiality may be requested for certain information relating to principals.

18. *Form 8-T Associated Person Termination* — Form that must be filed within 20 days of the termination of an Associated Person, principal or branch manager. The form is filed with the NFA and is generally public.

19. *Annual Report* — Annual report of a pool must be filed pursuant to Reg. § 4.22(c) by that fund's CPO (unless the fund is exempt under § 4.7 as described below). The Annual Report must contain certain information, such as actual performance information and fees, and must be distributed to each participant in the fund.

The annual report must be filed by a registered CPO with NFA within 90 days of the fund's fiscal year-end and is generally publicly available; however, the CFTC is prohibited from disclosing information that would separately disclose the business transactions or market positions of any person or trade secrets or names of any investors.

20. *CPO / CTA Questionnaire* — Annual compliance questionnaire concerning its business activities for registered CPOs or CTAs. The questionnaire is filed electronically with the NFA and is not public.

21. *NFA Self-Audits* — In order to satisfy their continuing supervisory responsibilities, NFA members must review their operations on an annual basis using a

self-examination checklist. The checklist focuses on a member's regulatory responsibilities and solicits information on whether the member's internal procedures are adequate for meeting those responsibilities.

Registered CPOs and CTAs as members of NFA are required to conduct such self-audit annually. A written attestation affirming completion of the self-audit must be signed and dated by supervisory personnel. The attestation must be retained by the member for five years and provided to NFA upon request.

22. *Certain Claims for Exemption for CPOs and CTAs*

Filings must be made pursuant to Reg. § 4.12(b)(3) (notice of claim for exemption from certain requirements by a CPO that complies with the Securities Act and manages a fund with limited trading in commodity futures and options) and Reg. § 4.7(d) (notice of claim for exemption by a CPO or CTA with "qualified eligible persons" as investors in order to claim certain exemptions). Reg. § 4.7 provides exemptions for qualifying CPOs and CTAs from most disclosure, recordkeeping and reporting requirements applicable to CPOs and CTAs.

Reg. § 4.5 provides an exclusion from the definition of the term CPO for certain qualifying persons. Any person who desires to claim the exclusion provided by § 4.5 must file a notice of eligibility with NFA.

Reg. § 4.6 provides an exclusion for certain persons from the definition of the term CTA. Any person who has claimed an exclusion under this § 4.6 must submit to such special calls as the Commission may make to require the person to demonstrate compliance with the provisions of this Section.

These statements are filed with the CFTC and NFA and are public.

23. *Disclosure Document*

CPOs and CTAs are generally required to prepare detailed disclosure documents containing specified information. Such documents are filed with NFA and provided to investors but are not publicly available.

CPOs and CTAs operating under Reg. § 4.7, however, are exempt from the disclosure document requirement and are required only to provide all material disclosures (and include specified legends on their materials). In addition, under the exemption provided in Reg. § 4.8, funds (which would otherwise be treated as commodity pools) with exemptions under Reg. § 4.12(b) (compliance with the requirements of the Securities Act and certain limits on the trading of commodity futures and options) or which sell interests solely to "accredited investors" and rely on the safe harbor provisions of Rules 505 or 506 of Regulation D under the Securities Act may begin soliciting, accepting and receiving money upon providing the CFTC and the participants with disclosure documents for the fund, which requirement may be satisfied by a private placement memorandum.

24. *Year-End Financial Reports for § 4.7 Funds*	Annual reports for § 4.7 funds (*i.e.*, funds that are limited to qualified eligible persons and are exempt from the normal disclosure requirements applicable to commodity pools) must contain a Statement of Financial Condition, a Statement of Income (Loss), appropriate footnote disclosure and other material information, as well as a legend as to any claim made for exemption. The Annual Report must be presented and computed in accordance with GAAP consistently applied and, if it is certified by an independent public accountant, it must be certified in accordance with Rule 1.16. The annual report is filed with NFA and distributed to each investor, and the report is not public.

Position Reports

25. *Form 40*	"Statement of Reporting Trader" for persons who own or control reportable positions in futures. A hedge fund and/or Hedge Fund Manager will be required to file a Form 40 upon special call by the CFTC or its designee if the fund or manager holds positions equal to or in excess of specified levels. The form generally must be filed within ten business days after the CFTC makes the call. Such specified levels are set separately for each type of contract. For example, the reportable level for S&P 500 futures is 1,000 contracts. The Form 40 requires the disclosure of information about ownership and control of futures and option positions held by the reporting trader as well as the trader's use of the markets for hedging. Hedging exemptions from speculative position limits must be reported. The CFTC often issues a special call for a Form 40 after receiving a Form 102 (described below) with respect to a particular account. The form is filed with the CFTC and is not publicly available.
26. *Form 102*	Form filed by clearing members, futures commission merchants ("FCMs"), and foreign brokers, which identifies persons, including Hedge Funds, having financial interest in, or trading control of, special accounts in futures and options. The CFTC is advised of the type of account that is being reported and gives preliminary information regarding whether positions and transactions are commercial or noncommercial in nature. The form must be filed

when the account first becomes "reportable" (*i.e.*, when it first contains futures or options positions equal to or in excess of specified levels), and updated when information concerning financial interest in, or control of, the special account changes. In addition, the form is used by exchanges to identify accounts reported through their large trader reporting systems for both futures and options.

The form is filed with the CFTC and is non-public.

Selected Stock and Futures Exchange Reports

Application for Exemption from Speculative Position Limits

27. *Spec. Position Limit Exemption*

Application filed for exemption from speculative position limits. Exchanges generally have speculative position limits for physical commodities and stock index contracts, and the CFTC has speculative position limits for certain agricultural commodities. Exemptions from such limits are generally available for hedging transactions. Financial contracts, such as interest rate contracts, generally have "position accountability" levels rather than strict position limits. Accounts or account controllers exceeding position accountability levels must justify their positions to an exchange or the CFTC upon request. Generally, an application for any speculative position limit exemption must show that such position is a bona fide hedging, risk management, arbitrage or spread position. The filing is made with the appropriate exchange in the case of physical commodities and stock index contracts and with the CFTC in the case of certain agricultural commodities.

Federal Trade Commission ("FTC") and Department of Justice

Filings Made Prior to Mergers and Acquisitions

28. *Hart-Scott-Rodino Notice*

Notification filed prior to the consummation of certain mergers, acquisitions and joint ventures. After notification is filed there is a waiting period while the FTC and Department of Justice review the competitive effects of the transaction. The notification includes information about the transaction and the participants in the transaction.

As a general matter, both the acquiring person and the acquired person must file notifications when either the acquiring person or the acquired person is engaged in U.S. commerce or an activity affecting U.S. commerce, and either of the following tests is met:

(1) (A) one person has total assets or annual net sales of $106.2 million or more and the other person has total assets or annual net sales of $10.7 million or more, and (B) as a result of the transaction, the acquiring person will hold an aggregate total amount of more than $53.1 million of the voting securities and assets of the acquired person, or

(2) as a result of the transaction, the acquiring person will hold an aggregate total amount of more than $212.3 million of the voting securities and assets of the acquired person, regardless of the sales or assets of the acquiring and acquired persons.

Acquisitions of voting securities are exempt from filing if they are made "solely for the purpose of investment" and if, as a result of the acquisition, the securities held do not exceed 10% of the outstanding voting securities of the issuer. Securities are acquired "solely for investment purposes" if the person acquiring the securities has no intention of participating in the formulation, determination, or direction of the basic business decisions of the issuer.

The Hart-Scott-Rodino Act and rules thereunder contain various other exemptions, which are complex and require familiarity with the concepts and terminology of this legislation. The formation of partnerships and limited liability companies is potentially subject to notification under Hart-Scott-Rodino, as the result of changes to the Hart-Scott-Rodino rules that became effective on April 7, 2005.

The notice is filed with the FTC and the Department of Justice and is confidential.

APPENDIX III

MFA PRELIMINARY GUIDANCE FOR HEDGE FUNDS AND HEDGE FUND MANAGERS ON DEVELOPING ANTI-MONEY LAUNDERING PROGRAMS

Editor's Note: The attached *Preliminary Guidance for Hedge Funds and Hedge Funds Managers on Developing Anti-Money Laundering Programs* was published by MFA in 2002. At the time of the publication of MFA's *2005 Sound Practices for Hedge Fund Managers*, anti-money laundering regulations applicable to Hedge Funds and Hedge Fund Managers were still pending before the Treasury Department. Accordingly, the most up-to-date lists maintained by the Financial Action Task Force on Money Laundering and the Office of Foreign Assets Control, and referred to in the appendices to this Appendix III, can be found at the websites: *www1.oecd.org/fatf* and *www.treas.gov/ofac*, respectively.

MANAGED FUNDS ASSOCIATION

PRELIMINARY GUIDANCE FOR HEDGE FUNDS AND HEDGE FUND MANAGERS ON DEVELOPING ANTI-MONEY LAUNDERING PROGRAMS

Sponsored by

Managed Funds Association

March 2002

(Release No. 1)

NOTE: *This Preliminary Guidance is solely for the use of Managed Funds Association (MFA) and its Members and should not be copied, altered or redistributed without the express permission of MFA.*

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The Guidance was prepared by Managed Funds Association with the advice and assistance of Sullivan & Cromwell LLP.

Release No. 1/March 28, 2002
(Appendix III)

Managed Funds Association

Preliminary Guidance for Hedge Funds and Hedge Fund Managers
on Developing Anti-Money Laundering Programs

Preamble

Purpose of Guidance. On October 26, 2001, President Bush signed into law the USA PATRIOT Act. Title III of the USA PATRIOT Act, entitled the "International Money Laundering Abatement and Anti-Terrorist Financing Act of 2001", requires all "financial institutions" to establish an anti-money laundering program by April 24, 2002. In particular Section 352 of the USA PATRIOT Act states that each financial institution must establish an anti-money laundering program that includes at a minimum:

- The development of internal policies, procedures and controls;
- The designation of a compliance officer;
- An ongoing employee training program; and
- An independent audit function to test programs.

As defined in the USA PATRIOT Act, the term "financial institution" includes, among other things, any entity that is "an investment company"[1], as well as any entity that is registered (or required to register) as a commodity pool operator ("CPO") or a commodity trading advisor ("CTA") under the Commodity Exchange Act [2]. Although it is not entirely clear whether the reference to an investment company could be construed to include a hedge fund excepted from the definition of investment company under the Investment Company Act of 1940, Managed Funds Association ("MFA") believes that

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[1] The reference to "an investment company" in this definition is not expressly limited to registered investment companies; as a result, it is unclear whether the definition is intended to include unregistered, private investment funds, *i.e.*, funds excepted from the definition of "investment company" under the Investment Company Act of 1940. This ambiguity may be resolved by the "investment company study" to be undertaken by the Secretary of the Treasury, the Federal Reserve Board and the Securities and Exchange Commission by October 26, 2002 pursuant to Section 356(c) of the USA PATRIOT Act, which requires these agencies to report on recommendations for effective regulations to apply the currency reporting and related requirements of the Bank Secrecy Act to registered investment companies as well as certain funds excepted from the definition of "investment company".

[2] Section 321 of the USA PATRIOT Act expands the definition of "financial institution" in the Bank Secrecy Act to include "any futures commission merchant, commodity trading advisor, or commodity pool operator registered or required to register under the Commodity Exchange Act," and as a result, any CPO or CTA managing a hedge fund would be required to comply with Section 352 of the USA PATRIOT Act.

hedge funds and their Hedge Fund Managers should adopt and implement anti-money laundering programs consistent with Section 352 of the USA PATRIOT Act as a matter of sound practice.[3] Consequently, this preliminary guidance ("Guidance") is intended to highlight what MFA believes to be key elements for hedge funds and Hedge Fund Managers to consider in developing an effective anti-money laundering program.[4]

Role of MFA. MFA is the only U.S.-based association of managed funds professionals. MFA is a national trade association of more than 690 members that represents the alternative investment industry globally. MFA and its member firms have long been strong supporters of the industry's anti-money laundering efforts.

MFA recognizes that anti-money laundering compliance will be undergoing great change as regulations implementing the USA PATRIOT Act are promulgated and as industry practice develops. MFA is publishing this Guidance at this time in order to help hedge funds and Hedge Fund Managers implement or enhance their anti-money laundering programs in a timely manner. MFA may update this Guidance in the future to reflect regulations promulgated under the USA PATRIOT Act that may be applicable to hedge funds and Hedge Fund Managers and changes in industry practice.

Applicability of Guidance. This Guidance is intended primarily for U.S.-based hedge funds and Hedge Fund Managers. MFA also believes that the Guidance may be applicable to offshore hedge funds and Hedge Fund Managers to the extent that they utilize U.S.-based prime brokers, since, in order to comply with the requirements of the USA PATRIOT Act and implementing regulations, these prime brokers may require comfort regarding their fund clients' anti-money laundering policies, procedures and controls. Similarly, the Guidance may also be applied more generally to commodity pools, CPOs and CTAs based in the United States.[5] In light of MFA's expectation that

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3 MFA believes that hedge funds and their Hedge Fund Managers should adopt effective anti-money laundering programs for a number of compelling reasons, including (but not limited to) ensuring compliance with applicable blocking statutes and other restrictions on assisting money laundering and terrorist financing, satisfying the potential requirements of prime brokers and other institutions subject to the provisions of and regulations promulgated under the USA PATRIOT Act and the Bank Secrecy Act regarding the soundness of their customer due diligence procedures, and minimizing exposure to reputational and legal risks, e.g., risks associated with accepting an investment from a Listed Investor (as defined below).

4 Unless otherwise defined, capitalized terms used in the Guidance have the meanings ascribed to them in Annex A.

5 Entities registered with the Commodity Futures Trading Commission ("CFTC") must also consider applicable rules and regulations issued by the CFTC and the National Futures Association. Firms with international offices would also need to consider the applicability of non-U.S. law on their businesses.

most hedge funds will rely on their Hedge Fund Managers for development of and compliance with an appropriate anti-money laundering program, the Guidance has been written from the perspective of the Hedge Fund Manager. If a hedge fund were to develop an anti-money laundering program without involvement of its Hedge Fund Manager, the Guidance would apply equally to the hedge fund itself.

One Size Does Not Fit All. Given the considerable differences among Hedge Fund Managers and the investors with which they deal, MFA believes that no one standard or model anti-money laundering program can be appropriate for all hedge funds. Hedge funds vary not only in size, strategy and organizational structure, but also in the profile of their investor bases. Some hedge funds may have mostly natural persons as investors, whereas others may have primarily an institutional client base; some maintain relationships with investor intermediaries and nominees, while others have predominantly direct investors; some have an international client base, while others are purely domestic; some may limit their investors to insiders and other investors that are known to the Hedge Fund Manager, while others deal with investors from a wide variety of sources. The characteristics of a hedge fund's investor base should influence the types of anti-money laundering policies and procedures adopted by the Hedge Fund Manager.

Individualized Assessment and Application of Guidance. The Guidance focuses on the responsibilities of an established, global Hedge Fund Manager and contains aspects that are aspirational in nature. Each Hedge Fund Manager should assess the Guidance in light of the characteristics of its investor base, its business model and the resources of its organization, and, based upon this assessment, apply the Guidance as appropriate. Certain aspects of the Guidance may not be relevant or appropriate to every Hedge Fund Manager. Consequently, the Guidance should not be viewed as definitive requirements that could be rigidly applied by all Hedge Fund Managers or that could serve as a basis either for auditing a Hedge Fund Manager's anti-money laundering policies and practices or for any legal claim or action. Nor should the Guidance be viewed as exhaustive or addressing the only issues to consider in developing an anti-money laundering program. In evaluating the relevance of the Guidance and its ability to implement the recommended policies and procedures, a Hedge Fund Manager should recognize that, while some recommendations can be implemented easily or unilaterally, others may require planning, and in some cases negotiation with, and cooperation by, third parties.

No Substitute for Professional Advice. The Guidance is not intended to serve as or be a substitute for professional advice, and neither hedge funds nor their Hedge Fund Managers should rely upon the Guidance as such. In developing an anti-money laundering program, a Hedge Fund Manager should consult with its professional legal and accounting advisors.

I. Fundamental Elements of Anti-Money Laundering Programs

1.1 General

Broad Policy Statement. As part of its anti-money laundering program, a Hedge Fund Manager should adopt a broad statement, at its highest executive level, that clearly sets forth its policy against money laundering and any activity which facilitates money laundering or the funding of terrorist activities.[6]

Objectives. The Hedge Fund Manager should clearly state the objectives of its anti-money laundering program, which may include the detection and deterrence of instances of money laundering, terrorist financing and other illegal activity.

1.2 Role of Senior Management and the Anti-Money Laundering Compliance Officer

Involvement in Policy Development and Enforcement. Senior Management and the Anti-Money Laundering Compliance Officer (designated in accordance with 1.4 below) should be involved in the development, adoption and enforcement of written anti-money laundering policies, procedures and controls so as to ensure the efficacy of the Hedge Fund Manager's anti-money laundering program.

Involvement in Decision-Making. The anti-money laundering policies, procedures and controls should provide that the decision to accept or reject an Investor should involve the Anti-Money Laundering Compliance Officer, who, consistent with the Hedge Fund Manager's policies, may consult with Senior Management on such decisions as appropriate.

Determinations Regarding Third Party Reliance. As discussed in Part III, the Anti-Money Laundering Compliance Officer should be involved in any decision to rely upon Investor Identification Procedures performed by a third party.

1.3 Investor Identification Policies and Procedures

Establishing Investor Identification Policies and Procedures. The Hedge Fund Manager should establish written policies and procedures regarding investor identification that are reasonably designed to be both feasible and effective in achieving the stated objectives of the anti-money laundering program. Key elements to consider in developing these procedures are addressed in Part II. The

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6 A sample resolution of the board of directors of a Hedge Fund Manager adopting a policy statement against money laundering and terrorist financing is attached as Annex D-1.

Guidance also addresses reliance upon third parties for the performance of investor identification procedures in Part III.

Review and Update as Necessary. **Hedge Fund Managers should periodically review and update their anti-money laundering policies and procedures based on applicable amendments to existing anti-money laundering legislation and regulations, as well as changes in the characteristics of the investor base of the hedge funds managed.** In this regard MFA may periodically update the Guidance to reflect changes in anti-money laundering law and regulation applicable to the hedge fund industry. In particular a Hedge Fund Manager should ensure that investor due diligence checklists and procedures are updated on a periodic basis and that changes are independently reviewed and approved by the Anti-Money Laundering Compliance Officer.

1.4 Designation of Anti-Money Laundering Compliance Officer

The Hedge Fund Manager should designate an Anti-Money Laundering Compliance Officer and should provide the Anti-Money Laundering Compliance Officer with adequate authority and resources to effectively implement the Hedge Fund Manager's anti-money laundering program.[7]

The Anti-Money Laundering Compliance Officer's responsibilities should specifically include:

- Coordination and monitoring of the Hedge Fund Manager's day-to-day compliance with applicable anti-money laundering laws and regulations and its own anti-money laundering program;
- Conducting employee training programs for appropriate personnel related to the Hedge Fund Manager's anti-money laundering program; and
- Reviewing any reports of suspicious activity from personnel of the Hedge Fund Manager.

The Anti-Money Laundering Compliance Officer may serve other functions and may serve multiple departments within the Hedge Fund Manager's organization. However, the Anti-Money Laundering Compliance Officer should not be responsible for functional areas within the organization where money laundering activity may occur.

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[7] A sample resolution of the board of directors of a Hedge Fund Manager appointing the Hedge Fund Manager's Anti-Money Laundering Compliance Officer is attached as Annex D-2.

1.5 Ongoing Employee Training Program

Establishment and Content of Program. The Hedge Fund Manager should establish anti-money laundering training programs for all relevant personnel to be conducted on a periodic basis, as appropriate. The training programs should, among other things:

- Review applicable anti-money laundering laws and regulations and recent trends in money laundering, including the ways in which such laws and trends relate to hedge funds; and

- Address elements of the Hedge Fund Manager's own anti-money laundering program, particularly its Investor Identification Procedures and policies regarding detection of suspicious activity.

Requiring Attendance. The Hedge Fund Manager should develop and maintain policies, procedures and controls reasonably designed to ensure that all appropriate personnel attend the anti-money laundering training programs as required.

Recordkeeping. Records of all anti-money laundering training sessions conducted, including the dates and locations of the training sessions and the names and departments of attendees, should be retained for at least five years, or for such longer period as may be required by applicable law or regulation.

1.6 Independent Audit Function

The Hedge Fund Manager's anti-money laundering program should include an independent audit function to assess compliance with and the effectiveness of its anti-money laundering program on a periodic basis. The independent audit function should involve:

- Evaluation by the Hedge Fund Manager's legal and compliance director or officer or by external auditors or counsel of compliance with applicable anti-money laundering laws and regulations and the Hedge Fund Manager's own anti-money laundering program; and
- Reporting of the results of such evaluation to the audit committee of the board of directors or similar oversight body of the hedge fund or Hedge Fund Manager.

The Hedge Fund Manager's anti-money laundering program should also provide for appropriate follow-up to ensure that any deficiencies detected in the course of the audit of its anti-money laundering program are addressed and rectified.

II. Investor Identification Policies and Procedures

2.1 General

Objective. As part of an anti-money laundering program, a Hedge Fund Manager should establish and maintain reasonable procedures that are designed to verify Investors' identities to the extent reasonable and practicable (such procedures are referred to generally as "Investor Identification Procedures").[8]

Consider Characteristics of Investor Base. The Hedge Fund Manager's Investor Identification Procedures should take into account the specific risks presented by the Investor base of the hedge fund(s) it manages.

General Premise. The Hedge Fund Manager's Investor Identification Procedures should further be based on the premise that the Hedge Fund Manager should accept an investment from a new Investor only after:

- The Hedge Fund Manager has confirmed the identity of the Investor and that the Investor is investing as principal and not for the benefit of any third party;
- If the Investor is investing on behalf of other underlying investors, the Hedge Fund Manager has confirmed the identities of the Investor and the underlying investors; or
- The Hedge Fund Manager has determined that it is acceptable to rely on the investor due diligence performed by a third party, such as a fund administrator or an investor intermediary, with regard to the Investor (and underlying investors, if applicable). Reliance upon Investor Identification Procedures performed by a third party is addressed in Part III.

2.2 Investor Identification Procedures

Perform Procedures Appropriate to Type of Investor. Where the Hedge Fund Manager undertakes to confirm the identity of an Investor (rather than relying on its fund administrator or another third party, as discussed in Part III), it should conduct Investor Identification Procedures based upon the specific characteristics presented by an Investor. Possible identification procedures are presented in 2.2.1. and 2.2.2, and procedures for screening for prohibited Investors are addressed in 2.3. Possible enhanced procedures for

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8 Section 326 of the USA PATRIOT Act provides that the Secretary of the Treasury shall prescribe regulations that require financial institutions to implement reasonable procedures for "verifying the identity of any person seeking to open an account to the extent reasonable and practicable".

addressing "high risk" Investors are addressed in 2.4. These procedures are provided as examples only and are not intended to be prescriptive or exhaustive. For example, a Hedge Fund Manager may elect to apply alternative Investor Identification Procedures based upon the specific characteristics of an Investor or apply enhanced measures for reasons other than those discussed in the Guidance.

Timing. A Hedge Fund Manager should complete appropriate Investor Identification Procedures with regard to an Investor prior to accepting an investment from the Investor.

Due Diligence Checklists. A Hedge Fund Manager may wish to develop a due diligence checklist to facilitate the performance of Investor Identification Procedures.

Document Procedures Undertaken. The Hedge Fund Manager should retain copies of all documents reviewed or checklists completed in connection with its Investor Identification Procedures in accordance with its investor records retention policies (see 2.5.).

Include Appropriate Identity Provisions in Subscription Documents. Fund subscription documents should require an Investor to:

- Represent and covenant that all evidence of identity provided is genuine and all related information furnished is accurate;
- Agree to provide any information deemed necessary by the Hedge Fund Manager in its sole discretion to comply with its anti-money laundering responsibilities and policies; and
- In the case of a Direct Investor, represent that it is investing solely as principal and not for the benefit of any third parties.[9]

2.2.1 <u>Natural Persons as Investors</u>

In order to confirm the identity of a natural person, a Hedge Fund Manager should take reasonable steps to ascertain satisfactory evidence of the Investor's name, address and date of birth (such as official driver's license with photograph, passport or other government-issued identification). In certain circumstances, to gain additional comfort regarding an Investor's identity, a Hedge Fund Manager may wish to consider obtaining:

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9 Sample provisions that could be included in subscription documents are attached as Annex C-3. The Hedge Fund Manager may also wish to include some or all of these sample provisions in amendments (in the form of a letter or otherwise) to subscription documents with existing Investors.

- The Investor's social security number or taxpayer identification number, if applicable;
- Additional forms of identification (not necessarily government-issued) from the Investor which may be used to confirm the Investor's identity (*e.g.*, a utility bill containing the Investor's name and address); or
- Reports from credit bureaus or other generally available public information confirming the Investor's identity.

2.2.2 Corporations, Partnerships and Comparable Legal Entities as Investors

In order to confirm the identity of a legal entity, the Hedge Fund Manager should obtain satisfactory evidence of the entity's name and address and its authority to make the contemplated investment. Where the Investor is neither a publicly traded company listed on a major, regulated exchange (or a subsidiary or a pension fund of such a company) nor a regulated institution organized in a FATF-Compliant Jurisdiction,[10] the Hedge Fund Manager may wish to gain additional comfort regarding the Investor's identity by obtaining certain of the following, as appropriate under the circumstances:

- Evidence that the Investor has been duly organized in its jurisdiction of organization;
- If the Hedge Fund Manager believes it would be reasonable to rely upon a certification from the Investor, a certification from the Investor that it has implemented and complies with anti-money laundering policies, procedures and controls that, for example, seek to ensure that none of its directors, officers or equity holders are prohibited Investors, as set forth in 2.3 (such a certificate, an "AML Certificate"), or, alternatively, a list of directors, senior officers and principal equity holders (in order to ensure, for example, that none of these persons are prohibited Investors, as set forth in 2.3);
- In the case of a trust, evidence of the trustee's authority to make the contemplated investment and either an AML Certificate from the trustee (if the Hedge Fund Manager believes it would be reasonable to rely upon such a certificate) or, alternatively, the identities of beneficiaries, the provider of funds (*e.g.*, settlor(s)), those who have control over funds *(e.g.*, trustee(s)) and any persons who have the power to remove trustees, as well

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10 The term "FATF-Compliant Jurisdiction" is defined in Annex A to the Guidance. It should be noted that the term, as defined and used in the Guidance, requires not only that a jurisdiction be a member in good standing of the Financial Action Task Force on Money Laundering ("FATF"), but also that such jurisdiction has undergone two rounds of FATF mutual evaluations.

as of authorized activity of the trust and the persons authorized to act on behalf of the trust;

- Description of the Investor's primary lines of business;
- Publicly available information from law enforcement agencies or regulatory authorities; or
- If appropriate, Investor's financial statements and/or bank references.

2.3 Prohibited Investors

Listed Investors. A Hedge Fund Manager should not accept an investment from or on behalf of any Investor (a "Listed Investor") whose name appears on:

- The List of Specially Designated Nationals and Blocked Persons maintained by the U.S. Office of Foreign Assets Control ("OFAC");[11] or
- Such other lists of prohibited persons and entities as may be mandated by applicable law or regulation.

Necessity to Check for List Updates. A Hedge Fund Manager should update the information that it maintains and relies upon for purposes of checking the above lists as necessary in order to ensure that it does not accept an investment from a prohibited Investor.[12]

Foreign Shell Banks. Hedge Fund Managers should not accept investments from or on behalf of a Foreign Shell Bank. With respect to Investors that are Foreign Banks, Hedge Fund Managers may wish to consider obtaining a representation that the bank either (i) has a Physical Presence; or (ii) does not have a Physical Presence, but is a Regulated Affiliate.

2.4 High Risk Investors

Prior to accepting an investment from an Investor that the Hedge Fund Manager has reason to believe presents high risk factors (a "High Risk Investor") with regard to money laundering or terrorist financing, the Hedge Fund Manager should conduct enhanced due

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11 For a description of the lists maintained by OFAC, please refer to Annex H. The complete OFAC lists may be accessed at http://www.treas.gov/ofac. While the Guidance recommends the adoption of procedures to ensure investments are not accepted from a Listed Investor, compliance with regulations promulgated by OFAC and specific issues related thereto are beyond the scope of the Guidance.

12 Where compliance resources are limited, a Hedge Fund Manager may wish to consider using a third party compliance service for assistance with monitoring prohibited lists.

diligence with regard to the Investor in addition to routine Investor Identification Procedures.

The enhanced due diligence procedures undertaken with respect to High Risk Investors should be well documented, and any questions or concerns with regard to a High Risk Investor should be directed to the Anti-Money Laundering Compliance Officer.

The following are examples of types of Investors that may be deemed to present high risk factors with regard to money laundering or terrorist financing:

- A Senior Foreign Political Figure, any member of a Senior Foreign Political Figure's Immediate Family, and any Close Associate of a Senior Foreign Political Figure;[13]
- Any Investor resident in, or organized or chartered under the laws of, a Non-Cooperative Jurisdiction;[14]
- Any Investor resident in, or organized or chartered under the laws of, a jurisdiction that has been designated by the Secretary of the Treasury under Section 311 or 312 of the USA PATRIOT Act as warranting special measures due to money laundering concerns;
- Any Investor who gives the Hedge Fund Manager reason to believe that its subscription funds originate from, or are routed through, an account maintained at an "offshore bank",[15] or a bank organized or chartered under the laws of a Non-Cooperative Jurisdiction; and
- Any Investor who gives the Hedge Fund Manager reason to believe that the source of its subscription funds may not be legitimate.

Examples of enhanced due diligence procedures that a Hedge Fund Manager might consider in order to address high risk factors presented by Investors are detailed in 2.4.1. (for natural persons) and 2.4.2. (for legal entities).

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13 See Supervisory Letter SR 01-03 (SUP), *Guidance on Enhanced Scrutiny for Transactions That May Involve the Proceeds of Foreign Official Corruption* (January 16, 2001), available on the website of the Board of Governors of the Federal Reserve System at http://www.federalreserve.gov/boarddocs/SRLETTERS/2001/sr0103.htm.

14 For a list of countries and territories that have been designated by the Financial Action Task Force on Money Laundering ("FATF") as non-cooperative with international anti-money laundering efforts, please refer to Annex G.

15 Here the term "offshore bank" refers to a Foreign Bank that is barred, pursuant to its banking license, from conducting banking activities with the citizens of, or with the local currency of, the country that issued the license, but does not include a Regulated Affiliate.

2.4.1 Natural Persons as High Risk Investors

Below are examples of measures a Hedge Fund Manager might consider, as appropriate, in order to seek comfort with respect to certain High Risk Investors who are natural persons:

- Reviewing pronouncements of U.S. governmental agencies and multilateral organizations such as the Financial Action Task Force on Money Laundering ("FATF") with regard to the adequacy of anti-money laundering and counter-terrorism legislation in the Investor's home country jurisdiction;
- Assessing the Investor's business reputation through review of generally available media reports or by other means;
- Considering the source of the Investor's wealth, including the economic activities that generated the Investor's wealth, and the source of the particular funds intended to be used to make the investment;
- Reviewing generally available public information, such as media reports, to determine whether the Investor has been the subject of any criminal or civil enforcement action based on violations of anti-money laundering laws or regulations or any investigation, indictment, conviction or civil enforcement action relating to financing of terrorists.

2.4.2 Legal Entities as High Risk Investors

Below are examples of measures a Hedge Fund Manager might consider, as appropriate, in order to seek comfort with respect to certain High Risk Investors who are legal entities:

- Reviewing pronouncements of U.S. governmental agencies and multilateral organizations such as FATF with regard to the adequacy of anti-money laundering and counter-terrorism legislation in the Investor's home country jurisdiction;
- Reviewing recent changes in the ownership or senior management of the Investor;
- If applicable, determining the relationship between the Investor and the government of its home country jurisdiction, including whether the Investor is a government-owned entity;
- Reviewing generally available public information to determine whether the Investor has been the subject of any criminal or civil enforcement action based on violations of anti-money laundering laws or regulations or

any criminal investigation, indictment, conviction or civil enforcement action relating to financing of terrorists.

2.5 Investor Records Retention

The Hedge Fund Manager should establish procedures requiring that copies of documents reviewed as part of the performance of its Investor Identification Procedures be retained for an appropriate period of time and, at a minimum, the period of time required by applicable law or regulation. For example, a Hedge Fund Manager might require that documents be retained for so long as an Investor remains invested in one of the hedge funds it manages and for a minimum of five years following the final redemption by the Investor.

The following are examples of the types of documents that the Hedge Fund Manager might wish to retain as part of its investor records retention policy:

- Copies of documents reviewed in connection with Investor Identification Procedures or enhanced due diligence procedures.
- Investor identification checklists, if any, or similar due diligence documentation.
- Any other documents required to be retained by applicable anti-money laundering legislation.

2.6 Risk-Focused Review of Existing Investors and Detection of Suspicious Activity

As appropriate, a Hedge Fund Manager should undertake a periodic review of its existing Investor base in order to ensure that no Investor is a Listed Investor, as defined in 2.3. Based on its own risk assessment, a Hedge Fund Manager should periodically review, for example, as part of the audit function addressed in 1.6, the adequacy of due diligence performed on existing Investors.

In addition a Hedge Fund Manager's policies, procedures and controls should provide for the detection of suspicious activity and should include examples of the types and patterns of activities that may require further review to determine whether the activity is suspicious. For example, in some circumstances, the following activities, none of which *per se* constitutes suspicious activity, may be indicative of activity that may require further investigation:

- Investor exhibits an unusual concern regarding the hedge fund's compliance with government reporting requirements, particularly with respect to the Investor's identity, type of business and assets, or the Investor is reluctant or refuses to reveal any information concerning business activities, or the Investor furnishes unusual or suspect identification or business documents;

- Investor wishes to engage in investments that are inconsistent with the Investor's apparent investment strategy;
- Investor (or a person publicly associated with the Investor) is the subject of news reports indicating possible criminal, civil or regulatory violations;
- Investor appears to be acting as the agent for another entity but declines, or is reluctant, without legitimate commercial reasons, to provide any information in response to questions about such entity;
- Investor has difficulty describing the nature of his or her business or lacks general knowledge of the industry he or she is apparently engaged in;
- Investor attempts, with unusual frequency (taking into account the differences between Direct Investors and investor intermediaries as appropriate), to make investments, request redemptions or transfer funds;
- Investor engages in unusual or frequent wire transfers (taking into account the differences between Direct Investors and investor intermediaries as appropriate), particularly to unfamiliar bank accounts; and
- Investor transfers funds to jurisdictions other than its home country jurisdiction.

The Hedge Fund Manager's anti-money laundering program should require any employee who detects suspicious activity or has reason to believe that suspicious activity is taking place to immediately inform his or her immediate supervisor as well as the Anti-Money Laundering Compliance Officer. In addition, as discussed in 3.3 below, a Hedge Fund Manager should seek to establish effective lines of communication for addressing suspicious activity detected by its fund administrator or another third party on which the Hedge Fund Manager relies for investor due diligence and provide, for example, that the fund administrator or other third party should immediately notify the Hedge Fund Manager's Anti-Money Laundering Compliance Officer of any suspicious activity relating to the Hedge Fund Manager's funds.

III. Reliance Upon Investor Identification Procedures Performed by Third Parties

3.1 Relationships between Hedge Fund Managers and Third Parties

As in the banking and mutual fund industries, Hedge Fund Managers often rely on third parties for the introduction of investors and the processing of fund investments and subscription documents. For example, investor intermediaries and nominees may introduce their investor clients to a hedge fund or may invest in hedge funds on their clients' behalf. Similarly, a "fund of funds" may make investments in a hedge fund on behalf of its investors. In addition, hedge funds typically rely on their fund administrators for the processing of subscription documents and compliance with anti-money laundering laws and regulations applicable in the fund's jurisdiction of organization.[16]

These third parties often have direct contact and maintain the primary relationship with the Investor and are consequently in the best position to "know the customer". As a result, a Hedge Fund Manager may, directly or indirectly, rely upon the Investor Identification Procedures performed by such third parties, as set forth below. Given the complexity and importance of appropriately allocating investor identification responsibilities to such a third party, the Anti-Money Laundering Compliance Officer should be directly involved in the decision to rely upon a particular third party to perform investor due diligence.

3.2 Deciding to Rely Upon Investor Identification Procedures Performed by Third Parties

(i) *Determination of Circumstances Where Reliance May Generally Be Appropriate*

The Anti-Money Laundering Compliance Officer should be directly involved with the determination of circumstances in which the Hedge Fund Manager may appropriately rely on third parties for the performance of Investor Identification Procedures. In order to direct its due diligence efforts where they are most likely to be productive, the Anti-Money Laundering Compliance Officer might determine, taking into account applicable law and regulation, its own risk assessment and available resources, that it believes it will generally be appropriate (absent any suspicious circumstances) to rely on the Investor Identification Procedures performed by certain categories of third parties. For example, a

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16 For example, fund administrators organized under the laws of the Bahamas, Bermuda and the Cayman Islands are required to comply with anti-money laundering laws and regulations enacted in these jurisdictions during the past few years. The anti-money laundering laws and regulations of these jurisdictions impose detailed "know your customer" obligations on fund administrators.

Hedge Fund Manager might establish a policy providing that it will generally rely upon the Investor Identification Procedures performed with respect to Investors by:

- A U.S.-regulated financial institution where the Investor is a customer of the U.S.-regulated financial institution and the Investor's investment funds are wired from its account at the U.S.-regulated financial institution;[17]
- An investor intermediary, nominee, fund of funds or asset aggregator that is itself a U.S.-regulated financial institution; or
- A regulated foreign financial institution organized in a FATF-Compliant Jurisdiction. To the extent that the Hedge Fund Manager believes that the Investor Identification Procedures performed by a regulated foreign financial institution, although reliable, may not include procedures that the Hedge Fund Manager is required to perform, *e.g.*, verification of whether an Investor is a Listed Investor as defined in 2.3, the Hedge Fund Manager should either expressly request that the foreign financial institution confirm that it has performed the necessary additional procedures or otherwise provide for the performance of such procedures prior to accepting an Investor through the financial institution.

(ii) *Case-by-Case Assessment of Third Parties' Investor Identification Procedures*

In some cases a Hedge Fund Manager may conclude that it must assess whether to rely on certain third parties on a case-by-case basis, for example, when dealing with unregulated entities or entities that are not based in jurisdictions that have been pre-determined to be acceptable to the Hedge Fund Manager. In determining whether the Investor Identification Procedures of such third parties may be appropriately relied upon, the Hedge Fund Manager may wish to consider various factors, as appropriate, such as:

- Jurisdiction in which third party is based and the existence of applicable anti-money laundering laws and regulations.[18] In order to gain comfort

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17 As used herein, the term "U.S.-regulated financial institution" would include institutions subject to the anti-money laundering provisions of the USA PATRIOT Act, such as a registered broker-dealers and a U.S. branch or agency of a Foreign Bank. Where doubt exists as to the existence of a formal "customer" relationship between such a financial institution and an Investor, the Hedge Fund Manager may wish to obtain representations from the financial institution confirming the existence of a customer relationship and the performance of customer due diligence.

18 Another way in which a Hedge Fund Manager could evaluate the adequacy of a jurisdiction's anti-money laundering regime may be to obtain a legal opinion from local counsel in such jurisdiction with regard to applicable anti-money laundering laws and regulations. However, MFA recognizes that it may be time-consuming, inefficient and costly for a Hedge Fund Manager to seek a legal opinion from local counsel in the jurisdiction of every third party with which it maintains a (continued)

regarding the anti-money laundering regime of another jurisdiction, a Hedge Fund Manager may wish to review pronouncements of U.S. governmental agencies and multilateral organizations[19] regarding the anti-money laundering laws and regulations in such other jurisdiction.

- Regulatory status of third party and affiliates.
- Reputation and history of third party in the investment industry.
- The anti-money laundering and investor due diligence policies, procedures and controls implemented by the third party.

(iii) *Further Assurances*

Should the Hedge Fund Manager determine that further assurances from a third party are warranted, it may also wish to consider some of the following possibilities:

- Requiring the third party to provide the Hedge Fund Manager with a copy of its anti-money laundering and investor due diligence policies, procedures and controls and to promptly notify the Hedge Fund Manager of any amendment thereto.
- Requiring the third party to certify and covenant that it complies and will continue to comply with its anti-money laundering and investor due diligence policies, procedures and controls.
- Requiring meaningful written representations and covenants as to Investors verified by the third party, *e.g.*, a covenant that it will ensure that no such Investors are prohibited Investors, as set forth in 2.3.
- Requiring the third party to provide access, upon request, to copies of documents reviewed by the third party in performing investor due diligence.

(continued)

relationship. Consequently, MFA is considering an initiative to obtain legal opinions regarding the anti-money laundering regimes in various jurisdictions from local counsel in such jurisdictions.

19 In this regard, a Hedge Fund Manager may wish to consult pronouncements and publications by the Financial Action Task Force on Money Laundering ("FATF") (see also Annexes F and G hereto), the Financial Crimes Enforcement Network ("FinCEN") (see also Annex I hereto) and the U.S. Department of State's annual International Narcotics Control Strategy Report ("INCSR").

- Requiring the third party to submit to a review or audit of its anti-money laundering policies, procedures and controls and its compliance with them as they relate to the funds managed by the Hedge Fund Manager.
- In the case of an intermediary or nominee, obtaining evidence of or representations as to its authority to make the contemplated investment.

3.3 Allocation of Responsibilities Between the Parties

Agreements with Third Parties Generally. As discussed below, agreements with third parties that either introduce or process hedge fund investments should clearly allocate anti-money laundering responsibilities between the third party and the hedge fund and its Hedge Fund Manager, as appropriate. As noted above, the Hedge Fund Manager may wish to obtain a copy of the third party's anti-money laundering and investor due diligence policies, procedures and controls and to require that the third party promptly notify the Hedge Fund Manager of any amendment thereto. Agreements with third parties should also seek to establish effective lines of communication for addressing investor due diligence issues and suspicious activity or circumstances as they arise. Such agreements should also contemplate means by which a hedge fund or its Hedge Fund Manager may periodically verify or audit the third party's compliance with its anti-money laundering policies, procedures and controls.

Agreements with Fund Administrators. A hedge fund's agreement with its fund administrator should specifically allocate between the administrator, on the one hand, and the fund and the Hedge Fund Manager, on the other hand, their respective obligations for compliance with applicable U.S. anti-money laundering law and regulation as well as the law and regulations applicable in the fund's home country jurisdiction.[20] Sample representations and covenants that could be sought from fund administrators are included in Annex C-1.

Agreements with Investor Intermediaries. A Hedge Fund Manager's agreement with an introducing firm or asset aggregator should clearly allocate responsibilities for investor identification in accordance with the policies adopted by the Hedge Fund Manager. Sample representations and covenants that could be sought from investor intermediaries in this regard are included in Annex C-2.

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[20] The Hedge Fund Manager may wish to seek amendments (in the form of a letter or otherwise) to its existing agreements with fund administrators.

Definitions

1. The Anti-Money Laundering Compliance Officer is the person appointed by Senior Management to, among other things, administer the Hedge Fund Manager's anti-money laundering program.

2. A Close Associate of a Senior Foreign Political Figure is a person who is widely and publicly known internationally to maintain an unusually close relationship with the Senior Foreign Political Figure, and includes a person who is in a position to conduct substantial domestic and international financial transactions on behalf of the Senior Foreign Political Figure.

3. A Direct Investor is an investor who invests in a hedge fund as principal and not for the benefit of any third party.

4. A FATF-Compliant Jurisdiction is a jurisdiction that (i) is a member in good standing of FATF; and (ii) has undergone two rounds of FATF mutual evaluations.

5. Foreign Bank means an organization that (i) is organized under the laws of a foreign country; (ii) engages in the business of banking; (iii) is recognized as a bank by the bank supervisory or monetary authority of the country of its organization or principal banking operations; (iv) receives deposits to a substantial extent in the regular course of its business; and (v) has the power to accept demand deposits, but does not include the U.S. branches or agencies of a foreign bank.

6. Foreign Shell Bank means a Foreign Bank without a Physical Presence in any country, but does not include a Regulated Affiliate.

7. A hedge fund is a pooled investment vehicle that is privately organized, not widely available to the public and administered by a Hedge Fund Manager. The term "hedge fund" is used to describe a wide range of investment vehicles, which can vary substantially in terms of size, strategy, business model and organizational structure, among other characteristics.

8. A Hedge Fund Manager is a professional investment management firm that manages a hedge fund or funds.

9. High Risk Investor has the meaning set forth in 2.4.

10. The Immediate Family of a Senior Foreign Political Figure typically includes the political figure's parents, siblings, spouse, children and in-laws.

11. The term Investor includes, unless otherwise indicated, any Direct Investor, and any intermediary or nominee that makes an investment on behalf of other investors.

12. Listed Investor has the meaning set forth in 2.3.

13. Non-Cooperative Jurisdiction means any foreign country that has been designated as non-cooperative with international anti-money laundering principles or procedures by an intergovernmental group or organization, such as the Financial Action Task Force on Money Laundering ("FATF"), of which the United States is a member and with which designation the United States representative to the group or organization continues to concur.

14. Physical Presence means a place of business that is maintained by a Foreign Bank and is located at a fixed address, other than solely a post office box or an electronic address, in a country in which the Foreign Bank is authorized to conduct banking activities, at which location the Foreign Bank: (1) employs one or more individuals on a full-time basis; (2) maintains operating records related to its banking activities; and (3) is subject to inspection by the banking authority that licensed the Foreign Bank to conduct banking activities.

15. A Prohibited Investor includes a Listed Investor, a Foreign Shell Bank and other Investors prohibited by law or regulation, as well as those prohibited by the Hedge Fund Manager in its sole discretion.

16. Regulated Affiliate means a Foreign Shell Bank that: (1) is an affiliate of a depository institution, credit union, or Foreign Bank that maintains a Physical Presence in the United States or a foreign country, as applicable; and (2) is subject to supervision by a banking authority in the country regulating such affiliated depository institution, credit union, or Foreign Bank.

17. Senior Foreign Political Figure means a senior official in the executive, legislative, administrative, military or judicial branches of a foreign government (whether elected or not), a senior official of a major foreign political party, or a senior executive of a foreign government-owned corporation. In addition, a Senior Foreign Political Figure includes any corporation, business or other entity that has been formed by, or for the benefit of, a Senior Foreign Political Figure.

18. Senior Management refers to members of a group of senior executives or other management body with the authority and responsibility to direct and oversee a Hedge Fund Manager's day-to-day activities on behalf of a hedge fund or funds.

19. USA PATRIOT Act means the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT) Act of 2001 (Pub. L. No. 107-56).

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(Appendix III)

Proposed Template for Anti-Money Laundering Policies & Procedures

MFA believes that the template below sets forth the key elements that should be included in a Hedge Fund Manager's anti-money laundering policies, procedures and controls. Anti-money laundering compliance will be undergoing great change as regulations implementing the USA PATRIOT Act are promulgated and as industry guidance develops over time, and MFA anticipates that it will periodically update this template accordingly. Similarly, a Hedge Fund Manager should therefore update its anti-money laundering policies, procedures and controls as necessary to reflect applicable law and regulation and developing industry practice.

Given the degree to which hedge funds vary in size and organizational structure, as well as in the profile of their investor bases, MFA believes that no one standard or model anti-money laundering program can be appropriate for all Hedge Fund Managers. The appropriateness of policies and procedures for a Hedge Fund Manager will depend on a number of factors, including, but not limited to, (i) law and regulation applicable to the Hedge Fund Manager and its hedge funds; (ii) the specific risks presented by the investor base of the hedge funds it manages; (iii) the Hedge Fund Manager's relationships with its fund administrator and its investor intermediaries; and (iv) the Hedge Fund Manager's available resources. Consequently, a Hedge Fund Manager's anti-money laundering policies, procedures and controls need to be tailored to the specific circumstances presented and should only be adopted on the advice of qualified professional advisors.

Unless otherwise defined, capitalized terms shall have the meanings ascribed to them in the Guidance. All cross-references are to the provisions of the Guidance.

[NAME OF HEDGE FUND MANAGER]

ANTI-MONEY LAUNDERING POLICIES, PROCEDURES AND CONTROLS

Dated as of [*insert date adopted/last updated*]

A. POLICY STATEMENT

This section should clearly set forth the Hedge Fund Manager's policy against money laundering and any activity which facilitates money laundering or the funding of terrorist activity **(See 1.1.)**. This policy should be adopted at the Hedge Fund Manager's highest executive level.

The following is an example of such a policy statement:

"[SENIOR MANAGEMENT/THE BOARD OF DIRECTORS] HAS DETERMINED THAT IT IS THE POLICY OF _______________ TO SEEK TO

PREVENT THE MISUSE OF THE FUNDS IT MANAGES AND ITS PERSONNEL AND FACILITIES FOR PURPOSES OF MONEY LAUNDERING AND TERRORIST FINANCING. ______________ HAS ADOPTED AND ENFORCES RIGOROUS POLICIES, PROCEDURES AND CONTROLS TO DETECT AND DETER THE OCCURRENCE OF MONEY LAUNDERING AND OTHER ILLEGAL ACTIVITY.]"

A statement could also be included to emphasize that (i) anti-money laundering compliance is the responsibility of every employee of the Hedge Fund Manager; and (ii) any employee that detects activity that seems to be suspicious should immediately report such activity to the Anti-Money Laundering Compliance Officer.

B. *OBJECTIVES OF THE ANTI-MONEY LAUNDERING PROGRAM*

This section should clearly set forth the objectives of the Hedge Fund Manager's anti-money laundering program **(See 1.1.)**. These objectives should include the detection and deterrence of instances of money laundering, terrorist financing and other illegal activity.

C. *ANTI-MONEY LAUNDERING COMPLIANCE OFFICER*

This section should clearly identify the Anti-Money Laundering Compliance Officer appointed by the Hedge Fund Manager and provide sufficient contact details for this person. In addition the responsibilities of the Anti-Money Laundering Compliance Officer should be clearly set forth. **See 1.4** for a discussion of the role and possible responsibilities of the Anti-Money Laundering Compliance Officer. This section might also include a statement that (i) encourages the employees of the Hedge Fund Manager to seek the assistance of the Anti-Money Laundering Compliance Officer in addressing any money laundering-related concerns that they may have; and (ii) directs the employees of the Hedge Fund Manager to immediately report suspicious activity to the Anti-Money Laundering Compliance Officer.

D. *EMPLOYEE TRAINING PROGRAM*

This section should describe the Hedge Fund Manager's employee training program **(See 1.5)** and in particular might set forth:

(1) The general content of the Hedge Fund Manager's anti-money laundering training program(s);

(2) Regularity with which the training program will be conducted;

(3) Person(s) responsible for conducting the program (*e.g.*, the Anti-Money Laundering Compliance Officer);

(4) The employee functions that will be required to attend the anti-money laundering training program(s) and procedures to ensure attendance; and

(5) The procedures for creating and maintaining records of all anti-money laundering training sessions conducted, including the dates and locations of the training sessions and the names and departments of attendees, and maintenance of these records for a minimum specified period (*e.g.*, five years).

E. *INDEPENDENT AUDIT FUNCTION*

This section should provide for an independent audit function to assess the Hedge Fund Manager's compliance with, and the effectiveness of, its anti-money laundering program **(See 1.6)** and in particular might set forth:

(1) Regularity with which the independent audit will be performed (*e.g.*, annually at a specified time);

(2) Person(s) responsible for performing the audit (*e.g.*, appropriate member of Senior Management or external professionals);

(3) Procedures applicable to auditing performance of third parties upon whom the Hedge Fund Manager relies for the performance of Investor Identification Procedures and other anti-money laundering responsibilities.

F. *INVESTOR IDENTIFICATION PROCEDURES*

This section should describe in detail the procedures required by the Hedge Fund Manager to verify the identities of Investors to the extent reasonable and practicable and to ensure that Prohibited Investors are not permitted to invest in the hedge funds it manages **(See Part II)**. To the extent that the Hedge Fund Manager relies on third parties to perform certain Investor Identification Procedures (as discussed in Part III of the Guidance and as addressed in Section H of this template), this section should take into account those arrangements as applicable.

Investor Identification Procedures should be based upon the specific characteristics presented by the following types of Investors:

(1) Natural persons

See 2.2.1 for examples of the types of procedures that might be included here.

(2) Corporations, partnerships and comparable legal entities

See 2.2.2 for examples of types of procedures that might be included here.

(3) Prohibited Investors

This section should clearly identify those types of Investors that are prohibited from investing in the hedge funds managed by the Hedge Fund Manager. **See 2.2.3.** for examples of the types of Investors that should be so prohibited from investing; a Hedge Fund Manager or hedge fund may wish to identify other types of Investors that are prohibited. This section should also include procedures that provide for screening for Prohibited Investors, including:

a. Listed Investors, *i.e.*, Investors whose names appear on (1) the List of Specially Designated Nationals and Blocked Persons maintained by the Office of Foreign Assets Control ("OFAC")[21]; and (2) such other lists of prohibited persons and entities as may be mandated by applicable law or regulation;

b. Foreign Shell Banks; and

c. Other Investors identified as Prohibited Investors by the Hedge Fund Manager.

(4) High Risk Investors

This section should identify the types of Investors that the Hedge Fund Manager considers to be "high risk" and requiring enhanced Investor Identification Procedures. Examples of High Risk Investors are discussed in **2.4** and include:

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21 OFAC's List of Specially Designated Nationals and Blocked Persons may be accessed at http://www.treas.gov/ofac.

a. A Senior Foreign Political Figure, any member of a Senior Foreign Political Figure's Immediate Family, and any Close Associate of a Senior Foreign Political Figure;[22]

b. Any Investor resident in, or organized or chartered under the laws of, a Non-Cooperative Jurisdiction;[23]

c. Any Investor resident in, or organized or chartered under the laws of, a jurisdiction that has been designated by the Secretary of the Treasury under Section 311 or 312 of the USA PATRIOT Act as warranting special measures due to money laundering concerns;

d. Any Investor who gives the Hedge Fund Manager reason to believe that its subscription funds originate from, or are routed through, an account maintained at an "offshore bank",[24] or a bank organized or chartered under the laws of a Non-Cooperative Jurisdiction.

This section should then address the enhanced Investor Identification Procedures that should be applied to High Risk Investors. The procedures should distinguish between:

a. Natural persons

See 2.4.1 for examples of the types of procedures that might be included here.

b. Legal entities

See 2.4.2 for examples of the types of procedures that might be included here.

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22 See Supervisory Letter SR 01-03 (SUP), *Guidance on Enhanced Scrutiny for Transactions That May Involve the Proceeds of Foreign Official Corruption* (January 16, 2001), available on the website of the Board of Governors of the Federal Reserve System at http://www.federalreserve.gov/boarddocs/SRLETTERS/2001/sr0103.htm.

23 The current list of non-cooperative countries and territories maintained by the Financial Action Task Force on Money Laundering ("FATF") may be accessed at http://www1.oecd.org/fatf/NCCT_en.htm.

24 Here the term "offshore bank" refers to a Foreign Bank that is barred, pursuant to its banking license, from conducting banking activities with the citizens of, or with the local currency of, the country that issued the license, but does not include a Regulated Affiliate.

G. *INVESTOR RECORD RETENTION*

This section should describe the Hedge Fund Manager's procedures regarding retention of documents reviewed as part of its performance of Investor Identification Procedures. **See 2.5** for examples of the types of procedures that might be included here.

H. *RELIANCE ON INVESTOR IDENTIFICATION PROCEDURES PERFORMED BY THIRD PARTIES*

This section should set forth the Hedge Fund Manager's policies and procedures for reliance on the Investor Identification Procedures performed by third parties **See Part III** generally. These policies and procedures should distinguish between reliance on Investor Identification Procedures performed by ***fund administrators*** and ***investor intermediaries*** **(See 3.1)**. In each case, these procedures should clearly identify:

(1) Circumstances where the Hedge Fund Manager has determined it may generally be appropriate to rely on the Investor Identification Procedures performed by a third party **(See 3.2(i))**;

(2) Factors to be considered in reviewing the Investor Identification Procedures of a third party where an individualized assessment of a third party's Investor Identification Procedures may be warranted **(See 3.2(ii))**; and

(3) Required representations/agreements to be obtained from a third party in those instances where the Hedge Fund Manager determines that written assurances from the third party are needed in order to appropriately rely upon such party's Investor Identification Procedures **(See 3.2(iii))**.

This section should also provide that, where anti-money laundering responsibilities are to be shared between the Hedge Fund Manager and a third party, the agreement with the third party, such as an Administrator Agreement with a fund administrator or an Introducing Agreement with an investor intermediary, should clearly allocate such responsibilities between the parties **(See 3.3.)**. In addition, this section should specify the representations and covenants that should be obtained from fund administrators **(See Appendix C-1** for examples**)** and investor intermediaries **(See Appendix C-2** for examples**)**, as applicable.

I. *REVIEW OF EXISTING INVESTOR BASE AND DETECTION OF SUSPICIOUS ACTIVITY*

This section should set forth the Hedge Fund Manager's policies, procedures and controls for a risk-focused periodic review of the existing Investor base of the hedge funds it manages. **See 2.6** for examples of the types of procedures that might be included here. This section could also address procedures for the detection of suspicious activity **(see 2.6)** and might specifically include:

(1) Examples of possible suspicious activity; and

(2) A statement directing employees of the Hedge Fund Manager (i) to report suspicious activity immediately to their immediate supervisor and the Anti-Money Laundering Compliance Officer; and (ii) not to discuss the suspicious activity or the fact that it has been referred to the Anti-Money Laundering Compliance Officer with the Investor concerned.

CONCLUSION

Any questions, comments or concerns regarding the Hedge Fund Manager's anti-money laundering policies, procedures and controls should be directed to the Anti-Money Laundering Compliance Officer.

Sample Provisions
for Fund Administrators, Investor Intermediaries and Subscription Documents

Sample Provisions for Fund Administrators

Below are examples of representations and covenants that a Hedge Fund Manager might seek from a fund administrator (an "Administrator"). These examples are provided for illustrative purposes only and should not be viewed as prescriptive requirements, nor as addressing the only issues to consider when seeking representations and covenants from an Administrator. The appropriateness of representations and covenants will depend on a number of factors, including, but not limited to, (i) the anti-money laundering policies, procedures and controls established by the Administrator; (ii) the Hedge Fund Manager's anti-money laundering program; and (iii) the risks presented by a hedge fund's investor base. Consequently, such provisions need to be tailored to the specific circumstances presented and should only be adopted on the advice of qualified legal counsel. Unless otherwise defined, capitalized terms shall have the meanings ascribed to them in the Guidance.

(i) Provisions Related to the Administrator's Anti-Money Laundering Program

- The Administrator has adopted and implemented anti-money laundering policies, procedures and controls that comply and will continue to comply in all respects with the requirements of applicable anti-money laundering laws and regulations in its home country jurisdiction.
- The Administrator has provided the Hedge Fund Manager with a copy of its anti-money laundering policies, procedures and controls, and will promptly provide the Hedge Fund Manager with any [material/substantive] amendment thereto. [Alternatively, the Hedge Fund Manager may wish to incorporate the Administrator's anti-money laundering policies, procedures and controls into its agreement with the Administrator so that the Administrator's anti-money laundering policies, procedures and controls could only be amended with the consent of the Hedge Fund Manager.]
- The Administrator strictly adheres to, and will at all times during its relationship with the Hedge Fund Manager strictly adhere to, its anti-money laundering policies, procedures and controls.
- The Administrator agrees to [annually] submit, at its own expense, to an independent audit by [the Hedge Fund Manager] [external auditors or other experts agreed by the Hedge Fund Manager] to assess its compliance with and the effectiveness of its anti-money laundering policies, procedures and controls.

(ii) Provisions Related to Prospective Investors

- The Administrator will verify the identities of, and conduct due diligence (and, where appropriate, enhanced due diligence) with regard to, all prospective investors and, where applicable, the principal beneficial owners on whose behalf an investor makes an investment in accordance with its anti-money laundering policies, procedures and controls and [this Agreement/Amendment].

- The Administrator will hold evidence of the identities of each investor and, where applicable, the beneficial owners on whose behalf an investor makes an investment in accordance with its anti-money laundering policies, procedures and controls and [this Agreement/Amendment], maintain such evidence for at least five years following an investor's final redemption from [applicable fund(s)], [and make such information available to the Hedge Fund Manager promptly [upon request]].

- The Administrator will [take all reasonable and practicable steps to] ensure that it does not accept or maintain subscription funds, directly or indirectly, from:

    - A person or entity whose name appears on:

    (a) the List of Specially Designated Nationals and Blocked Persons maintained by the U.S. Office of Foreign Assets Control ("OFAC");[25]

    (b) [such other lists of prohibited persons and entities as may be mandated by [applicable][U.S.] law or regulation] [consider specifying other lists to be verified]; or

    (c) such other lists of prohibited persons and entities as may be provided to the Administrator by the Hedge Fund Manager;

    - A Foreign Shell Bank; or

    - A person or entity resident in or whose subscription funds originate from a [Non-Cooperative Jurisdiction].

- Prior to accepting an investment from a High Risk Investor, the Administrator will conduct enhanced due diligence with regard to such High Risk Investor, [as provided by the Administrator's anti-money laundering policies, procedures and controls] [as agreed upon between the Hedge Fund Manager and the Administrator], in addition to routine Investor Identification Procedures.

- The Administrator and the Hedge Fund Manager agree that, absent any suspicious circumstances, the Administrator may rely upon the due

[25] OFAC's list may be accessed at http://www.treas.gov/ofac.

diligence procedures performed with respect to investors whose investment funds are transmitted by the following sources:

- [Identify institutions/entities that the Hedge Fund Manager has determined to be worthy of reliance. For example, a Hedge Fund Manager may determine that certain of the following may be relied upon:

– A U.S.-regulated financial institution where the investor is a customer of the U.S.-regulated financial institution and the customer's investment funds are wired from its account at the U.S.-regulated financial institution;[1]

– A regulated foreign financial institution organized [in a FATF-Compliant Jurisdiction] [in a jurisdiction determined by the Hedge Fund Manager to have an acceptable anti-money laundering regime] where the investor is a customer of the regulated foreign financial institution and the customer's investment funds are wired from its account at the foreign financial institution;

– An investor intermediary that [has been approved by the Hedge Fund Manager] [is itself a U.S.-regulated financial institution or a regulated foreign financial institution organized [in a FATF-Compliant Jurisdiction] [in a jurisdiction determined by the Hedge Fund Manager to have an acceptable anti-money laundering regime]].

(iii) Provisions Related to Suspicious Activity

- The Administrator will immediately notify the Anti-Money Laundering Compliance Officer of the Hedge Fund Manager if it knows, or has reason to suspect, that a prospective or existing investor, or the principal beneficial owners on whose behalf a prospective or existing investor has made or is attempting to make, an investment, is:
  - A person or entity whose name appears on:
    (a) the List of Specially Designated Nationals and Blocked Persons maintained by OFAC;

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26 The term "U.S.-regulated financial institution" includes any U.S. branch and agency of a Foreign Bank. Where doubt exists as to the existence of a formal "customer" relationship between such a financial institution and an investor, the Hedge Fund Manager may wish to obtain representations from the financial institution confirming the existence of a customer relationship and the performance of customer due diligence.

    - (b) such other lists of prohibited persons and entities as may be mandated by applicable law or regulation; or
    - (c) such other lists of prohibited persons and entities as may be provided by the Hedge Fund Manager;

  - A Senior Foreign Political Figure, any member of a Senior Foreign Political Figure's Immediate Family, and any Close Associate of a Senior Foreign Political Figure;[2]

  - A person or entity resident in, or organized or chartered under the laws of, a Non-Cooperative Jurisdiction;

  - A person or entity resident in, or organized or chartered under the laws of, a jurisdiction that has been designated by the Secretary of the Treasury under Section 311 or 312 of the USA PATRIOT Act as warranting special measures due to money laundering concerns; or

  - A person or entity who gives the Administrator reason to believe that its subscription funds originate from, or are routed through, an account maintained at a Foreign Shell Bank, an "offshore bank",[3] or a bank organized or chartered under the laws of a Non-Cooperative Jurisdiction.

- The Administrator will immediately notify the Anti-Money Laundering Compliance Officer of the Hedge Fund Manager if it becomes aware of any suspicious activity or pattern of activity or any activity that may require further review to determine whether it is suspicious.

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27 See Supervisory Letter SR 01-03 (SUP), *Guidance on Enhanced Scrutiny for Transactions That May Involve the Proceeds of Foreign Official Corruption* (January 16, 2001), available on the website of the Board of Governors of the Federal Reserve System at http://www.federalreserve.gov/boarddocs/SRLETTERS/2001/sr0103.htm.

28 Here the term "offshore bank" refers to a Foreign Bank that is barred, pursuant to its banking license, from conducting banking activities with the citizens of, or with the local currency of, the country that issued the license, but does not include a Regulated Affiliate.

Sample Provisions for Investor Intermediaries

Below are sample representations and covenants that a Hedge Fund Manager might seek from an investor intermediary, which, for purposes of this Annex, may include, without limitation, an introducing firm, an asset aggregator, a nominee or a fund of funds (each, an "Intermediary"). These examples should not be viewed as prescriptive requirements, nor as addressing the only issues to consider in obtaining representations and covenants from an Intermediary. The appropriateness of representations and covenants will depend on a number of factors, including, but not limited to, (i) the anti-money laundering policies, procedures and controls established by the Intermediary; (ii) the Hedge Fund Manager's own anti-money laundering program; and (iii) the risks presented by a hedge fund's investor base. Consequently, such provisions need to be tailored to the specific circumstances presented and should only be adopted on the advice of qualified legal counsel. Unless otherwise defined, capitalized terms shall have the meanings ascribed to them in the Guidance.

(i) Provisions Relating to Status of Intermediary

- The Intermediary is (*select one as applicable*):
  - A regulated financial institution or intermediary based in a FATF-Compliant Jurisdiction; or
  - An unregulated entity based in a FATF-Compliant Jurisdiction.
- [*Where Intermediary invests in its own name:*] The Intermediary is subscribing/will subscribe for shares in the [applicable fund(s)] as a record owner in its capacity as [agent/representative/nominee] on behalf of one or more investors ("Underlying Investors"), and agrees that the representations, warranties and covenants made in the Subscription Agreement are made by it on behalf of itself and the Underlying Investors.
- [Where *Intermediary is a banking entity*:] The Intermediary has (*select one as applicable*):
  - A Physical Presence; or
  - It does not have a Physical Presence, but is a Regulated Affiliate.
- [*Where Intermediary invests on behalf of other investors:*] The Intermediary (i) has all requisite power and authority from the Underlying Investors to execute and perform the obligations under the Subscription Agreement; (ii) has carried out Investor Identification Procedures with regard to all Underlying Investors; and (iii) has established the identity of all Underlying Investors, holds evidence of such identities [and will make such information available to the Hedge Fund Manager upon request].

(ii) Provisions Relating to Intermediary's Anti-Money Laundering Program

- The Intermediary has adopted and implemented anti-money laundering policies, procedures and controls that comply and will continue to comply in all respects with the requirements of applicable anti-money laundering laws and regulations in its home country jurisdiction.
- The Intermediary has provided the Hedge Fund Manager with a copy of its anti-money laundering policies, procedures and controls, and will immediately provide the Hedge Fund Manager with any [material/substantive] amendment thereto.
- The Intermediary strictly adheres to, and will at all times during its relationship with the Hedge Fund Manager strictly adhere to, its anti-money laundering policies, procedures and controls.
- The Intermediary agrees to [annually] submit to an independent audit at the direction of the Hedge Fund Manager to assess its compliance with and effectiveness of its anti-money laundering policies, procedures and controls.

(iii) Provisions Relating to Prospective Investors

- The Intermediary will verify the identities of, and conduct due diligence (and, where appropriate, enhanced due diligence) with regard to, all prospective investors and, where applicable, the principal beneficial owners on whose behalf an investor is seeking to make an investment, in accordance with its anti-money laundering policies, procedures and controls.
- The Intermediary will hold evidence of the identity of each investor and, if applicable, the beneficial owners on whose behalf an investor is seeking to make an investment, maintain such evidence for at least five years from the date of an investor's complete redemption from the [applicable fund(s)], [and agrees to make such information available to the Hedge Fund Manager [and the fund administrator] promptly [upon request]].
- The Intermediary will [take all reasonable and practicable steps to] ensure that [it does not make an investment, directly or indirectly, for or on behalf of] [it does not introduce any investor that is]:
    - A person or entity whose name appears on:

        (a) the List of Specially Designated Nationals and Blocked Persons maintained by the U.S. Office of Foreign Assets Control ("OFAC");

(b) [other lists of prohibited persons and entities as may be mandated by applicable law or regulation] [consider specifying other lists to be verified by the Intermediary]; or
(c) such other lists of prohibited persons and entities as may be provided to the Intermediary by the Hedge Fund Manager;

- A Foreign Shell Bank; or
- [A person or entity resident in, or whose funds are transferred from, a Non-Cooperative Jurisdiction.]

- Prior to making an investment for or on behalf of a High Risk Investor, the Intermediary will conduct enhanced due diligence with regard to such High Risk Investor, [as provided by the Intermediary's anti-money laundering policies, procedures and controls][as agreed upon between the Hedge Fund Manager and the Intermediary], in addition to routine Investor Identification Procedures.

(iv) Provisions Relating to Suspicious Activity

- The Intermediary will immediately notify the Anti-Money Laundering Compliance Officer of the Hedge Fund Manager or the fund administrator, as applicable, if it knows, or has reason to suspect, that a prospective or existing investor, or the principal beneficial owners on whose behalf a prospective or existing investor has made or is seeking to make an investment, is:

    - A person or entity whose name appears on:

        (a) the List of Specially Designated Nationals and Blocked Persons maintained by OFAC;
        (b) such other lists of prohibited persons and entities as may be mandated by applicable law or regulation; or
        (c) such other lists of prohibited persons and entities as may be provided by the Hedge Fund Manager;

    - A Senior Foreign Political Figure, any member of a Senior Foreign Political Figure's Immediate Family, and any Close Associate of a Senior Foreign Political Figure;
    - A person or entity resident in, or organized or chartered under the laws of, a Non-Cooperative Jurisdiction;
    - A person or entity resident in, or organized or chartered under the laws of, a jurisdiction that has been designated by the Secretary of the Treasury under Section 311 or 312 of the USA PATRIOT Act as warranting special measures due to money laundering concerns; or

    - A person or entity who gives the Intermediary reason to believe that its subscription funds originate from, or will be or have been routed through, an account maintained at a Foreign Shell Bank, an "offshore bank" or a bank organized or chartered under the laws of a Non-Cooperative Jurisdiction.

- The Intermediary agrees to immediately notify the Anti-Money Laundering Compliance Officer of the Hedge Fund Manager if it becomes aware of any suspicious activity or pattern of activity or any activity that may require further review to determine whether the activity or pattern of activity is suspicious.

Sample Provisions for Subscription Documents

Below are examples of types of provisions that a Hedge Fund Manager might include in subscription documentation in connection with its Investor Identification Procedures. These examples should neither be viewed as prescriptive requirements, nor as exhaustive or addressing the only issues to consider in developing provisions related to investor identification in subscription documentation. Consequently, such provisions need to be tailored to the specific circumstances presented and should only be adopted on the advice of qualified legal counsel. Unless otherwise defined, capitalized terms shall have the meanings ascribed to them in the Guidance.

(i) Provisions Relating to Identity of Investor

- Investor represents that all evidence of identity provided is genuine and all related information furnished is accurate.
- Investor agrees to provide any information deemed necessary by the Hedge Fund Manager in its sole discretion to comply with its anti-money laundering program and related responsibilities from time to time.

(ii) Provisions Relating to Purpose of Investment

For an Investor investing for its own account:

- Investor is subscribing for shares in the [applicable fund(s)] for its own account, risk and beneficial interest.
- Investor is not acting as agent, representative, intermediary/nominee or in any similar capacity for any other person.1
- No other person will have a beneficial or economic interest in the shares being purchased by the investor.
- Investor does not have any intention or obligation to sell, distribute, assign or transfer all or a portion of the shares to any other person.

For an investor intermediary investing in its own name on behalf of other Investors, which, for these purposes, may include, without limitation, an introducing firm, an asset aggregator, a nominee or a fund of funds (each, an "Intermediary"):

- The Intermediary is subscribing for shares in the [applicable fund(s)] as a record owner in its capacity as [agent/representative/nominee] on behalf of

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[29] The term "person" means any nominee account, beneficial owner, individual, bank, corporation, partnership, limited liability company, or any other legal entity.

one or more investors ("Underlying Investors"), and agrees that the representations, warranties and covenants made in the Subscription Agreement are made by it on behalf of itself and the Underlying Investors.

- The Intermediary (i) has all requisite power and authority from the Underlying Investors to execute and perform the obligations under the Subscription Agreement; (ii) has carried out agreed Investor Identification Procedures with regard to all Underlying Investors; and (iii) has established the identity of all Underlying Investors, holds evidence of such identities [and will make such information available to the Hedge Fund Manager upon request].

(iii) Provisions Relating to Prohibited Investors

- Investor acknowledges that the Hedge Fund Manager prohibits any investment in the hedge fund by or on behalf of the following persons (each, a "Prohibited Investor"):
    - A person or entity whose name appears on:
        (a) the List of Specially Designated Nationals and Blocked Persons maintained by the U.S. Office of Foreign Assets Control ("OFAC");
        (b) [identify such other lists of prohibited persons and entities as may be mandated by applicable law or regulation, *e.g.*, federal control or watch lists]; or
        (c) [identify other prohibited persons and entities];
    - A Foreign Shell Bank; or
    - A person or entity resident in or whose subscription funds are transferred from or through an account in a Non-Cooperative Jurisdiction.
- Investor represents and covenants that neither it, nor any person controlling, controlled by, or under common control with, it, nor any person having a beneficial interest in it, is a Prohibited Investor, and that it is not investing and will not invest in [the applicable fund(s)] on behalf of or for the benefit of any Prohibited Investor. Investor agrees to promptly notify the [investor relations representative/fund administrator/Anti-Money Laundering Compliance Officer of the Hedge Fund Manager] of any change in information affecting this representation and covenant.
- Investor acknowledges that, if, following its investment in [the applicable fund(s)], the Hedge Fund Manager, the fund administrator or [the applicable fund(s)] reasonably believes that Investor is a Prohibited Investor [or has otherwise breached its representations and covenants [hereunder/as to its identity]], the Hedge Fund Manager may be obligated

to freeze its investment, either by prohibiting additional investments, declining any redemption requests and/or segregating the assets constituting the investment in accordance with applicable regulations, or its investment may immediately be redeemed by [the applicable fund(s)], and it shall have no claim against the Hedge Fund Manager, the fund administrator or [the applicable fund(s)] for any form of damages as a result of any of the aforementioned actions.

- Investor acknowledges that additional investments by Investor may be refused and/or a request for redemption may be delayed or declined if [the Hedge Fund Manager, the fund administrator or [the applicable fund(s)] reasonably believes it does not have satisfactory evidence of the Investor's identity.

(iv) Other Possible Disclosures and Acknowledgements

- Investor represents that [, except as otherwise disclosed to the Hedge Fund Manager in writing,]:
    - It is not a Senior Foreign Political Figure, any member of a Senior Foreign Political Figure's Immediate Family, and any Close Associate of a Senior Foreign Political Figure;
    - It is not resident in, or organized or chartered under the laws of, [a jurisdiction that has been designated by the Secretary of the Treasury under Section 311 or 312 of the USA PATRIOT Act as warranting special measures due to money laundering concerns;]
    - Its subscription funds do not originate from, nor will they be routed through, an account maintained at a Foreign Shell Bank, an "offshore bank", or a bank organized or chartered under the laws of a Non-Cooperative Jurisdiction.]
- Investor acknowledges and agrees that any redemption proceeds paid to it will be paid to the same account from which its investment in [the applicable fund(s)] was originally remitted, unless [Anti-Money Laundering Compliance Officer, in its sole discretion], agrees otherwise.
- Investor acknowledges and agrees that the Hedge Fund Manager may release confidential information about it and, if applicable, any Underlying Investor or beneficial owner, to regulatory or law enforcement authorities, if [Senior Management], in its sole discretion, determines that it is in the best interests of [the applicable fund(s)] to do so.

Sample Board Resolutions

1. Sample Board Resolution Adopting Anti-Money Laundering Program and Policy Statement Against Money Laundering and Terrorist Financing – Annex D-1

2. Sample Board Resolution Appointing Anti-Money Laundering Compliance Officer – Annex D-2

Sample Board Resolution Adopting Anti-Money Laundering Program

and Policy Statement Against Money Laundering and Terrorist Financing

[NAME OF HEDGE FUND MANAGER]

WHEREAS, a proposed draft of the Anti-Money Laundering Program (the "Program") developed by [Name of Hedge Fund Manager] (the "Company") and attached hereto as Exhibit A has been distributed to each member of the Board of Directors of the Company.

WHEREAS, a proposed draft of the Company's Policy Statement Against Money Laundering and Terrorist Financing (the "Policy Statement"), attached hereto as Exhibit B, has been distributed to each member of the Board of Directors.

NOW, THEREFORE, BE IT RESOLVED, that the Program, in the form submitted to the Board of Directors and attached hereto as Exhibit A, be, and the same hereby is, approved and adopted, to be effective as of the date of adoption of this resolution.

RESOLVED FURTHER, that the Policy Statement, in the form submitted to the Board of Directors and attached hereto as Exhibit B, be, and the same hereby is, approved and adopted, to be effective as of the date of adoption of this resolution.

RESOLVED FURTHER, that the officers of the Company be, and each acting alone is, hereby authorized, empowered and directed, for and on behalf of the Company, to take or cause to be taken any and all actions as such officers may deem necessary or advisable to carry out and perform the responsibilities and obligations of the Company under the Program and the Policy Statement.

RESOLVED FURTHER, that the officers of the Company are, and each acting alone is, hereby authorized to do and perform any and all such acts as such officers shall deem necessary or advisable, to carry out the purposes and intent of the foregoing resolutions.

Sample Board Resolution Appointing
Anti-Money Laundering Compliance Officer

[NAME OF HEDGE FUND MANAGER]

WHEREAS, [Name of the Hedge Fund Manager]'s Anti-Money Laundering Program (the "Program") requires the appointment of an Anti-Money Laundering Compliance Officer who will be responsible for the day-to-day administration of the Program in accordance with the provisions thereof.

RESOLVED, that ______________ is hereby appointed as the Anti-Money Laundering Compliance Officer of [Name of Hedge Fund Manager] to serve until [his][her] successor shall be duly appointed or, if earlier, until [he][she] resigns, is removed from office or is otherwise disqualified from serving as the Anti-Money Laundering Compliance Officer.

RESOLVED FURTHER, that the Anti-Money Laundering Compliance Officer is hereby authorized to do and perform any and all such acts and functions as [he][she] is charged with under the provisions of the Program.

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(Appendix III)

Effective Dates of Certain Key Anti-Money Laundering Provisions of the USA PATRIOT Act

- **October 26, 2001**
  - Enactment.
- **By December 25, 2001**
  - Prohibition on U.S. correspondent accounts with foreign shell banks and "nested" shell banks (Section 313) becomes effective.
- **Prior to January 1, 2002**
  - Treasury, in consultation with the Securities and Exchange Commission and the Federal Reserve, required to publish proposed regulations requiring registered brokers and dealers to submit suspicious activity reports (Section 356). Final regulations to be published by no later than July 1, 2002.
- **By February 23, 2002**
  - Treasury required to adopt regulations encouraging further cooperation among financial institutions, their regulatory authorities and law enforcement authorities (Section 314).
- **By April 24, 2002**
  - All "financial institutions" required to establish anti-money laundering programs (Section 352).
  - Treasury to adopt regulations considering the extent to which the requirements of Section 352 are commensurate with size, location and activities of financial institutions to which such regulations apply.
  - Treasury to promulgate regulations delineating due diligence requirements for correspondent accounts and private banking accounts under Section 312.
- **By July 23, 2002**
  - Special due diligence required for correspondent accounts and private banking accounts (Section 312).

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- **By October 26, 2002**

  – Final regulations regarding the identification and verification of accountholders to become effective (Section 326).

  – The Secretary of the Treasury, the Board of Governors of the Federal Reserve System and the Securities and Exchange Commission to jointly submit a report to Congress on recommendations for effective regulations to apply the requirements of subchapter II of chapter 53 of title 31 of the United States Code to registered investment companies as well as investment companies excepted from the definition of investment company pursuant to 3(c)(1) and 3(c)(7) of the Investment Company Act of 1940 (Section 356).

Members of Financial Action Task Force on Money Laundering ("FATF")

(as of March 27, 2002)

1. Argentina
2. Australia
3. Austria
4. Belgium
5. Brazil
6. Canada
7. Denmark
8. European Commission
9. Finland
10. France
11. Germany
12. Greece
13. Gulf Co-operation Council
14. Hong Kong, China
15. Iceland
16. Ireland
17. Italy
18. Japan
19. Luxembourg
20. Mexico
21. Kingdom of the Netherlands
22. New Zealand
23. Norway
24. Portugal
25. Singapore
26. Spain
27. Sweden
28. Switzerland
29. Turkey
30. United Kingdom
31. United States

Please Note: The list of FATF Members is amended periodically. FATF Members are not *per se* FATF-Compliant Jurisdictions.

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List of FATF Non-Cooperative Countries and Territories

(As of March 27, 2002)

1. Cook Islands
2. Dominica
3. Egypt
4. Grenada
5. Guatemala
6. Hungary
7. Indonesia
8. Israel
9. Lebanon
10. Marshall Islands
11. Myanmar (Burma)
12. Nauru
13. Nigeria
14. Niue
15. Philippines
16. Russia
17. St. Kitts and Nevis
18. St. Vincent and the Grenadines
19. Ukraine

Please Note: The list of Non-Cooperative Countries and Territories is amended periodically. For a current list of Non-Cooperative Countries and Territories, please refer to the FATF website at www1.oecd.org/fatf.

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Lists Maintained by the Office of Foreign Assets Control ("OFAC")

A. Persons and Entities Subject to OFAC Sanctions

See list of "Specially Designated Nationals and Blocked Persons" at http://www.treas.gov/ofac.[1]

B. Countries Subject to OFAC-Administered Sanctions (as of March 27, 2002)[2]

1. Balkans
2. Burma (Myanmar)
3. Cuba
4. Iran
5. Iraq
6. Liberia
7. Libya
8. North Korea
9. Sierra Leone
10. Sudan
11. Taliban (Afghanistan)
12. Unita (Angola)
13. Yugoslavia

Please Note: These lists are amended periodically. For current OFAC lists, please refer to the OFAC website at http://www.treas.gov/ofac.

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30 This list includes "Specially Designated Global Terrorists", including those persons listed in Executive Order 13224 - Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten to Commit or Support Terrorism.

31 The OFAC-administered sanctions targeting specific countries take many different forms. The sanctions are generally couched in terms of identifying certain forbidden transactions, which may or may not include transactions such as hedge fund investments. Compliance with regulations promulgated by OFAC are beyond the scope of the Guidance.

Release No. 1/March 28, 2002
(Appendix III)

Money Laundering Advisories Issued by the Financial Crimes Enforcement Network ("FinCEN") of the Department of the Treasury

As of March 27, 2002, FinCEN has issued advisories with regard to deficiencies in the anti-money laundering regimes of the following jurisdictions:

1. The Cook Islands
2. Dominica
3. Israel
4. Lebanon
5. The Marshall Islands
6. Nauru
7. Niue
8. The Philippines
9. The Russian Federation
10. Seychelles
11. St. Kitts and Nevis
12. St. Vincent and the Grenadines

Please Note: FinCEN Advisories with regard to the anti-money laundering regimes in certain jurisdictions are issued and withdrawn by Treasury periodically. Advisories are also issued by FinCEN that generally describe trends and developments related to money laundering and financial crime. Please refer to the FinCEN website at www.treas.gov/fincen.

Release No. 1/March 28, 2002
(Appendix III)

APPENDIX IV

CHECKLIST FOR HEDGE FUND MANAGERS TO CONSIDER IN DEVELOPING A COMPLIANCE MANUAL

The following checklist has been drafted to assist Hedge Fund Managers in developing their own compliance policies and procedures. MFA expects that the contents and specific details of a Hedge Fund Manager's policies and procedures will vary significantly depending on factors specific to each Hedge Fund Manager, such as, among other things, organizational structure and the strategies of the Hedge Funds advised by the Hedge Fund Manager. In addition, Hedge Fund Managers that are required to register under the Investment Advisers Act of 1940 (the "Advisers Act") will need to adopt policies and procedures that meet the requirements of Rule 206-4(7) of the Advisers Act. Some of the requirements of that Rule are summarized in the checklist below for the benefit of SEC-registered Hedge Fund Managers, but may also be considered as a reference for unregistered Hedge Fund Managers, to the extent they are appropriate for their operations. By providing this list, MFA does not intend to advocate the adoption of policies and procedures containing any particular provision nor does it intend to provide an exhaustive list of the provisions that should be included, but rather hopes that Hedge Fund Managers will consider the various categories set forth in this checklist in developing policies and procedures that are tailored to, and include all provisions appropriate for, their own businesses.

Applicability and General Provisions

- ***Identify Covered Personnel.*** Explain which employees, officers, directors and other personnel at the Hedge Fund Manager are covered ("covered personnel"). *Note that Rule 206-4(7) requires registered investment advisers' compliance policies to apply to the adviser and any supervised person ("any partner, officer, director (or other person occupying a similar status or performing similar functions), or employee of an investment adviser, or other person who provides investment advice on behalf of the investment adviser and is subject to the supervision and control of the investment adviser").*

- ***Purpose of Policies and Procedures.*** Set forth policies and procedures that are reasonably designed to prevent violations of such policies and procedures from occurring, detect and address violations that have occurred. *Note that Rule 206(4)-7 of the Advisers Act requires all registered investment advisers to adopt and implement policies and procedures reasonably designed to prevent the investment adviser and its personnel and the entity he or she is advising from violating the Advisers Act and its rules and regulations.*

- ***Use and Distribution.*** Distribute policies and procedures to all covered personnel and make clear that it is the responsibility of the covered personnel to understand the contents of the policies and procedures.

Compliance Officer

- ***Appointment and Responsibilities of the Compliance Officer***—Explain that there must be a chief compliance officer or other similar individual (the "Compliance Officer")* appointed and that the Compliance Officer is assigned primary responsibility for coordinating and supervising compliance with applicable laws and regulations, as well as all internal procedures adopted by the investment adviser. *Note that Rule 206-4(7) requires registered investment advisers to designate an individual responsible for administering the policies and procedures of the Hedge Fund Manager*.

  **Recommendations for sound practices relating to the Compliance Officer are contained in Section V of the 2005 Sound Practices.*

Elements of Policies and Procedures

A. Investment Adviser as Fiduciary

Include information about a Hedge Fund Manager's applicable fiduciary duties and explain that the adviser must act solely in the best interests of its client and must make full and fair disclosure of all material facts about the Hedge Fund Manager's business and business practices to its clients.

- Note that all *investment advisers*, whether registered or unregistered, are subject to the antifraud provisions of Section 206 of the Advisers Act, which generally makes it unlawful for an investment adviser to engage in fraudulent, deceptive or manipulative conduct.

  In addition, note that in adopting Rule 206(4)-7, the SEC indicated that advisers should consider their fiduciary obligations under the Advisers Act and formalize policies and procedures to address them.

B. Portfolio Management Processes

Include provisions addressing controls and procedures for various portfolio management processes.

- ***Allocate investment opportunities fairly among Funds.*** Create procedures for allocating opportunities that relate to types of investments involved, investment strategies employed by the Hedge Fund Manager and operational processes, including policies on partial fills, *de minimis* reallocations, deviations from allocation policy and allocations of "New Issues". Establish a committee, designate an employee or otherwise allocate responsibility to review the facts and circumstances of opportunities to ensure that the Hedge Fund Manager addresses its applicable fiduciary duties.

- ***Maintain portfolios consistent with Funds' objectives.*** Undertake reviews of portfolios (electronic and/or manual reviews) and establish controls in order to detect departures from established investment objectives.

- ***Disclose information about portfolio management processes.*** Develop disclosure controls to consider whether and the way in which policies and changes to policies should be reviewed and communicated to investors.

- ***Comply with applicable regulatory restrictions.*** Evaluate and address applicable regulatory requirements, including filing requirements with various government regulators* and establish timelines and assign oversight responsibility for compliance to the Compliance Officer or a designated employee.

In the case of registered investment advisers, this requirement covers a number of substantive provisions under the Advisers Act, including:

  - Filing and updating Form ADV;
  - Proxy voting policies and procedures;
  - Custody requirements;
  - Procedures for solicitation activities;
  - Books and records;
  - Insider trading policies and codes of ethics;
  - Advertising; and
  - Requirements for an advisory contract.

** A list of required U.S. filings that Hedge Fund Managers may be required to file is contained in Appendix II of the 2005 Sound Practices.*

C. Trading Practices

Include provisions that address procedures for trading practices and execution of strategies.

- ***Transaction Review.*** Name authorized traders for transactions, establish procedures for specific periodic review of certain transactions and orders, include a retention policy for transaction reports, and describe procedures for handling transactions upon completion, including distribution of confirmations. Establish a procedure for handling and reporting execution errors.

- ***Conflicts Review.*** Establish effective review and approval processes for dealing with any conflicts of interest that arise, including in connection with Soft Dollar Arrangements* or other services from brokers. This should include policies for selection of broker-dealers, use of affiliated broker-dealers, use of agency crosses and disclosure to investors about the process for dealing with these potential conflicts.

**Note that Section 206(3) of the Advisers Act makes it unlawful for any investment adviser, whether registered or unregistered, to act as a principal on the other side of a* *transaction from a client, without first disclosing it and obtaining the written consent of the client.*

- ***Aggregated Trade Review.*** Fairly allocate aggregated trades among Hedge Funds. Establish procedures for when to aggregate trades, how to allocate aggregated trades and how to review adherence to policy.

  * Suggestions for soft dollar and best execution practices are addressed in Section VI of Sound Practices.

D. Trading Activity

Procedures should address proprietary trading of the Hedge Fund Manager and personal trading activities of supervised persons. *Note that this element may be covered by other policies adopted by Hedge Fund Managers. In the case of registered investment advisers, Section 204A requires advisers to adopt insider trading policies and Rule 204-1 requires registered investment advisers to adopt codes of ethics, which codes are required to contain provisions covering personal trading activities.**

- Establish policies to direct that any trading by employees and affiliates will be conducted in a manner that is consistent with the requirements of the policies and in a manner consistent with the applicable fiduciary duties owed by the Hedge Fund Manager.

  ** Suggestions for elements of trading policies and codes of ethics are addressed in Appendix V of the 2005 Sound Practices.*

E. Disclosures

Develop disclosure controls and procedures to ensure prompt and accurate disclosure to investors and any applicable regulators, including relating to account statement disclosures.

- Establish a committee or a designated employee to review required disclosure documents for accuracy and consistency.

- Establish procedures for updating and distributing any required information to investors and regulators. *In the case of registered investment advisers this procedure should address required updates in Form ADV and required financial and disciplinary information in Rule 206(4)-4.*

  Note that Section 207 of the Advisers Act prohibits any person from willfully making any untrue statement of a material fact, or willfully omitting to state any material fact which is required to be stated, in any registration application or report filed with the SEC.

F. Safeguarding Client Assets

Develop procedures to safeguard client assets from conversion or inappropriate use by advisory personnel.

- Limit authority and access to client accounts to designated employees and require approval of Compliance Officer for deviations from that policy.

- Monitor activity of employees with access to client accounts to ensure adherence with procedures.

G. Recordkeeping

Create policies that address maintaining complete and accurate records of the Hedge Fund Manager and all Hedge Funds it manages.

- These policies and procedures should be designed to ensure the retention of accurate and complete records and may include, as appropriate, maintenance of original copies of all records, including those created in email, protection against electronic destruction, development of searchable indices of stored data and records, and policies relating to access to records. A Hedge Fund Manager should also establish a policy relating to the length of time records are required to be retained that is appropriate for its organizational structure and business activities.

  Note that Rule 204-2 under the Advisers Act identifies certain books and records that must be prepared and retained by registered investment advisers. For purposes of Section 204 of the Advisers Act, books and records include records of the private funds for which the adviser or a related person acts as general partner, managing member or in a similar capacity. This Rule specifies the time periods for which such books and records must be retained, which is generally five years.

H. Marketing and Fees

Include procedures to address marketing activities, including use of solicitors, and payment of fees.

- Develop disclosure controls to ensure that arrangements are fully and accurately disclosed. *Note that if a registered investment adviser pays a cash fee to a person soliciting investors, the adviser must meet the requirements of Rule 206(4)-3 under the Advisers Act.*

- Develop disclosure controls to ensure that any performance fees are fully and accurately disclosed. *Note also that registered advisers of 3(c)(1) funds may be subject to limitations on the ability to charge performance fees. Section 205(a)(1) of the Advisers Act generally prohibits a registered investment adviser from receiving a performance fee. However, Rule 205-3 of the Advisers Act permits a registered investment adviser to* *receive a performance fee from certain eligible clients. Registered advisers should establish the qualifications for "eligible clients" in accordance with the rule.*

I. Valuation

Include processes to value holdings and assess fees based on those valuations.*

* *Suggestions for valuation practices are included in Section III of the 2005 Sound Practices.*

J. Safeguards for Privacy Protection of Client Records and Information

Adopt policies to address administrative and physical safeguards for the protection of customer records and information.

- Develop procedures and lists of employees permitted to access client information. Set forth policy for providing client information to affiliates and nonaffiliated third parties. Consider requiring pre-approval of client or Compliance Officer.

  Note that the SEC's Regulation S-P ("Privacy of Consumer Financial Information") requires registered investment advisers to adopt policies and procedures reasonably designed to (i) ensure the confidentiality of customer records and information, (ii) protect against any anticipated threats or hazards to the security of customer records and information, and (iii) protect against unauthorized access or use of customer records or information that could result in substantial harm or inconvenience to any consumer. Registered investment advisers are required to distribute a notice of their privacy policy to each of their underlying investors in a fund that are natural persons at the time a person becomes an investor in a Hedge Fund and on an annual basis.

K. Business Continuity and Disaster Recovery Plans

Develop procedures to reduce risk to clients as a result of unforeseen events that would impact the adviser's ability to continue active management of the clients' assets.*

* *Recommendations for BC/DR plans are included in Section VII of the 2005 Sound Practices.*

L. Anti-Money Laundering

Develop policies and procedures in connection with the prevention of money laundering. This section should include the Hedge Fund Manager's policy on cash or cash equivalent bearer instruments, its documentation policies and its reporting and disclosure obligations, as well as the role of the Compliance Officer.

Review and Updating of Policies.

- Establish processes for reviewing the policies and procedures to determine their adequacy and the effectiveness of their implementation.

- Update policies in the event of significant changes to business or unforeseen market events.

  Note that Rule 206(4)-7 requires registered investment advisers to conduct this review no less frequently than annually.

2. Acknowledgment and Training

- Develop requirements for employees, such as requiring an employee to sign a written statement acknowledging his or her receipt and understanding of and agreement to abide by, the policies.

- Require periodic training of employees to ensure understanding of and compliance with policies and procedures.

APPENDIX V

CHECKLIST FOR HEDGE FUND MANAGERS TO CONSIDER IN DEVELOPING A CODE OF ETHICS

The following checklist is intended to assist Hedge Fund Managers in developing their own codes of ethics or conduct. MFA expects that the codes of ethics or conduct among different Hedge Fund Managers will vary significantly depending on factors specific to each Hedge Fund Manager, including organizational structure and the types of Hedge Funds advised by the Hedge Fund Managers. By providing this checklist, MFA does not intend to advocate the adoption of a code of ethics or conduct containing any particular provision nor does it intend to provide an exhaustive list of the provisions that should be included, but rather hopes that Hedge Fund Managers will consider the various elements of this checklist in developing a code of ethics or conduct that is specifically tailored to their own businesses. Moreover, particular provisions identified below may be contained in one or more other policy manual, memorandum or other document not styled as a "code".

Hedge Fund Managers should be aware that those required to register with the Securities and Exchange Commission (the "SEC") must establish, maintain and enforce a code of ethics pursuant to Rule 204A-1 of the Investment Advisers Act of 1940 (the "Advisers Act") and must offer in Part II of their Form ADV to provide such code to clients and prospective clients. The requirements of that Rule are summarized in the checklist below for the benefit of registered Hedge Fund Managers, but may also be considered as a reference for unregistered Hedge Fund Managers to the extent such requirements are appropriate to their operations. To be adequately implemented, Hedge Fund Managers should consider supporting the principles of conduct set forth in any code of ethics or conduct with compliance policies.

Hedge Fund Managers should consider including the following provisions:

Applicability of the Code

- Identification of personnel covered ("covered personnel") by the Code of Ethics or Conduct ("the Code").
- Emphasis on the adherence to the provisions of the Code.
- *Note that Rule 204A-1 requires registered Hedge Fund Managers to make the Code available to all clients and potential clients of any Hedge Fund advised by the Hedge Fund Manager, upon request.*

Standards of Conduct

- A provision setting forth standards of business conduct for covered personnel.
- A statement that covered personnel are to comply with all applicable federal securities laws, including the various applicable provisions of the Advisers Act, the Investment Company Act of 1940, the Securities Act of 1933, the Securities

Exchange Act of 1934 and all applicable rules and regulations adopted by the SEC. *Note that Rule 204A-1 requires codes of ethics to include provisions requiring supervised persons to comply with applicable federal law.*

- Articulation of covered personnel's fiduciary duty to act in the client's best interest. *For certain Hedge Fund Managers, the scope of the duties to clients may be set forth in investment management agreements, offering documents or other written materials, and the Code may make reference to these. Note that Rule 204A-1 requires standards of conduct that reflect the registered investment adviser's fiduciary obligations and the fiduciary obligations of its supervised persons.*
- A statement that covered personnel should strive to act in a professional and ethical manner.
- Incorporation of the Hedge Fund Manager's fundamental ideals (such as integrity, honesty, trust, etc.), as well as the legal, ethical and moral obligations with which covered personnel should comply.

Personal Trading

- Policies emphasizing that the interests of clients will at all times be placed first, and that covered personnel will not take advantage of their positions for personal benefit.
- Procedures for personal trading, such as blackout periods, restricted lists, reviews, holding periods and prohibitions on certain types of trades.
- Procedures for the required pre-approval/clearance of certain transactions such as IPOs, private placements/limited offerings or securities on any restricted list. *Note that Rule 204A-1 requires pre-approval before "access persons" (as defined in Rule 204A-1(e)(1)) may directly or indirectly acquire beneficial ownership in any security in an IPO or limited offering.*

Reporting of Holdings

- Procedures that covered personnel file an initial holding report, or account statements, covering all their current holdings in specified investments. This holding report should be updated periodically. *Note that Rule 204A-1 contains specific reporting requirements for "access persons", including the content and timing of holdings reports and transaction reports.*
- With respect to implementation of the foregoing bullet, Hedge Fund Managers may consider setting up a system to have copies of brokerage statements and confirmations of covered personnel delivered directly to the Hedge Fund Manager.
- Procedures to report all specified types of personal transactions on a quarterly basis to designated personnel.

- Requirement that the compliance officer should review the personal security reports to check for any trading improprieties. *Note that Rule 204A-1 requires Hedge Fund Managers to review personal securities transactions and holdings periodically.*

Client Information

- Policies that identify confidential client information, and then ensure that the information is not disclosed, other than in the necessary course of business (*i.e.*, on a "need to know" basis).
- Policies to prevent the misuse of information.
- *Note that these confidentiality policies may also be contained within the compliance policies and procedures. See Appendix IV.*

Insider Trading

- Formulation of policies that are designed to prevent and detect insider trading that reflect the nature of the Hedge Fund Manager's business and type of instruments traded and include procedures, such as a restricted list and the monitoring of trading activity by covered personnel.
- Implement policies to prevent the misuse of material non-public information, such as controlling access to the information through a gatekeeper and controlling the ability to make copies of such information.

Gifts and Acts of Hospitality

- Creation of policies on the giving or receiving of business gifts and other acts of hospitality that may create the appearance of impropriety.
- Inclusion of provisions that require mandatory reporting of gifts accepted in the course of business. Consider whether gifts should need to cross a certain threshold, depending on the nature of the Hedge Fund Manager's business, before such reporting would be required.

Acknowledgement and Certification and Training

- Requirement that covered personnel sign an acknowledgement that they have received the Code. *Note that Rule 204A-1 requires supervised persons to acknowledge receipt of the Code and any amendments.*
- Provisions concerning training staff on the principles and policies of the Code.
- Designation of a person that covered personnel can seek advice from for any questions about the Code.
- Requirement for conducting annual recertification of the policies in the Code.

- Requirement that a record of the acknowledgements by supervised persons be kept. *Note that Rule 204-2(a)(12)(iii) requires a record of acknowledgements for each supervised person to be kept for 5 years.*
- Requirement that a record of the Code and any amendments to the Code be kept and maintained by appropriate supervisory personnel. *Note that Rule 204-2(a)(12)(i) requires a record of the Code to be kept for 5 years*.

Violations of Code

- Provision for a reporting mechanism for any violations of the Code. *Note that Rule 204A-1 requires a code of ethics to contain provisions requiring supervised persons to report any violations of the code of ethics promptly to the chief compliance officer or, provided the chief compliance officer also receives reports of all violations, to other persons designated in the code of ethics*.
- Provision for whistleblower protection to those who report violations.
- Provisions designed to ensure that sensitive information about violations is kept confidential until otherwise notified by the designated person.
- Policies for when and how an investigation is initiated and carried out, as well as who has responsibility to undertake the investigation.
- Determination of whether records of every violation or alleged violation will be kept and for how long. *Note that Rule 204-2(a)(12)(ii) requires that a record be kept of any violation of the Code, and any action taken as a result of the violation*.

Sanctions

- Development of appropriate sanctions for breaches of the provisions of the Code, such as suspension, letter of censure, restitution and termination.

For further reference materials on drafting a Code, please see the following resources:

Asset Manager Code of Professional Conduct (2005) from the CFA Centre for Financial Market Integrity:

- *http://www.cfainstitute.org/cfacentre/positions/pdf/asset_manager_code.pdf*

SEC final rule release on the Investment Adviser Code of Ethics:

- *http://www.sec.gov/rules/final/ia-2256.htm*

APPENDIX VI

GLOSSARY

Terms contained in this glossary are defined for the purpose of the Recommendations and may have a wider or different meaning outside the context of the Recommendations. Italicized terms in the definitions are defined elsewhere in the glossary.

Arbitrage A type of financial transaction or strategy that seeks to profit from a price differential perceived with respect to related or correlated instruments in different markets and typically involves the simultaneous purchase of an instrument in one market and the sale of the same or related instrument in another market.

Asset Liquidity See **Liquidity** and **Liquidity Risk**.

Backtest (Backtesting) An examination of the results generated by a model (*e.g.*, a Value-at-Risk model) as compared to actual or realized results in order to assess the accuracy of the model.

Balance Sheet Leverage See **Leverage Measures**.

Borrowing Capacity The amount of money a Hedge Fund can borrow from a broker or dealer or other *credit provider* (*e.g.*, in order to fund purchases of securities). For example, according to Regulation T of the Federal Reserve Board (12 C.F.R. 220.4), a borrower may borrow up to 50% of the value of a security, depending on the type of security.

Capital The total assets of a Hedge Fund net of liabilities but including assets such as deferred compensation owed to the Hedge Fund Manager. In the Recommendations, capital and equity are often used interchangeably.

Cash Cash balances held in bank accounts and short-term, high-quality marketable securities, such as government bonds.

Cash Market A market in which goods are purchased either immediately for cash, as in a cash and carry contract, or where they are contracted for presently, with delivery and payment occurring shortly thereafter. All terms of the contract are negotiated between buyer and seller.

Collateral An asset that is pledged as security, or whose title is transferred to a secured party, in order to secure payment or performance obligations. If the party providing collateral defaults, the asset pledged or transferred may be taken and sold by the secured party to satisfy obligations of the pledgee/transferee. Instruments that are typically accepted as collateral include government securities, cash and, to a lesser extent, corporate debt and equities. Collateral generally serves to mitigate counterparty credit risk (see **Credit Risk**).

Collateral Agreement An agreement between two parties that governs the delivery and use of *collateral*. Key provisions of such agreements are: collateral delivery and return requirements, the rights of the secured party in the collateral, the level of unsecured credit risk that each party is willing to assume (*i.e.*, exposure thresholds above which the transfer of collateral is required), the type of instruments that can be posted as collateral, minimum transfer amounts, *haircut* provisions, among others.

Collateral Call A notice given by a secured party to the provider of *collateral* informing the latter that the change in the market value of a position has required the posting of *collateral*.

Collateral Event An event that triggers an obligation to post additional *collateral* (rather than causing a termination of all transactions that are subject to a *Master Agreement*, for example).

Commodity Generally, an article of commerce or a product that can be used for commerce. In the United States, the term often is narrowly used to refer to products underlying futures contracts traded on regulated futures exchanges. The types of "commodities" that underlie such contracts include both physical and financial commodities such as agricultural and energy products, metals, foreign currencies, and interest rate and equity instruments (see **Futures**). Commodities are also traded in the *forward* and cash markets.

Concentration Arises when a significant percentage of a Hedge Fund's portfolio is exposed to the same or similar *market factors* or other risk factors, increasing the risk of losses caused by adverse market or economic events affecting such risk factors. Hedge Fund Managers may track concentration levels with respect to asset classes, industry sectors, regions or other relevant areas.

Correlation A standardized measure of the relative movement between two variables, such as the prices of two different securities. The level of correlation between two variables is measured on a scale of –1 to +1. If two variables move up or down together, they are positively correlated. If they tend to move in opposite directions, they are negatively correlated.

Counterparty A third party that enters into transactions with a Hedge Fund.

Credit Provider A bank, securities firm or other third party that extends credit to a Hedge Fund, either in connection with financing a Hedge Fund's purchases of securities or other instruments or through stand-alone loan facilities. A counterparty may be viewed as a credit provider when it engages in uncollateralized or partially collateralized OTC derivatives transactions with a Hedge Fund.

Credit Risk The risk that an issuer of a security (asset credit risk) or a counterparty (counterparty credit risk) will not meet its obligations when due. Asset credit risk also includes sovereign risk where the potential loss is related to the financial solvency of a sovereign issuer of a security. Counterparty credit risk is frequently broken down into component risks for monitoring purposes (see, *e.g.*, **Settlement Risk** and **Pre-Settlement Risk**)).

Credit Spread The difference between the yield (or percentage rate of return) of a Treasury security and a non-Treasury debt security (*e.g.*, a corporate bond) that are identical in most respects (particularly the term of the obligation), except with respect to credit rating.

Derivative A *derivative* is a financial instrument whose value depends on, or is derived from, the value of an underlying asset, index, rate or instrument.

Equity In the context of investing, a synonym for stocks or shares of companies. When used in connection with accounting, equity refers to the amount by which the assets of an entity exceeds its liabilities. With respect to Hedge Funds, see also **Capital**.

Fair Value Generally refers to the price at which a single unit of an instrument would trade between disinterested parties in an arm's-length transaction. Fair value does not generally take into account control premiums (the price difference between the market price per share of an individual security and the price per share of a block of such securities that carries the power to control a corporation) or discounts for large or illiquid positions (see **Illiquid Instrument**).

Financial Statement-Based Leverage See **Leverage Measures.**

Funding Liquidity See **Liquidity** and **Liquidity Risk**.

Gross Balance Sheet Assets See **Leverage Measures**.

Haircuts The difference between the market value of an asset posted as *collateral* and the value attributed to such an asset by a party in determining whether the *collateral* requirements of such party have been met. A haircut is intended to protect a party that receives *collateral* from fluctuations in the value of the instruments posted as *collateral*.

Hedge Fund A privately offered, pooled investment vehicle that is not widely available to the public and the assets of which are managed by a *Hedge Fund Manager*. The term Hedge Fund, as used in the Recommendations, is not intended to capture private equity, venture capital or real estate funds.

Hedge Fund Manager An entity that serves as investment manager for a Hedge Fund and manages its assets and investments. Offshore Hedge Funds typically have Hedge Fund Managers that are separate legal entities, while many U.S. Hedge Fund Managers may be part of the Hedge Fund structure (*e.g.*, as general partner of a limited partnership or managing member of a limited liability company). Hedge Fund Managers are often investors in the Hedge Funds they manage and are compensated in part based on the performance of the Hedge Fund.

Holding Period The period over which *Value-at-Risk* is calculated (*e.g.*, one day, three days, one week, 10 days). The holding period should reflect the amount of time it would take to liquidate or *neutralize* the positions in the relevant portfolio.

Illiquid Instrument See **Liquidity**.

Interest Rate Term Structure The relationship among interest rates of *fixed income instruments* with different maturities usually depicted as a graph, also referred to as a "yield curve".

Legal Risk The risk of loss arising from uncertainty in laws, regulations or legal actions which may affect transactions between parties. Legal risk may include issues related to the enforceability of netting agreements, the perfection of collateral, the capacity of parties, the legality of contracts, among others.

Leverage A factor (rather than an independent source of risk) that influences the rapidity with which changes in market risk, credit risk or liquidity risk change the value of a portfolio.

Leverage Measures Generally, Hedge Funds use two types of *leverage measures*. Financial statement-based leverage measures compare the nominal sizes of Hedge Fund balance sheet positions to a Hedge Fund's equity. Risk-based leverage measures assess the relationship between the riskiness of a Hedge Fund's portfolio and its capacity to absorb the impact of that risk.

Liquidity There are two separate but related types of liquidity. Funding liquidity is the ability of a Hedge Fund to hold its market positions and meet the cash and/or collateral demands of counterparties, other credit providers and investors (see **Collateral Call** and **Redemption**). Asset liquidity refers to the ability to liquidate an asset quickly, and in large volume, without substantially affecting the asset's price. An asset that cannot be liquidated in a short period of time without substantially affecting the asset's price is considered an *illiquid instrument*.

Liquidity Risk With respect to asset liquidity, the inability to sell an asset quickly and/or in large volume at a reasonable price. With respect to funding liquidity, the risk that a party will not have or cannot obtain sufficient funds to meet its obligations.

Margin A certain amount of assets that must be deposited in a margin account in order to secure a portion of a party's obligations under a contract (see **Margin Account**). For example, to buy or sell an exchange-traded futures contract, a party must post a specified amount which is determined by the exchange, referred to as an "initial margin". In addition, a party will be required to post "variation margin" if the futures contracts change in value. Margin is also required in connection with the purchase and sale of securities where the full purchase price is not paid upfront or the securities sold are not owned by the seller.

Margin Accounts The account in which margin is held for securities or exchange-traded futures or options. Positions that are subject to margin requirements are generally valued, or "marked to market," daily, and additional margin may be required if the market value of a position declines.

Market Factors Refers collectively to interest rates, foreign exchange rates, equity prices, commodity prices and indices constructed from these rates and prices, as well as their *volatility* and *correlation*.

Market Risk Narrowly defined, it is the risk of a decline in value of a Hedge Fund's portfolio resulting from changes in *market factors*. Since asset liquidity risk and the credit risk of an asset's issuer may also affect the value of instruments in a portfolio, Hedge Funds frequently manage all of these risks jointly as *market risk*.

Master Agreement An agreement that sets forth the standard terms and conditions of privately negotiated, bilateral transactions between two parties, such as the "1992 ISDA Master Agreement" form published by the International Swaps and Derivatives Association, Inc.

("ISDA") for OTC derivatives transactions (see **OTC**). These agreements typically include payment netting and close-out netting provisions (see **Netting**).

Model A program or process that is designed to create a depiction of reality through graphs, pictures or mathematical representations.

Net Asset Value (NAV) The fair value of a Hedge Fund's assets minus the fair value of its liabilities. NAV is the basis for determining the prices applicable to investor subscription and redemptions. NAV would generally not include special adjustments that may be made to valuations for risk monitoring purposes, such as adjustments for illiquidity concerns. Under generally accepted accounting principles, NAV computations should include accrued interest, dividends and other receivables of the Hedge Fund, as well as accrued expenses and other payables.

Netting Netting involves aggregating exposures on multiple transactions between the same two counterparties and reducing them down to a single net exposure amount by offsetting the positive exposures with the negative. Netting provisions are typically included in *master agreements* between two parties and provide that positive mark-to-market values on transactions for one counterparty will be offset by negative mark-to-market values for the same counterparty on other transactions for purposes of determining net payments to be made or amounts of collateral to be delivered, for example.

Off-Balance-Sheet Transaction A transaction entered into by a Hedge Fund that does not appear on its balance sheet. Until the adoption of Financial Accounting Standards Board's Statement 133, most *derivatives* had been treated as *off-balance-sheet transactions*.

Operational risk The risk of loss due to system breakdowns, employee fraud or misconduct, errors in *models* or natural or man-made catastrophes, among other risks. It may also include the risk of loss due to the incomplete or incorrect documentation of trades. Operational risk may be defined by what it does not include: market risk, credit risk and liquidity risk.

OTC See **Over-the-Counter Transaction**.

Over-the-Counter (OTC) Transaction A transaction between parties that is not executed on an organized exchange but rather is privately negotiated on a bilateral basis between the parties. Stocks of smaller companies, as well as *forward* contracts and other *derivatives*, are traded in OTC markets.

Pooled Investment Vehicle An investment entity, such as a limited partnership, trust, corporation or similar form of enterprise operated for the purpose of trading securities or other investment instruments, and which is exempt from registration under the Investment Company Act of 1940.

Portfolio Manager A person who invests and manages an amount of capital allocated to it by a Hedge Fund Manager on behalf of a Hedge Fund. Portfolio Managers may be either employees of the Hedge Fund Manager itself or external managers who are actively managed by the Hedge Fund Manager or with whom the Hedge Fund Manager makes a *passive investment*.

Pre-settlement Risk A form of *credit risk*; the risk that a counterparty will default on an *OTC* derivative contract prior to the contract's settlement at expiration.

Prime Broker A brokerage firm that provides multiple services to a Hedge Fund which are beyond the scope of those offered by a traditional broker, such as clearing and settlement of securities transactions, financing, recordkeeping, custodial services and research capabilities.

Redemption The redemption of shares or other interests in, or withdrawals of funds from, a Hedge Fund by an investor.

Redemption Window The time period during which an investor can redeem shares or other interests in, or otherwise withdraw funds from, a Hedge Fund. Investments in a Hedge Fund are often "locked-up" for a minimum period or during certain intervals, meaning withdrawals or redemptions can only be made during prescribed periods (*e.g.*, once per year) provided sufficient notice is given by the investor.

Risk-Based Leverage Measure See **Leverage Measures**.

Risk Monitoring Function A Hedge Fund employee or a team of employees that is responsible for measuring and tracking the risk assumed by a Hedge Fund. In most cases, the *Risk Monitoring Function* provides an independent source of information about, and analysis of, a Hedge Fund's performance, current risk position, sources of risk and exposures to changes in Market Factors. The *risk monitoring function* generally does not make decisions about how much risk or the types of risk the Hedge Fund should assume.

Scenario Analysis Similar to a "stress test," the practice of subjecting a model (*e.g.*, a Value-at-Risk model) to adjusted inputs in order to assess the impact of a specified scenario of market events on a Hedge Fund's portfolio. (See **Stress Test**, **Value-at-Risk** and **Model**). A scenario could be historical (*e.g.*, by reproducing the events of October 1987) or hypothetical (*e.g.*, by simulating an event that would stress the *market factors* to which the Hedge Fund is most exposed).

Settlement Risk The risk that a counterparty will fail to perform its obligations under a contract on the *settlement date*; a form of credit risk.

Sharpe Ratio A measure that is widely used by investors to evaluate the performance of a portfolio or to compare the performance of different portfolios on a "risk-adjusted" basis. The numerator of the *Sharpe Ratio* is a measure of a portfolio's return during a given period, generally the return earned on the portfolio in excess of the risk-free rate of return over one year. The denominator of the ratio is a measure of the risk incurred in achieving the return, usually measured as the *standard deviation* of the portfolio's daily return. The higher the *Sharpe Ratio*, the better the portfolio's return in risk-adjusted terms. While the *Sharpe Ratio* contains information similar to that contained in a *Value at Risk* measure, the two measures have different purposes and different perspectives. *VAR* is a forward-looking measure which is strictly a risk measurement tool; the *Sharpe Ratio* is a retrospective measure that compares risk and return information for an elapsed period.

Soft Dollar Arrangement An arrangement whereby a Hedge Fund Manager directs transactions to a broker, in exchange for which the broker provides, in addition to transaction execution, other products and services to the Hedge Fund Manager.

Sovereign Risk See **Credit Risk** and **Market Risk**

Spread The excess of the price or yield on a particular security or instrument relative to a benchmark. For example, the "spread over Treasury" is the difference between the yield for a certain fixed income instrument and the yield for a comparable U.S. Treasury security.

Standard Deviation Technically, a statistical measure of the dispersion of a set of numbers around a central point. Standard deviation measures the *volatility*, or uncertainty, of investment returns, and is therefore commonly used to measure the risk of a portfolio. The higher the standard deviation of a portfolio, the higher the uncertainty of the portfolio's return.

Stress Test A general term for the practice of subjecting a *model* (*e.g.*, a *Value-at-Risk* model) to inputs that are adjusted to represent extreme or unusual changes in market factors. The sources of stress may be actual historical changes in *market factors* or hypothetical changes.

Systemic Risk The risk that the failure of a significant market participant in a payment or settlement system to meet its obligations when due will cause other participants or financial institutions to be unable to meet their obligations. Such a failure could potentially cause significant market liquidity or credit problems and threaten the stability of financial markets generally.

Third Party Service Provider A firm that provides certain administrative, technical, financial or other services to a Hedge Fund Manager that chooses to outsource parts of its operations.

Valuation The process of determining the value of positions in a Hedge Fund portfolio. Valuation serves two distinct purposes: it provides the base input for both the risk monitoring process and the calculation of a Hedge Fund's Net Asset Value, which serves as the basis for pricing investor subscriptions and redemptions.

Value-at-Risk (VAR) An integrated measure of the market risk of a portfolio of assets and/or liabilities. At the most general level, VAR is a measure of the potential change in value of a specified portfolio over a specified time interval or *holding period*, resulting from potential changes in *market factors* (*e.g.*, prices and volatilities). The VAR measure is based on the distribution of potential changes in the value of the portfolio and is expressed in terms of a *confidence level*. A Hedge Fund Manager's *risk monitoring function* may choose to use VAR to estimate the maximum expected amount a Hedge Fund could lose over a specified time horizon at a specified probability level. For instance, the *risk monitoring function* could calculate the maximum expected loss for a one-day period at a 95% probability level (*i.e.*, the level of loss that should be exceeded on only five trading days out of 100).

The challenge in calculating an accurate VAR is determining the distribution of potential value changes for *market factors*, which requires the *risk monitoring function* to choose a methodology for modeling potential changes in *market factors*. Different methods are currently used to determine such distribution when calculating VAR (*e.g.*, Historical Simulation Method, Monte Carlo Simulation Method, Analytic Variance – Covariance Method).

Volatility A measure of risk based on the *standard deviation* of an asset's return (see **Standard Deviation**). The greater the degree of an asset's volatility, the greater the risk of the asset.

Worst Historical Drawdown The largest decrease in the *net asset value* of a Hedge Fund measured as the difference between the highest and lowest value since its inception or during a given period of time (*e.g.*, last five years).

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