

**Part 2A of Form ADV: Firm Brochure**

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**This Brochure provides information about the qualifications and business practices of Millennium Management LLC. If you have any questions about the contents of this Brochure, please contact us at (212) 841-4100. The information in this Brochure has not been approved or verified by the U.S. Securities and Exchange Commission (“SEC”) or by any state securities authority.**

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

**This document does not constitute an offer to sell or a solicitation of any offer to invest in any security.**

Item 2 Material Changes

Millennium Management's headquarters in New York have moved to 399 Park Avenue, New York, New York 10022.

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#### Item 4 Advisory Business

Millennium Management LLC (“**Millennium Management**”), a Delaware limited liability company, and its predecessors have been in business since 1989. Millennium Management and its relying advisers (identified in Item 10 of this Brochure, as well as on Schedule R of Millennium Management’s Form ADV Part 1) (each a “**Relying Adviser**” and together the “**Relying Advisers**”) provide discretionary investment advisory services to certain private funds in accordance with their investment objectives and strategies as broadly described in Item 10 of this Brochure. Unless specifically noted otherwise, the responses to this Form ADV Part 2A combine information about Millennium Management and its Relying Advisers. Millennium Management and its affiliated entities are collectively referred to throughout this Brochure as “**Millennium**.” Millennium Management and its Relying Advisers are collectively referred to throughout this Brochure as the “**Firm**” or by use of the first person plural pronoun. Each of the private funds we manage is generally referred to throughout this Brochure as a “**Fund**” and are collectively referred to throughout this Brochure as the “**Funds**.” Certain Funds, directly or indirectly, invest all or substantially all of their assets in other Funds in a master-feeder structure.

The principal of Millennium Management is Israel Englander. Mr. Englander and certain companies and trusts for his benefit and the benefit of his family (including MLM Trust B) directly or indirectly own 100% of the economic interests of Millennium Management.

As of December 31, 2020, we managed approximately \$50.3 billion in net assets for the Funds (including the Millennium Partners Funds and the WMA Funds, each as defined herein). All of these assets are managed on a discretionary basis.

## Item 5 Fees and Compensation

Fees, expenses and/or allocations associated with an investment in a Fund vary, depending on the Fund, and are set forth in such Fund's offering document. Any applicable fees, expenses and/or allocations are deducted from a Fund investor's assets as described below.

Performance-based allocations or fees are generally allocated or paid, respectively, annually and upon an investor's withdrawal or redemption from the applicable Fund. Asset-based fees are generally paid quarterly in advance and are generally subject to proration for (i) a subscription that does not fall on the first day of a quarter or (ii) a withdrawal or redemption that does not fall on the last day of a quarter.

*Millennium Partners, L.P. ("Millennium Partners") and its Feeder Funds (together with Millennium Partners as the context may require, the "Millennium Partners Funds")*

The Millennium Partners Funds generally bear, directly or indirectly, all expenses incurred in connection with the operation of the Millennium Partners Funds, without limitation (which are therefore borne by the investors in the Millennium Partners Funds), other than as described in Item 11 under "Portfolio Manager Investment in Own Strategies." We generally refer to this as an "expense pass-through." Each Millennium Partners Fund also pays us a performance-based allocation or an asset-based fee, and are generally responsible for:

- a generally *pro rata* portion of all of the fees and expenses that such Millennium Partners Fund and its affiliates incur (which include, among other things, the salaries, fringe benefits, bonuses, fees and performance-based compensation (collectively, "**compensation**") and expenses paid or reimbursed to Portfolio Managers (as defined in Item 8 of this Brochure), other employees, consultants, subcontractors and agents, fees paid to persons or entities who assist in identifying and recruiting Portfolio Managers, expenses related to computers and other equipment and expenses related to maintaining offices, including leases and fixtures); and
- all fees and expenses incurred in connection with any transactions, engagements, and other agreements that such Millennium Partners Fund enters into on its own behalf, including, among other things, costs and expenses of its administrator, expenses incurred in connection with the private placement of interests (other than placement fees), and, with respect to non-U.S. Millennium Partners Funds, directors' fees and expenses.

Millennium Partners Funds in the aggregate bear all of the compensation paid to the Portfolio Managers (including Portfolio Managers that are Relying Advisers) and other employees of, and consultants to, the Firm and its affiliates. The compensation expenses also include management or "base" fees that are charged by certain Portfolio Managers or third-party funds. In addition, certain personnel who assist in overseeing groups of Portfolio Managers (e.g., the head of a particular strategy) receive compensation based on the overall performance of such Portfolio Managers. This compensation of Portfolio Managers and such personnel responsible for overseeing Portfolio Managers (as well as other Millennium employees) is separate from and in addition to the performance- or asset-based compensation we receive from the Millennium Partners Funds, which compensates us for services provided by our principal. Such expense is deducted prior to calculation of the performance- or asset-based compensation we receive from the Millennium Partners Funds. Compensation of a Portfolio Manager is generally determined as a percentage of profits earned by such Portfolio Manager during the preceding calendar year, with profits measured on an accrual (i.e., mark-to-market) basis and without taking into account the performance of other Portfolio Managers or of the Millennium Partners Funds generally. If a Portfolio Manager suffers net losses during the year, generally the losses are carried forward and past losses must be made up before performance-based compensation becomes payable in subsequent years. Portfolio Managers also receive a salary, which is generally treated as an advance against their profits interest if there are profits (although, for certain Portfolio Managers, instead is treated as an expense of their respective accounts). There is generally no "carryback" or "clawback" of losses to permit recouping of profit interests from prior years. Portfolio Managers with positive performance will receive performance-based compensation even if the Millennium Partners Funds' overall returns are negative. We have agreed, and may in the future agree, to

“guarantee” a level of compensation for a Portfolio Manager or other personnel for a particular year (or years) or to replace compensation that a Portfolio Manager or other personnel has forfeited in connection with the termination of prior employment. We have from time to time in the past negotiated, and may in the future negotiate, different compensation arrangements with Portfolio Managers and other personnel than those described above.

In addition to the expenses listed above, the expenses of the Millennium Partners Funds, which are paid directly or indirectly by such Millennium Partners Funds, include all expenses directly or indirectly related to such Millennium Partners Funds’ investment activities, including, without limitation, brokerage commissions and interest expense; internal and external accounting expenses; audit and tax (including withholding tax) expenses; legal expenses; administrator, registrar and transfer agent fees and expenses; premiums for general partner liability insurance and risk-specific insurance and “key-man” life insurance on certain personnel; and other administrative and operating expenses. Millennium Partners has also loaned or advanced the capital to establish, capitalize and maintain the Foreign Advisers (as defined in Item 10), and the expenses attributable to the loans or advances are paid by the Millennium Partners feeder funds. All determinations as to whether particular expenses are payable by the Millennium Partners feeder funds are made by the Firm in the reasonable exercise of its discretion.

We may from time to time in the future advise additional funds or accounts with expense pass-through arrangements similar to the foregoing.

*WMQS Global Equity Active Extension Master Fund LP (the “WMQS GEAE Master”) and its Feeder Funds (together with the WMQS GEAE Master as the context may require, the “WMQS GEAE Funds”), WMA US Equity 130/30 Master Fund LP (the “WMA US Equity 130/30 Master” and its Feeder Fund (together with the WMA US Equity 130/30 Master, the “WMA US Equity 130/30 Funds”) and WMA International Equity 130/30 Master Fund LP (the “WMA International Equity 130/30 Master”) and its Feeder Fund (together with the WMA International Equity 130/30 Master, the “WMA International Equity 130/30 Funds”) (The WMQS GEAE Funds, the WMA US Equity 130/30 Funds and the WMA International Equity 130/30 Funds are collectively referred to herein as the “WMA Funds”)*

The WMA Funds are subject to the fee and allocation arrangements, and bear such expenses, as are set forth in the terms of such WMA Funds. The WMA Funds pay us either (i) a flat asset-based fee or (ii) the greater of an asset-based fee or a performance-based fee. The WMA Funds are generally responsible for the WMA Funds’ direct expenses (and generally a *pro rata* share of the expenses of the applicable master fund) as set forth in the WMA Funds offering documents. Examples of the types of expenses borne by the WMA Funds include, but are not limited to, investment expenses, whether or not such investments are consummated (such as brokerage commissions, expenses relating to short sales, clearing and settlement charges, custodial fees, bank service fees and interest expenses); certain market data costs; third-party professional fees (including, without limitation, expenses of consultants, attorneys, accountants and other experts) relating to investments; directors’ fees and expenses; third-party administrative fees and expenses (including fees and expenses of the administrator); third-party legal expenses (including the updating of such WMA Fund’s offering documents, processing transfer requests, negotiations with prospective investors and extraordinary legal expenses, such as those related to litigation or regulatory investigations or proceedings); third-party accounting and valuation expenses (including, without limitation, the cost of accounting software packages); third-party audit and tax preparation expenses; fees, expenses (including, without limitation, expenses related to the organization and conduct of investor meetings (including, without limitation, travel, lodging and meal expenses)), if any; costs of printing and mailing reports and notices; entity-level taxes (including, without limitation, investor-related taxes); third-party expenses related to preparing and making regulatory and compliance filings associated with such WMA Fund and its investment activities, such as filing fees and costs of software and systems relating to such filings; organizational expenses; expenses incurred in connection with the offering and sale of the interests and other similar expenses related to such WMA Fund (excluding fees payable to any placement agent); indemnification expenses; extraordinary expenses; and the cost of certain Bloomberg terminals in support of investment activities, operations and middle office.

We may from time to time in the future advise additional funds or accounts with expense arrangements similar to or different from the foregoing. Such funds or accounts may bear additional expenses as permitted under the terms of such fund or account.

*General*

Certain expenses are shared across different Funds or across the Funds and other businesses of the Firm and allocated among the Funds and the Firm in accordance with our expense allocation methodologies. Our expense allocation methodologies and certain conflicts of interest that may be raised by them are discussed further in Item 11 of this Brochure.

The Funds incur brokerage and other transaction costs, as discussed further in Item 12 of this Brochure.

## Item 6 Performance-Based Fees and Side-By-Side Management

As described in Item 5 of this Brochure, we manage Funds that bear performance-based allocations or fees and Funds that bear asset-based fees.

Performance-based allocations or fees borne by the Funds may, under some circumstances, create an incentive to cause a Fund to make investments that are riskier or more speculative than would be the case if the compensation were not performance-based, particularly in any period after losses have been suffered, as losses from prior periods must generally be recovered before any performance-based allocation or fee is payable.

Further, Portfolio Managers, who are generally compensated based on their performance, may have similar incentives to engage in more speculative activities than would be the case if their compensation were not performance-based, particularly in any period after losses have been suffered. This compensation structure may be seen to create an incentive for a Portfolio Manager to accept significant risks, in excess of levels that a Fund might find acceptable, in seeking to obtain profits. Nonetheless, we have found the compensation scheme generally effective over time in providing trading incentives that correspond appropriately to each Fund's goals.

Additional conflicts regarding the management of multiple Funds with different fee and expense structures are described in Item 11 of this Brochure.



Item 7 Types of Clients

Our clients are private funds. In the future, we may provide investment advice to other clients, including other funds or separately managed accounts.

## Item 8 Methods of Analysis, Investment Strategies and Risk of Loss

We manage the capital of each Fund in accordance with its investment objectives, which are broadly set forth in the applicable Fund's offering document.

### *Millennium Partners Funds*

For the Millennium Partners Funds, we follow an investment strategy that is opportunistic with respect to investments and strategies and that is broadly diversified and global in scope. We do so by selecting, monitoring and evaluating Portfolio Managers and allocating and reallocating the Millennium Partners Funds' invested capital among them. For the Millennium Partners Funds, we also make direct (*i.e.*, not through Portfolio Managers) investments of the Millennium Partner Funds' capital, either as a profit-seeking investment (*e.g.*, direct trading activities) or as hedges, or "contra" trades that seek to establish a reduction in certain exposures. Our direct trading activities with respect to the Millennium Partners Funds have included, and may in the future include, increasing (potentially materially) the Millennium Partners Funds' exposure to certain strategies or positions or to netted positions held by a number of Portfolio Managers. However, there is no obligation for us to engage in such activities. Additionally, there is no guarantee that direct trading activities will be profitable, and, with respect to increasing the Millennium Partners Funds' exposure to certain strategies or positions, such activities may exacerbate any losses associated with such strategies or positions. Consistent with this approach (and unlike many investment partnerships that as a matter of investment policy require that no more than a fixed percentage of their assets be invested in any one industry or group of industries), we do not establish fixed guidelines regarding diversification of investments to be followed by the Millennium Partners Funds. At any given time, the Millennium Partners Funds' assets could be concentrated in securities or asset classes that the Portfolio Managers (subject to the oversight of our Risk Management group) believe offer an optimal opportunity for appreciation. However, by virtue of our structure, in which assets are allocated among a number of Portfolio Managers utilizing different strategies and investment approaches, as well as our general risk management principles, which discourage concentrations and apply Firm-wide oversight, the Millennium Partners Fund's assets will usually be deployed among a diversified set of strategies. The investment strategies that the Millennium Partners Funds employ include, among other things, most or all of the following core strategies: relative value fundamental equity; quantitative; equity arbitrage; and fixed-income. The Millennium Partners Funds may, and typically do, also invest in certain other strategies, including, among others, closed-end fund/asset arbitrage and distressed investing, and may reclassify, and have reclassified, strategies or components thereof from time to time. However, as noted above, the Millennium Partners Funds may concentrate investments in a select few strategies while not employing others and may employ additional investment strategies or suspend any such strategies, as determined by us in our discretion, at any time without notice. There are no substantive limits on the investment strategies that may be pursued by the Millennium Partners Funds.

As used in this Brochure, the term "**Portfolio Manager**" refers to a group, typically one to five individuals but sometimes many more, operating as a single team to manage all or portion of a particular Fund's assets. In some instances a team-member is a sub-Portfolio Manager to whom day-to-day responsibility for oversight of a portion of a Portfolio Manager's portfolio is delegated. Although most of the Firm's Portfolio Managers are actively involved in the day-to-day investment decision-making process with respect to their respective strategies, we may, and do, allocate capital to Portfolio Managers who manage larger teams and whose primary function is to oversee and manage other investment personnel that are responsible for making investment decisions within a particular strategy or strategies. Most Portfolio Managers are employed by Millennium, while certain others are third-party investment management firms whose employees are not employed by Millennium, including in certain cases Relying Advisers. Certain Portfolio Managers employed by Millennium form limited liability companies or other entities in connection with the performance of their services to Millennium. Portfolio Managers operate their respective trading groups and are primarily responsible for their groups' trading, personnel, and similar decisions, subject to our risk management and, in the case of Portfolio Managers that are Millennium employees or that are Relying Advisers, to Millennium's supervision and control. Portfolio Managers whose personnel are not employees of Millennium are responsible for hiring of personnel and certain other aspects of their business, although Millennium generally retains ultimate control over the Millennium accounts managed by such Portfolio Managers. Millennium may also provide certain administrative or other services to such Portfolio Managers, and has done so for certain Portfolio Managers. Certain of such Portfolio Managers also manage capital for one or more other clients. Certain Portfolio Managers who were previously employed by Millennium or who managed

assets of the Funds exclusively have formed their own investment management firms and are now providing services to Millennium as well as other clients, and others may do so in the future.

#### *WMA Funds*

The WMA Funds are ultimately managed by a single Portfolio Manager, WorldQuant (as defined below), and have more specific strategies, investment types, markets or countries in which they invest than the Millennium Partners Funds. WorldQuant utilizes systematic, model-based strategies for data sourcing and processing, “alpha” research, strategy development and portfolio management.

The following are certain risk factors describing risks related to the trading strategies and instruments we may implement for the Funds (including the Millennium Partners Funds and the WMA Funds) and the investment techniques we may utilize. All of these risk factors apply to the Millennium Partners Funds. Certain of these risk factors are relevant for certain other Funds, while others are not. This list is not exhaustive.

*Investment and Trading Risks in General.* Inherent in any investment in securities is the risk of losing the invested capital. We believe that a Fund’s investment program and the Portfolio Managers’ research techniques moderate this risk through a careful selection of securities and investment opportunities, as well as through the application of our ongoing qualitative and quantitative risk assessment and management program. However, no guarantee or representation is made that a Fund’s investment program will be successful or profitable, and investment results may vary substantially over time. The Funds’ investment programs utilize investment techniques such as option and derivative transactions, limited diversification, margin transactions, short sales, and futures and forward contracts, which can, in certain circumstances, maximize the adverse impact of any loss or adverse event to which such Funds may be subject. We do not, in general, attempt to measure or hedge all market or other risks inherent in a Fund’s portfolio, and seek to measure and hedge certain risks, if at all, only partially. Specifically, we may choose not, or may determine that it is economically unattractive, to hedge certain risks, instead relying on diversification in an attempt to mitigate the risks. Additionally, our direct trading activities with respect to certain Funds may increase such Funds’ exposure to certain strategies or positions, which may exacerbate any losses associated with such strategies or positions. As discussed below, the Funds are not limited to any specific policies or requirements for diversification or risk mitigation.

*General Market and Economic Risk.* Most trading strategies utilized by the Funds involve some, and occasionally a significant degree of, market risk. The profitability of a Fund depends, in significant part, upon our and the Portfolio Managers’ correctly assessing future price movements of securities and other financial instruments. A Fund cannot assure any investor in such Fund that we or the Portfolio Managers will accurately predict these price movements. Additionally, unanticipated illiquidity in a market could lead to substantial losses or mean that a Fund is unable to close out certain positions when it wishes. The success of a Fund’s activities also will be affected by general economic and market conditions, such as interest rates, availability of credit, inflation rates, economic uncertainty, changes in laws (including laws relating to taxation of such Fund’s investments) or regulations (or their interpretation), trade barriers, currency exchange controls, and national and international political circumstances (including wars, terrorist acts or security operations). These factors will affect the level and volatility of the prices of securities, commodities and other financial instruments and the liquidity of a Fund’s investments. Illiquidity or significant changes in volatility could impair a Fund’s profitability or result in losses. The Funds invest in the U.S. and a number of other countries. The economies of non-U.S. countries may differ favorably or unfavorably from the U.S. economy in such respects as growth of gross domestic product, rate of inflation, relative currency appreciation or depreciation, asset reinvestment opportunities, resource self-sufficiency and balance of payments position. Further, certain economies are heavily dependent upon international trade and, accordingly, have been and may continue to be adversely affected by trade barriers, exchange controls, managed adjustments in relative currency values and other protectionist measures imposed or negotiated by the countries with which they trade. The economies of certain non-U.S. countries may be based, predominantly, on only a few industries and may be vulnerable to changes in trade conditions and may have higher levels of debt or inflation than others.

*Public Health Risk.* The Funds could be materially adversely affected by the widespread outbreak of infectious disease or other public health crises, including the current COVID-19 pandemic. As further described below, public health crises such as the COVID-19 pandemic, together with any containment or other remedial measures undertaken or imposed, could have a material and adverse effect on the Funds and their investments, including by

disrupting or otherwise materially adversely affecting the human capital, business operations or financial resources of the Firm, the Funds, the Administrator and/or other service providers and counterparties as well as exchanges, clearinghouses and other market participants and severely disrupting global, national and/or regional economies and financial markets and precipitating an economic downturn or recession that could materially adversely affect the value and performance of the Funds and their investments. For example, the COVID-19 pandemic has already led to extreme volatility in the financial markets (including several brief automatic trading halts on U.S. stock exchanges). Public health crises and efforts to address them may result in any or all of the following (and, in the case of the COVID-19 pandemic, has resulted in certain of the following): (i) the closure of the Firm's offices or other businesses, including office buildings, factories, retail stores, distribution channels and other commercial venues, (ii) workforce, trade or travel disruptions or restrictions negatively impacting the Firm's operations, (iii) a greater susceptibility to cybersecurity incidents, (iv) the institution of short sale or other trading bans or limitations, or increased reporting relating to such trading, in a number of markets or the closure of certain exchanges or trading venues or (v) a reduction in the availability, and/or adverse changes in the terms, of capital or financing available to the Funds. Any of the foregoing could have a material adverse impact on the Funds, the Funds' investments and the Funds' ability to continue to operate certain investment strategies. In addition, public health crises such as the COVID-19 pandemic and related containment efforts may adversely affect the ability, or the willingness, of a party to perform its obligations under its contracts and lead to uncertainty over whether such failure to perform (or delay in performing) might be excused under so called "material adverse change," force majeure and similar provisions in such contracts. As a result, (i) counterparties and service providers to the Funds or the Firm may fail to perform (or delay the performance of) their obligations, (ii) pending transactions may not close or settle on time or at all, (iii) the Funds or the Firm may be forced to breach (or may determine not to perform obligations under) certain agreements, and (iv) related litigation may ensue. Any of these occurrences could have a material adverse effect on the Funds and their investments. The extent of the impact of COVID-19 (or any similar health crisis) on the Funds and their investments will depend largely on future developments, including the severity, duration and spread of the outbreak throughout the world and the effect on the global economy and the markets in which the Funds invest, all of which are highly uncertain and cannot be predicted, but the impact may be material.

*Potential Interest Rate Volatility.* The U.S. has experienced a sustained period of historically low interest rate levels. In recent years, however, short-term and long-term interest rates have risen and have recently fallen back to historical lows as a result of central bank steps taken in response to the COVID-19 pandemic. The uncertainty of the U.S. and global economy, changes in U.S. government policy, and changes in the federal funds rate, increase the risk that interest rates will remain volatile in the future. Sustained future interest rate volatility may cause the value of the fixed income securities held by a Fund to decrease, which may result in substantial withdrawals or redemptions from the Fund that, in turn, force the Fund to liquidate such securities at disadvantageous prices negatively impacting the performance of the Fund.

*Negative Interest Rates.* Periods of very low or negative interest rates may lead to lower total returns for a Fund in the future. Certain countries have recently experienced negative interest rates on certain fixed-income instruments. Very low or negative interest rates may magnify interest rate risk. Changing interest rates, including rates that fall below zero, may have unpredictable effects on markets, may result in heightened market volatility and may detract from Fund performance to the extent a Fund is exposed to such interest rates. To the extent a Fund is obligated to pledge cash collateral to secure its obligations under prime brokerage, currency hedging and other arrangements, if interest rates are negative, the Fund may be required to pay interest to the secured party at a rate equal to the absolute value of the negative interest rate. Certain U.S. banks, citing Federal Reserve liquidity requirements and/or the costs and/or decreased profitability of holding capital deposits, have indicated that they intend to impose a negative interest rate and/or a balance sheet utilization fee on certain deposits from certain institutional customers. Certain European and other non-U.S. banks have also adopted similar measures. Negative interest rates and/or fees of this type could have an adverse effect on a Fund.

*General Economic and Market Conditions.* The success of a Fund's activities will be affected by general economic and market conditions, such as interest rates, availability of credit, credit defaults, inflation rates, economic uncertainty, changes in laws (including laws relating to taxation of the Fund's investments), trade barriers, currency exchange controls, and national and international political circumstances (including wars, terrorist acts or security operations). These factors may affect the level and volatility of the prices and the liquidity of a Fund's investments.

Volatility or illiquidity could impair a Fund's profitability or result in losses. A Fund may maintain substantial trading positions that can be adversely affected by the level of volatility in the financial markets.

*Extraordinary Market Conditions and Governmental Actions.* Unpredictable or unstable market conditions may result in reduced opportunities to find suitable investments to deploy capital or make it more difficult to exit and realize value from a Fund's existing investments. An example of this sort of instability started in 2007, when markets experienced significant losses arising largely because global credit spreads widened materially, equity index levels declined and many funds liquidated assets. In reaction to the extreme losses and volatility in commodities and securities markets and the failure of credit markets to function normally, regulators in several countries undertook extraordinary regulatory actions in 2008, including, but not limited to, short-selling restrictions. Regulators and central banks in the U.S. and other countries continue to consider and implement measures intended to stabilize and encourage growth in U.S. and global financial markets. We believe that a Fund may be materially and adversely affected by similar or other events in the future. For example, markets may experience extreme volatility and losses and a Fund may be unable to hedge, or effectively hedge, certain material risks. In the long term, there may be significant new regulations that could limit a Fund's activities and investment opportunities or change the functioning of capital markets. In addition, these regulations have typically been unclear in scope and application, resulting in uncertainty. It is impossible to predict when these restrictions will be imposed, what the interim or permanent restrictions will be and/or the effect of such restrictions on a Fund's strategies. Consequently, a Fund may not be capable of, or successful at, preserving the value of its assets, generating positive investment returns or effectively managing its risks. It is important to understand that a Fund can incur material losses even if it reacts quickly to difficult market conditions and there can be no assurance that a Fund will not suffer material adverse effects from broad and rapid changes in market conditions and related regulatory actions.

*Regulatory Changes for Hedge Funds.* The legal, tax and regulatory environment worldwide for private funds (such as the Funds) and their managers is evolving, and changes in the regulation of private funds, their managers, and their trading and investing activities may have a material adverse effect on the ability of a Fund to pursue its investment program and the value of investments held by a Fund. There has been an increase in scrutiny of the alternative investment industry by governmental agencies and self-regulatory organizations. New laws and regulations or actions taken by regulators that restrict the ability of a Fund to pursue its investment program or conduct business with brokers and other counterparties could have a material adverse effect on a Fund and the investors' investments therein. Such laws and regulations may also materially increase the costs of operating a Fund and the costs of executing and financing certain strategies utilized by a Fund, which costs are borne by the applicable Fund. In addition, we may, in our sole discretion, cause a Fund to be subject to certain laws and regulations if we believe that to be in such Fund's interest, even if such laws and regulations may have a detrimental effect on one or more investors.

*Dodd-Frank Act.* The U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act (the "**Dodd-Frank Act**") was enacted in July 2010. The Dodd-Frank Act has resulted in extensive rulemaking and regulatory changes that affect private fund managers, the funds that they manage and the financial industry as a whole. Additionally, under the Dodd-Frank Act, the SEC and the U.S. Commodity Futures Trading Commission (the "**CFTC**") have mandated (and will mandate) recordkeeping, reporting, central clearing and mandatory trading on electronic facilities requirements for investment advisers, which add costs to our and the Funds' legal, operational and compliance obligations and increase the amount of time that we spend on non-investment-related activities. The Dodd-Frank Act affects a broad range of market participants with whom a Fund interacts or may interact, including banks, non-bank financial institutions, rating agencies, mortgage brokers, credit unions, insurance companies, payday lenders and broker-dealers, and may change the way in which we conduct business with its brokers and other counterparties.

*Regulation in the Derivatives Industry.* Certain swaps, options and other derivative instruments may be subject to various types of risks, including market risk, liquidity risk, credit risk, legal risk and operations risk. The regulatory and tax environment for derivative instruments in which a Fund may participate is evolving, and changes in the regulation or taxation of such instruments may have a material adverse effect on the Fund. There are many rules related to derivatives that may negatively impact a Fund, such as requirements related to recordkeeping, reporting, portfolio reconciliation, central clearing, portfolio compression, valuation, minimum margin for uncleared over-the-counter ("**OTC**") instruments and mandatory trading on electronic facilities, and other transaction-level obligations. Parties that act as dealers in swaps, are also subject to extensive business conduct standards, additional

“know your counterparty” obligations, documentation standards and capital requirements. All of these requirements add costs to the legal, operational and compliance obligations of a Portfolio Manager and a Fund, and increase the amount of time that a Portfolio Manager spends on non-investment-related activities. Requirements such as these also raise the costs of entering into derivative transactions, and these increased costs will likely be passed on to a Fund. These rules are operationally and technologically burdensome for a Portfolio Manager and a Fund. These compliance obligations require employee training and use of technology, and there are operational risks borne by the Fund in implementing procedures to comply with many of these additional obligations. These regulations may also result in a Fund forgoing the use of certain trading counterparties (such as broker-dealers and futures commission merchants (“FCMs”)), as the use of other parties may be more efficient for the Fund from a regulatory perspective. However, this could limit a Fund’s trading activities, create losses, preclude the Fund from engaging in certain transactions or prevent the Fund from trading at optimal rates and terms. Many of these requirements were implemented under, the EU Regulation on OTC Derivatives, Central Counterparties and Trade Repositories (known as the European Market Infrastructure Regulation, or “EMIR”), other legislation intended to reform the U.S. financial regulatory system and similar regulations globally. In the U.S., regulatory responsibility for derivatives is divided between the SEC and the CFTC, a distinction that does not exist in any other jurisdiction. The SEC has regulatory authority over “security-based swaps” and the CFTC has regulatory authority over “swaps”. EMIR is implemented in phases through the adoption of delegated acts by the European Commission. As a result of the SEC and CFTC bifurcation and the different pace at which the SEC, the CFTC, the European Commission and other international regulators have promulgated necessary regulations, different transactions are subject to different levels of regulation. Though many rules and regulations have been finalized, there are others, particularly SEC regulations with respect to security-based swaps, that are still in the proposal stage or are expected to be introduced in the future. The following describes derivatives regulations that may have the most significant impact on a Fund:

#### *Reporting*

Most swap transactions have become subject to anonymous “real time reporting” requirements, meaning that information relating to transactions entered into by a Fund will become visible to the market in ways that may impair the Fund’s ability to enter into additional transactions at comparable prices or could enable competitors to “front run” or replicate the Fund’s strategies.

#### *Central Clearing*

In order to mitigate counterparty risk and systemic risk in general, various U.S. and international regulatory initiatives, including EMIR, are underway to require certain derivatives to be cleared through central clearinghouses. In the U.S., clearing mandates affect certain interest rate and credit default swaps. The CFTC and the SEC may introduce clearing requirements for additional classes of derivatives in the future. EMIR also requires OTC derivatives contracts meeting specific criteria to be cleared through central counterparties. While such clearing requirements may be beneficial for a Fund in many respects (for instance, they may reduce the counterparty risk to the dealers to which the Fund would be exposed under non-cleared derivatives), the Fund could be exposed to new risks, such as the risk that an increasing percentage of derivatives will be required to be standardized and/or cleared through central clearinghouses, and, as a result, the Fund may not be able to hedge its risks or express an investment view as well as it would have been able to had it used customizable derivatives available in the over-the-counter markets. A Fund may have to split its derivatives portfolio between centrally cleared and over-the-counter derivatives, which may result in operational inefficiencies and an inability to offset risk between centrally cleared and over-the-counter positions, and which could lead to increased costs. Another risk is that a Fund may be subject to more onerous and more frequent (daily or even intraday) margin calls from both the Fund’s FCM and the clearinghouse. Virtually all margin models utilized by the clearinghouses are dynamic, meaning that unlike traditional bilateral swap contracts where the amount of initial margin posted on the contract is typically static throughout the life of the contract, the amount of the initial margin that is required to be posted in respect of a cleared contract will fluctuate, sometimes significantly, throughout the life of the contract. The dynamic nature of the margin models utilized by the clearinghouses and the fact that the margin models might be changed at any time may subject a Fund to an unexpected increase in collateral obligations by clearinghouses during a volatile market environment, which could have a detrimental effect on the Fund. Clearinghouses also generally limit collateral that they will accept to cash, U.S. treasuries and, in some cases, other highly rated sovereign and private debt instruments, which may require a Fund to borrow eligible securities from a dealer to meet margin calls and raise

the costs of cleared trades to the Fund. In addition, clearinghouses may not allow a Fund to portfolio-margin its positions, which may increase the Fund's costs. Although standardized clearing for derivatives is intended to reduce counterparty risk (for instance, it would reduce the counterparty risk to the dealers to which a Fund would have been exposed under OTC derivatives), it does not eliminate risk. Derivatives clearing may also lead to concentration of counterparty risk, namely in the clearinghouse and a Fund's FCM, subjecting the Fund to the risk that the assets of the FCM are insufficient to satisfy all of the FCM's payment obligations, leading to a payment default. The failure of a clearinghouse or FCM could have a significant impact on the financial system. Even if a clearinghouse does not fail, large losses could force significant capital calls on FCMs during a financial crisis, which could lead FCMs to default and thus worsen the crisis.

#### *Swap Execution Facilities*

In addition to the central clearing requirement, certain swap transactions are required to trade on regulated electronic platforms, such as swap execution facilities ("SEFs"), which require a Fund to subject itself to regulation by these venues and subject the Fund to the jurisdiction of the CFTC. CFTC rules governing the operation of SEFs continue to evolve; the SEC has yet to finalize rules related to security-based SEFs. The EU regulatory framework governing derivatives is set not only by EMIR but also by a legislative package known as a recast of the Markets in Financial Instruments Directive 2014/65/EU and the Markets in Financial Instruments Regulation (EU) ("MiFIR") (together "MiFID II"). Among other things, MiFID II requires transactions in derivatives to be executed on regulated trading venues. It is not clear whether these trading venues will benefit or impede liquidity, or how they will fare in times of market stress. Trading on these trading venues may increase the pricing discrepancy between assets and their hedges as products may not be able to be executed simultaneously, therefore increasing basis risk. It may also become relatively expensive for a Fund to obtain tailored swap products to hedge particular risks in its portfolio due to higher collateral requirements on bilateral transactions as a result of these regulations.

#### *Margin Requirements for Non-Cleared Swaps*

Rules issued by U.S., EU and other regulators globally (the "Margin Rules") impose various margin requirements on all swaps that are not centrally cleared, including the establishment of minimum amounts of initial margin that must be posted, and, in some cases, the mandatory segregation of initial margin with a third-party custodian. Although the Margin Rules are intended to increase the stability of the derivatives market, the overall amount of margin that a Fund will be required to post to swap counterparties may increase by a material amount, and as a result the Fund may not be able to deploy capital as effectively. Additionally, to the extent a Fund is required to segregate initial margin with a third party custodian, additional costs will be incurred by the Fund.

*Systemic Risk.* Systemic risk is the risk of broad financial system stress or collapse triggered by the default of one or more financial institutions, which results in a series of defaults by other interdependent financial institutions. Financial intermediaries, such as clearing houses, banks, securities firms and exchanges with which a Fund interacts, as well as the Funds, are all subject to systemic risk. A systemic failure could have material adverse consequences on a Fund and on the markets for the securities in which such Fund seeks to invest.

*Assumption of Business, Terrorism and Catastrophe Risks.* A Fund may be subject to the risk of loss arising from exposure that it may incur, indirectly, due to the occurrence of various events, including, without limitation, hurricanes, earthquakes, and other natural disasters, terrorism and other catastrophic events. These risks of loss can be substantial and could have a material adverse effect on a Fund and its investors' investments therein.

*The EU Regulation on OTC Derivatives, Central Counterparties and Trade Repositories.* EMIR (including the EMIR Refit amendments) on OTC derivatives, central counterparties and trade repositories introduced uniform requirements covering financial counterparties, such as investment firms, credit institutions, insurance companies and managers of alternative investment funds and certain non-financial counterparties in respect of central clearing of so-called "eligible" OTC derivative contracts through a duly authorized central counterparty, required reporting the details of derivative contracts to a trade repository and established certain risk mitigation requirements. Prospective investors should be aware that the regulatory changes arising from EMIR have increased and may

further increase the cost of entering into derivative transactions and adversely affect a Fund's ability to adhere to its investment approach and achieve its investment objective.

*Impact of MIFID II.* MiFID II set out new rules applicable to investment activities and investment services carried on in the European Union ("EU"). Among other things, MiFID II mandated broader post-trade transparency in the EU than was previously the case in the EU, and extended the market-facing and regulatory reporting requirements on all financial instruments traded on a trading venue (and certain other related instruments). MiFID II has introduced a new type of regulated trading venue, the Organised Trading Facility ("OTF"), and required that certain OTC derivative contracts be traded only on a regulated trading venue. MiFID II has introduced an EU-wide position limits regime applicable to EU commodity derivatives, which has direct extraterritorial application and could affect the portfolio composition and/or trading strategy of a Fund. In addition, MiFID II sets out various requirements applicable to high frequency and other algorithmic trading in financial instruments, which may have an adverse impact on the Firm's operations, including its ability to trade on EU trading venues in the manner it wishes. MiFID II also introduced requirements on firms providing direct electronic access to EU trading venues, including a requirement that such firms must be regulated under MiFID II (or an equivalent legislative regime) and that, among other requirements, such firms undertake appropriate due diligence on the persons to whom they provide direct electronic access, especially if direct electronic access is provided to non-EU persons. The broad range of regulatory changes arising from MiFID II may adversely affect a Fund's ability to adhere to its investment approach and achieve its investment objectives.

*Brexit.* The United Kingdom formally withdrew from the European Union on January 31, 2020 with the transition period having expired on December 31, 2020. The ongoing impact of the withdrawal could cause an extended period of uncertainty and market volatility, not just in the United Kingdom but throughout the European Union, the European Economic Area and globally. It is not possible to ascertain the precise impact these events may have on the Fund or its Portfolio Managers from an economic, financial or regulatory perspective but any such impact could have material consequences for the Fund.

*Financial Transaction Taxes ("FTTs").* A number of European countries have adopted or proposed FTTs covering a wide variety of financial transactions, including transactions in equity and debt securities and derivatives and certain "high frequency" trading activity. The European Commission also proposed a pan-European FTT in at least 11 Member States that based on current proposals would levy the tax at a minimum level of 0.1% of the value of transactions in debt or equity securities and 0.01% of the value of derivative transactions. Eleven EU Member States (the "ECP Member States") initially indicated their interest in proceeding with this measure under an enhanced cooperation procedure. However, these ECP Member States (subsequently reduced to ten) were unable to reach agreement on this proposal and in May 2019 began discussions on a new proposal for an FTT, modelled on the French domestic FTT, which would impose a tax of at least 0.2% on transactions in the listed shares of companies or other entities incorporated in an ECP Member State with a market capitalisation of not less than EUR 1 billion. As yet, no agreement has been reached on the adoption of this new proposal. There have also been discussions of proposing an FTT in the U.S. In the future, additional countries may adopt FTTs and countries that have adopted FTTs may seek to expand the scope of transactions that are subject to FTTs. There are a number of uncertainties with respect to the calculation, remittance and enforcement of such FTTs. The FTTs that have been adopted increase the cost of trading affected financial instruments and in some instances contain measures designed to preclude avoidance of the tax by trading, for example, in derivative instruments. In some instances, such FTTs and administrative costs associated with them would make it prohibitive for a Fund to engage in trading activity subject to the tax, and there may be no alternative means of trading in equivalent instruments. Any such measures are likely to increase the costs of a Fund's business, reduce the trading opportunities open to a Fund, or both, and their effect could be material.

*Counterparty Risks.* A Fund may enter into many transactions, including derivative and other over-the-counter transactions, with or through third parties in which the failure of the third party to perform its obligations could have a material adverse effect on such Fund. The counterparty risk is accentuated for contracts with longer maturities where events may intervene to prevent settlement, or where a Fund has concentrated its transactions with a single or small group of counterparties. The assets of a Fund and its trading affiliates generally are held in accounts maintained for them by their prime brokers or in accounts with other market participants, including non-U.S. sub-custodians selected by the prime brokers. The accounts generally are not segregated, bankruptcy-remote accounts titled in the owner's name and, therefore, a failure of any broker or market participant is likely to have a



greater adverse impact than if the assets, or the accounts in which they are held, were registered in the name of a Fund or its affiliate. In addition, because a Fund's and its affiliates' securities generally are held in margin accounts, and the prime brokers have the ability to loan those securities to other persons, such Fund's or an affiliate's ability to recover all of its assets in the context of a bankruptcy or other failure of a prime broker may be further limited. The Funds and their affiliates transact with counterparties (including prime brokers) located in various jurisdictions outside the United States. Such local counterparties usually are subject to various laws and regulations in various jurisdictions that are designed to protect their customers in the event of their insolvency. However, the practical effect of these laws and their application to a Fund's or its affiliates' assets are subject to substantial limitations and uncertainties. Because of the large number of entities and jurisdictions involved and the range of possible factual scenarios involving the insolvency of a counterparty, it is impossible to generalize about the effect of such an insolvency on a Fund and its assets. Investors should assume that the insolvency of any such counterparty would result in significant delays in recovering a Fund's securities from or the payment of claims therefor by such counterparty and a loss to a Fund, which could be material. If any counterparties of a Fund or its affiliates were to become insolvent or the subject of liquidation proceedings, there exists the risk that the recovery of such Fund's or its affiliates' securities and other assets from the prime broker or broker-dealer will be delayed or be of a value less than the value of the securities or assets originally entrusted to the prime broker or broker-dealer. Additionally, there is a risk that positions that are reasonably hedged may become "unhedged" as a result of the effect of insolvency proceedings.

*Investments in Emerging Markets.* Investing in the securities of companies (and, from time to time, governments) in emerging markets involves certain considerations not usually associated with investing in securities of companies based in developed countries or those of governments of developed countries, including political and economic considerations, such as greater risks of expropriation, nationalization, confiscatory taxation or similar risks, limitations on the removal of assets and general social, political and economic instability; the relatively small size of the securities markets in such countries and the low volume of trading, resulting in potential lack of liquidity and in price volatility; evolving and relatively unsophisticated laws and regulations applicable to the securities and financial services industries; fluctuations in the rate of exchange between currencies and costs associated with currency conversion; and certain government policies that may restrict a Fund's investment opportunities. In addition, accounting and financial reporting standards generally are not as high as U.S. and other developed country standards and, consequently, less information is typically available concerning companies located outside of developed countries than for those located in the U.S. and other developed countries. As a result, a Fund may be unable to structure its transactions to achieve the intended results or to mitigate risks associated with such markets. It may also be difficult to enforce a Fund's rights in such markets. For example, securities traded on non-U.S. exchanges and the non-U.S. persons that trade these instruments are not subject to the jurisdiction of the SEC or the CFTC or the securities and commodities laws and regulations of the U.S. Accordingly, the protections accorded to a Fund under such laws and regulations may be unavailable. As another example, a Fund may be exposed to the direct and indirect consequences of potential or actual political, economic, social and diplomatic changes in China. A Fund and any investments it may make in China may be subject to the following significant risks among others: volatility in exchange rates and other economic imbalances resulting from continued state involvement as China transitions to a market-driven economy; expropriation; less stringent and less uniform financial reporting standards, practices and disclosure requirements of publicly listed Chinese companies, lack of publicly available information about Chinese companies and unreliability of official data; and increasing geopolitical, governmental, economic and social instability in China.

*Limited Diversification.* In the normal course of making investments, certain Funds that follow a multi-strategy, multi-manager approach, are generally expected to have a diverse investment portfolio, while other Funds with a more specific investment strategy are not. While we monitor investment concentrations for risk management purposes, we do not establish fixed limits and guidelines regarding diversification of investments to be followed by a Fund as a whole. As a result, a Fund's portfolio could, to a certain degree, become concentrated in a single issuer, industry, market or sector. The concentration of risk may increase losses suffered by a Fund. It is also possible that a Fund could become concentrated in any one strategy, and the investments of the strategy may be more illiquid than the investments in another strategy. In addition, it is possible that we may select Portfolio Managers who make investments that are concentrated in a limited number of types of financial instruments. This limited diversity may lead to greater volatility than would otherwise be the case, and could expose a Fund to losses disproportionate to market movements in general. Even when we attempt to control risks and diversify the portfolio, risks associated with different assets may be correlated in unexpected ways, with the result that a Fund

faces concentrated exposure to certain risks. Although we attempt to identify, monitor and manage significant risks, these efforts do not take all risks into account and there can be no assurance that these efforts will be effective. Any inadequacy or failure in our risk management efforts could result in material losses for a Fund.

*Borrowing and Lending Activities and Margin Requirements.* The Funds borrow, pledge, loan and otherwise finance assets on both a secured and an unsecured basis and may issue notes or enter into credit agreements, indentures or other financing arrangements in order to achieve efficient financing structures. At any given time, the outstanding contractual obligations of a given Fund are likely to total well in excess of its equity. There is no restriction on the ability of a Fund to borrow or enter into such contractual obligations. The brokers and market counterparties with which a Fund transacts will usually have a secured claim against the assets of such Fund that are on deposit with the brokers or counterparties, senior to the claim of such Fund (and its investors). Significant losses from investment activities or changes in market conditions that affect the assets could result in the brokers' or counterparties' foreclosing on the assets securing the obligations. A Fund may maintain balances with certain counterparties in excess of margin requirements or other obligations to such counterparties (*i.e.*, "excess collateral"). In the event of the insolvency of the financing provider under such an arrangement, a Fund's claim for the value of such excess collateral would be unsecured. While a Fund seeks to enter into "lockup" agreements with many of its key equity prime brokerage counterparties limiting the ability of those counterparties to change financing or margin terms, recall loans or refuse to execute trades for a period of time after notice is given absent an event of default or other termination event under the agreements, creditors that provide financing to a Fund may, in certain circumstances, accelerate a loan and require repayment in full upon the occurrence of certain events, including: (i) changes in key management; (ii) suspension of redemptions; (iii) violations of minimum capital levels; (iv) the imposition of regulatory sanctions on such Fund or its key personnel that would materially and adversely affect such Fund's ability to conduct its business or perform under the agreements; or (v) certain market conditions, including in the event that such counterparty is no longer able to secure financing. In addition, market conditions may make it difficult to obtain committed financing for extended periods of time or at all, particularly when assets securing the financing are less liquid and such agreements may not be available or economically attractive with respect to certain asset classes. In many cases, when such lockup agreements are not in place, the banks and dealers that provide financing to a Fund may apply discretionary margin, "haircut" financing and security and collateral valuation policies. Changes by banks and dealers in such policies, or the imposition of other credit limitations or restrictions, including those due to market circumstances or governmental, regulatory or judicial action, may result in large margin calls, requirements to post additional collateral, loss of financing, forced liquidation of assets, termination of swap or repurchase agreements or cross defaults to agreements with the same or other counterparties. Any such adverse effects may be exacerbated in the event that such limitations or restrictions are imposed suddenly and/or by multiple market participants at or about the same time. The imposition of any such limitations or restrictions could compel a Fund to liquidate all or part of its portfolio at disadvantageous prices. Assets loaned by a Fund to third parties or collateral used to finance borrowing may not be required to be kept segregated by the third parties, and may be subject to the claims of other creditors of the third parties. Third parties that enter into financing transactions with a Fund may default on their obligations to return such Fund's assets or pay amounts owed to such Fund. Additionally, a Fund may experience a delay in the recovery of or loss of rights in the collateral, if any.

*Liquidity; Availability of Credit.* The Funds' investment strategies depend on the availability of credit in order to permit the financing of their portfolios. A Fund's liquidity could be impaired by an inability to access debt markets, an inability to sell assets or unforeseen outflows of cash or collateral. Any or all of these situations could arise due to circumstances that a Fund may be unable to control, such as a general market disruption or an operational problem that affects third parties. A lack of liquidity has historically been the cause of substantial losses in the securities industry. Liquidity risk will be increased if a Fund is required to liquidate positions to meet margin requirements, margin calls or other funding requirements. If there are other market participants seeking to dispose of similar financial instruments at the same time, a Fund may be unable to sell the financial instruments or prevent losses relating to the financial instruments. In times of market stress, the liquidation of securities that are generally regarded as highly liquid nonetheless may result in a Fund incurring significant losses. Furthermore, if a Fund incurs substantial trading losses, the need for liquidity could rise sharply while its access to liquidity could be impaired. The ability of counterparties to take actions following declines in investment values which result in the forced liquidation of highly leveraged positions in declining markets, including as a result of a Fund's having insufficient liquidity to meet margin calls, could subject it to substantial losses. We may fail to adequately predict the liquidity that a Fund requires to address counterparty requirements relating to falling values of investments

being financed by the counterparties, which could result not only in losses related to the investments, but also in losses related to the need to liquidate unrelated investments in order to meet a Fund's obligations. A Fund's losses may be magnified in the event that significant capital is invested in highly leveraged investments or investment strategies. Such losses would result in a decline in assets, may lead to requests from investors in a Fund to redeem or withdraw remaining assets, and may damage such Fund's reputation.

*Cost and Availability of Financing.* The Funds obtain significant financing from counterparties that are regulated entities subject to regulatory capital requirements, which require the counterparty to maintain certain core capital and risk-based capital ratios and limit the type of assets that qualify as capital. In addition to the capital requirements, counterparties (or an applicable affiliate from which a counterparty obtains internal funding) that are depository institutions are required to comply with (i) reserve requirements that require an institution to maintain cash reserves at least equal to a certain percentage of the total value of all its transactional accounts and non-personal time deposits, and (ii) liquidity requirements that require an institution to maintain cash and other liquid assets at least equal to a certain percentage of the total value of its net withdrawable deposit accounts and borrowings payable in one year or less. These regulatory capital, reserve, and liquidity requirements have become more stringent with the implementation of the standards set forth in the Basel Committee's 2010 capital and liquidity reform package known as Basel III. The implementation of Basel III may cause the cost of financing obtained by a Fund from such counterparties to become more expensive or, in some cases, unavailable. Additionally, the margin and collateral requirements of a Fund with respect to such financing may also increase. An increase in financing costs may cause certain of a Fund's trading strategies to become less profitable or unprofitable. Additionally, an increase in the margin and collateral requirements with respect to financing may adversely affect a Fund in other ways.

*Position Limits.* "Position limits" imposed by various regulators or self-regulatory organizations and exchanges may also limit a Fund's ability to effect desired trades. Position limits are the maximum amounts of gross, net long or net short positions that any one person or entity may own or control in a particular financial instrument. All positions owned or controlled by the same person or entity, even if in different accounts, may be aggregated for purposes of determining whether the applicable position limits have been exceeded. Thus, even if a Fund does not intend to exceed applicable position limits, it is possible that another Fund or account managed by the Firm or its Portfolio Managers may be aggregated. To the extent that a Fund's position limits were aggregated with another Fund's or an affiliate's position limits, the effect on such Fund and resulting restriction on its investment activities may be significant. If at any time, positions managed by us were to exceed applicable position limits, we would be required to liquidate positions, which might include positions of a Fund, to the extent necessary to come within those limits. Further, to avoid exceeding any position limits, a Fund might have to forego or modify certain of its contemplated trades.

*Exposure to Material Non-Public Information.* From time to time, Portfolio Managers or other personnel may receive, and have received, material non-public information related to the investments of one or more Funds or Other Accounts we manage with respect to an issuer of publicly traded securities. In such circumstances, a Fund may be prohibited by law, policy or contract, including any "restricted list" we maintain, for a period of time from (i) unwinding a position in such issuer, (ii) establishing an initial position or taking any greater position in such issuer and/or (iii) pursuing other investment opportunities related to such issuer. A Fund with an investment objective of tracking a particular benchmark may increase the "tracking error" that it experiences if a security that is part of such benchmark is placed on a "restricted list," as such Fund will be unable to trade in securities which remain in the benchmark that are also on a "restricted list." We also may and do, from time to time, place a security on a "restricted list" under other circumstances.

*Indebtedness.* Certain Funds customarily borrow funds on a secured basis. Certain Funds may also borrow through the issuance of notes. In the event that funds available to a Fund were insufficient to meet principal or interest obligations on indebtedness (by reason of acceleration of the indebtedness or otherwise), then funds would not be available to such Fund for equity redemptions or withdrawals or for other purposes. Additionally, the terms of any indebtedness or related agreements could include covenants restricting the ability of a Fund to take actions, or waive conditions, that might otherwise have been taken for the benefit of such Fund and ultimately its investors. One such covenant might include a limitation on a Fund's ability to pay equity distributions, if, for example, such

Fund's net asset value were to drop below a specified threshold as a result of the payment. There is no limitation on the right or ability of a Fund to enter into any such borrowing arrangements or related agreements.

*Valuation Risk.* A Fund's net asset value is issued by its administrator on a monthly basis after the administrator performs certain checks on valuation and independent verification and reconciliation of such Fund's assets and liabilities, as well as reviewing and recording of such Fund's expenses. Valuations of publicly traded security positions are compared to market data independently obtained from third party market data providers. Valuations of some other securities positions are compared to information received from third parties, including brokers and independent valuation service providers. Securities positions and cash balances are reconciled with a Fund's records based upon confirmations or statements that the administrator independently receives from prime brokers and other financial institutions which hold assets of a Fund. The procedures performed do not constitute an audit in accordance with auditing standards generally accepted in the United States (although the financial statements of a Fund are audited in accordance with such standards by such Fund's independent auditors on an annual basis). The verification and review work conducted by a Fund's administrator does not constitute a 100% verification of our valuation work. The initial processes for determining the fair value of a Fund's positions (which are generally subject to independent verification by a Fund's administrator) are administered by our Valuation Committee, which is comprised of persons independent from specific portfolio management decisions. The fair value of investment positions is determined using a number of methodologies described in our valuation policies and procedures as amended or revised from time to time, which may, in some cases, involve the exercise of a significant degree of judgment by us. The methodologies that the Valuation Committee uses in valuing individual investments are based on a variety of estimates and assumptions specific to the particular investment, and actual results related to the investment therefore may vary materially as a result of the inaccuracy of the assumptions or estimates. In addition, certain Funds may at times hold illiquid investments in industries or sectors that are unstable, in distress or undergoing some uncertainty, and such investments are subject to rapid changes in value. The values of investments reflected in the net asset value of a Fund (which is used to calculate performance-based compensation as well as prices paid or payable in connection with withdrawals or redemptions and new investments) may not always reflect the prices that would actually be obtained by us on behalf of a Fund if all of the investments were immediately liquidated. A Fund's audited financial statements generally are prepared in accordance with GAAP. Accounting Standards Codification 820, *Fair Value Measurements and Disclosures*, defines and establishes a framework for measuring fair value under GAAP and expands financial statement disclosure requirements relating to fair value measurements. Under rare circumstances, certain of a Fund's assets or liabilities may be assigned a value under our valuation policies and procedures that diverges from their valuation in accordance with GAAP.

*Investments in Third-Party Investment Funds.* Certain Funds have invested and may continue to invest a portion of their assets in investment funds managed by third parties. These Funds generally will have less ability to (i) monitor the investments, (ii) regularly obtain full, current information and (iii) exercise control rights over the investments, than they have with respect to other allocations of capital of these Funds. In addition, these Funds may not be able to withdraw assets from third-party funds at times when it might otherwise wish to do so. With respect to any such assets, these Funds generally rely on the valuations provided by the third-party funds and generally will not have sufficient information to be able to confirm or review the accuracy of the valuations. In the event that these Funds do not receive a valuation from a third-party fund, or determine, in their sole discretion, that a valuation is inaccurate or incomplete, these Funds may, in their sole discretion, determine the fair value of its interests in the third-party fund independently of the valuations provided by the third-party fund based on information available to, and factors deemed relevant by, these Funds at the time.

*Trade Execution Risk.* Many of the investment techniques used by the Portfolio Managers require the rapid and efficient execution of transactions, or the ability of the Portfolio Managers to accumulate or liquidate large positions. Inefficient execution can impair realization of the market opportunities sought with the techniques.

*Trade Error Risk.* Occasionally, transactions may be executed erroneously on terms other than those intended by a Fund or a Portfolio Manager. For example, a transaction may be executed in the wrong asset, for the wrong quantity or price, to buy when a Fund or a Portfolio Manager meant to sell, to sell when a Fund or a Portfolio Manager meant to buy or by reason of a programming error in a trading program. Programming errors could also lead to the submission of repetitive orders or orders otherwise made in excess of any intention, or could cause an algorithm-driven program to bypass risk management or other controls. Without limiting or modifying the generality of the exculpation and indemnification provided by the Fund to the Firm, its affiliates and personnel, in

accordance with our Trade Errors policy, a Fund will generally bear the losses and costs of any such errors, unless we determine that the error occurred due to fraud, gross negligence or reckless or intentional misconduct by us (or, in certain circumstances, our agents), we determine that it is appropriate to charge a Portfolio Manager for the costs and expenses of the error, or as required by law. Given the potentially large volume of transactions executed on behalf of the Funds, investors should expect that trade errors will occur from time to time.

*Investment Strategies of the Portfolio Managers.* Portfolio Managers, among other things, will seek to use specialized investment strategies, follow allocation methodologies, apply investment models or assumptions, and enter into hedging and other strategies intended to affect their performance and risk levels. A Fund cannot guarantee that any Portfolio Manager will have success in achieving any goal related to those practices.

*Relative Value and Fundamental Value Strategies.* Certain Portfolio Managers may engage in both relative-value/arbitrage and fundamental-value strategies with directional exposures. Certain Portfolio Managers will use elements of both approaches in their strategies. Fundamental-value strategies frequently involve judgments about the future direction of financial instrument prices, markets and market factors. If Portfolio Managers make incorrect judgments, a Fund could fail to earn profits or could sustain significant losses. Arbitrage and relative-value strategies seek to profit from mispricings and inefficiencies in the capital markets, frequently by entering into simultaneous long and short positions. Pure arbitrage opportunities are rare. Relative-value/arbitrage Portfolio Managers may hold directional exposures to select financial instrument prices, markets, and market factors. Generally, it is not possible to hedge all risks and exposures in relative-value/arbitrage strategies. Arbitrage and relative-value strategies frequently entail the use of significant leverage and derivative instruments, which may be volatile and illiquid. Portfolio Managers may be incorrect about perceived mispricings among financial instruments, relative mispricings could be sustained for an extended period or Portfolio Managers may be unsuccessful in structuring and executing trades to profit from perceived mispricings. Financial instruments may move in unexpected patterns. Even if financial instruments are mispriced relative to each other based on historical or other relationships, they may fail to converge in price for various reasons. The historical relationships between the prices of different securities and financial instruments may change suddenly and unexpectedly for various reasons. Also, strategies that are largely uncorrelated under normal market conditions may become more correlated at times of market stress. As a result, relative value/arbitrage strategies may be subject to the same risk of loss as fundamental or directional strategies.

*Model-based Strategies.* Certain investment strategies utilized by certain Funds are based on models of the behavior of financial instruments, market conditions or certain market participants and use formulas or algorithms to make trading decisions by reviewing a variety of inputs, comparing the information against historical and current data, and predicting price movements. These models are developed by Portfolio Managers or third parties. Models generally must be updated in order to remain effective. There can be no assurance that Portfolio Managers will be able to continue to develop, update or acquire effective models and any changes that are made in an attempt to respond to perceived changes in market conditions may be unsuccessful. Additionally, virtually all computer programs contain some errors or “bugs” and it is impractical to eliminate 100% of the bugs in the programming process (although programs generally are tested before they are put into use, in an attempt to eliminate errors that would be likely to have significant consequences). As a result, while we expect that our and our Portfolio Managers’ personnel will endeavor to minimize the effect of programming errors, we cannot provide any assurance that all programs will in all instances operate in the intended manner, and there may be remaining programming errors which could have substantial adverse consequences.

*Statistical Arbitrage Strategies.* The success of some of a Fund’s statistical arbitrage or quantitative strategies depends on the market values of various financial instruments moving towards their theoretical values (or relative values) as predicted by statistical modeling. In the event of market disruptions generally or specific events that cause deviations from historical relationships between certain financial instruments and other instruments or data points used to predict value, significant losses could be incurred.

*Regulatory Risks Applicable to Algorithmic and Automated Trading Strategies.* A recent increase in governmental and regulatory scrutiny has focused on investment funds that operate automated, computer-based or high frequency trading. Such scrutiny has led, and can in the future lead, to costly investigations, litigation, legislative testimony, loss of reputation, fines and settlements, and could also result in additional severe consequences. The SEC has imposed a rule that prohibits the practice of providing “naked” or “unfiltered” access to markets. Such a prohibition

bars brokers from granting high-frequency traders with unfiltered access to the financial markets. The impact of such a prohibition is unknown, but such a rule may potentially limit the implementation of a Fund's investment strategy. The SEC is also considering the imposition of additional market maker obligations on anyone engaged in high-frequency trading. While the U.S. government's definition of high-frequency trading may be designed primarily to capture ultra-high-frequency trading, it is likely that a number of these proposals may affect the trading activities utilized by certain Portfolio Managers. The SEC has considered the imposition of additional mechanisms to eliminate "quote stuffing," whereby large numbers of stock orders are placed and canceled almost immediately, such as by setting minimum amounts of time for which stock quotes must remain active. Lastly, the implementation of new trading "circuit breakers" and additional trading limitations are being considered by the SEC. These mechanisms would restrict programmatic trading in the event that a market moved up or down by more than a predetermined amount on any trading day. In the event of their implementation, compliance with any one or more of the abovementioned proposed regulations may negatively impact certain Portfolio Managers' ability to effect their trading strategies, and may in turn have a negative effect on a Fund's investments.

*Risk of Programming and Modeling Errors.* The research and modeling process engaged in by certain Portfolio Managers is extremely complex and involves financial, economic, econometric and statistical theories, research and modeling; the results of that process must then be translated into computer code. Although such Portfolio Managers seek to retain individuals skilled in each of these functions and to provide appropriate levels of oversight, the complexity of the individual tasks, the difficulty of integrating such tasks, and the limited ability to perform "real world" testing of the end product raise the chances that the finished model may contain an error; one or more of such errors could adversely affect a Fund's performance and likely would not constitute a trade error under our policies or Fund documents. (See also, "Trade Error Risk.")

*Quantitative Analysis.* Certain Portfolio Managers as well as the Fund's risk management systems rely heavily on quantitative models and information and data that is supplied or acquired rather than developed by trade-by-trade analysis and discretion. Models are used to construct sets of transactions and investments, to value investments or potential investments for trading purposes, to provide risk management insights, and to assist in hedging a Fund's investments. When models and data prove to be incorrect, misleading or incomplete, any decisions made in reliance thereon expose a Fund to potential risks. For example, by relying on models and data, a Portfolio Manager may be induced to buy certain investments at prices that are too high, to sell certain other investments at prices that are too low, or to miss favorable opportunities altogether. Similarly, any hedging based on faulty models and data may prove to be unsuccessful. A significant number of the models are predictive in nature. The use of predictive models has inherent risks. For example, such models may incorrectly forecast future behavior, leading to potential losses on a cash flow and/or a mark-to-market basis. In addition, in unforeseen or certain low-probability scenarios (often involving a market disruption of some kind), such models may produce unexpected results, which can result in losses for a Fund. Furthermore, because predictive models are usually constructed based on historical data supplied or acquired, the success of relying on such models may depend heavily on the accuracy and reliability of the supplied historical data. While such data regarding historical market conditions, pricing and other information is believed to be accurate, such data will not necessarily be independently verified in each instance. All models rely on correct market data inputs. If incorrect market data is entered into even a well-founded model, the resulting valuations will be incorrect. In addition, given that the systems can execute trades autonomously, undesired results may only be detected after the fact, perhaps after a significant number of transactions have occurred.

*Data Feed Failure.* Certain Portfolio Managers' models utilize data feeds from a number of sources. If such data feeds become corrupted, compromised or discontinued, or become undeliverable or inaccessible in a timely manner, the models may not be properly formulated. The failure to receive the data feeds or receive the data feeds in a timely manner may leave a Portfolio Manager or Fund unable to trade, and may expose a Fund to risk of loss or loss of opportunities, especially if the loss of the data feed coincides with turbulent market conditions. If the data feeds are discontinued, compromised in any material respect or not deliverable or accessible in a timely manner, it may result in a material loss to a Fund.

*Use of Simulations.* Certain Portfolio Managers' investment processes involve the construction of investment strategies based on a combination of trading signals and the simulated back-testing of such trading signals and investment strategies against historical market conditions, pricing and other information over chosen historical time periods. Similarly, certain Portfolio Managers use simulations as part of the process of determining how to allocate investment strategies among our various Funds. Simulations generated by a Portfolio Manager for the purpose of

constructing a Fund's portfolio and allocating investment strategies among Funds involve numerous methodologies and assumptions, certain of which are highly subjective in nature. There can be no guarantee that the predictive results of any simulation will be accurate. For example, a simulation may not reflect the impact that material economic and market conditions may have had on the Portfolio Manager's decision making if the simulation had been reflective of actual trading by the Portfolio Manager. Methodologies and assumptions used to generate simulations are subjective in nature and modifications in the methodologies used and assumptions made could materially impact the results of a simulation and associated investment activity.

*Obsolescence Risk.* Certain Funds are unlikely to be successful in strategies relying on models unless the assumptions underlying the models utilized by the Portfolio Managers prove to be realistic more often than not, and either remain realistic and relevant in the future or are adjusted to account for changes in the overall market environment. If such assumptions are inaccurate or become inaccurate and are not promptly adjusted, it is less likely that profitable trading signals will be generated. If and to the extent that the models do not reflect certain relevant factors, and the Portfolio Manager does not successfully address such omission through its testing and evaluation and modify the models accordingly, significant losses may result. Portfolio Managers may, and often do, continue to test, evaluate and add new models, as a result of which the existing models may be modified from time to time. Any modification of the models or strategies will not be subject to any requirement that limited partners receive notice of the change or that they consent to it. There can be no assurance that any modifications will achieve their intended objective or as to the effects (positive or negative) of any modification on a particular strategy's or a Fund's performance.

*Crowding/Convergence.* There is significant competition among quantitatively focused managers and the ability of applicable Portfolio Managers to deliver returns that have a low correlation with global aggregate equity markets, and to achieve their intended results generally, may be dependent on their ability to employ models that are simultaneously profitable and differentiated from those employed by other similar managers. To the extent that such Portfolio Managers are not able to develop sufficiently differentiated models, and maintain the differentiating factors, such Portfolio Managers' intended investment objective may not be met, irrespective of whether the models are profitable in an absolute sense. In addition, to the extent that such Portfolio Managers' models come to resemble those employed by other managers, the risk that a market disruption that negatively affects predictive models will adversely affect a Fund is increased, as such a disruption could accelerate reductions in liquidity or rapid repricing due to simultaneous trading across a number of funds in the marketplace.

*Unauthorized Access Risk.* The ability of certain Portfolio Managers to achieve their investment goals for a Fund is dependent in large part on their and the Fund's ability to develop and protect such models and proprietary research. The models and proprietary research and the models and data are largely protected by us through the use of policies, procedures, agreements, surveillance and other measures designed to create and enforce confidentiality, non-disclosure and similar safeguards. There can be no assurance, however, that such safeguards will be successful, and unauthorized access to such information could lead to opportunities for third-parties to reverse-engineer such Portfolio Managers' models and thereby impair the performance of a Fund.

*Trend Following.* Certain trading decisions made by certain Portfolio Managers may be based on trend following. Any factor that would lessen the prospect of major trends occurring in the future (such as increased governmental control of, or participation in, the financial markets) may reduce the prospect that a particular trading method or strategy will be profitable in the future. In the past, there have been periods without discernible trends and, presumably, such periods will likely continue to occur in the future. Moreover, any factor that would make it more difficult to execute trades at desired prices in accordance with the signals of the trading method or strategy (such as a significant lessening of liquidity in a particular market) would also be detrimental to profitability. Further, many managers' trading methods utilize similar analyses in making trading decisions. Therefore, bunching of buy and sell orders can occur, which makes it more difficult for a position to be taken or liquidated.

*Market Data.* We, like many financial institutions, use a wide variety and large quantity of market data procured from a host of different suppliers, including multiple exchanges. Notwithstanding certain Portfolio Managers' reliance on large quantities of market data, sources of market data may decline over time, which could adversely impact the investment program of a Fund. In addition, market data contract pricing and terms are complex and subject to change without prior notice in many cases; increases in market data contract pricing could make the

acquisition of certain data significantly more expensive, which would negatively impact certain Funds' net performance by reducing returns or making it cost-prohibitive to acquire or retain certain data sources.

*Use of Alternative Data.* Certain Portfolio Managers may, and do, obtain and use alternative data in their investment processes. Alternative data may consist of datasets that have been culled from a variety of sources, such as internet usage, payment records, financial transactions, weather and other physical phenomena sensors, applications and devices (such as smartphones) that generate location and mobility data, data gathered by satellites, and government and other public records databases (this data is sometimes referred to as "big data" or "alternative data"). Certain Portfolio Managers may apply this alternative data to better anticipate micro- and macro-economic trends and otherwise to develop or improve trading or investment themes. The analysis and interpretation of alternative data involves a high degree of uncertainty and may entail significant expense, including technological efforts, that are expected to be borne—in whole or in part—by a Fund. No assurance can be given that Portfolio Managers will be successful in utilizing alternative data in their investment processes. Moreover, there has been increased scrutiny from a variety of regulators regarding the use of alternative data in this manner, and its use or misuse under current or future laws and regulations could create liability for Millennium and a Fund in numerous jurisdictions. Millennium cannot predict what, if any, regulatory or other actions may be asserted with regard to alternative data, but any adverse inquiries or formal actions could cause reputational, financial, or other harm to Millennium or to a Fund. Conversely, any future limitations on the use of alternative data could have a material adverse impact on the performance of a Fund.

*Risks Inherent in Computer-Driven and Technological Systems.* We and certain Portfolio Managers and Funds rely extensively on a wide range of technological systems, including computer hardware and software systems and telecommunications systems, in all phases of daily operations, including research, valuation, trade identification and construction, trade execution, clearing, risk management, back office functions and reporting. Such systems are subject to a number of inherent and unpredictable risks. For example, there may be materially adverse undiscovered errors in software programs; costs of procurement of such technology may increase; claims related to intellectual property infringement may be brought against users of technology, including a Fund; software and/or hardware may malfunction and/or degrade; electronic and telecommunications delivery may fail; security breaches may lead to unauthorized trades or stolen intellectual property; services provided by third-party vendors to support the intellectual property systems may be interrupted; and computer-driven trading errors may occur.

*Merger Arbitrage, Index Arbitrage and Other Event-Driven Strategies.* Merger arbitrage and other event-driven, including index rebalancing, investment strategies generally incur significant losses when proposed transactions are not consummated, issuer modifications or reweighting applied to indices do not occur as anticipated or other expected events do not occur. The consummation of mergers, tender offers, exchange offers and other significant corporate events can be prevented or delayed by a variety of factors, including: (i) regulatory intervention; (ii) efforts by a target company to pursue a defensive strategy; (iii) the failure to obtain necessary shareholder approvals; (iv) adverse company, market or business conditions resulting in a material change or termination of the pending transaction; (v) additional requirements imposed by law; and (vi) the inability to obtain adequate financing. Any such events could lead to losses. Index rebalancing strategies rely on directional long and short positions based on anticipated modifications and reweighting of issuers making up a certain index or indices. These strategies may result in increased concentration risk with respect to any issuer that is part of such an index. In addition, given that other market place participants may pursue an index rebalancing strategy and anticipate similar directional trades (on a long and/or short basis) at or around the same time, index rebalancing strategies may lead to potential for losses resulting from a scarcity of sourcing for trades pertaining to an issuer.

*Convertible Arbitrage Strategies.* Convertible arbitrage strategists identify convertible bonds, convertible preferred stocks or warrants that appear mispriced or undervalued, yet offer a favorable rate of return. By establishing a long position in a convertible security (usually preferred stock or bonds) and an offsetting (complete or partial) short position in the underlying security into which the convertible security is convertible (usually common stock of the issuer), a Portfolio Manager invests with the expectation of capturing price or yield differences or to seek to profit from cash flow (e.g., coupon income and stock borrowed rebate). There can be no assurance that a Portfolio Manager will be able to identify profitable convertible arbitrage opportunities or that changes in price differentials will not cause losses. Generally, changes in interest rates can influence the investment value of a convertible security. The credit standing of the issuer, the value of the underlying stock and other factors may also have an effect on the convertible security's investment value. A convertible security may be subject to redemption at the



option of the issuer at a price established in the convertible security's governing instrument. If a convertible security held by a Portfolio Manager is called for redemption, the Portfolio Manager will be required to permit the issuer to redeem the security, convert it into the underlying common stock or sell it to a third party. Any of these actions could result in losses to a Fund or otherwise have an adverse effect on a Fund's ability to achieve its investment objective.

*Option-Volatility Trading.* Option-volatility trading is a derivatives-based strategy that seeks to profit from market turbulence (or the lack thereof), as reflected in movements in option prices that result from market fluctuations. The goal of a Portfolio Manager employing this strategy is to buy inexpensively priced (*i.e.*, cheap implied volatility) options whose underlying instruments are expected to be more volatile, and sell expensively priced (*i.e.*, rich implied volatility) options whose underlying instruments are expected to be less volatile. The strategy may be implemented through options on equities and equity indices, or in other asset classes such as FX and fixed income. Such option combinations include spreads (buying an option to buy or sell an asset while simultaneously selling an option to buy or sell the same asset with a different expiration date or strike price) or straddles (option combinations that will profit from movement in the level of the value of an asset outside of certain bands, or the lack of such movement, without regard to whether the movement is upward or downward). Option-volatility trading may also involve trades in which futures (or other derivatives) are used to create a position that synthetically resembles an option or option combination, or in which options are purchased or sold versus an offsetting position in the underlying market (such as a basket of stocks). The decision process is dependent on fundamental and technical analysis of the underlying instruments and computer models are often used to enhance the execution of various hedges. Option-volatility trading is a complex financial strategy and requires significant resources and capabilities. The pricing of options, VIX futures, volatility swaps, variance swaps and other related products (together, "volatility derivatives") involves a wide variety of factors—including prices of the underlying assets, implied volatility surfaces, interest rate yield curves, and time to expiry. Not only will different traders differ among themselves concerning the correct theoretical value for a given volatility derivative, but actual and theoretical values may diverge for extended periods of time. There can be no assurance Portfolio Managers will correctly identify volatility derivative positions that are mispriced relative to the underlying or relative to another volatility derivative or that the market will, in fact, regress to theoretical values. In addition, when trading options on equity indices, a Fund could suffer losses from increased diversification in the index even when individual equities are more volatile than expected, resulting in less than expected movement in the index. As a consequence of the foregoing factors, substantial losses could be incurred by a Fund.

*Short Positions.* Portfolio Managers routinely take short positions in a wide range of assets, typically as part of a hedged strategy intended to reduce the risk of investing. A short sale of an asset exposes the seller to the risk of an increase in the market price of that asset with a theoretically unlimited risk of loss. Purchasing assets to close out a short position can itself cause their market price to rise further, increasing losses on the short position. Furthermore, Portfolio Managers may prematurely be forced to close out a short position if a lender demands the return of the asset borrowed (and sold short) and an alternative source of borrowing that asset is not available. Certain market regulators have imposed restrictions (including required reporting) or bans on the ability of market participants to take short positions and the frequency with which such restrictions are imposed has increased in recent years. Among other things, such restrictions make hedging practices more difficult and expose a Fund to greater risk.

*Portfolio Turnover.* Certain Portfolio Managers frequently invest on the basis of short-term market considerations. The turnover rate of the Portfolio Managers' positions may therefore be significant, potentially involving substantial brokerage commissions and fees.

*Investments in Exchange-Traded Funds ("ETFs").* As part of their investment programs, certain Funds have in the past and likely will in the future invest in ETFs. ETFs are funds whose shares are listed on a national securities exchange and trade like other publicly-traded securities. The price of an ETF share is its market price and, although it is expected that the market price of an ETF share will typically approximate the ETF's net asset value ("NAV"), because ETF shares trade at market prices that can fluctuate over the course of a day rather than at the ETF's NAV, shares may trade at a price greater than NAV (a premium) or less than NAV (a discount). Although an ETF's shares are listed for trading on a national securities exchange, there can be no assurance that an active trading market will continue for the shares of an ETF or that there will be liquidity in the trading market. Investors in ETFs bear a proportionate share of the expenses of such funds, including management fees, custodial and accounting

costs and other expenses. The Funds which invest in ETFs may invest in ETFs that track the performance of a particular index or basket of securities or other assets (each, an “**Underlying Reference**”) by investing in a portfolio of securities or other assets intended to replicate, or be a representative sample of, securities or other assets that are constituents of the Underlying Reference. Such an investment in an ETF is subject to risks inherent in investing in the particular securities or other assets held in such ETF’s portfolio. Further, when an ETF focuses its investments in a particular index, industry or sector, financial, economic, business, and other developments affecting issuers in that index, industry, market, or economic sector will have a greater effect on the ETF than if it had not focused its assets in that index, industry, market, or economic sector, which may increase the volatility of the ETF. An ETF is also subject to management risk, which is the risk that the applicable investment adviser’s investment strategy, the implementation of which is subject to a number of constraints, may not produce the intended results. These constraints could adversely affect the market prices of the shares of an ETF. The performance of an ETF and its Underlying Reference may vary for a number of reasons, including transaction costs, relative currency valuations, asset valuations, corporate actions (such as mergers and spin-offs), timing variances and differences between the ETF’s portfolio and the Underlying Reference resulting from the ETF’s use of representative sampling or from legal restrictions (such as diversification requirements) that apply to the ETF but not to the Underlying Reference. This risk may be heightened during times of increased market volatility or other unusual market conditions.

*Loan Participations.* Certain Funds or certain of their affiliates may buy and sell loan participations (*i.e.*, interests in a loan, generally governed by a credit agreement between the original lending syndicate and the borrower) in the secondary market. These investments involve certain risks in addition to those associated with direct loans. A loan participant has no direct contractual relationship with the borrower of the underlying loan. As a result, the participant generally is dependent on the lender that originated the loan to enforce its rights and obligations under the credit agreement in the event of a default, and may not have the right to object to amendments to or modifications of the terms of the credit agreement in which it participates. A participant in a syndicated loan generally does not have voting rights, which are retained by the lender that originated the loan. In addition, a loan participant may be subject to the credit risk of the lender from which the participation is purchased as well as that of the borrower, since a loan participant is dependent upon the lender or lenders from which the participation is purchased to furnish to the participant its share of payments of principal and interest received on the underlying loan. Participations in which a Fund invests generally are not secured obligations of the lender or lenders from which they are acquired.

*Distressed and High-Yield Securities.* Certain Portfolio Managers may invest in securities issued by, or other indebtedness of, companies in weak and/or deteriorating financial condition, experiencing poor operating results, needing substantial capital investment, having negative net worth, facing special competitive or product obsolescence problems or involved in bankruptcy or reorganization proceedings. Investments of this type are generally not exchange-traded and, as a result, these instruments trade in the over-the-counter marketplace, which is less transparent than the exchange-traded marketplace, and further, may involve substantial financial and business risks, which are often heightened by an inability to obtain reliable information about the issuers. The investments can result in significant or even total losses. In addition, the markets for distressed and high-yield securities are frequently illiquid. The market prices of distressed and high-yield assets are subject to abrupt and erratic market movements and above-average price volatility, and the spreads between the bid and asked prices of such assets may be greater than those prevailing in other markets. It may take a number of years before the market price of the assets reflects their perceived intrinsic value, if they ever do. In liquidation (both in and out of bankruptcy) and other forms of corporate reorganization, there exists the risk that the reorganization either will be unsuccessful (for example, due to failure to obtain requisite approvals), will be delayed (for example, until various liabilities, actual or contingent, have been satisfied), or will result in a distribution of cash or a new asset the value of which will be less than the carrying value of the asset in respect of which the distribution was made. Distressed assets also may be adversely affected by laws relating to, among other things, fraudulent transfers and other voidable transfers or payments and lender liability, as well as bankruptcy and other judicial courts’ power to disallow, reduce, subordinate or disenfranchise particular claims. High-yield instruments face ongoing uncertainties and exposure to adverse business, financial or economic conditions which could lead to the issuer’s inability to meet timely interest and principal payments. The market values of certain of these lower-rated and unrated debt instruments tend to reflect individual corporate developments to a greater extent than do higher-rated instruments which react primarily to fluctuations in the general level of interest rates, and tend to be more sensitive to economic conditions than are higher-rated instruments. Companies that issue such instruments are often highly leveraged and may not have available to them more traditional methods of financing. It is possible that a major economic recession could

disrupt severely the market for such instruments and may have an adverse impact on the value of such instruments. In addition, it is possible that any such economic downturn could adversely affect the ability of the issuers of such instruments to repay principal and pay interest thereon and increase the incidence of default of such instruments.

*Differential Cash Flows on Related Positions.* Certain of a Fund's strategies may involve taking positions that are subject to unilateral margin in favor of the counterparty. These positions may be related to or hedged with other positions margined on a bilateral mark-to-market basis, which may require a Fund to supply margin on a position while a counterparty would not be required to supply margin on the related position. Additionally, there may be circumstances where the financing costs of related positions may become imbalanced (e.g., where the financing rates of one of the positions is subject to more frequent revision). Due to the cash flow imbalances between the assets, in certain market scenarios, a Fund may be forced to close out the positions, perhaps at disadvantageous prices, or may bear additional expenses in keeping positions open.

*Structured Investment Products.* Certain Portfolio Managers may invest in, or otherwise participate in, a variety of different structured investment products; for example, total return swaps, participating notes, options, credit default swaps and collateralized debt obligations. These structured products involve not only the risks of the underlying "reference asset," but also other risks including, without limitation, acceleration of the financing embedded in the structure, counterparty credit risk, and/or restrictions imposed on the management and nature of the permissible reference assets and costs of creating the structured products.

*Interest-Rate and Foreign Exchange-Rate Risks.* The prices of assets held by a Fund may be sensitive to interest-rate and foreign exchange-rate fluctuations; such fluctuations could cause the U.S. dollar value of long and short positions to move in unanticipated directions. To the extent that interest-rate and foreign exchange-rate assumptions underpin the hedging of a particular position, fluctuations in rates could invalidate those underlying assumptions and expose a Fund to losses. A Fund is not obligated to hedge its exposure to any risks, including, without limitation, interest-rate and foreign exchange-rate risks.

*Mortgage-backed Securities ("MBS") and Asset-backed Securities ("ABS").* Some investment characteristics of MBS and ABS differ from traditional debt securities. Among the major differences are that interest and principal payments are made more frequently, usually monthly, and that the principal may be prepaid at any time because the underlying mortgages or other assets generally may be prepaid at any time. The frequency with which prepayments (including voluntary prepayments by the obligors and liquidations due to defaults and foreclosures) occur on loans and other assets underlying MBS and ABS will be affected by a variety of factors including the prevailing level of interest rates as well as economic, demographic, tax, social, legal and other factors. Generally, mortgage obligors tend to prepay their mortgage loans when prevailing mortgage rates fall below the interest rates on their mortgage loans. Although ABS are generally less likely to experience substantial prepayments than are MBS, certain of the factors that affect the rate of prepayments on MBS also affect the rate of prepayments on ABS. Particular investments may experience outright losses, as in the case of an interest only security in an environment of accelerated actual or anticipated prepayments. Particular investments will be affected by the credit quality of their underlying loans and the creditworthiness of the borrowers. Also, particular investments may underperform relative to hedges that a Portfolio Manager may have constructed in these investments, resulting in a loss.

*Illiquid and Restricted Securities; PIPE Transactions.* Certain Portfolio Managers may, and do, invest in illiquid over-the-counter securities, securities of young, development-stage companies (whether publicly traded or issued in a private placement) and financially troubled companies, non-publicly traded securities, MBS, ABS and securities traded on exchanges in less-developed markets, and may make other investments that are relatively illiquid or that subsequently become illiquid. In general, securities and other investments are classified as illiquid because there are legally-imposed restrictions on resale or liquidation, because the market for the particular security or the volume of trading is so small as to effectively impose limits on the speed or price at which the liquidation of a given position can be effected, or due to a combination of the foregoing factors. Portfolio Managers may be unable to sell illiquid securities and investments at the most opportune times or at prices approximating the value at which a Fund is carrying the securities or investments. Without limiting the generality of the foregoing, certain Funds may, and do, invest in private investments in public companies commonly referred to as "PIPE" transactions. PIPE transactions will generally result in a Fund acquiring either restricted stock or an instrument convertible into restricted stock. As with investments in other types of restricted securities, such an investment may be illiquid. A Fund's ability to dispose of securities acquired in PIPE transactions may depend on the registration of such

securities for resale. Any number of factors may prevent or delay a proposed registration. There can be no guarantee that there will be an active or liquid market for the stock of any issuer of a PIPE security. As a result, even if a Fund is able to have securities acquired in a PIPE transaction registered or sell such securities through an exempt transaction, the Fund may not be able to sell all the securities on short notice, and the sale of the securities could lower the market price of the securities.

*Small Capitalization Companies.* Certain Portfolio Managers may invest in securities of small capitalization companies and recently organized companies and may establish significant long or short positions in such securities. While such securities may provide significant potential for appreciation, the securities of certain companies, particularly smaller-capitalization companies, involve higher risks in some respects than do investments in securities of larger companies. Historically, such securities have been more volatile in price than those of larger capitalized, more established companies. The securities of small capitalization and recently organized companies typically pose greater investment risks because the issuers may have limited product lines, distribution channels and financial and managerial resources. In particular, small capitalization companies may be operating at a loss or have significant period-to-period variations in operating results; may be engaged in a rapidly changing business with products subject to substantial risk of obsolescence; may require substantial additional capital to support their operations, to finance expansion or to maintain their competitive position; and may have substantial borrowings or may otherwise have a weak financial condition. In addition, these companies may face intense competition, including competition from companies with greater financial resources, more extensive development, manufacturing, marketing, and other capabilities, and a larger number of qualified managerial and technical personnel. Further, there is often less publicly available information concerning such companies than for larger, more established businesses. The equity securities of small capitalization companies may not be traded in the volumes typical of larger capitalization companies. Consequently, the Portfolio Managers or entities in which the Portfolio Managers invest may be required to dispose of the securities or cover a short position over a longer (and potentially less favorable) period of time than is required to dispose of or cover a position with respect to the securities of larger, more established companies. Investments in small capitalization companies may also be more difficult to value than other types of securities because of the foregoing considerations as well as lower trading volumes. Investments in companies with limited operating histories may be more speculative and may entail greater risk than investments in companies with an established operating record. Additionally, transaction costs for these types of investments are often higher than for those in larger capitalization companies. In addition, due to thin trading in the securities of some small-capitalization companies, an investment in those companies may be illiquid.

*Special Purpose Acquisition Companies.* Special purpose acquisition companies, commonly referred to as “SPACs”, are publicly traded companies formed for the purpose of raising capital through initial public offerings to fund the acquisition, through a merger, capital stock exchange, asset acquisition or other similar business combination, of one or more operating businesses. Following the acquisition of a target company, a SPAC may exercise some degree of control over the management of such target company. Capital raised through the initial public offering of securities of a SPAC is typically placed into a trust until a target company is acquired or a predetermined period of time elapses. Investors in a SPAC would receive a return on their investment in the event that a target company is successfully acquired and the securities of the combined company increased in value relative to the pre-transaction value of the SPAC securities. In the event that a SPAC is unable to locate and acquire a target company by the deadline, the SPAC would typically be forced to liquidate its assets, which may result in losses due to the expenses and liabilities of the SPAC. Investors in a SPAC are subject to the risk that, among other things, (i) such SPAC may not be able to locate or acquire a target company by the deadline, (ii) assets in the trust may be subject to third-party claims against such SPAC, which may reduce the per share liquidation price received by the investors in the SPAC, (iii) such SPAC may be exempt from the rules promulgated by the SEC to protect investors in “blank check” companies, such as Rule 419 promulgated under the Securities Act, so that investors in such SPAC may not be afforded the benefits or protections of those rules, (iv) such SPAC may only be able to complete one business combination, which may cause it to be solely dependent on a single business, (v) the value of any target company may decrease following its acquisition by such SPAC, (vi) the value of the funds invested and held in the trust decline, (vii) the investor in the SPAC may not be able to redeem due to the failure to hold the securities in the SPAC on the record date or the failure to vote against the acquisition and (viii) if the SPAC is unable to consummate a business combination, public stockholders will be forced to wait until the deadline before liquidating distributions are made. In addition, interests in most SPACs are relatively illiquid and have a concentrated shareholder base that tends to be comprised of institutional investors, including hedge funds (at least

at inception). Certain Funds may, and often do, invest in a SPAC that, at the time of investment, has not selected or approached any prospective target businesses with respect to a business combination. In addition, the certain Funds may invest capital in vehicles acting as the sponsors of SPACs in exchange for interest in the SPAC that will only have value to the extent that a transaction is consummated by the SPAC and the Fund continues to hold interests in the combined company thereafter. There may be limited basis for a Fund to evaluate the possible merits or risks of such SPAC's investment in any particular target business or the track record of its management team. To the extent that a SPAC completes a business combination, it will be affected by numerous risks inherent in the business operations of the acquired company or companies. For these and additional reasons, investments in SPACs are speculative and involve a high degree of risk.

*Hedging Transactions.* A Fund utilizes financial instruments both for investment purposes and for risk management purposes in order to: (i) protect against possible changes in the market value of such Fund's investment portfolio resulting from fluctuations in the securities markets and changes in interest rates; (ii) protect such Fund's unrealized gains in the value of such Fund's investment portfolio; (iii) facilitate the sale of any such investments; (iv) enhance or preserve returns, spreads or gains on any investment in such Fund's portfolio; (v) hedge against a directional trade; (vi) hedge the interest rate or currency exchange rate or other specific attributes of any position among such Fund's liabilities or assets; (vii) protect against any increase in the price of any securities such Fund anticipates purchasing at a later date; or (viii) satisfy any other purpose that the Portfolio Manager deems appropriate. Hedging against a decline in the value of a portfolio position does not eliminate fluctuations in the values of portfolio positions or prevent losses, although hedging does typically reduce the risk of loss. On the other hand, the hedging transactions also limit the opportunity for gain if the value of a portfolio position should increase. Moreover, it should be noted that (i) a Portfolio Manager may determine not to hedge against, or may not anticipate, certain risks, (ii) the portfolio will always be exposed to certain risks that cannot be hedged, and (iii) there is no guarantee that a hedge will be properly implemented, will function in the manner anticipated or will not be adversely effected by changes in the applicable law or regulation. The success of a Fund's hedging transactions to a significant degree will be subject to the ability of each Portfolio Manager correctly to assess the relationships between groupings of securities within the Portfolio Manager's portfolio. In addition, the degree of correlation between price movements of the instruments used in a hedging strategy and price movements in the portfolio position being hedged may vary. Since the characteristics of many securities change as markets change or time passes, the success of any hedging strategy will also be subject to the ability to continually recalculate, readjust and execute hedges in an efficient and timely manner. While a Fund may enter into hedging transactions to seek to reduce risk, such transactions may result in a poorer overall performance for such Fund than if it had not engaged in such hedging transactions. For a variety of reasons, a Portfolio Manager may not seek to, and usually will not be able to, establish a perfect correlation between the hedging instruments utilized and the portfolio holdings being hedged. Such an imperfect correlation may prevent a Fund from achieving the intended hedge or expose a Fund to risk of loss. A Fund will not be required to hedge any particular risk in connection with a particular transaction or its portfolios generally, and it is anticipated that a Fund will always be exposed to certain risks that may not be hedged and that may not be able to be adequately hedged. The successful utilization of hedging and risk management transactions requires skills complementary to those needed in the selection of a Fund's portfolio holdings. Currency hedging activities that a Fund engages in will generally require the use of a portion of such Fund's assets for margin or settlement payments or other purposes. For example, a Fund may from time to time be required to make margin, settlement or other payments, including intra-month, in connection with the use of certain hedging instruments. Counterparties to any currency hedging activities may demand payments on short notice, including intra-day. As a result, a Fund may liquidate assets sooner than it otherwise would have in order to have available cash to meet current or future margin calls, settlement or other payments, or for other purposes. Moreover, due to volatility in the currency markets and changing market circumstances, a Fund may not be able to accurately predict future margin requirements, which may result in holding excess or insufficient cash and liquid securities for such purposes. Where a Fund does not have cash or assets available for such purposes, a Fund may be required to dispose of assets at disadvantageous prices or might fail to comply with certain of its contractual obligations. Such failures could, without limitation, include failing to meet margin calls or settlement or other payment obligations. If a Fund were to default on any of its material contractual obligations, a Fund would likely be materially adversely affected.

*Hedging Related to Non-U.S. dollar Denominated Sub-Classes.* One particular Fund has issued Non-USD Shares (as defined in Item 11 of this Brochure). Such Fund generally expects to seek to hedge the currency exposure of the Non-USD Shares to minimize, to the extent reasonably practicable, fluctuations in the value of such shares arising from fluctuations in the applicable exchange rate and expects to engage in transactions, including the

purchase and sale of spot and forward contracts, currency options and currency futures contracts to manage U.S. dollar-foreign currency risks. The expense and risk associated with such transactions is borne by the holders of the relevant sub-classes of Non-USD Shares. There can be no assurance that the currency hedging activities in connection with the Non-USD Shares will be effective. In addition, there can be no assurance that the currency hedging activities will fully protect investors from a decline in the value of the U.S. dollar against the foreign currency. There may be circumstances in which such Fund (or any other entity engaging in the hedging of the Non-USD Shares) determines not to conduct any currency hedging activities in whole or in part for a certain period of time, including, without limitation, when such entity determines, in its sole discretion, that currency hedging is not practicable or possible or may materially and adversely affect such Fund or any of its direct or indirect investors, such actions may be taken without notice to shareholders of such Fund. As a result, foreign currency exposure could go fully or partially unhedged for that period of time. There can be no assurance that such Fund (or any other entity engaging in the hedging of the Non-USD Shares), will, or will be able to, hedge, or be successful in hedging, the currency risk referred to. As an alternative to some or all of the hedging activities described above such Fund may maintain part or all of the initial investment in the applicable currency, and may convert a portion of amounts subsequently earned by such Fund's master fund into such currency and, directly or indirectly, may make that currency available to the such Fund's master fund for business conducted in such currency by it in the ordinary course.

*Cash Management.* The Funds may, and do, hold cash or money market instruments. The percentage of a Fund invested in and among such holdings varies and depends on various factors, including market conditions and purchases and redemptions or withdrawals of shares or interests of such Fund. A Fund may agree to certain restrictions on the liquidity of the underlying cash or money market instruments in exchange for a more favorable interest rate or increased capacity (e.g., "time deposits"). Furthermore, when instruments other than demand deposits of cash are held (e.g., money market instruments or short-term securities), there may be greater market risk, illiquidity risk or the risk of operational delays in converting the instrument into cash. Demand deposits in cash are generally not collateralized and would give rise to an unsecured claim in the event of the bankruptcy of the deposit-taking institution.

*Trading in Commodities and Derivatives Generally.* Certain Portfolio Managers utilize derivative instruments such as options, futures, forward contracts, total return swaps, credit default swaps, and interest rate swaps, caps and floors, both for investment purposes and as hedges. These are instruments whose values are based upon underlying assets, indices or reference rates or a combination of these, and generally represent future commitments to exchange cash flows or to purchase or sell other financial instruments (or make an equivalent cash payment) at specified future dates. Certain derivatives (options and credit default swaps in particular) have intrinsic value separate from the value of underlying assets based upon market perception of creditworthiness or expected volatility in the value of the asset. The use of derivatives involves a variety of material risks, including the possibility of counterparty non-performance as well as of deviations between the actual and theoretical value of the derivatives. Derivatives also are inherently subject to two sources of risk: risk of loss due to adverse changes in the value of the underlying asset and risk of loss due to the insolvency or creditworthiness of the counterparty. In addition, the markets for certain derivatives may be illiquid. Derivatives are typically intrinsically leveraged investments that may entail investment exposures that are greater than the initial amount of collateral required to enter into the derivative, meaning that an investment in a derivative could ultimately incur losses many times greater than the initial collateral requirements and could therefore have a disproportionate effect on the performance of a Fund. A Fund could also experience losses if the derivatives that are acquired or sold as a hedge are poorly correlated with the investment to be hedged, or if a Portfolio Manager is unable to liquidate a position because of an illiquid secondary market. Changes in liquidity may result in significant, rapid and unpredictable changes in the prices for derivatives. The Portfolio Managers may trade commodities, futures and options, and may enter into swap agreements. The prices of commodities contracts and all derivative instruments, including futures and options, may depend upon a number of factors, including the prices of the underlying assets and may be highly volatile. Price movements of commodities, futures and options contracts and payments pursuant to swap agreements are influenced by, among other things, interest rates, changing supply and demand relationships, trade, fiscal, monetary and exchange control programs and policies of governments, and national and international political and economic events and policies. In addition, a Fund is subject to the risk of failure of any of the exchanges on which they trade, their clearinghouses or the clearing brokers through which their trades clear. In the case of commodity contracts traded on non-U.S. exchanges and certain derivative instruments, a Fund may be subject to the risk of the inability of, or refusal by,

the counterparty to perform. In addition, profits realized in non-U.S. markets could be eliminated by adverse changes in the applicable currency exchange-rate, or a Fund could incur losses as a result of those changes.

*Factors Affecting Commodities Prices.* The values of commodities which underlie commodity futures contracts and other types of financial instruments are generally affected by, among other factors, the cost of producing commodities, changes in consumer demand for commodities, the hedging and trading strategies of producers and consumers of commodities, speculative trading in commodities by commodity pools and other market participants, disruptions in commodity supply, weather and climate conditions, changes in interest rates, rates of inflation, currency devaluations and revaluations, embargoes, tariffs, regulatory developments, governmental, agricultural, trade, fiscal, monetary and exchange control programs and policies, political and other global events and global economic factors. In addition, governments from time to time intervene, directly and by regulation, in certain markets, often with the intent to influence prices directly. The effects of governmental intervention may be particularly significant at certain times in certain markets and this intervention may cause these markets to move rapidly. A Fund and the Portfolio Managers have no control over the factors that affect the price of commodities. Accordingly, the value of a Fund's investments could change substantially and in a rapid and unpredictable manner.

*Energy.* Markets for energy-related commodities, including, without limitation, electricity, coal, natural gas, crude oil and other petroleum products, can be susceptible to substantial price fluctuations over short periods of time and are particularly affected by political events, natural disasters, exploration and development success or failure, and technological changes. Energy-related commodities are also subject to governmental action for political reasons. In addition, significant short-term price volatility can be caused by the inability to store electricity, tariff regulation and consumer advocacy.

*Agricultural Commodities.* Agricultural commodities are particularly sensitive to changes in, among other things, climate, crop and livestock health, world political events, government action (including export and import restrictions and embargoes), international and regional trade contracts, labor contracts, transportation systems and crop predictions. Significant production declines and volume decreases of agricultural commodities can occur as a result of, among other things, hurricanes, weather patterns, floods, fires and other natural disasters. In addition, agricultural commodities are subject to price volatility as a result of disruptions relating to the facilities necessary to produce, transport, store and deliver the agricultural commodity. As a result, the net assets of a Fund may be affected by such factors.

*Precious and Industrial Metals.* Prices of precious metals (e.g., gold, silver, platinum and palladium) and industrial metals (e.g., iron and steel) are affected by factors such as cyclical economic conditions, political events, and monetary policies of various governments and countries. In addition, certain precious metals are geographically concentrated, and events in those parts of the world in which such concentration exists may affect their values. Gold and other precious metals are also subject to governmental action for political reasons. The markets for precious metals are volatile and there may be sharp fluctuations in prices even during period of rising prices.

*Storage of Physical Commodities.* Certain Funds may from time to time take physical delivery of commodities and store them for future sale. In such cases these Funds will make use of commercial storage facilities appropriate to the particular physical commodity in question. Commodities held in storage are subject to a risk of loss in the event of bankruptcy of the storage facility, or physical damage to the storage facility and its contents. Physical loss of stored commodities may be the result of insurable or uninsurable risks. We may choose not to purchase insurance for insurable risks based on our assessment of the cost of the insurance compared to the risks insured. Even if the physical commodities owned by a Fund are insured, certain events such as terrorist attacks or extreme weather events may not be covered by such insurance.

*Physical Assets.* Investments in physical assets, including, without limitation, oil, gas, electric power, transmission facilities and power plants, as well as traditional commodities such as wheat or sugar, are subject to risks—destruction, loss, industry-specific regulation (e.g., pollution control regulation), operating failures, labor relations, etc.—that are not typically directly relevant to financial instrument trading. In addition, the regulation of such assets is extensive and variable, and a Fund's interests in certain of such assets could be wholly illiquid for long periods of time. Prices of physical assets are affected by factors such as global supply and demand, investors' expectations with respect to the rate of inflation, currency exchange rates, interest rates, investment and trading activities of hedge funds and commodity funds, and global or regional political, economic or financial events and

situations. Markets can be volatile at times, and there may be sharp fluctuations in prices even during periods of rising prices.

*Leverage; Interest Rates; Margin.* The Funds typically borrow funds (and certain Funds could potentially issue debt securities), and leverage their investment portfolio in order to be able to increase the amount of capital available to make investments and for use as collateral in connection with investments in derivatives. In addition, there is a significant degree of leverage typically embedded in certain derivative instruments and certain repurchase and reverse repurchase transactions in a Fund's investment portfolio. Consequently, the level of interest rates, generally, and the rates at which a Fund can borrow, in particular, will affect its operating results. Although leverage will increase investment return if a given Portfolio Manager earns a greater return on the investments purchased with borrowed funds than it pays for the use of those funds, the use of leverage will decrease the return of a Fund if the Portfolio Manager fails to earn as much on investments utilizing borrowed funds as it pays for the use of those funds. The use of leverage will in this way magnify the volatility of changes in the value of an interest in a Fund. In the event of a sudden, precipitous drop in value of a Fund's assets, the providers of leverage to such Fund may be entitled under their agreements with such Fund to liquidate the assets at then-prevailing levels, which would be depressed. There can be no certainty that the assets of a Fund would be sufficient to repay all of its debts under those or similar circumstances.

*Risk of Loss.* The performance of a Fund can be highly volatile. A Fund may lose capital through (i) investment losses, (ii) withdrawals of capital to fund expenses or in connection with equity withdrawals and redemptions by investors or (iii) a combination of investments losses and such withdrawals of capital. Investment losses may give rise to requests for equity withdrawals and redemptions, but withdrawals and redemptions may occur irrespective of performance, and perhaps for reasons wholly unrelated to a Fund.



Item 9 Disciplinary Information

On October 31, 2017, Millennium Management LLC (the “**Millennium Respondent**”) consented, without admitting or denying the findings therein, to the entry of an order issued by the SEC finding that on four occasions in 2012 it violated Rule 105 of Regulation M of the US Securities Exchange Act of 1934 (“**Rule 105**”). (See SEC Release No. 34-81989.) In settlement of this matter, the Millennium Respondent agreed to pay a civil money penalty of \$300,000, as well as disgorgement and prejudgment interest of \$338,709.11, and to cease and desist from committing or causing any violations and any future violations of Rule 105.

Additionally, as disclosed in detail on the Firm’s Form ADV Part 1, in four instances the Firm submitted notifications to the Swedish Financial Supervisory Authority (the “**SFSA**”) later than the next-day filing deadline. In each instance, the delay in filing was due to inadvertent human error. The SFSA issued a special fee in each matter. The fines became effective and were paid by the Firm in November 2019.

#### Item 10 Other Financial Industry Activities and Affiliations

Millennium Group Management Trust, a revocable trust (together with any successor or residuary trust or trusts, the “**Trust**”) established in July 2017, serves as the ultimate controller of Millennium, including as the managing member of Millennium Group Management LLC, which is in turn the managing member of Millennium Management and the general partner of Millennium International Management. Mr. Englander serves as trustee of the Trust along with a number of other trustees (referred to herein collectively as the “**Trustee Advisory Board**”) as disclosed in Millennium Management’s Form ADV Part 1, as amended from time to time, with Mr. Englander retaining exclusive control of the Trust until his death or during any period of incapacity (as determined in accordance with the Trust). Following Mr. Englander’s death or during any period of incapacity, the remaining members of the Trustee Advisory Board would assume control of the Trust to be exercised by majority vote. Under the terms of the Trust, in such a circumstance, the trustees generally would be authorized to appoint additional and successor trustees meeting certain eligibility criteria specified by the Trust. It is expected that in such a circumstance where Mr. Englander dies or becomes incapacitated and the remaining trustees assume control, the day-to-day affairs of Millennium would continue to be managed by its senior management team, subject to the oversight of the Trustee Advisory Board until such time as a decision about ultimate succession is made by the Trustee Advisory Board (if applicable).

Millennium Management’s Relying Advisers are listed below, together with any applicable foreign licenses or registrations:

1. MCP (Switzerland) GmbH, (“**MCP Switzerland**”), a company incorporated in Switzerland, which is licensed by the Swiss Financial Market Supervisory Authority.
2. Millennium Capital (DIFC) Limited (“**MC DIFC**”), a private company incorporated in the Dubai International Financial Centre and regulated by the Dubai Financial Services Authority as a Category 3C Firm.
3. Millennium Capital Management (Australia) Pty Ltd (“**MCM Australia**”), an Australian proprietary company limited by shares, which is licensed by the Australian Securities and Investments Commission.
4. Millennium Capital Management (Hong Kong) Limited (“**MCM HK**”), a Hong Kong limited company, which is licensed by the Hong Kong Securities and Futures Commission.
5. Millennium Capital Management (Mauritius) Ltd. (“**MCM Mauritius**”), a Mauritius private company limited by shares, which is licensed by the Republic of Mauritius Financial Services Commission.
6. Millennium Capital Management (Singapore) Pte. Ltd. (“**MCM Singapore**”), a Singapore private company limited by shares, which is licensed by the Monetary Authority of Singapore.
7. Millennium Capital Management Asia Limited, including its Tokyo Branch (“**MCM Asia**”), a Hong Kong limited company, whose Tokyo Branch is licensed by the Japanese Financial Services Authority.
8. Millennium Capital Partners LLP (“**MCP UK**,” and together with MC DIFC, MCP Switzerland, MCM Australia, MCM HK, MCM Mauritius, MCM Singapore and MCM Asia, the “**Foreign Advisers**”), a UK limited liability partnership, registered with the UK Financial Conduct Authority as an investment manager.
9. Millennium Global Estate GP LLC (“**Millennium Global Estate GP**”), a Delaware limited liability company. Millennium Global Estate GP has appointed an investment committee (the “**Investment Committee**”), which has responsibility for independently considering and evaluating, on behalf of Millennium Global Estate GP, the suitability of investments made by Millennium Global Estate LP

on behalf of Millennium Global Estate GP. The Investment Committee is made up of certain members of Millennium's senior management and one independent member.

10. Millennium International Management LP ("**Millennium International Management**"), a Delaware limited partnership.
11. MPG PR Management LLC, a Puerto Rico limited liability company.
12. Blue Arrow Capital Management LLC, a Delaware limited liability company.
13. Cannon Asset Management LLC, a Delaware limited liability company.
14. Catapult Capital Management LLC, a Delaware limited liability company.
15. Decade Capital Management LLC, a Delaware limited liability company.
16. Green Arrow Capital Management LLC, a Delaware limited liability company.
17. WMA International Equity 130/30 GP LLC, a Delaware limited liability company.
18. WMA US Equity 130/30 GP LLC, a Delaware limited liability company.
19. WMA Global Equity Active Extension GP LLC (formerly, WMQS Global Equity Active Extension GP LLC), a Delaware limited liability company.
20. WMA Global Management LLC (formerly, WMQS Global Management LLC), a Delaware limited liability company.
21. WorldQuant Millennium Advisors LLC (formerly, WorldQuant Millennium Quantitative Strategies LLC), a Delaware limited liability company.
22. WorldQuant, LLC ("**WorldQuant**"), a Delaware limited liability company.
23. WorldQuant (Singapore) Pte. Ltd., a Singapore private company limited by shares, which is licensed by the Monetary Authority of Singapore.
24. Azur IM LP ("**Azur**"), a Delaware limited partnership, which provides investment advice solely to the Fund and has no other clients. Azur is subject to Millennium Management's supervision and control, which is established by contractually obligating Azur to comply with Millennium's policies and procedures, including Millennium's Code (as defined below).
25. Kodai Capital Management, L.P. ("**Kodai**"), a Delaware limited partnership, which provides investment advice solely to the Fund and has no other clients. Kodai is subject to Millennium Management's supervision and control, which is established by contractually obligating Kodai to comply with Millennium's policies and procedures, including Millennium's Code.

Millennium Management, Millennium International Management and Millennium Global Estate GP are registered as commodity pool operators and commodity trading advisors, and WorldQuant Millennium Advisors LLC and WMA Global Management LLC are registered as commodity pool operators, and certain of their respective management persons are registered as associated persons.

MPG Operations LLC, a wholly-owned subsidiary of Millennium International Management, is a payroll entity that employs most of Millennium's U.S.-based personnel.

Mr. Englander and the other principals of our Firm and our affiliates devote to the Funds as much of their time as, in their respective judgments, is necessary or appropriate in connection with the Funds' activities. Our Firm, principals and affiliates, from time to time have in the past and may in the future, however, conduct other businesses. The conflicts related to such businesses are described in Item 11 of this Brochure.

## Item 11 Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

We have adopted a Code of Ethics (the “**Code**”) setting forth a standard of business conduct expected of all of our employees (including compliance with federal securities laws).

Among other things, the Code (through its reference to other policies incorporating them) sets forth policies and procedures designed to prevent insider trading and market manipulation. The Code also contains policies and procedures addressing personal trading. Employees are required to certify their compliance with the Code quarterly. We will provide our clients and prospective clients a copy of our Code upon request.

*Changes of Control and Certain Related-Party Transactions.* We, on behalf of the investors, are authorized to select one or more persons not affiliated with us, including a Fund’s unaffiliated directors, to serve on a committee as may be established from time to time in the future, the purpose of which is to consider and, on behalf of each Fund and its investors, approve or disapprove, to the extent required by applicable law or deemed advisable by us, principal transactions, other related-party transactions and other transactions and matters involving potential conflicts of interest, including without limitation changes in control of us and our affiliates. Such committee may approve of such matters prior to or contemporaneous with, or ratify such transactions subsequent to, the consummation of such matters. The person(s) so selected may be exculpated and indemnified by the Funds (or their associated master funds) in the same manner and to the same extent as we are.

*Personal Trading.* As our related persons have in the past and may in the future invest in the same securities (including options, warrants, futures, etc.) as a Fund invests in based on our and our related persons’ investment advice, potential conflicts of interest may arise. We have adopted policies and procedures relating to personal trading by all personnel—including personnel of our affiliates—which are administered by our Compliance Department. Among other things, our policies and procedures include a pre-approval requirement for personal transactions (with certain limited exceptions, including broad-based indices and mutual funds) of all personnel. These requirements may be and in certain cases, after consideration, have been waived by us. Portfolio Managers generally are not permitted to hold positions that are identical or similar to the positions held in the portfolios they manage for a Fund. Such a situation could provide an incentive for a Portfolio Manager to trade in a way that would be advantageous to him or her personally but that would not be expected to have a positive effect on (and could even be adverse to) a Fund. Consideration of such matters is a factor in our decision as to whether permission will be granted for any particular transaction. In addition, members of our management may (with prior Compliance approval) trade for their own accounts. From time to time these activities may come into conflict with our business; if such a conflict were to arise, our management personnel would generally be required to subordinate the interests of any other parties (or their own interests) to a Fund, and in any event would be required to disclose the conflicts. We will endeavor to resolve any such conflicts in a manner that is fair and reasonable. Additionally, the Firm or its principal may (with prior Compliance approval) from time to time make an investment in another private fund and take an interest in such fund’s management company or have a role in the management of such fund. We will address, under the supervision of the CLEO Committee (described below) or any successor body thereto, any conflicts of interest that arise from such a situation in a manner we believe to be fair and equitable under the circumstances.

*Other Accounts or Activities.* We manage multiple Funds and may in the future, create, sponsor or provide investment management, administrative or other services to funds, accounts, clients or other investment structures that are separate from and unrelated to the Funds (any such fund, account or other investment structure, an “**Other Account**” and, collectively, “**Other Accounts**”) and to engage in other activities unrelated to the Funds. With respect to each Fund we manage, the term “Other Account” shall include each other Fund we manage (e.g., with respect to the Millennium Partners Funds, the term Other Account shall include the WMA Funds, and vice versa). Numerous potential conflicts exist for us in providing services to multiple Funds, as well as any Other Accounts to which we provide services now or in the future. The nature and extent of such conflicts depend in part on the specific activities undertaken by us and, if applicable, on the fee and expense structure of the Funds and Other Accounts, or the potential benefits or costs to us, relative to those to the Funds. Other conflicts include the need to allocate common expenses and investment opportunities and other resources, and the diversion of time and attention of management, as well as competition for investment and management talent. We will attempt to mitigate such conflicts, under the ultimate supervision of the CLEO Committee or any successor body thereto, by making allocations and other judgments on a basis that we believe to be fair and reasonable under the circumstances,

although it may not be possible fully or even partially to mitigate each such conflict, and such conflicts will not necessarily be resolved in the favor of investors in any particular Fund.

*Allocation of Investment Strategies and Investments to and Among the Funds and Other Accounts; Conflicting Investment Opportunities; Cross Transactions.* Certain Funds and certain related entities through which the Portfolio Managers invest have similar investment programs, while other Funds have different investment programs. We may in the future establish Other Accounts that have investment programs similar to those of the Funds or that invest similarly to a Fund's portfolio or certain of its strategies. The Funds and Other Accounts do not currently, but may in the future, make certain investments in tandem with each other. A conflict arises when allocating transaction prices and expenses where multiple entities purchase or sell the same or substantially similar investment positions.

We may determine, in accordance with any investment allocation policies adopted by us, as updated from time to time, which would likely be without notice to investors (the **"Investment Allocation Policy and Procedures"**), that a particular investment strategy, investment opportunity, or investment with a particular Portfolio Manager, is appropriate for one or more Funds or Other Accounts, but not for all of the Funds, or vice versa, in which case that investment may not be allocated to a Fund (or Funds) or Other Account (or Other Accounts), as applicable. Similarly, we may elect to allocate a particular investment or opportunity to one or more Funds in the same master-feeder structure, but not to others, by allocating income or loss from the investment or opportunity away from the other feeder funds in such master-feeder structure directly or at the master fund level. In some instances, investment strategies or investment opportunities that might have been available to and suitable for a Fund may instead be utilized for or placed with an Other Account or may be utilized or made by us, or vice versa, and there is (i) no requirement that any Fund or Other Account receive any preference or priority with respect to investment strategies or investment opportunities and (ii) no limitation on a Fund or an Other Account receiving such preference or priority in accordance with the Investment Allocation Policies and Procedures.

WorldQuant, a Relying Adviser, serves as a Portfolio Manager (or in a similar capacity) for multiple Funds that we manage, specifically as the sole Portfolio Manager for the WMA Funds and as one of the Portfolio Managers of the Millennium Partners Funds. Investment strategies developed by WorldQuant are allocated among the WMA Funds and the Millennium Partners Funds based on their respective investment programs in accordance with the Investment Allocation Policy and Procedures. Specifically, we have established allocation criteria for WorldQuant strategies that reflect a determination of those strategies which in the aggregate are, or are not, appropriate for the Millennium Partners Funds based on, among other factors, our assessment of the characteristics of the strategies and the current risk and return profile applicable to the Millennium Partners Funds and such other considerations as we deem relevant. Other considerations for permitting strategies to be allocated to the WMA Funds may include their simulated market impact (or lack thereof) on the Millennium Partners Funds. The allocation approach set forth in the Investment Allocation Policy and Procedures may result in strategies being preferentially allocated to the Millennium Partners Funds or Other Accounts over the WMA Funds. Further, the strategies utilized for the benefit of a Fund or Other Account could have a market impact that negatively correlates with another Fund's or Other Account's returns and, if utilized for a Fund, could potentially have improved (or detracted from) the overall returns of the Fund. The above allocation criteria may be changed from time to time in our sole discretion if we determine that such changes are appropriate in light of changes in circumstances or otherwise in accordance with the Investment Allocation Policy and Procedures. For example, to the extent we change the investment program of a Fund, and in particular its risk and return profile for strategies developed by WorldQuant, these allocation criteria may be revised without prior notice to investors. Additionally, the approach to allocating strategies described above may change materially over time. Without limiting the generality of the foregoing, certain strategies may be utilized for the WMA Funds and the Millennium Partners Funds in proportions to be determined in accordance with the Investment Allocation Policy and Procedures. The determination at a given time not to allocate certain strategies to a Fund is not an indication that strategies having similar attributes are not currently, or will not in the future be, utilized on behalf of such Fund. As discussed above, strategy allocations will be made based in large part on simulated results. Simulated performance of a strategy does not guarantee similar performance in production, which may be, and often is, materially different. While the simulation process is designed to be objective, methodologies used to conduct simulations may be, and often are, adjusted over time, which may result in different and potentially less favorable allocations than if such adjustments were not made.

In general, where an investment opportunity or investment with a particular Portfolio Manager is not allocated to a Fund or a particular Other Account, the net result will be to provide the other Funds or applicable Other Accounts (and their investors) with all of the benefits (and risks) of that opportunity and, as a result, the returns realized by any such other Fund or Other Account may differ from those of the others. A Fund may attract investors' capital away from another Fund and Other Accounts may also attract investors' capital away from such Fund, which may result in such Fund's having a smaller investor base, thereby increasing the proportionate share of expenses to investors in such Fund (and, therefore, investors in such Fund).

While we intend to manage potential conflicts of interest in good faith, the portfolio strategies employed by us in managing Funds and Other Accounts could conflict with the transactions and strategies employed by us in managing other Funds or Other Accounts and may affect the prices and availability of the securities and instruments in which such Funds or Other Accounts invest. A Fund or Other Account may invest in financial instruments in which other Funds or Other Accounts have already invested or are expected to invest. There can be no assurance that the Funds or Other Accounts will invest on the same terms, or will invest and divest at the same time. Funds and Other Accounts may make separate investments in the same issuer, in which case the terms of each of such Fund's or Other Account's investments, including the type of security purchased, may be different from the terms of other Funds' and Other Accounts' investments or the types of security that the other Funds or Other Accounts purchase (or the level at which the investments are made in an issuer's capital structure). Conflicts could arise after a Fund or an Other Account on the one hand, and another Fund or Other Account on the other hand, make separate investments in the same financial instrument with respect to the manner and timing of such Fund's or Other Account's exit from the investment compared to such other Fund's or Other Account's exit. If a Fund or an Other Account invests in a different type of security from the security purchased by another Fund or Other Account, additional conflicts may arise, particularly if the issuer experiences financial difficulties.

There may also be certain strategies or investment sectors in which the portfolio managers of Other Accounts are already invested that, as a result, a Fund may be restricted from participating in, or vice versa, because of applicable regulatory, reporting, tax or similar requirements or as a result of internal policies or preferences.

In addition, certain Funds and Other Accounts, which are part of a master-feeder structure, do not currently, but may in the future, invest directly in certain vehicles in which the associated master fund invests, which raises additional conflicts.

The potential for such conflicts of interest to exist may be exacerbated if we receive a higher rate of compensation in respect of such investment from certain Funds or Other Accounts (as is the case with certain Funds) than others, including the Funds. In all cases, it is intended that participation in investment opportunities or with a particular Portfolio Manager will be allocated on a fair and equitable basis over time.

A Fund being part of a master-feeder structure may create a conflict of interest in that different tax considerations for the associated master fund and feeder funds may cause the master fund to structure or dispose of an investment in a manner that provides more advantageous tax treatment, or different returns, to one or more of its feeder funds than to others. Additionally, a Fund that is a feeder fund may trade and invest part of its capital for its own account, when presented with investment opportunities appropriate for it and its investors but that are not appropriate or not optimal (for tax or other reasons) for direct or indirect investors in the associated master fund.

The Firm or its affiliates, including Mr. Englander, may, and typically do, have a disproportionate investment in one or more of the Funds and may, therefore, benefit from any benefit derived disproportionately by such Fund or Funds. The same may be true in connection with an investment in an Other Account.

We may engage in a cross transaction between Funds and Other Accounts, including, for example, in connection with the establishment of an Other Account, termination of an Other Account, or the periodic rebalancing of positions if we determine that such cross transaction is fair, equitable and in the best interest of both accounts.

Other conflicts may arise in connection with the management of multiple clients. We seek to resolve conflicts on a fair and equitable basis, which in some instances might mean a resolution that would not maximize the benefit to any particular client, including the Funds.

*Allocation of Expenses Among Funds, Other Accounts and/or Other Activities of Millennium.* As noted above, we manage multiple Funds. We seek to allocate expenses (including, without limitation, the compensation and related expenses of Millennium personnel, expenses for office space, equipment and software, among other things) incurred in connection with the provision of investment management, administrative or other services by Millennium and its affiliates among the Funds, Other Accounts and the Firm in a manner we consider fair and reasonable under the circumstances based on certain estimates and assumptions that we believe to be reasonable and appropriate. However, such estimates and assumptions may be imprecise and may result in a Fund bearing a larger portion of such expenses than if they were calculated in a different manner. The allocation of expenses is determined in accordance with expense allocation policies and related procedures adopted by us, as updated from time to time without notice to investors (the “**Expense Allocation Policy and Procedures**”), which are intended to create, to the extent practical, a framework for the effective mitigation of conflicts related to the allocation of expenses.

Expenses related to a Fund are generally borne *pro rata* by the Funds in the same master-feeder structure, but a particular expense may be allocated differently if we determine that it would be fair and reasonable to do so and expenses that are shared by multiple Funds (in different master-feeder structures) will be allocated among such Funds in accordance with our Expense Allocation Policy and Procedures. In considering whether and how to allocate an expense, we will consider factors such as whether such expense might ultimately directly or indirectly benefit one or more Funds or Other Accounts other than the initial beneficiary, whether such expense is *de minimis* in nature, and/or whether the expense is associated with determining and administering such allocation would be disproportionate relative to the actual expense to be allocated.

Advising Other Accounts, or engaging in other business activities, raises a number of potential conflicts of interest related to the allocation of expenses. The nature and extent of such conflicts depend on the specific activities undertaken by the Other Accounts and the fee and expense structure of the Other Accounts relative to that of the Funds. In general, given the potential for there to be greater differentials in the level of utilization of any shared resources or services as among the Funds and Other Accounts or activities, the allocation of expenses associated with such resources or services have the potential to be more complex. Investors in Funds such as the Millennium Partners Funds with an expense pass-through arrangement generally bear all expenses incurred by or allocated to such Funds while investors in other Funds generally bear more limited expenses, in addition to an asset-based fee. We may and currently do impose certain constraints on the utilization of certain resources on behalf of the Funds that do not have an expense pass-through arrangement, including research-related resources and other resources, that have the potential to contribute positively to the performance of such Funds, because it would not be cost effective for the Firm to bear the expenses associated with such resources pursuant to the Expense Allocation Policy and Procedures.

The Expense Allocation Policy and Procedures are intended to establish an equitable (and administratively practical) approach to allocating shared expenses among the Funds, Other Accounts and the Firm, under the ultimate supervision of the CLEO Committee or any successor body. While it is generally not possible to precisely determine the portion of a shared resource that was utilized for the benefit of a particular product, account or project, the methodologies utilized in the Expense Allocation Policy and Procedures are intended to establish a reasonable basis for approximating such utilization. The methodologies employed may include, among others, allocating based on: (i) an average cost basis (*i.e.*, allocating total expenses based on a reasonable estimate of proportionate utilization) or a marginal cost basis (*i.e.*, charging for the incremental cost of additional utilization); (ii) independent third-party pricing for comparable transactions, goods or services; (iii) one or more subjective measures of the relative capital associated with a particular Fund or Other Account (which measures may reflect a number of factors, including, without limitation, a fund’s or account’s investment structure and strategy, and, in the case of a particular Fund or Other Account that is not yet accepting investments from third parties, may reflect an estimate of the capital expected to be associated with such fund or account once it matures); and/or (iv) an approximation of the relative amount of time spent by our personnel performing services on behalf of the Firm or a particular Fund or Other Account or in respect of a particular product, in which case the associated compensation expense may be determined



by calculating an average compensation figure across a particular department or function and/or over a certain time period.

Any methodologies used to determine an allocation of expenses will necessarily involve estimates (including, for example, when determining the allocation of a particular resource across different services) and subjective judgments about the most appropriate methodology to use to allocate a particular expense and it is possible that there may be other reasonable (and potentially more precise) methods for allocating any particular item of expense, including methods that could have resulted in less (or more) expense being borne by a Fund or Funds or the Other Accounts than those which have been selected.

*Trade Errors.* Trade errors involving transactions in any account directly or indirectly held by a Fund or any derivatives contract or other similar agreement of the Fund and/or any trading vehicle may occur. Examples of trade errors include: (i) the placement of orders (either purchases or sales) in excess of, or less than, the amount of securities or financial instruments the account intended to trade; (ii) the sale of a security or financial instrument when it should have been purchased; (iii) the purchase of a security or financial instrument when it should have been sold; (iv) the purchase or sale of the wrong security or financial instrument; and (v) the purchase or sale of a security or financial instrument for the wrong account. Trades implemented as a result of faulty analysis, trades that are properly executed but result in losses and errors committed by other persons (including brokers and custodians), are generally not considered trade errors. The loss of an investment opportunity is not considered a trade error. We have in place policies and procedures reasonably designed to attempt to prevent, identify, resolve and document trade errors. Such errors may result in losses or gains. Without limiting or modifying the generality of the exculpation and indemnification provided by a Fund to the Firm, its affiliates and personnel, in accordance with the Firm's Trade Errors policy, the Fund will generally bear the losses and costs of any trade errors, unless we determine that such trade error occurred due to fraud, gross negligence or reckless or intentional misconduct by us (or, in certain circumstances, our agents), we determine that it is appropriate to charge a Portfolio Manager for the costs and expenses of the error, or as required by law. Given the potentially large volume of transactions executed on behalf of the Funds, investors should assume that trade errors and other errors will occur and that, to the extent permitted by applicable law and under the Fund's governing documents, the Fund will be responsible for any resulting losses, even if such losses result from the negligence (but not gross negligence) of our personnel.

*Portfolio Manager Investment in Own Strategies.* As indicated above, certain Portfolio Managers, including those that are Relying Advisers, and related personnel, have invested and others may in the future invest in a Fund that invests in Millennium Partners through which they are able to achieve the same rate of return that is achieved by their own strategies. We believe that permitting Portfolio Managers and related personnel to do this is useful in aligning their interests with those of investors in certain Funds; however, this could lead to potential conflicts of interest. The determination of the Portfolio Manager's capital base, which determination may utilize different methodologies depending on the underlying portfolio, and therefore rate of return, involves significant elements of subjective judgment and analysis. Additionally, the Portfolio Managers and related personnel bear the expenses generally allocated to such portfolio for purposes of determining compensation of Portfolio Managers, but do not bear other Fund expenses generally or any performance- or asset-based fees. Therefore, the rate of return achieved by such Portfolio Managers may be higher than the rate Millennium Partners achieves for the same strategy after taking into account such fees and expenses. While we believe that in substantially all situations these kinds of relationships are useful in aligning the interests of Portfolio Managers with those of investors in a Fund, they could lead to situations in which the interests of Portfolio Managers diverge from those of other investors.

*Additional Activities.* As noted in Item 10 of this Brochure, Mr. Englander and the other principals of our Firm and our affiliates devote to the Funds as much of their time as, in their respective judgments, is necessary or appropriate in connection with the Funds' activities. Our Firm, principals, employees and affiliates, from time to time may and do, however, conduct other businesses with prior approval of Compliance or CLEO Committee (or any successor body).

The principal and certain employees of WorldQuant may invest, and have invested, directly or indirectly, in certain types of early-stage and other illiquid private companies. WorldQuant, from time to time, uses the services of such companies in connection with the operation of its business, including the portfolio management services it provides

to the Funds. While this may give rise to actual or potential conflicts of interest, we have policies and procedures in place and seek to take appropriate steps to mitigate any actual or potential conflicts of interest.

We may from time to time manage Other Accounts that may invest in a Fund and other Accounts, which may include Other Accounts established for the benefit of our principals or their family members.

As noted in Item 10 of this Brochure, we may, from time to time conduct other businesses (with prior approval of Compliance or CLEO Committee (or any successor body)), including, without limitation, the provision of investment management, administrative or other services to Other Accounts or third parties and may expand the extent to which we provide such services to others. We intend to address any conflicts of interest that arise from such situations in a manner we believe to be fair and equitable under the circumstances.

Assets of the Firm and its affiliates, including, without limitation, intellectual property developed in connection with services provided to the Funds, may be utilized in the conduct of other business activities in the sole discretion of the Firm and its affiliates without compensation or reimbursement to the Funds, including (without limitation) reimbursement of the costs incurred in the development of such assets, but subject to the appropriate allocation of ongoing expenses in accordance with our Expense Allocation Policy and Procedures.

*Ownership Influence.* Persons related to or affiliated with our Firm (including Mr. Englander, senior officers, various Portfolio Managers, and other employees and consultants) hold, through a variety of direct and indirect investment channels (including deferred compensation), a relatively large portion of certain Funds' capital. There are no limitations on the ability to dispose of or transfer such interests, or otherwise modify the ownership structure of our Firm or any of our affiliated management companies, except to the extent limited by law, regulation or the terms of the applicable interests. From time to time, individuals affiliated with certain Funds have in the past become aware of and purchased (and may in the future become aware of and purchase) interests in such Funds (or other entities managed by the Firm or its affiliates) that were (or are) available for transfer from other holders at prices less than net asset value because of limitations affecting the redemption or withdrawal of the interests at the time.

*Investments by Related Parties of the Firm.* The principal, senior officers and certain employees of the Firm and its affiliates, and other related parties, may invest in, or have an interest in the returns of, certain Funds through a number of channels, including in certain cases through deferred compensation arrangements. Some of these investments are leveraged through the extension of credit by a third party to the investment vehicle through which these parties invest. In connection with structuring these investments, the third parties typically make an investment in a class of interests in the relevant Fund that is entitled to more favorable liquidation and other rights under certain circumstances. For example, upon the occurrence of certain events, including declines in the capital of the relevant Fund below pre-determined thresholds and changes in senior management, such extensions of credit can be terminated by the counterparties and the interests of the relevant Fund pledged to or held by the counterparties (up to an amount necessary to repay the extension of financing) can be redeemed without the imposition of early redemption charges, on either a monthly or quarterly basis. This may increase the risk of redemptions, and result in redemptions at times when other investors in such Fund are unable to effect redemptions, if there are specified declines in the net asset value of such Fund or a termination of the financial arrangement with the third party due to the occurrence of events of default. In addition, other similar structures may be formed in the future. While we believe that in substantially all situations these kinds of relationships are useful in aligning the interests of management with those of investors in a Fund, they could lead to situations in which the interests of management diverge from those of other investors.

*Conflicts Related to the Firm Having Investments in Other Management Companies.* Although we have not done so to date, the Firm could in the future acquire an interest in a management company formed by an independent Portfolio Manager (including one who was previously a Millennium employee or Relying Adviser) to which assets of a Fund are allocated. The interest might take various forms, such as shares or partnership interests in, or an economic interest in the revenues of, the Portfolio Manager's management company. If such a situation were to arise, we may have an economic incentive to favor such a Portfolio Manager over other Portfolio Managers. Additionally, family members of the principal or other members of senior management may be employed by the

Firm or have an interest in the management company of a Portfolio Manager to which a Fund currently allocates capital.

*Custody/Commingling of Property.* Investment assets of the Funds required to be custodied are held by third party prime brokers and custodians. We do not currently commingle the investment assets of the Funds with the property of any other person, although (i) specified assets may be pooled in a side-by-side co-investment arrangement with another entity, which may include the Funds or their affiliates or of a Portfolio Manager, and (ii) the investment assets of the Funds may be commingled by those firms which act as brokers, futures commission merchants and custodians for the Funds or the Portfolio Managers.

*Hedging Activities Related to Shares of Affiliated Funds Not Denominated in U.S. Dollars.* One particular Millennium Partners Fund has issued a sub-class of shares the functional currency of which is the Euro and another sub-class of shares the functional currency of which is the Yen (collectively, the “**Non-USD Shares**”), and such Millennium Partners Fund or other Funds may in the future offer other interests which have different functional currencies or reference assets. As with the Non-USD Shares, the terms of such interests may provide that such Fund may seek to hedge the exposure of such interests to minimize, to the extent practicable, fluctuations in the value of such shares arising from the fluctuations in the applicable exchange rates or reference assets price relative to the U.S. dollar. Such hedging may be undertaken by such Fund’s master fund on behalf of such Fund, with such Fund (and, within such Fund, the affected shares) being allocated the profits and losses, including expenses, associated with such activity. The capital of such Fund’s master fund may be used to satisfy any margin requirements associated with hedging activities and a financing charge would be allocated to the capital account of such Fund (which would, in turn, be allocated to the relevant hedged interests) at a rate based on prevailing rates charged to such Fund’s master fund, as we determine in our sole discretion, which rates would likely be less than rates that would be available to investors in such interests if they sought to obtain financing for such activities directly. Although such Fund’s master fund anticipates having excess cash available to satisfy margin requirements, to the extent that this changes and/or the amount of cash necessary to satisfy margin requirements increases substantially, cash that would otherwise be available for investment by such Fund’s master fund may be used for such purposes, which could adversely impact the returns of such Fund’s master fund. Alternatively, such Fund may engage in hedging activities directly, in which case such Fund’s master fund may advance cash to such Fund in order to satisfy margin requirements. Any such transactions will raise similar considerations to those described above.

*Inter-Company Loans.* Each of the Foreign Advisers is owned by Millennium International Management. The capital to establish, capitalize and maintain these entities has been loaned to Millennium International Management by Millennium Partners. The loans are secured by Millennium International Management’s interest in the shares of each entity. If the loans become due and payable and have not been paid, Millennium Partners is authorized, among other things, to transfer the shares to itself or to sell the shares (and the assets of the relevant entity) and apply the proceeds toward the discharge of the loans. These loans have been structured in a way that seeks to ensure that Millennium International Management does not receive any additional pecuniary benefit from owning these entities. The ownership structure of these entities may change from time to time without notice. These inter-company loans in the aggregate currently represent less than 1% of the net asset value of Millennium Partners. These inter-company loans are exclusively for the benefit of the applicable Funds and are not for our benefit or the benefit of our respective principals or affiliates. Under the terms of the applicable Funds’ governing documents, the Funds are obligated to reimburse all costs, fees and expenses incurred in managing the assets of the Funds, including the costs, fees and expenses associated with the offices of the Foreign Advisers. As a result, these inter-company loans are an advancement of regulatory capital and expenses that would otherwise be incurred by the applicable Funds, and do not result in any increased costs to the Funds. The Funds may enter into similarly structured inter-company loans or other similar arrangements to facilitate the Funds’ investment activities, including in other jurisdictions, in the future.

*Compliance, Legal and Ethics Oversight (CLEO) Committee.* The CLEO Committee is responsible for reviewing Firm-wide compliance, legal and ethics issues throughout our business as they arise, and investigating (directly or indirectly) possible breaches of compliance, legal or ethical duties, rules, policies or procedures committed by any of our employees or agents or persons acting on our behalf.

## Item 12 Brokerage Practices

In selecting brokers, dealers and other counterparties to effect portfolio transactions for a Fund and provide financing for such Fund's portfolio, we and our Portfolio Managers consider such factors as they deem appropriate under the circumstances, which may, and do, include one or more of the following: the ability to obtain timely execution and deliver timely execution reports; the responsiveness to the Firm's orders; the reliability, reputation, integrity, and financial condition of the broker-dealer; the size and volume of the broker's order flow; the ability to handle difficult trades, including block trades; the ability to find liquidity in the market while also minimizing market impact; research and other services provided to the Firm that are expected to enhance the Firm's general portfolio management capabilities; other relationships between the Firm or a Fund and the broker; the accommodation of special needs, including the broker's willingness to enter into commission sharing arrangements/give-up agreements; and commission rates, fees or market maker's commission equivalent (*i.e.*, mark-downs and mark-ups). We do not have an obligation to obtain the lowest available commission cost. Accordingly, if we determine in good faith that the commissions charged by a broker or the prices charged by a dealer are reasonable in relation to the value of the brokerage and research products or services provided by the broker or dealer, a Fund may pay commissions to the broker or prices to the dealer in an amount greater than another might charge. Subject to our duty to seek to obtain best execution, we have complete discretion in deciding what brokers, dealers and other counterparties the Funds will use and in negotiating the rates of compensation the Funds will pay to such brokers, dealers and other counterparties. In many instances that discretion is delegated to Portfolio Managers who make specific trading decisions, subject to oversight by Millennium. Millennium maintains policies and procedures to review the quality of executions, including periodic review by relevant personnel.

From time to time, brokers (including prime brokers) assist the Funds in raising additional capital from investors. Additionally, brokers provide capital introduction and marketing assistance services, and our representatives from time to time speak at conferences and programs sponsored by the brokers, for investors interested in investing in private investment funds. Through such events, prospective investors in a Fund encounter our representatives. Certain of a Fund's prime brokers (or their affiliates) also advise private funds or clients that make investments in a Fund or may facilitate such investments in other ways. Neither our Firm nor the Funds directly compensate any prime broker for engaging in such activities (except in circumstances where the Firm is required to do so under applicable law). However, the events and other services provided by a prime broker may influence us to some extent in selecting prime brokers and determining the extent to which a prime broker will be used.

The Millennium Partners Funds utilize soft dollar arrangements, while currently other Funds do not. The disclosure below relates to the Millennium Partners Funds.

With respect to soft dollar arrangements, the conflicts that typically give rise to concerns underlying the use of soft dollars do not generally exist for us, because the Millennium Partners Funds (and not our Firm) bears all of the expenses related to its own operation. Therefore, our use of soft dollars does not result in any expense shifting between our Firm, on the one hand, and the Millennium Partners Funds, on the other hand. However, Millennium Partners' financial statements will be affected by soft dollar arrangements, as noted below.

Soft dollar arrangements provide an incentive to select or recommend a broker-dealer based on an interest in receiving research or other products or services, rather than on receiving most favorable execution. Soft dollar arrangements may cause the Millennium Partners Funds to pay commissions (or markups or markdowns) higher than those charged by other broker-dealers in return for soft dollar benefits (known as paying-up). We use soft dollar benefits to service the Millennium Partners Funds. Portfolio Managers may also benefit from the use of soft dollars. We are not required to allocate soft dollar benefits among our clients proportionately to the soft dollar credits the accounts of the clients generate. Therefore, it is theoretically possible that a client will benefit disproportionately from soft dollars relative to its contribution to the expenditure that generated them. If we advise additional clients in the future, our clients may experience this to an even greater degree.

We have determined that the use of soft dollars will be limited to research and brokerage products and services that we believe meet the requirements of Section 28(e) of the Securities Exchange Act of 1934 ("**Section 28(e)**"), and the SEC interpretations thereof, in jurisdictions and transactions where Section 28(e) applies. This includes research and brokerage products and services paid for with soft dollars generated by the trading

activity directed by our affiliated management companies. Although potentially outside the scope of Section 28(e), we have also adopted a policy to the effect that the requirements of Section 28(e) should generally be satisfied by our affiliated non-U.S. management companies in addition to any local requirements applicable to a particular management company with respect to the use of soft dollars.

It is our policy to generate soft dollars with commissions on securities transactions, and, in accordance with SEC interpretations, with markups, markdowns, commission equivalents or other fees paid to a dealer for executing a transaction. In addition, to the extent consistent with applicable regulatory requirements, soft dollars may be generated through futures transactions, certain principal transactions, non-U.S. transactions, or other transactions.

Research products or services provided to the Millennium Partners Funds include research reports on particular industries and companies, economic surveys and analyses, recommendations as to specific securities, and relevant market data, as well as other products and services that provide assistance to us in the performance of their investment and trading decision-making responsibilities. Brokerage products or services provided to us may include message services used to transmit orders to brokers for execution, trading software used to route orders to market centers, software used to transmit orders to direct market access systems and short-term custody. Where a product or service obtained with soft dollars provides both research or brokerage and non-research or non-brokerage assistance (*i.e.*, a “mixed use” item), we will make a reasonable allocation of the cost which is to be paid for with commission dollars.

Consistent with Section 28(e), research products or services obtained with soft dollars generated by Millennium Partners may be used by Millennium to service one or more Other Accounts, including Other Accounts that may not have paid for the soft dollar benefits. Millennium will seek to allocate the cost of the research products or services, including such items paid for using soft dollars, among the Millennium Partners Funds and the Other Accounts in accordance with its Expense Allocation Policy and Procedures.

A consequence of the use of soft dollar arrangements is that, under GAAP, items that would otherwise have been characterized as expense in the consolidated financial statements of Millennium Partners will instead be subsumed within commissions. As a result, line-item expenses will appear smaller than they would have had soft dollars not been utilized. It is possible that some expenses paid through the utilization of soft dollar arrangements might be greater than if the Millennium Partners Funds or the Firm had purchased the research or brokerage services in question directly or had produced them internally.

In Europe, separate research charges may be assessed alongside Millennium Partners transactions and collected by Millennium Partners’ trading counterparties for the purpose of funding a research payment account controlled by Millennium. Such research charges are separate and independent of any commissions.

The Firm’s Brokerage Committee oversees the Firm’s use of commissions and soft dollar arrangements, and its broker-dealer and counterparty relationships. The Brokerage Committee is responsible for: (1) reviewing the reasonableness of commissions and soft dollar usage throughout the Firm, (2) assessing the quality of services obtained from broker-dealer relationships generally, (3) implementing appropriate processes, reviews and procedures and (4) making appropriate recommendations to management concerning brokerage relationships and issues.

We do not currently but may in the future elect to combine purchase or sale orders for securities on behalf of multiple clients, including the Funds, and allocate the securities or other assets so purchased or sold on an average price basis among the accounts or using another methodology that we consider equitable, and may engage in cross transactions between clients, including, for example, in connection with the establishment of an Other Account, termination of an Other Account or periodic rebalancing of positions among Other Accounts and the Funds.

Our clients do not direct brokerage, as currently our only clients are the Funds, for which we select brokers.

Item 13 Review of Accounts

We, primarily through the Portfolio Managers, manage the investment portfolio of the Funds. Generally, the Portfolio Managers are responsible for frequently reviewing the portion of the portfolio managed by them for consistency with the Firm's policies. The Portfolio Managers are responsible to the head of the department for the strategy in which the Portfolio Managers trade, either directly or indirectly. In addition, various members of our management review the Funds' portfolios and accounts on a regular basis.

Reports that we generate for our internal use and for the benefit of the Funds typically contain portfolio breakdown and performance. The reports are provided no less frequently than monthly.

#### Item 14 Client Referrals and Other Compensation

We generally do not receive an economic benefit from anyone other than the Funds for providing investment advice or other advisory services to the Funds, although see Item 11 of this Brochure regarding outside activities of the Firm and certain of its affiliates.

We may and currently do compensate certain persons who are not our supervised persons for referrals of investors to invest in certain Funds. We have entered into, and may in the future enter into additional, agreements with registered broker-dealers or other appropriately licensed or registered (to the extent legally required) persons providing for payment of a portion of the subscription amount or ongoing payments based on a percentage of the compensation we earn from certain Funds that are attributable to the interests of an investor in such Funds introduced by the persons. Any such fees are paid by the Firm (and not a Fund).

Item 15 Custody

This is not applicable to us.



#### Item 16 Investment Discretion

We have discretionary authority to manage securities accounts on behalf of the Funds. This authority is established through a limited partnership agreement, an investment management agreement, or other contract. There are no substantive limits on our discretionary authority.

#### Item 17 Voting Client Securities

We have authority to vote client securities. As a general matter, we do not authorize individual Portfolio Managers to make proxy voting decisions without permission. In situations where a Portfolio Manager believes it is useful to vote a proxy, we will vote client securities on behalf of a Fund upon the request of a Portfolio Manager who has discretion over the relevant securities, provided that the CLEO Committee (or its designee), or any successor body thereto, determines that the requested vote is in such Fund's best interests and approves the requested vote. Any conflicts, including where two or more Portfolio Managers seek permission to vote a proxy but have differing views concerning how the proxy should be voted, are considered and resolved, as appropriate, by the CLEO Committee or any successor body thereto. The Funds may obtain information from us about how we voted their securities by contacting us at (212) 841-4100. The Funds may obtain a copy of our proxy voting policies and procedures upon request.

Item 18 Financial Information

We are not aware of any financial condition that is reasonably likely to impair our ability to meet contractual commitments to the Funds, and have not been the subject of a bankruptcy petition at any time during the past 10 years.

Item 19 Requirements for State Registered Advisers

This is not applicable to us.