

# TWO SIGMA INVESTMENTS, LLC

June 1, 2012

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**This brochure provides information about the qualifications and business practices of Two Sigma Investments, LLC (the “Adviser”). If you have any questions about the contents of this brochure, please contact us at (212) 625-5700. The information in this brochure has not been approved or verified by the United States Securities and Exchange Commission (the “SEC”) or by any state securities authority.**

**Additional information about the Adviser also is available on the SEC’s website at [www.adviserinfo.sec.gov](http://www.adviserinfo.sec.gov).**

**The Adviser is registered with the SEC as an investment adviser under the U.S. Investment Advisers Act of 1940, as amended. Registration with the SEC or with any state securities authority does not imply a certain level of skill or training.**

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## Item 3. Table of Contents

### TABLE OF CONTENTS

|           |   |    |
|-----------|---|----|
| Item 4.   | Advisory Business .....   | 3  |
| Item 5.   | Fees and Compensation .....   | 4  |
| Item 6.   | Performance-Based Fees and Side-by-Side Management .....                                    | 5  |
| Item 7.   | Types of Clients .....  | 9  |
| Item 8.   | Methods of Analysis, Investment Strategies and Risk of Loss .....                           | 10 |
| Item 9.   | Disciplinary Information .....  | 23 |
| Item 10.  | Other Financial Industry Activities and Affiliations .....                                  | 24 |
| Item 11.  | Code of Ethics, Participation or Interest in Client Transactions and Personal Trading ..... | 27 |
| Item 12.  | Brokerage Practices .....   | 30 |
| Item 13.  | Review of Accounts .....  | 33 |
| Item 14.  | Client Referrals and Other Compensation .....   | 34 |
| Item 15.  | Custody .....   | 35 |
| Item 16.  | Investment Discretion .....   | 36 |
| Item 17.  | Voting Client Securities .....  | 37 |
| Item 18.  | Financial Information .....   | 38 |
| Item 19.  | Requirements for State-Registered Advisers .....  | 39 |
| Appendix. | Material Changes .....  | 40 |

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## Item 4. Advisory Business

The Adviser is an investment adviser with its principal place of business in New York, New York. The Adviser commenced operations as an investment adviser in July 2001 and has been registered with the SEC since August 21, 2009. Two Sigma Management, LLC is the managing member of the Adviser. Trusts established by John A. Overdeck and David M. Siegel are the principal beneficial owners of the Adviser.

The Adviser is a process-driven, systematic investment manager specializing in quantitative analysis and uses quantitative mathematical models that rely on patterns inferred from historical prices and other financial data in evaluating prospective investments. The Adviser provides advisory services on a discretionary basis to its Clients, which include various private investment funds and commingled vehicles. The private investment funds and commingled vehicles to which the Adviser provides advisory services are referred to herein collectively as “Clients,” and each individually as a “Client”.

The Adviser provides advisory services with respect to a broad range of U.S. and non-U.S. securities and instruments, including, without limitation, U.S. and non-U.S. equity and equity-related securities, bonds and other fixed income securities (including, without limitation, corporate, agency, non-U.S. and U.S. municipality, treasury and insurance-linked bonds and other fixed income instruments), loan participations, futures, forward contracts, warrants, put and call options (both listed and OTC including, without limitation, caps and floors), repurchase agreements, reverse repurchase agreements, swaps (of any and all types including, among other things, equity swaps, commodity swaps, interest rate swaps, variance swaps, correlation swaps, currency swaps, credit default swaps and real estate swaps), convertible instruments, inflation protection instruments, mortgage and asset-backed instruments, swaptions, foreign exchange contracts, currencies, commodities, insurance-linked securities and any derivatives on all of the instruments listed above (collectively, “Financial Instruments”).

The Adviser provides advisory services to Clients based on specific investment mandates, objectives and strategies set forth in each Client’s offering memorandum. Other than those restrictions set forth in the applicable offering memorandum, Clients may not impose restrictions on investing in certain securities or certain types of securities.

As of December 31, 2011, the Adviser had approximately \$17,877,451,000 of regulatory assets under management, all on a discretionary basis.

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## Item 5. Fees & Compensation

### ***Asset-Based Compensation***

Clients pay the Adviser management fees for its management services (the “Management Fees”) through a deduction by the client’s custodian of such Management Fees from the Client’s account under the Adviser’s instructions. The Management Fees are typically based on the Client’s assets under management and are determined based on an annualized rate. Currently, such rates range from 2% to 4%, as described in each such Client’s applicable offering memorandum. The Management Fees are generally paid monthly in advance on the first day of each month.

The Adviser may waive, reduce or modify the Management Fee for certain investors in Clients.

### ***Performance-Based Compensation***

The Adviser may also receive performance-based compensation, which is compensation that is based on a share of capital gains or capital appreciation of the assets of a Client. This compensation may be allocated to the Adviser (or a related person of the Adviser). The Adviser (or a related person of the Adviser) is entitled to receive an incentive allocation (the “Incentive Allocation”) from Clients in amounts currently ranging from 20-30% of the net profits, if any, allocated to each investor in such Clients for each fiscal quarter or year, as applicable, provided that certain Clients may have Incentive Allocations allocated more or less frequently. In addition, many of the Incentive Allocations are subject to adjustment for any previously unrecovered new losses allocated to each investor in prior periods, subject to certain other adjustments and provisions. The Adviser deducts the performance-based compensation from *client* accounts by instructing the client’s custodian.

The Adviser may waive, reduce or modify the performance-based compensation for certain investors in Clients.

In addition to paying investment management fees and performance-based compensation to the Adviser (or a related person to the Adviser), Clients pay all of their own operating and investment expenses including, but not limited to, brokerage, transaction costs and custodian fees; fees and expenses of any advisers and consultants to the Client; external legal, auditing, accounting, administration, tax return preparation and other professional fees and expenses; fees and expenses of the Client’s administrator; taxes, fees and governmental charges; fees and expenses of any third party research, data, recommendations and/or services used by the Adviser in its investment decision making process (*e.g.*, in connection with the use, implementation and support of alpha capture systems developed by the Adviser and/or its affiliates); fees and expenses of valuation and/or pricing services and software; interest expenses; expenses of preparing and distributing reports, financial statements and notices to investors in Client; litigation and other extraordinary expenses; certain insurance expenses; and other expenses as may be detailed in the Client’s offering memorandum.

Please refer to Item 12 of this Brochure for further discussion of the Adviser's brokerage practices.

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## **Item 6. Performance-Based Fees & Side-by-Side Management**

The Adviser and its investment personnel provide investment management services to multiple Clients. The Adviser is entitled to be paid performance-based compensation from the Clients. In addition, the Adviser's investment personnel are typically compensated by the Adviser on a basis that includes a performance-based component. The Adviser and its investment personnel, including investment personnel that share in performance-based compensation, manage both Client accounts that are charged performance-based compensation and accounts that are charged an asset-based fee, which is a non-performance-based fee. Certain Clients may have higher asset-based fees or more favorable performance-based compensation arrangements than other Clients. When the Adviser and its investment personnel manage more than one Client account, a potential exists for one Client account to be favored over another Client account. The Adviser and its investment personnel have a greater incentive to favor Clients that pay the Adviser (and indirectly its personnel) higher fees.

In addition, the Adviser, its affiliates and/or its principals invest in a number of Clients. Certain of such Clients utilize a higher degree of leverage than others. Because of the varying fee structures, leverage levels and allocation of proprietary capital from the investment of the Adviser, its affiliates and/or its principals, a potential exists for one Client to be favored over another Client. The Adviser and its investment personnel have a greater incentive to favor Clients that contain proprietary money, pay the Adviser (and indirectly the portfolio manager) performance-based compensation or higher fees or, potentially, use a higher level of leverage.

Additionally, certain investment personnel of the Adviser provide investment-related services to affiliates of the Adviser.

### ***Allocation of Trades***

The Financial Instruments traded on behalf of each Client (which, for the purpose of this Item 6 shall include certain clients of the Adviser's affiliates (please refer to Item 10 of this Brochure for a discussion of the Adviser's other financial industry activities and affiliations)) may involve substantial correlation with those traded on behalf of the other Clients. However, there can be no assurance that any Financial Instrument will be traded in the same way or at the same time on behalf of each entity.

Client orders in liquid, exchange-traded Financial Instruments are typically handled by a sophisticated, proprietary order management system (the "OMS") and execution management system (the "EMS") in order to direct the execution of the Clients' orders in liquid, exchange-traded Financial Instruments through such systems (which for purposes hereof include either fully automated or with limited employee assistance). These systems also seek to algorithmically ensure proper allocation of fills among the Clients.

When appropriate, the Adviser may, but is not required to, aggregate its Clients' trade orders to achieve more efficient execution or to provide for equitable treatment among accounts. Clients (including Clients owned primarily or entirely by proprietary capital) participating in aggregated trades will generally be allocated securities or other instruments based on the average price achieved for such trades. In the event that multiple Clients and/or clients of applicable affiliates wish to purchase the same instrument concurrently, it is the Adviser's intention to allocate all filled orders and corresponding prices ratably based on desired trade amounts measured at the time that the trade was requested by the applicable desk. Notwithstanding the foregoing, an aggregated order may be allocated on a basis different from that specified above under certain circumstances. Examples of reasons for allocating orders on a different basis include, among other things, available cash, liquidity requirements, macro risk parameters set by the portfolio manager, legal and/or regulatory reasons (including a desire to avoid and/or minimize a regulatory filing, disclosure or other obligation) and/or to avoid odd lots. While the Adviser will endeavor to ensure that its trade allocation system does not systematically advantage one account over another, due to the sheer volume of orders being placed and fills received, it is possible that for a relatively small number of trades, one account may be inadvertently advantaged over another during order placement and/or fill receipt. The Adviser will monitor, review and periodically modify its trade allocation system in an effort to minimize the occurrence of these events.

Further, because certain strategies used by certain Clients may have shorter trading horizon and/or use separate trading desks from similar strategies used by other Clients, it is likely that in many instances certain Clients will buy (or sell) Financial Instruments prior to certain other Clients buying (or selling) the same or similar Financial Instruments. In those instances where Clients use a separate trading desk, the Adviser's trade allocation policy described above will not apply since that policy is only applicable to trades and investments that are made concurrently on the same desk. As a result, the prices paid by a Client and the amounts received by a Client may be adversely affected.

The introduction of any new strategy, capability or execution method, either by the Adviser or by another market participant, impacts existing strategies, capabilities and execution methods. Similarly, the use of separate execution modalities by certain strategies, including but not limited to, extremely low latency strategies ("Alternative Strategies"), particularly when existing investment management research is also being used by the Alternative Strategies, will frequently impact, to varying degrees, the price or amount of securities available to the Clients. Often times, the use of these separate execution desks in conjunction with investment management research used on behalf of the Clients will result in the Alternative Strategies receiving fills before and after Clients, which will likely result in the Alternative Strategies receiving executions at better prices and quantities than the Clients.

Although a significant proportion of the execution of investments made on behalf of each Client is done through the Adviser's automated execution system, certain of the Adviser's traders have substantial discretion in the execution of orders in an attempt to improve execution results and/or to achieve other specified objectives. Accordingly, even if multiple Clients, for instance, are executing the same strategy, differences may arise due to the level of discretion granted to the traders (e.g., all trades that involve the exercise of discretion could be allocated on a direct or indirect basis substantially more or all to one Client and substantially less or not at all to another

Client). The Adviser measures and monitors each trader's performance versus the modeled execution expected by the Adviser's automated execution system on a regular basis. Accordingly, in the future each trader's discretion regarding execution of orders for the Clients may change such that the discretion granted to the traders regarding the Clients is broadened or narrowed and exercised differently for different clients.

Because there will likely be overlap in the trading on behalf of the Clients, in order to minimize the risk of preferential execution of one Client's orders over another's, the Adviser anticipates that generally, with the exceptions noted below, trades in a given instrument (other than trades which are sent by automated execution systems directly to electronic trading systems) will be handled by a single execution desk which will fill desired trades on the open market. However, multiple execution desks may handle the same instrument for a variety of reasons, including, but not limited to: when such instrument is not the primary instrument handled by one or both such desks but is instead used to hedge the primary instrument handled by such desk(s); when a separate trading desk is set up due to regulatory or policy limitations of a Client; or when one or more separate desks are set up because they are necessary for the execution of certain strategies. Certain strategies (including the Alternative Strategies) utilized primarily on behalf of specific Clients, frequently Clients which are owned largely or entirely by proprietary capital, generally rely on different execution logic, venues and pathways as compared to the strategies deployed on behalf of other Clients, many of which cannot currently be accommodated by the Adviser's core trading desks. To employ these new execution modalities, the Adviser has created separate execution desks (e.g., order execution systems, traders, co-location facilities and/or similar capabilities) which are being used solely on behalf the strategies relying on the different execution logic, venues and pathways. Therefore, the resulting trades executed on these desks are allocated entirely to the entities in which these strategies are housed. It should be noted that the trading volume handled by these desks is material when compared to the volume of trades handled by the Adviser's core desks.

The Adviser's trade allocation policy is designed to provide a fair allocation of purchases and sales of Financial Instruments among the various Clients, and to ensure compliance with appropriate regulatory requirements. However, because there will likely be overlap in the trading done in the Clients, it is likely that for a relatively small number of trades, one Client may be inadvertently advantaged over another during order placement, fill receipt, stock borrow allocations and/or applications of reporting limits. It is also possible that such advantaged Client may be owned largely or solely by proprietary capital. While the Adviser will monitor, review and periodically modify its trade allocation system in an effort to minimize the occurrence of these events, it is highly likely that a *de minimis* number of preferential allocations will remain, and the Adviser will only act to reverse or otherwise change these allocations in the event they are deemed by the Adviser, in its sole discretion, to be material. Further, because certain strategies used by certain Clients may have a shorter trading horizon than similar strategies used by other Clients, it is likely that in many instances those Clients with a shorter trading horizon will buy (or sell) Financial Instruments prior to or after the other Clients buying (or selling) the same or similar Financial Instruments which may have a materially adverse impact on the prices paid or received by a Client on its transactions.

### *Allocation of Strategies*

As a process-driven, systematic investment manager, the Adviser utilizes multiple investment strategies (both systematic and, at times, non-systematic) on behalf of each of its Clients in order to generate results. The Adviser periodically reviews and assesses the amount of capital that can reasonably be allocated to its existing investment strategies. This amount is dependent on several factors including, among others, each Client's investment objectives, current and projected market conditions, the development of new strategies, the licensing of certain strategies to affiliates (including, but not limited, to Two Sigma Advisers, LLC, an affiliated investment manager registered with the SEC ("TSA")), obtainable financing (both in absolute terms and on a relative basis between third party capital and proprietary capital), various risk considerations and the amount of available third party capital and proprietary capital. The amount of third party capital invested through the Clients in any of the Adviser's strategies, particularly those with limited capacity, does and will continue to face pressure from the continued growth of proprietary capital. The Adviser recognizes that this continued growth, as well as the higher amount of leverage that it can elect to apply to proprietary capital, is likely to create an increasing conflict of interest between third party capital and proprietary capital, as the Adviser determines how much proprietary capital it will elect to manage in each of its trading strategies and how much third party capital it elects to accept or return to investors going forward. The Adviser clearly cannot be free from, and is not free from, inherent conflicts of interest in making these elections, and shall be free to make such elections as it sees fit in its sole discretion.

Through its extensive research, the Adviser has developed and expects to continue to develop strategies and models, and to research the use of new investment techniques, which it believes could offer Clients solid absolute returns, but which cannot be fully utilized or in some cases utilized at all by the certain Clients because of the restrictive investment policies and mandates of such Clients (as set forth in each Client's offering memorandum). These under-utilized or unutilized strategies, models and/or investment techniques may differ from those that are fully utilized by certain Clients because, among other reasons, (i) they have larger capacity than can be optimally used in such Clients; (ii) they involve asset classes outside the investment mandates of such Clients; (iii) they involve somewhat higher levels of volatility and/or liquidity risk than that targeted by such Clients; (iv) they are less strictly or fully hedged by taking somewhat larger exposures to certain style factors, sectors or other directional risks than that targeted by such Clients; and/or (v) they involve greater liquidity risk than that targeted by such Clients.

In the future, the Adviser may, in its sole discretion and without notice to any Client or investor in such Clients, (i) remove any or all strategies, models and/or investment techniques from utilization on behalf of any Client or (ii) materially increase or decrease a Client's exposure to any strategies, models and/or investment techniques including eliminating a Client's exposure to such strategies, models and/or investment techniques altogether.



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## **Item 7. Types of Clients**

The Adviser provides advisory services to private investment funds and commingled vehicles, typically organized as Delaware limited partnerships, Cayman Islands exempted corporations or other similar structures.

Clients are generally set up in master-feeder structures wherein each feeder fund invests portions of its assets into master funds. Each master fund then invests substantial portions of its assets into certain investment trading vehicles managed by the Adviser. In addition, a number of the feeder and/or master funds periodically invest varying portions of their assets into cash management vehicles managed by the Adviser. Currently, a significant majority (if not all) of the investments made on behalf of the Clients is made through either the investment trading vehicles or the cash management vehicles. The structure of any given Client is described in further detail in the applicable offering memorandum referencing such Client.

With respect to Clients, initial and additional subscription minimums, if any, are disclosed in the applicable offering memorandum referencing such Client.

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## Item 8. Methods of Analysis, Investment Strategies & Risk of Loss

**Methods of Analysis and Investment Strategies.** The Adviser utilizes a variety of methods and strategies to make investment decisions and recommendations. The Adviser primarily combines multiple hedged and leveraged investment strategies with proprietary risk management and execution techniques to make investment decisions for its Clients. The Adviser integrates information, computing power and human skill to attempt to systematically extract alpha.

The investment strategies that the Adviser employs include, but are not limited to, the following: statistically-based strategies; merger (or risk) arbitrage; closed-end fund/constituent arbitrage; fundamentally-driven strategies; event-driven strategies; spread-based and long/short strategies; volatility arbitrage and trading strategies; structured credit trading strategies; and contributor-based and sentiment-based strategies (e.g., strategies based on the Adviser's affiliate's proprietary alpha capture system). The specific strategies utilized on behalf of any given Client are described in greater detail in such Client's offering memorandum.

The Adviser primarily uses quantitative mathematical models to implement its strategies. Such quantitative mathematical models rely on patterns inferred from historical prices and other financial data in evaluating prospective investments. These formulas and models are typically developed and implemented using high-powered computers that may generate buy or sell indications to assist the Adviser in the purchase and sale of securities and other financial instruments or alternatively may send buy or sell orders directly to brokers. The models used are highly complex and rely on quantitative (and to a lesser extent, technical) analysis of large amounts of real-time and historic data with a view towards identifying pricing discrepancies, inefficiencies and/or anomalies.

In addition to the models described above, the Adviser also employs models that focus more on fundamental analysis and research conducted by analysts (rather than computer-based quantitative and technical analysis) and models that combine two or more types of analysis in varying degrees. Fundamental analysis and research explores, among other things, issuers, industries, current market and financial conditions and an understanding of the drivers of change within these areas. Such fundamental analysis and research is expected to be generated by substantial numbers of external investment professionals, market participants and/or other consultants to the Adviser and to be augmented from time to time by the Adviser. The Adviser may apply systematic mathematical formulas to such analysis and research, or, in the alternative, may use such analysis and research alone, without further quantitative analysis to assist in the Adviser's investment decision making process.

The Adviser may at times also employ certain non-systematic investment strategies in order to, among other things, manage certain risks or take advantage of perceived or predicted events or market conditions.

All of the investment methods and strategies used by the Adviser involve the risk of loss that Clients and investors in Clients should be prepared to bear.

**Material Risks (Including Significant, or Unusual Risks) Relating to Investment Strategies.**

*Quantitative Strategies and Trading.* Most quantitative models cannot fully match the complexity of the financial markets and therefore sudden unanticipated changes in underlying market conditions can significantly impact the performance of the Adviser. Further, as market dynamics shift over time, a previously highly successful model may become outdated – perhaps without the Adviser recognizing that fact before substantial losses are incurred. Moreover, there are likely to be an increasing number of market participants who rely on models that may be similar to those used by the Adviser, which may result in a substantial number of market participants taking the same action with respect to an investment and some of these market participants may be substantially larger than any given Client. Should one or more of these other market participants begin to divest themselves of one or more positions, a “crisis correlation”, independent of any fundamentals and similar to the crises that occurred in September 1998 and August 2007, could occur, thereby causing certain Clients to suffer material, or even total, losses.

Although the Adviser generally will attempt to deploy relative value strategies, this does not mean that the Clients will not be affected by adverse market conditions similar to those described above and/or others. There can be no assurances that the strategies pursued will be profitable, and various market conditions may be materially less favorable to certain strategies than others. Mispricings, even if correctly identified, may not be corrected by the market, at least within a time frame over which it is feasible for any given Client to maintain a position. In the event that the perceived mispricings underlying the Adviser’s relative value trading positions were to fail to converge toward, or were to diverge further from, relationships expected by the Adviser, Client accounts may incur a loss. Even pure arbitrage positions can result in significant losses if a Client does not maintain both sides of the position until expiration. Certain Clients utilize leverage and therefore could be forced to liquidate positions prematurely in order to meet margin or collateral calls, causing an otherwise “pure” arbitrage position to result in major losses.

Many of the trading strategies employed by the Adviser rely on patterns inferred from the historical series of prices and other financial data. Even if all the assumptions underlying the models were met exactly, the model can only make a prediction, not afford certainty. There can be no assurance that the future performance will match the prediction. Further, most statistical procedures cannot fully match the complexity of the financial markets and as such, results of their application are uncertain. In addition, changes in underlying market conditions can adversely affect the performance of a statistical model.

*Reliance on Technology.* The Adviser’s investment strategies are fundamentally dependent on technology, including hardware, software and telecommunications systems. The data gathering, research, forecasting, portfolio construction, order execution, trade allocation, risk management, operational, back office and accounting systems, among others, utilized by the Adviser are all highly automated and computerized. Such automation and computerization is dependent upon an extensive amount of proprietary software and third- party hardware and software. The Adviser typically does not utilize design documents or specifications when building its

proprietary software. The proprietary software code thus typically serves as the only definitive documentation and specification for how such software should perform.

This proprietary software and third-party hardware and software are known to have errors, omissions, imperfections and malfunctions (collectively, “Coding Errors”). Coding Errors in third-party hardware and software are generally entirely outside of the control of the Adviser.

The Adviser seeks to reduce the incidence and impact of Coding Errors through a certain degree of internal testing and real-time monitoring, and the use of independent safeguards in the overall portfolio management system and often, with respect to proprietary software, in the software code itself. Despite such testing, monitoring and independent safeguards, Coding Errors will result in, among other things, the execution of unanticipated trades, the failure to execute anticipated trades, the failure to properly allocate trades, the failure to properly gather and organize available data, the failure to take certain hedging or risk reducing actions and/or the taking of actions which increase certain risk(s)—all of which may have materially negative effects on the Adviser’s Clients and/or their returns.

Coding Errors are often extremely difficult to detect, and, in the case of proprietary software, the difficulty of detecting Coding Errors may be exacerbated by the lack of design documents or specifications. Regardless of how difficult their detection appears in retrospect, some Coding Errors will go undetected for long periods of time and some will never be detected. The degradation or impact caused by these Coding Errors can compound over time. Finally, the Adviser will detect certain Coding Errors that it chooses, in its sole discretion, not to address or fix. The Adviser will not perform a materiality analysis on the vast majority of discovered Coding Errors. Investors in the Clients should assume that Coding Errors and their ensuing risks and impact are an inherent part of investing with a process-driven, systematic investment manager such as the Adviser. Accordingly, the Adviser does not expect to disclose discovered Coding Errors to the Clients or their investors.

The Adviser seeks, on an ongoing basis, to create adequate backups of software and hardware where possible but there is no guarantee that such efforts will be successful.

Further, to the extent that an unforeseeable software or hardware malfunction or problem is caused by a defect, virus or other outside force, the Clients may be materially adversely affected.

*Reliance on Data.* The Adviser’s investment strategies are highly reliant on the gathering, cleaning, culling and analysis of large amounts of data from third-party and other external sources. It is not possible or practicable, however, to factor all relevant, available data into forecasts and/or trading decisions. The Adviser will use its discretion to determine what data to gather with respect to any investment strategy and what subset of that data the research models take into account to produce forecasts which may have an impact on ultimate trading decisions. In addition, due to the automated nature of such data gathering and the fact that much of this data comes from third-party sources, it is inevitable that not all desired and/or relevant data will be available to, or processed by, the Adviser at all times. In such cases, the Adviser may and often will continue to generate forecasts and make trading decisions based on the data available to it. Additionally, the Adviser may determine that certain available data, while potentially useful in generating forecasts and/or making trade decisions, is not cost effective to gather due to either

the technology costs or third-party vendor costs and, in such cases, the Adviser will not utilize such data. Investors in the Clients should be aware that, for all of the foregoing reasons and more, there is no guarantee that any specific data or type of data will be utilized in generating forecasts or making trading decisions on behalf of the Clients, nor is there any guarantee that the data actually utilized in generating forecasts or making trading decisions on behalf of the Clients will be (i) the most accurate data available or (ii) free of errors. Investors in the Clients should assume that the foregoing limitation and risks associated with gathering, cleaning, culling and analysis of large amounts of data from third-party and other external sources are an inherent part of investing with a process-driven, systematic Adviser such as the Adviser.

*Leverage Risk.* The Adviser employs substantial leverage on behalf of many, if not all, of its Clients. Such leverage may be achieved by borrowing funds from U.S. and non-U.S. brokers, banks, dealers and other lenders, purchasing or selling Financial Instruments on margin or with collateral and using options, futures, forward contracts, swaps and various other forms of derivatives and other instruments which have substantial embedded leverage.

If such Clients can no longer utilize margin or post collateral under such lending arrangements, such Clients could be required to liquidate a significant portion of its portfolio, and trading may be constrained, adversely affecting such Clients' performance.

The use of margin, short-term borrowing and collateral requirements creates additional risks to such Clients. Specifically, if the value of such a Client's portfolio fell below the margin or collateral level required by a prime broker or dealer, the prime broker or dealer would require additional margin deposits or collateral amounts. If such Client were unable to satisfy such a margin or collateral call by a prime broker or dealer, the prime broker or dealer could liquidate the Client's positions in the Client's account with the prime broker or for which the dealer is the counterparty, and cause the Client to incur significant losses. The failure to satisfy a margin or collateral call, or the occurrence of other material defaults under margin, collateral or other financing agreements, could trigger cross-defaults under such a Client's agreements with other brokers, dealers, lenders, clearing firms or other counterparties, multiplying the adverse impact to such Client. In addition, because the use of leverage will allow such a Client control of or exposure to positions worth significantly more than the margin or collateral posted for such positions, the amount that such a Client may lose in the event of adverse price movements will be high in relation to the amount of this margin or collateral amount, and could exceed the value of the assets of such a Client. Trading of futures, forward contracts, equity swaps and other derivatives, for example, generally involves little or no margin deposit or collateral requirement and, therefore, provides substantial leverage. Accordingly, relatively small price movements in these financial instruments (and others) may result in immediate and substantial losses to such a Client.

The banks and dealers that provide financing to such Clients can apply essentially discretionary margin, haircut, financing and collateral valuation policies. Changes by banks and dealers in any of the foregoing may result in large margin calls, loss of financing and forced liquidations of positions at disadvantageous prices. There can be no assurance that such Clients will be able to secure or maintain adequate financing.

*Hedging Risk.* The Adviser may employ hedging for certain Clients by taking long and short positions in related Financial Instruments. Hedging against a decline in the value of a portfolio position does not eliminate fluctuations in the values of such portfolio positions or prevent losses if the values of such positions decline, but establishes other positions designed to gain from those same developments, thus seeking to moderate the decline in the portfolio position's value. Such hedging transactions also limit the opportunity for gain if the value of the portfolio position should increase. In the event of an imperfect correlation between a position in a hedging instrument and the portfolio position that it is intended to protect, the desired protection may not be obtained, and a Client may be exposed to risk of loss. In addition, it is not possible to hedge fully or perfectly against any risk, and hedging entails its own costs. Positions which would typically serve as hedges may actually move in the same direction as the Financial Instruments they were initially attempting to hedge, adding further risk (and losses) to the Client.

*Commodities.* Commodity investments are affected by business, financial market or legal uncertainties. There can be no assurance that the Adviser will correctly evaluate the nature and magnitude of the various factors that could affect the value of and return on its commodity investments. Prices of commodity investments may be volatile, and a variety of factors that are inherently difficult to predict, such as domestic or international economic and political developments, may significantly affect the results of the Adviser's portfolio and the value of its investments. In addition, the value of the Adviser's portfolio may fluctuate as the general level of interest rates fluctuates.

*Short Selling Risk.* A Client's investment program may include a significant amount of short selling. Short selling transactions expose the Adviser to the risk of loss in an amount greater than the initial investment, and such losses can increase rapidly and without effective limit. There is the risk that the securities borrowed by the Adviser in connection with a short sale would need to be returned to the securities lender on short notice. If such request for return of securities occurs at a time when other short sellers of the subject security are receiving similar requests, a "short squeeze" can occur, wherein the Adviser might be compelled, at the most disadvantageous time, to replace the borrowed securities previously sold short with purchases on the open market, possibly at prices significantly in excess of the proceeds received earlier.

*Frequent Trading.* The Adviser's primary strategies involve frequent trading of securities which results in significantly higher commissions and charges to Client accounts due to increased brokerage, which will offset Client profits.

*Merger Arbitrage/Deal Risk.* The most significant risk in merger arbitrage is that a transaction will be abandoned such that the value of securities purchased may fall, resulting in loss of capital. This loss may be increased if the price of the shorted security (*i.e.*, the acquiring company) rises as the deal is called off. Abandonment may occur for a number of reasons, including (i) regulatory or antitrust prohibitions, delays or restrictive conditions for approval of the merger; (ii) problems arising out of due diligence review; (iii) incompatibility of the managements of the two parties; (iv) incompatibility of strategies; or (v) a movement outside of the required price range in "collar" transactions. When a deal is not abandoned, there may still be a risk of price renegotiation or a timing delay.

*Event Driven Strategies Risk.* A Client may have investments in companies involved in (or the target of) acquisition attempts or tender offers or companies involved in work-outs, liquidations, spin-offs, reorganizations, bankruptcies and similar transactions. In any investment opportunity involving any such type of business enterprise, there exists the risk that the transaction in which such business enterprise is involved either will be unsuccessful, will take considerable time or will result in a distribution of cash or a new security the value of which will be less than the purchase price to a Client of the security or other financial instrument in respect of which such distribution is received. Similarly, if an anticipated transaction does not in fact occur, a Client may be required to sell its investment at a loss. Because there is substantial uncertainty concerning the outcome of transactions involving financially troubled companies in which a Client may invest, there is a potential risk of loss by a Client of its entire investment in such companies. In connection with such transactions (or otherwise), a Client may purchase securities on a when-issued basis, which means that delivery and payment take place sometime after the date of the commitment to purchase and is often conditioned upon the occurrence of a subsequent event, such as approval and consummation of a merger, reorganization or debt restructuring. The purchase price and/or interest rate receivable with respect to a when-issued security are fixed when a Client enters into the commitment. Such securities are subject to changes in market value prior to their delivery.

**Risks Associated With Types of Securities that are Primarily Recommended (including Significant, or Unusual Risks).**

*Equity Securities.* The value of equity securities fluctuates in response to issuer, political, market, and economic developments. Fluctuations can be dramatic over the short as well as long term, and different parts of the market and different types of equity securities can react differently to these developments. For example, large cap stocks can react differently from small cap stocks, and "growth" stocks can react differently from "value" stocks. Issuer, political, or economic developments can affect a single issuer, issuers within an industry or economic sector or geographic region, or the market as a whole. Changes in the financial condition of a single issuer can impact the market as a whole. Terrorism and related geo-political risks have led, and may in the future lead, to increased short-term market volatility and may have adverse long-term effects on world economies and markets generally.

*Rights and Warrants.* Rights and warrants entitle the holder to buy equity securities at a specific price for a specific period of time. Rights and warrants may be considered more speculative than certain other types of investments in that they do not entitle a holder to dividends or voting rights with respect to the underlying securities that may be purchased nor do they represent any rights in the assets of the issuing company. Also, the value of a right or warrant does not necessarily change with the value of the underlying securities and a right or warrant ceases to have value if it is not exercised prior to the expiration date.

*Exchange-Traded Funds ("ETFs").* Equity-based ETFs are subject to risks similar to those of stocks; fixed income-based ETFs are subject to risks similar to those of bonds and other fixed-income securities. Investments in an ETF are also subject to the fees and expenses of the ETF, which may include a management fee, other fund expenses and a distribution fee. The Investment Company Act of 1940, as amended, places certain restrictions on the percentage of

ownership that a private investment fund may have in an ETF which is a registered investment company.

*Options and Derivatives.* A Client may engage in trading in options on individual securities, securities sectors, securities indices, futures contracts or foreign exchange contracts. Trading in options can result in a greater potential for profit or loss than trading in the underlying instruments. The value of an option may change because of a change in the value of the underlying instruments, the passage of time, changes in the market's perception as to the future price behavior of the underlying instruments or any combination of the foregoing and/or other factors. Additionally, Clients may purchase and sell exchange-traded options or privately negotiated OTC options. There can be no guarantee that there will at all times be a liquid market for these options. If an options market were to become illiquid or otherwise unavailable, an option holder would be able to realize profits or limit losses only by exercising the option and an options seller or writer would remain obligated until the option is exercised or expires.

*Futures.* A Client may engage in regulated futures transactions for independent profit opportunities or for hedging of existing long or short positions. Trading in futures involves significant risks, including, but not limited to: (i) price volatility; (ii) highly leveraged trading; and (iii) possible illiquidity. Clients may sustain a total loss of the initial margin and any maintenance margin that it posts to a broker to establish or maintain a position in the futures market. If the market moves against a Client's position, such Client may be called upon to post a substantial amount of additional margin, on short notice, in order to maintain its position. If a Client does not provide the required margin within the prescribed time, its position may be liquidated at a loss, and a Client will be liable for any resulting deficit in its account. Under certain market conditions, a Client may find it difficult or impossible to liquidate a position. The use of leverage can lead to large losses. Non-U.S. futures markets may have greater risk than U.S. futures markets. Unlike trading on U.S. commodity exchanges, trading on non-U.S. commodity exchanges is not regulated by the Commodity Futures Trading Commission (the "CFTC") and may be subject to greater risks than trading on domestic exchanges.

An option on a futures contract is a right or an obligation to either buy or sell the underlying futures contract at a specific price. The risks of trading options on futures are similar to the risks of trading securities options. See "Options and Derivatives" above. In addition, if the purchaser of an option on a futures contract exercises the option, the holder will, in effect, be buying or selling the underlying futures contract, and will then be subject to the same risks as are attendant to futures trading.

*Foreign Instruments.* Trading in non-U.S. instruments and derivatives on non-U.S. instruments may involve risks and considerations not present in the trading of U.S. instruments and derivatives. Since non-U.S. instruments generally are denominated, pay interest and are settled in non-U.S. currencies, the value of the assets of a Client as measured in U.S. Dollars may be affected favorably or unfavorably by changes in the exchange rate between the U.S. Dollar and other currencies. The weakening of a country's currency relative to the U.S. Dollar will affect, potentially adversely, the U.S. Dollar value of a Client's investments that are denominated in such country's currency. As a result, a Client could realize a net loss on an investment, even if there were a gain on the underlying investment before currency losses were taken into account. Currency exchange rates can be affected unpredictably by controls or restrictions imposed by



U.S. or non-U.S. central banks or other governmental agencies in joint or unilateral efforts to alter exchange rate trends. Political developments in the United States or abroad may also affect currency exchange rates. To the extent a Client trades instruments denominated in non-U.S. currencies, it may be adversely affected by restrictions on the conversion or transfer of non-U.S. currencies. The Adviser may (but may not necessarily) seek to hedge these risks by trading currencies, currency futures contracts, forward currency contracts, swaps, or any combination thereof (whether or not exchange traded), but there can be no assurance that such strategies will be effective. As a result, a default on the instrument may deprive a Client of unrealized profits and/or collateral held by the counterparty or may force a Client to cover its commitments for purchase or resale of the underlying currency at the then current market price.

In addition, there may be less publicly available information about foreign economies and foreign companies than the U.S. economy and U.S. companies. Non-U.S. companies may not be subject to accounting, auditing and financial reporting standards, practices and requirements comparable to those applicable to U.S. companies. Many non-U.S. securities markets have substantially less volume than U.S. securities markets and, therefore, securities of non-U.S. companies are generally less liquid and at times their prices may be more volatile than securities of comparable U.S. companies. In addition, in many non-U.S. markets there is less government supervision of exchanges, brokers, dealers and issuers than in the United States. Although a Client typically would trade instruments (and derivatives thereon) of or related to companies and governments in countries that the Adviser believes to have stable political environments, there is a possibility of expropriation or confiscatory taxation, seizure or nationalization of non-U.S. bank deposits, establishment of exchange controls, the adoption of non-U.S. government restrictions or other adverse political, social or diplomatic developments that could adversely affect any such investment. Some of the instruments may be subject to taxes levied by non-U.S. governments, which have the effect of increasing the cost of such trading and reducing the realized gain or increasing the realized loss on such securities at the time of sale. Income from non-U.S. instruments held by a Client may be reduced by a withholding tax at the source. Tax conventions between certain countries and the United States, however, may reduce or eliminate such taxes, and some or all of such taxes may be creditable against the U.S. federal income tax liability of investors which are U.S. taxpayers but may be eliminated or changed at any time.

*Forward Contracts.* Trading in forward contracts involves significant risks. Forward contracts are not traded on exchanges; rather, banks and dealers act as principals in these markets. A Client, in trading forward contracts, will therefore be subject to the risk of credit failure or the inability of or refusal of forward contract dealers to perform with respect to its forward contracts. There is no limitation on the daily price movements of forward contracts, and a dealer is not required to continue to make markets in such contracts. There have been periods during which forward contract dealers have refused to quote prices for forward contracts or have quoted prices with an unusually wide spread between the bid and ask price. Forward contract trading may therefore be or become highly illiquid.

*Foreign Exchange Contracts.* A Client may enter into foreign currency spot trades, forward contracts and/or other derivatives thereon for speculative, hedging or other investment purposes. Foreign currency spot trades, forward contracts and other derivatives involve a risk of loss if currency exchange rates move against a Client, unless such derivatives are hedges of foreign currency risk of a Client in its investments. In addition, forward contracts and certain currency

derivatives are not guaranteed by an exchange or clearinghouse. Therefore, a default by the forward contract, or derivative counterparty may result in a loss to a Client for the value of unrealized profits on the contract or derivative or for the difference between the value of its commitments, if any, for purchase or sale at the current currency exchange rate and the value of those commitments at the forward contract exchange rate.

It is contemplated that most foreign currency forward contracts will be with banks, including among others, investment banks and brokerage firms. There are no limitations on daily price moves of spot trades, forward contracts or many derivatives. Banks, including investment banks and brokerage firms, are not required to continue to make markets in currencies. There have been periods during which certain banks, including investment banks, and certain brokerage firms have refused to continue to quote prices for forward contracts or derivatives or have quoted prices with an unusually wide spread. The imposition of credit controls by governmental authorities might limit the level of such forward trading to less than that which the Adviser would otherwise recommend, to the possible detriment of a Client. Clients may be subject to the risk of bank or brokerage firm failure or the inability of or refusal by a bank or a brokerage firm to perform with respect to such contracts.

*Non-Deliverable FX Forwards.* Non-Deliverable FX Forwards (“NDFs”) are subject to the risks of loss associated with standard foreign exchange transactions. In addition, NDFs are subject to the risk that an event would force the parties to the transaction to find an alternative basis for determining settlement amounts such as, among other things, a general or specific default, inconvertibility, non-transferability or nationalization of one of the underlying currencies in the NDF. If on any date upon which an NDF transaction is to be valued such an event has occurred or is continuing, the settlement amount to be delivered may be adjusted by the clearing broker or its counterparty, acting in a reasonable manner. Such adjustments will result in changes to the prices at which such transactions were effected and such changes could be material. The fixation of a trade at a settlement price, the determination of whether such a disruption has occurred and the settlement amount associated therewith are beyond the control of the Adviser and the relevant Client.

*Fixed Income and Related Instruments.* A Client may be subject to interest rate risk in connection with its positions in futures contracts on interest rates, sovereign notes and bonds and futures contracts on sovereign notes and bonds, options on such futures contracts and interest rate swaps. Generally, the value of fixed income instruments will change inversely with changes in interest rates. As interest rates rise, the market value of such instruments tends to decrease. Conversely, as interest rates fall, the market value of such instruments tends to increase. This risk will typically be greater for instruments based on longer-term interest rates than for instruments based on shorter-term interest rates.

*Emerging Market Fixed Income Securities and Futures.* A Client may also trade emerging market fixed income securities and futures, including short-term and long-term futures denominated in various currencies. In addition to the risks related to investments in emerging markets generally and in emerging market equity securities and futures as outlined above, emerging market debt futures are subject to greater risk of loss due to high volatility. Additionally, evaluating credit risk for non-U.S. fixed income securities and futures involves great uncertainty because credit rating agencies throughout the world have different standards,

making comparisons across countries difficult. Because investors generally perceive that there are greater risks associated with such emerging market instruments, the yields or prices of such fixed income securities and futures may tend to fluctuate more than those for higher-rated fixed income securities or futures. The market for emerging market interest rate futures may be thinner and less active than that for developed market futures, which can adversely affect the prices at which futures are sold. In addition, adverse publicity and investor perceptions about emerging market interest rate futures may be a contributing factor to a decrease in the value and liquidity of such futures.

*Fixed Income and Related Instruments.* A Client may be subject to interest rate risk in connection with its positions in futures contracts on interest rates, sovereign notes and bonds and futures contracts on sovereign notes and bonds, options on such futures contracts and interest rate swaps. Generally, the value of fixed income instruments will change inversely with changes in interest rates. As interest rates rise, the market value of such instruments tends to decrease. Conversely, as interest rates fall, the market value of such instruments tends to increase. This risk will typically be greater for instruments based on longer-term interest rates than for instruments based on shorter-term interest rates.

*Sovereign Notes and Bonds and Related Derivatives.* A Client may trade in U.S. Government securities and in derivatives upon these instruments. Generally, these securities include U.S. Treasury obligations and obligations issued or guaranteed by U.S. Government agencies, instrumentalities or sponsored enterprises. U.S. Government securities also include Treasury receipts and other stripped U.S. Government securities, when the interest and principal components of stripped U.S. Government securities are traded independently. These securities are subject to market and interest rate risk. A Client may also trade in domestic or foreign government-issued inflation-protected securities (e.g., Treasury Inflation-Protected Securities (“TIPS”), Inflation Linked Gilts (“ILG”), etc.) and in futures, swaps and other derivatives on these securities and/or other inflation related underlyings.

A Client may also trade foreign or U.S. sovereign notes and bonds which may be unrated by a recognized credit-rating agency or below investment grade and which are subject to greater risk of loss of principal and interest than higher-rated debt securities. A Client may trade foreign or U.S. debt securities which rank junior to other outstanding securities and obligations of the issuer, all or a significant portion of which may be secured on substantially all of that issuer's assets.

A Client may trade foreign or U.S. sovereign notes and bonds which are not protected by financial covenants or limitations on additional indebtedness. A Client may trade distressed sovereign notes and bonds which are subject to the significant risk of the issuer's inability to meet principal and interest payments on the obligations (credit risk) and may also be subject to price volatility due to such factors as interest rate sensitivity, market perception of the creditworthiness of the issuer and general market liquidity risk. A Client may therefore be subject to credit, liquidity and interest rate risks. In addition, evaluating credit risk for foreign or U.S. sovereign notes and bonds involves uncertainty because credit rating agencies throughout the world have different standards, making comparison across countries difficult. Also, the market for credit spreads is often inefficient and illiquid, which can make it difficult to accurately calculate discounting spreads for valuing Financial Instruments.

*Repurchase Agreements or Reverse Repurchase Agreements.* Under a repurchase agreement, a Client sells a security to a counterparty and simultaneously agrees to repurchase the security back from the counterparty at an agreed upon price and date, with the difference between the sale price and the repurchase price establishing the cost of the transaction to a Client. Repurchase agreements essentially constitute a form of borrowing secured by collateral in the form of securities and will have the effect of leveraging a Client's assets. These agreements may be entered into on an overnight, specified term or open-ended basis.

A Client may also enter into reverse repurchase agreements, whereby a Client purchases a security from a counterparty and simultaneously agrees to resell the security back to the counterparty at an agreed upon price and date, with the difference between the purchase price and the resale price establishing a Client's return. If the seller of securities under a reverse repurchase agreement defaults on its obligation to repurchase the underlying securities, as a result of its bankruptcy or otherwise, a Client will seek to dispose of such securities, which action could involve costs or delays. If the seller becomes insolvent and subject to liquidation or reorganization under applicable bankruptcy or other laws, a Client's ability to dispose of the underlying securities may be restricted. If the seller fails to repurchase the securities, a Client may suffer a loss to the extent proceeds from the sale of the underlying securities are less than the repurchase price.

Additionally, certain types of bank obligations which may be acquired by a Client may not be covered by insurance from the U.S. Federal Deposit Insurance Corporation or the U.S. Federal Savings and Loan Insurance Corporation.

*Credit Derivative Contracts.* A Client may engage in trading of credit derivative contracts, which are contracts that transfer price, spread and/or default risks of debt and other instruments from one party to another, both for bona fide hedging of existing long and short positions, but also for independent profit opportunities. Such instruments may include one or more credits. The market for credit derivatives may be relatively illiquid, and there are considerable risks that may make it difficult either to buy or sell the contracts as needed or at reasonable prices. There are also risks in determining whether an event will trigger payment under the contract and whether such payment will offset the loss or payment due under another instrument. The occurrence of a credit event is generally the occurrence of bankruptcy, failure to pay, the acceleration of an obligation or modified restructuring of a credit obligation or instrument.

A Client may be either the buyer or seller in these transactions. If a Client is a buyer of credit protection and no credit event occurs, a Client may recover nothing. Worse still, if a credit event occurs, a Client, as a buyer, typically will receive full notional value for a reference obligation that may have little or no value. Buyers of credit derivatives carry the risk of non-performance by the seller due to an inability to pay.

As a seller of credit protection, a Client would typically receive a fixed rate of income throughout the term of the contract, which typically is between one month and five years, *provided* that no credit event occurs. If a credit event occurs, the seller may pay the buyer the full notional value of the reference obligations. Sellers of credit derivatives carry the inherent price, spread and default risks of the underlying instruments.

Credit default swaps involve greater risks than if a Client had invested in the reference obligation directly. In addition to general market risks, credit default swaps are subject to liquidity risk and credit risk. A buyer of credit protection also may lose its investment and recover nothing should no credit event occur. If a credit event were to occur, the value of the reference obligation received by the seller, coupled with the periodic payments previously received, may be less than the full notional value it pays to the buyer, resulting in a loss of value to a Client. Further, in certain circumstances, the buyer can receive the notional value of a credit default swap only by delivering a physical security to the seller, and is at risk if such deliverable security is unavailable or illiquid. Such a delivery “crunch” is a distinct risk of these investments.

*Illiquidity and Credit Risk of Derivative Instruments.* A Client may enter into transactions involving privately negotiated, OTC derivative instruments, including among others, derivatives on interest rates, commodities, bonds, volatility, energy, foreign currencies, equity and indices of any and all of these underlying instruments. Such transactions may include derivatives on derivatives of any or all of these underlying instruments as well. There can be no assurance that a liquid secondary market will exist for any particular derivative instrument at any particular time. Although OTC derivative instruments are designed to meet particular financing needs and, therefore, typically provide more flexibility than exchange-traded products, the risk of illiquidity is also greater as these instruments can generally be closed out only by negotiation with the other party to the instrument. OTC derivative instruments, unlike exchange-traded instruments, are not guaranteed by an exchange or clearinghouse and thus are generally subject to greater credit risks and the possibility of non-performance by the counter party.

*Distressed Securities.* A Client may invest in “distressed securities” securities, private claims and obligations of domestic and foreign entities which are experiencing significant financial or business difficulties. Investments may include loans, commercial paper, loan participations, trade claims held by trade or other creditors, stocks, partnership interests and similar financial instruments, executory contracts and options or participations therein that are not publicly traded. Distressed securities may result in significant returns to a Client, but also involve a substantial degree of risk. A Client may lose a substantial portion or all of its investment in a distressed environment or may be required to accept cash or securities with a value less than a Client’s investment. Among the risks inherent in investments in entities experiencing significant financial or business difficulties is the fact that it frequently may be difficult to obtain information as to the true condition of such issuers. Such investments also may be adversely affected by state and federal laws relating to, among other things, fraudulent conveyances, voidable preferences, lender liability and the bankruptcy court’s discretionary power to disallow, subordinate or disenfranchise particular claims. The market prices of such instruments are also subject to abrupt and erratic market movements and above average price volatility and the spread between the bid and asked prices of such instruments may be greater than normally expected. In trading distressed securities, litigation is sometimes required, which can be expensive and can frequently lead to unpredicted delays or losses.

*High-Yield Securities.* A Client may make investments in “high-yield” bonds and preferred securities that are not investment grade. Securities in the lower rating categories are subject to greater risk of loss, as to timely repayment of principal and timely payment of interest or dividends than higher-rated securities. They are also generally considered to be subject to greater risk than securities with higher ratings in the case of deterioration of general economic

conditions. The yields and prices of lower-rated securities may tend to fluctuate more than those for higher-rated securities. High-yield securities that are rated BB or lower by S&P or Ba or lower by Moody's (or equivalent ratings by other firms) are often referred to in the financial press as "junk bonds" and may include securities of issuers in default. "Junk bonds" are considered by the ratings agencies to be predominantly speculative and may involve major risk exposures such as: (i) vulnerability to economic downturns and changes in interest rates; (ii) sensitivity to adverse economic changes and corporate developments; (iii) redemption or call provisions which may be exercised at inopportune times; and (iv) difficulty in accurately valuing or disposing of such securities.

*Loan Participations.* A Client may invest in corporate secured loans acquired through assignment or participations. In purchasing participations, a Client will usually have a contractual relationship only with the selling institution, and not the borrower. A Client generally will have no right directly to enforce compliance by the borrower with the terms of the loan agreement, nor any rights of set-off against the borrower, nor will it have the right to object to certain changes to the loan agreement agreed to by the selling institution. A Client may not directly benefit from the collateral supporting the related secured loan and may not be subject to any rights of set-off the borrower has against the selling institution. In addition, in the event of the insolvency of the selling institution, under the laws of the United States and the states thereof a Client may be treated as a general creditor of such selling institution, and may not have any exclusive or senior claim with respect to the selling institution's interest in, or the collateral with respect to, the secured loan. Consequently, a Client may be subject to the credit risk of the selling institution as well as of the borrower. Certain of the secured loans or loan participations may be governed by the law of a non-U.S. jurisdiction, which may present additional risks as regards the characterization under such laws of such participation in the event of the insolvency of the selling institution or the borrower.

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## **Item 9. Disciplinary Information**

This Item is not applicable.

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## **Item 10. Other Financial Industry Activities & Affiliations**

The Adviser and certain of its related persons are affiliated with and/or own an interest in Two Sigma Securities, LLC (“TSS”), a broker-dealer registered with the SEC and a member of FINRA. TSS is a member of the NYSE, the NYSE Arca, the NYSE Amex, the BATS Y and BATS Z Exchanges, the NASDAQ OMX, the NASDAQ OMX BX, the NASDAQ OMX PSX, the EDGA and the EDGX (Direct Edge), the CME and the NSX. TSS is an “introducing broker-dealer” that does not custody customer (or Client) assets or clear or settle trades. However, the Adviser does use TSS to execute trades on behalf of certain of its Clients which generally contain a high proportion of proprietary capital.

TSS draws upon existing research, technology and other proprietary assets of the Adviser when TSS engages in market making and trading. TSS generates substantial trading volume and expects such trading volume to grow. The Adviser may cause Clients to trade through TSS in the future when the Adviser believes it would be in that Client’s best interest to do so. Additionally, the Adviser may become affiliated with one or more additional broker-dealers, exchanges and/or other U.S. or non-U.S. regulated entities.

While it is expected that TSS (and such other regulated entities, as applicable) would charge a Client commissions and other fees that compare favorably with those charged for similar services offered by other firms with similar capabilities, such commissions and other fees charged by TSS (or such other regulated entity) may not be the result of arms’ length negotiations and may not necessarily be the lowest commission rates or fees available. This may result from the fact that TSS (and such other regulated entities, as applicable) may provide services and/or execution capabilities for which comparable rates may not be available or ascertainable.

The Adviser or a related person may also have a conflict of interest arising from the additional compensation they may be entitled to receive based upon, in large part, the amount of commissions, fees and other revenues received or derived by TSS (or any other applicable regulated entity) from a Client or a Client’s orders. In other words, the Adviser may be incentivized to cause a Client to execute trades through TSS (or any other applicable regulated entity) rather than through a non-affiliated entity and/or to engage in more transactions than it would if such trades were executed through a non-affiliated entity. Accordingly, the Adviser or a related person may be deemed to have a financial conflict of interest with respect to the utilization of TSS (or any other applicable regulated entity) as compared with other entities, as well as with respect to the extent and frequency of Client transactions executed or sent through such an entity. Similarly, since the Adviser and TSS have certain ownership and control relationships in common, certain intrinsic conflicts of interest may exist when the Adviser causes a Client to execute transactions directly or indirectly with TSS (or any other applicable regulated entities) rather than with non-affiliated parties.



The Adviser recognizes the potential conflicts of interest associated with TSS executing trades on behalf of Clients and will seek to mitigate many of these potential conflicts through the following current policies and procedures, including but not limited to the following: (i) TSS will not trade principally with Clients; (ii) all TSS trades will be cleared through third-party clearing brokers; (iii) the Adviser and TSS have executed an information protection agreement to ensure appropriate treatment is provided to the confidential information, including information regarding orders, that the Adviser may send to TSS; and (iv) the Adviser's Conflicts & Risk Management Committee ("CRMC"), directed by the Adviser's Chief Risk Officer (as further discussed below), will oversee the Adviser's interactions with TSS. Such engagement is expected to include items such as the Adviser's best execution processes and the commission rates paid by such Clients. In addition, the Adviser will monitor its Clients' transactions and seek to ensure that they are conducted in the best interests of the Clients, including continuing to seek to obtain best execution for its Clients. The Adviser has established internal review processes and mechanisms to review conflicts of interest arising from Client transactions and will report on such matters to the Adviser's management. Furthermore, the Adviser and its affiliates have substantial direct or indirect incentives to see that the assets of the Clients appreciate in value.

The Adviser and certain of its related persons are affiliated with and/or own interests in TSA. The Adviser currently licenses certain strategies (and related models, optimizers and other order management and execution management systems) that it has developed, and intends to continue licensing certain new strategies that it develops, to TSA. TSA utilizes these strategies on behalf of its clients. The Adviser has the sole discretion to select the strategies that it licenses to TSA and may license strategies to TSA that it does not utilize on behalf of Clients even though such strategies have a positive expected return. The Adviser makes such determinations after factoring in, among other things, a strategy's capacity constraints and other potentially relevant issues relating to each of its relevant Clients. However, once the Adviser has licensed a strategy to TSA, TSA has sole discretion as to how such strategy is utilized on behalf of its clients and how such strategy is weighted within a given client. It is entirely possible, therefore, that clients of TSA will obtain greater benefit from such licensed strategies than any or all of the Clients. The Adviser is not, and does not intend to be, a fiduciary with respect to TSA's clients and, as such, does not base its licensing decisions on the needs or investment mandates of TSA's clients. The Adviser may, in the future, at its sole discretion, license certain strategies to other affiliates including TSS or other affiliated broker-dealers.

In addition to licensing strategies (and related models, optimizers and other order management and execution management systems) to TSA, the Adviser provides various services to TSA pursuant to a Services Contract (the "Services Contract") including, but not limited to, administrative, technical and clerical services, access to technology equipment and office facilities, maintenance and support services, and other related and miscellaneous services. TSA pays the Adviser a fee for the provision of these services, however, such fee is borne by TSA and will not be borne, directly or indirectly, by investors who invest in TSA's clients.

In addition to licensing certain strategies (and related models, optimizers and other order management and execution management systems) to TSA and providing various services to TSA, TSA currently directs certain of its clients to invest in certain Clients of the Adviser and the Adviser may, in the future, direct certain Clients to invest in clients of TSA.

Finally, the Adviser and certain of its related persons are affiliated with and/or own interests in Principals which, as the general partner or allocations shareholder of various Clients, is entitled to receive the performance-based compensation from the Clients as discussed in Item 5 hereof and similar performance-based compensation from certain clients of TSA.

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## **Item 11. Code of Ethics, Participation or Interest in Client Transactions & Personal Trading**

The Adviser has adopted a Code of Ethics (the “Code”) that obligates the Adviser and its supervised persons to put the interests of the Clients before their own interests and to act honestly and fairly in all respects in their dealings with Clients. All of the Adviser’s personnel are also required to comply with applicable federal securities laws. The Adviser will supply a complete copy of its Code to any Client or prospective Client or any investor or prospective investor in the Clients who requests a copy of the Code by contacting Matthew B. Siano, Esq., Managing Director, General Counsel, by email at [matt.siano@twosigma.com](mailto:matt.siano@twosigma.com) or by telephone at 212-625-5700 or Kevin M. Farley, Chief Compliance Officer, by email at [kevin.farley@twosigma.com](mailto:kevin.farley@twosigma.com) or by telephone at 212-625-5700.

The Adviser and its related persons may effect transactions for their own accounts in the same securities or other Financial Instruments purchased and sold for Clients.

To ensure trading by the Adviser’s supervised persons is conducted (i) in a matter that does not adversely affect the Adviser’s trading on behalf of the Clients and (ii) in a manner that is consistent with the fiduciary duties owed by the Adviser to the Clients, the Adviser has adopted the Code and attendant policies and procedures governing Financial Instrument transactions by the Adviser’s supervised persons and other “covered persons” (as defined in the Code). The Code contains provisions designed to (i) prevent improper personal trading by the Adviser’s supervised persons and other covered persons; (ii) identify actual or potential conflicts of interest; and (iii) provide guidance in resolving any actual or potential conflicts of which the Adviser is aware of in favor of the Clients. The Code attempts to accomplish these objectives by, among other things (i) requiring certain pre-clearance of personal trades by the Adviser’s supervised persons and other covered persons; (ii) restricting the number of such trades by the Adviser’s supervised persons and other covered persons in a given month; (iii) prohibiting certain trading by the Adviser’s supervised persons and other covered persons in securities of issuers listed on the Adviser’s and TSA’s “restricted list” (as that term is defined in the Code) and, for certain covered persons, “restricted lists” of certain Clients of the Adviser or TSA; and (iv) requiring certain minimum holding periods.

The Code also contains policies and procedures in the following key areas: (i) gifts and business entertainment; (ii) outside business activities; (iii) recordkeeping; (iv) oversight of the Code; (v) conflicts of interest; (vi) the treatment of confidential information; (vii) complying with SEC rules and regulations; and (viii) reporting misconduct. Periodic training regarding the Code is provided to the Adviser’s supervised persons.

The Adviser, in the course of its investment management and other activities (e.g., board or creditor committee service), may come into possession of confidential or material nonpublic information about issuers, including issuers in which the Adviser or its related persons have invested or seek to invest on behalf of Clients. The Adviser is prohibited from improperly disclosing or using such information for its own benefit or for the benefit of any other person,

regardless of whether such other person is a Client. The Adviser maintains and enforces written policies and procedures that prohibit the communication of such information outside of the Adviser and that prohibit the communication of such information internally within the Adviser to persons other than the general counsel and/or the chief compliance officer or their designees and to assure that the Adviser is meeting its obligations to Clients and remains in compliance with applicable law. In certain circumstances, the Adviser may possess certain confidential or material, nonpublic information that, if disclosed, might be material to a decision to buy, sell or hold a security, but the Adviser will be prohibited from communicating such information to a Client or using such information for a Client's benefit. In such circumstances, the Adviser will have no responsibility or liability to the Client for not disclosing such information to the Client (or the fact that the Adviser possesses such information), or not using such information for the Client's benefit, as a result of following the Adviser's policies and procedures designed to provide reasonable assurances that it is complying with applicable law.

The Adviser's Advisory Affiliates may trade in Financial Instruments for their own accounts and may engage in personal securities transactions in securities and other Financial Instruments in which Clients may invest. These activities create conflicts of interest between the Adviser's Advisory Affiliates and the Adviser's Clients with regard to such matters as allocation of opportunities to participate in, or refrain from participation in, particular Financial Instruments or to dispose of certain Financial Instruments.

The Code contains provisions designed to prevent improper personal trading by the Adviser's supervised persons. Pursuant to the Code, all of the Adviser's "access persons" (*i.e.*, any partner, officer, director, member, or employee of the Adviser or any such person's spouses, immediate family members, any person to whom an access person provides primary financial support, partnerships and corporations in which access persons maintain a certain level of beneficial interest, and any person with whom access persons share common financial support) must obtain pre-approval prior to trading a reportable security as defined under Rule 204A-1 of the Rules and Regulations promulgated under the U.S. Investment Advisers Act of 1940, as amended, unless such person has a long-term managed account with an independent adviser who has discretionary investment authority. The Adviser's access persons are prohibited from trading securities on the restricted list, and certain access persons are also prohibited from trading securities on the restricted lists of certain Clients of the Adviser or TSA, and generally are prohibited from participating in "new issues." Short selling is prohibited. It is specifically noted that certain trading desk personnel and their immediate family members, spouses and persons to whom they provide primary financial support are precluded from trading in instruments and derivatives on instruments for which they have trading responsibilities for the Adviser. Further, all purchase and sale transactions completed by certain trading desk personnel and their immediate family members, spouses and persons to whom they provide primary financial support, regardless of market, must be pre-cleared by the chief compliance officer or a designated member of the Adviser's compliance group. The Adviser's current personal trading policies limit the brokers that supervised persons can use for personal trading. All positions in reportable securities need to be disclosed upon joining the Adviser, and duplicates of brokerage account statements generally must be sent directly to the Adviser's compliance group.

As noted in Item 6 "Performance-Based Fee and Side-by-Side Management", certain of the Clients may be owned primarily or entirely by proprietary capital. Other than as set forth in Item

6, such Clients will be treated the same as all other Clients with respect to the allocation of trades.

Additionally, the Adviser has employed an independent risk manager and chartered a Conflicts and Risk Management Committee (the “CRMC”). The CRMC is directed by an independent risk manager and comprised of certain of the Adviser’s and TSA’s senior management and control personnel. The CRMC’s primary focus is to seek to identify and manage potential conflicts of interest surrounding investment process decisions.

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## Item 12. Brokerage Practices

Market intermediaries used to execute Client trades are selected primarily on the basis of their execution capability, financial stability, reputation, access to the market for the securities being trade and expertise. The Adviser need not solicit competitive bids for orders and does not have an obligation to seek the lowest available commission cost. It is not the Adviser's practice to negotiate "execution only" commission rates, thus Clients may be deemed to be paying for research, brokerage or other services provided by market intermediaries in recognition of the commissions, mark-ups or other compensation (collectively, "Commissions") received.

In determining the market intermediaries through which, and Commission rates and other transaction costs at which, investment transactions for a Client are to be executed, the Adviser will seek to obtain the best execution and negotiate the most favorable Commission and lowest costs obtainable on each type of transaction. Consistent with seeking overall best execution, the Adviser may also obtain research, brokerage and other services that would otherwise be a Client expense provided by the market intermediary for Commissions paid in connection with the transaction and the Adviser may place transactions that may involve increased transaction costs for the foregoing services with a market intermediary that also (i) provides the Adviser (or an affiliate) with the opportunity to participate in capital introduction events sponsored by the market intermediary or (ii) refers investors to the Adviser or other products advised by the Adviser (or an affiliate). Accordingly, a Client may pay to market intermediaries that provide these services and benefits higher Commissions, mark-ups, fees, costs or other compensation than such Client would pay to other market intermediaries that do not provide these services and benefits based on the Adviser's recognition of the value of the research, brokerage and other services that would otherwise be Client expenses being provided.

When appropriate, the Adviser may, but is not required to, aggregate its clients' trade orders to achieve more efficient execution or to provide for equitable treatment among accounts. Clients participating in aggregated trades will be allocated securities or other instruments based on the average price achieved for such trades. See Item 6 above for additional information concerning the Adviser's aggregation and allocation policies.

The Adviser currently only uses Commissions to obtain research and brokerage services that constitute research and brokerage within the meaning of Section 28(e). Research services within Section 28(e) may include, but are not limited to, research reports (including market research); certain financial newsletters and trade journals; software providing analysis of securities portfolios; corporate governance research and rating services; attendance at certain seminars and conferences; discussions with research analysts; meetings with corporate executives; consultants' advice on portfolio strategy; data services (including services providing market data, company financial data, certain valuation and pricing data and economic data); advice from brokers on order execution; investment and economic recommendations; and certain proxy services. Brokerage services within Section 28(e) may include, but are not limited to, services related to the execution, clearing and settlement of securities transactions and functions incidental thereto (*i.e.*, connectivity services between an investment manager and a broker-dealer and other relevant parties such as custodians); trading software operated by a broker-dealer to route orders;

software that provides trade analytics and trading strategies; software used to transmit orders; clearance and settlement in connection with a trade; electronic communication of allocation instructions; routing settlement instructions; post trade matching of trade information; and services required by the SEC or a self regulatory organization such as comparison services, electronic confirms or trade affirmations. Should the Adviser elect in the future to use Commissions arising from a Client's investment transactions for services other than research and brokerage, such usage will be limited to services that would otherwise be a Client expense. The use of Commissions to obtain such other services would be outside the parameters of Section 28(e).

In some instances, the Adviser may receive a product or service that may be used only partially for Section 28(e) types of services or services for which a Client is obligated to pay (*e.g.*, an order management system, trade analytical software or proxy services). In such instances, the Adviser will make a good faith effort to determine the proportion of the product or service used for Section 28(e) types of services or services for which such Client is obligated to pay and the proportion used for other purposes. The proportion of the product or service used for Section 28(e) types of services may be paid through Commissions generated by transactions for the Client and the proportion used for other purposes will be paid for by the Adviser from its own resources.

The Adviser may use “soft dollars” for brokerage and research products and services that provide lawful and appropriate assistance to the Adviser in carrying out its investment decision-making responsibilities, as permitted under the safe harbor of Section 28(e). While the Adviser currently does not do so, the Adviser is permitted under its Clients’ offering documents to also use soft dollars to pay certain client expenses that are outside of the scope of Section 28(e). The Adviser acknowledges and understands that it has an obligation to seek “best execution” for its Clients’ transactions under the circumstances of the particular transaction. Consequently, notwithstanding the Adviser’s soft dollar policy, no transaction shall be directed to a broker unless best execution of the transaction is reasonably expected to be obtained.

To the extent the Adviser uses soft dollars to pay for a product or service that includes a function that is not an eligible research or brokerage service under Section 28(e) or that the Adviser uses for purposes other than investment decision making, the Adviser will make an appropriate allocation of such product or service as a “mixed-use” item.

The use of Commissions (or certain markups or markdowns) to obtain research and brokerage products and services raises conflicts of interest. For example, the Adviser will not have to pay for the products and services itself. This creates an incentive for the Adviser to select or recommend a broker-dealer based on its interest in receiving those products and services. In addition, the receipt of benefits and the determination of the appropriate allocation in the case of “mixed use” products or services (as noted above) creates an additional potential conflict of interest between the Adviser and the Clients. The Adviser may cause Clients to pay Commissions (or certain markups or markdowns) higher than those charged by other broker-dealers in return for soft dollar benefits (known as paying-up), resulting in higher transaction costs for Clients. However, the Adviser will make a good faith determination that the amount of Commissions paid is reasonable in light of the research and brokerage services obtained.

Research and brokerage services obtained by the use of Commissions arising from a Client's portfolio transactions may be used by the Adviser (and may be shared with its affiliates) in its other investment activities, including, for the benefit of other Clients. The Adviser does not seek to allocate soft dollar benefits proportionately based on the Client which generated such soft dollar credits.

During the Adviser's last fiscal year, as a result of client brokerage commissions (or markups or markdowns), the Adviser and/or its related persons acquired research reports (including market research); corporate governance research and rating services; inputs from traders, analysts, experts on selected subjects, and other market participants (*e.g.*, in connection with the use, implementation and support of the alpha capture systems developed by the Adviser and/or its affiliates); and data services (including services providing market data, news data, company financial data, certain valuation and pricing data and economic data).

In selecting or recommending broker-dealers, the Adviser may consider whether the Adviser or a related person receives client referrals from a broker-dealer or third party. The Adviser may have an incentive to select or recommend a broker-dealer based on its interests to receive client referrals rather than on the Client's interests to receive most favorable execution. To address this conflict of interest, the Adviser will execute Client trades through broker-dealers that refer clients to the Adviser only if it is determined by the Best Execution Committee of the Adviser that Client trades with such broker-dealers are otherwise consistent with seeking best execution. In no event will the Adviser select a broker-dealer or pay a higher commission than the Adviser would otherwise pay as a means of remuneration for recommending the Adviser or any other product managed by the Adviser (or an affiliate) or affording the Adviser with the opportunity to participate in capital introduction programs.

Please refer to Item 6 – “*Allocation of Trades*” for further information regarding the procedures adopted by the Adviser for allocating trades among its Clients including procedures for order aggregation.



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## **Item 13. Review of Accounts**

### **Frequency and Nature of Review.**

One or both of the Co-Chairmen of the Adviser regularly review the trading activity conducted on behalf of the Clients. These reviews consist of a review and analysis of (i) various trading data, (ii) internally-generated risk reports and (iii) an evaluation of such other information the Adviser deems appropriate. Such persons also periodically review each Client's allocated portfolio holdings and performance.

### **Content and Frequency of Regular Account Reports.**

A Client's investors receive written reports from the Client as described in the offering or organization documents of the Client.

Clients may enter into agreements with certain investors to provide such investors with additional reports, including detailed information regarding portfolio positions.

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## **Item 14. Client Referrals & Other Compensation**

The Adviser receives certain research or other products or services from broker-dealers through “soft-dollar” arrangements. These “soft-dollar” arrangements create an incentive for the Adviser to select or recommend particular broker-dealers based on the Adviser’s interest in receiving the research or other products or services from such broker-dealers. Please see Item 12 above for further information on the Adviser’s “soft-dollar” practices, including the Adviser’s procedures for addressing conflicts of interest that arise from such practices.

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**Item 15. Custody**

This Item is not applicable.

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## **Item 16. Investment Discretion**

The Adviser provides investment advisory services on a discretionary basis to Clients. Other than those restrictions set forth in the applicable offering memorandum or investment management agreement, Clients generally may not impose restrictions on investing in certain securities or certain types of securities.

Prior to assuming full discretion in managing a Client's assets, the Adviser enters into an investment management agreement or other agreement that sets forth the scope of the Adviser's discretion.

Unless otherwise instructed or directed by a discretionary Client, the Adviser has the authority to determine (i) the securities to be purchased and sold for the Client (subject to restrictions on its activities set forth in the applicable offering memorandum, investment management agreement and any written investment guidelines) and (ii) the amount of securities to be purchased or sold for the Client. See Item 6 for a discussion of the Adviser's allocation and aggregation practices.

The Adviser may, directly or indirectly, from time to time, cause certain of the Clients to purchase equity securities that are part of an initial public offering (sometimes referred to as "IPOs" or "New Issues"). The Adviser will determine those Clients that are eligible to participate in the IPOs and will allocate such IPO securities in a manner consistent with the Adviser's fiduciary duties among such Clients. The Adviser is authorized to determine, among other things the (i) manner in which New Issues are directly purchased, held, transferred and sold and any adjustments (including interest) with respect thereto; (ii) manner in which the investors will participate in the profits and losses from New Issues; (iii) investors who are eligible and ineligible to participate in the profits and losses from New Issues; (iv) method by which profits and losses from New Issues are to be allocated among the investors in a manner that is permitted under the FINRA rules; and (v) time at which New Issues are no longer considered as such under the FINRA rules.

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## **Item 17. Voting Client Securities**

Although the trading frequency (and correspondingly relatively shorter holding periods, frequently changing position sizes and changing position directionality) of the securities targeted by the investment strategies employed by the Adviser significantly reduces the importance and usefulness of the proxies the Adviser receives and votes, or causes to be voted, on behalf of the Clients, the Adviser employs proxy voting guidelines and proxy voting procedures that are designed to seek to ensure that in cases when the Adviser votes proxies with respect to Client securities, such proxies are voted in the best interests of the Clients. The Clients are not permitted to direct their votes in a particular solicitation.

In voting proxies, the Adviser utilizes the services of a third-party proxy agent that votes pursuant to guidelines agreed with the Adviser in advance which the Adviser believes are in the best interests of the Client. If a material conflict of interest between the Adviser and a Client exists, the Adviser will determine whether voting in accordance with the guidelines set forth in the proxy voting policies and procedures is in the best interests of the Client or take some other appropriate action. The Adviser does not make any qualitative judgment regarding its Clients' investments.

An investor in a Client can obtain (i) a copy of the Adviser's proxy voting policies and procedures and (ii) information on how the Adviser voted proxies for each applicable Client in which they are invested, by contacting the Adviser's Investor Relations Department at (212) 625-5700.

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## **Item 18. Financial Information**

This Item is not applicable.

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## **Item 19. Requirements for State-Registered Advisers**

This Item is not applicable.

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## **Appendix: Material Changes**

Below are the material changes the Adviser has made to this brochure since the Advisers last annual Form ADV filing on March 31, 2011. Please be aware that other non-material changes have been included in this brochure.

- Item 4. The Adviser's regulatory assets under management has been provided, rather than assets under management.
- Item 5. Clarification has been provided that the Adviser deducts the management fee and performance based compensation from Client accounts by instructing the Client's custodian, and further description has been provided with respect to the payment of research expenses to third parties.
- Item 8. The sections entitled Methods of Analysis, Investment Strategies, Material Risks Relating to Investment Strategies, and Risks Associated with Types of Securities that are Primarily Recommended, have been revised to reflect updated strategy descriptions and risk factors.
- Item 11. Revisions in the Adviser's Code of Ethics have been noted.
- Item 12. A more detailed description of the Adviser's conflicts of interest policy with respect to selection of broker-dealers has been provided.