Morgan Stanley

Form ADV, Part 2A Brochure

Morgan Stanley Investment Management Inc.

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This brochure (the "Brochure") provides information about the qualifications and business practices of Morgan Stanley Investment Management Inc. (the "Adviser," "MSIM," "us" or "we"). If you have any questions about the contents of this Brochure, please contact us at (212) 537-2352. We will provide you with a new Brochure as necessary based on changes or new information, at any time, without charge. The information in this Brochure has not been approved or verified by the United States Securities and Exchange Commission (the "SEC") or by any state securities authority.

MSIM is a registered investment adviser. Registration of an investment adviser does not imply any level or skill or training. The oral and written communications of an adviser provide you with information with which you can determine to hire or retain an adviser.

Additional information about MSIM is also available on the SEC's website at http://www.adviserinfo.sec.gov/

Item 2 Material Changes

This Brochure is dated March 27, 2024 and represents our annual updating Brochure. The following is a summary of material updates made to this Brochure since the annual amendment, dated March 31, 2023:

- Item 4 Advisory Business MSIM updated the description of the advisory services it provides.
- Item 5 Fees and Compensation MSIM updated the description of fees paid by clients.
- Item 8 Methods of Analysis, Investment Strategies and Summary of Risk MSIM updated investment strategy descriptions and risk factor disclosures.
- Item 10 Other Financial Industry Activities and Affiliations MSIM updated the description of its relationship with affiliates.
- Item 11 Code of Ethics, Participation or Interest in Client Transactions and Personal Trading MSIM updated information concerning its relationship with affiliates and how it addresses conflicts of interest.
- Item 12 Brokerage Practices MSIM updated the description of its brokerage practices.
- Item 17 Voting Client Securities MSIM updated the description of its equity proxy voting policies and procedures.
- Appendix A MSIM updated its fee schedules.

In addition to the material changes listed above, other enhancements have been made throughout this Brochure.

The following update was made at the time of filing an other-than-annual amendment to this Brochure, dated January 2, 2024:

Cover Page – MSIM's principal office address was updated.

The following updates were made at the time of filing an other-than-annual amendment to this Brochure, dated December 8, 2023:

• Item 12 – Disclosure regarding trade rotation was added and disclosure regarding trading for wrap fee accounts was updated.

The following updates were made at the time of filing an other-than-annual amendment to this Brochure, dated August 24, 2023:

- Item 8 was updated to reflect a change to the name and description of one of the Emerging Markets Equity strategies.
- Item 8 was updated to remove the Fixed Income Managed Solutions strategies.
- Item 8 was updated to reflect the name change from MSIM Managed Solutions Group to MSIM Global Model Solutions.
- Appendix A was updated to reflect the changes described above.

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Item 4 Advisory Business

Morgan Stanley Investment Management (MSIM) and its advisory affiliates represent the investment management division of Morgan Stanley, a publicly held company ("Morgan Stanley"). We are a wholly owned subsidiary of Morgan Stanley, a corporation whose shares are publicly held and traded on the New York Stock Exchange under the symbol "MS". Morgan Stanley is a leading global financial services firm providing investment banking, securities, wealth management and investment management services. With offices in more than 41 countries, the Firm's employees serve clients worldwide including corporations, governments, institutions, and individuals. MSIM is organized as a Delaware corporation and has been registered with the SEC since 1981.

Overview

For more than 40 years MSIM has provided client-centric investment and risk-management solutions to a wide range of investors and institutions. Our clients include corporations, pension plans, intermediaries, sovereign wealth funds, central banks, endowments and foundations, governments, consultant partners, and retail investors worldwide. Investment strategies span the risk/return spectrum across geographies, investment styles and asset classes, including equity, fixed income, alternatives and private markets.

More than 20 investment teams are organized under six capabilities: Solutions & Multi-Asset, Real Assets, Active Fundamental Equity, Private Credit & Equity, Fixed Income and Global Liquidity. MSIM offers its clients the intelligence and creativity of some of the brightest professionals in the industry, and access to the global resources of Morgan Stanley. The extensive range of MSIM's services and products reflects our continuous effort to provide products and services that help meet the needs of investors worldwide. Depending on the selected product or offering, our investment teams have the ability to customize solutions for clients, creating tailored approaches in the context of a full-service platform.

MSIM is dedicated to providing superior client service to investors worldwide. In addition to responding to client inquiries and providing timely portfolio analytics and commentary, we share knowledge with clients by organizing proprietary conferences and webcasts, and distributing a wide array of publications and thought leadership papers that highlight our firm's intellectual capital. We aim to empower our clients to make more informed investment decisions. The longevity of many of our client relationships testifies to our commitment to superior investment service and the productive partnerships we have cultivated throughout our history.

MSIM provides investment advisory services to investment companies registered pursuant to the Investment Company Act of 1940, as amended ("Investment Company Act"), private investment vehicles and offshore pooled vehicles sponsored by MSIM and its affiliates and provides sub-advisory services to registered investment companies and other pooled investment vehicles sponsored by unaffiliated parties who serve as the primary investment adviser (collectively, "Funds"). MSIM advises separately managed accounts for a wide range of institutional clients. In addition, MSIM provides investment advice to individual retail investors through various bundled "wrap fee" programs ("Wrap Fee Programs") and other platforms sponsored by certain broker-dealers and/or investment advisers, including affiliates of MSIM. We also advise clients on a discretionary and non-discretionary basis as to the appropriate allocation of assets among multiple separate accounts and/or investment companies or other pooled vehicles that we advise ("asset allocation advice"). As a diversified global financial services firm that engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, and other activities, you should be aware that there will be occasions when Morgan Stanley encounters potential and actual conflicts of interest in connection with its investment management services.

Separate Accounts

MSIM provides investment advisory services through separately managed accounts to a variety of institutional clients, including high net worth individuals, business organizations, public and private pensions, trusts, foundations, charitable organizations, hospitals, labor unions, religious organizations, endowment funds, insurance companies, educational institutions, sovereign wealth funds and other entities ("Institutional Accounts"). The advisory services for these accounts

are tailored to each client based on its individual investment objectives. Before establishing an Institutional Account, MSIM and the client discuss the available investment strategies and the client's investment objectives. Investment in certain securities or types of securities can be restricted at the request of the client. See Item 8 "Methods of Analysis, Investment Strategies and Risk of Loss" for descriptions of the strategies offered for Institutional Accounts.

Wrap Fee and Platform Programs

Our investment advisory services are available through various Wrap Fee Programs sponsored by certain broker-dealers and/or investment advisers ("Sponsor(s)"), including affiliates of MSIM, to individual investors, including high net worth and other retail investors. As used herein, the term Sponsor includes overlay managers to the extent a Wrap Fee Program utilizes an overlay manager.

Clients that participate in these Wrap Fee Programs enter into a single agreement with the applicable Sponsor for our advisory services, as well as other bundled services. For a single "wrap" fee (which is paid to the Sponsor and the Sponsor then pays a portion to us) the Sponsors offer our investment advisory services to their separately managed account clients and are generally, depending on the program, primarily responsible for:

- i. Monitoring and evaluating our performance;
- ii. Executing client portfolio transactions typically without additional commission charge (except that the client will be charged an added commission charge if we use a broker other than the Sponsor to execute trades);
- iii. Providing custodial services for clients' assets;
- iv. Ensuring adherence to client guidelines, restrictions and/or client instructions; and/or
- v. Providing tax management services.

MSIM participates in certain Wrap Fee Programs pursuant to which we provide the Sponsors with a model portfolio that represents the securities we recommend in accordance with a particular investment strategy (the "Model Portfolio"). In most instances, we will communicate our recommendations comprising the Model Portfolio, and any changes thereto, to the Sponsors, who serve as investment advisers to the Wrap Fee Program clients and are responsible for implementation of any client-specific investment restrictions and for determining the suitability of our investment strategy for the client. In most instances, unless otherwise agreed, the Sponsor will exercise investment discretion with respect to securities that are purchased or sold for clients of such Model Portfolio Wrap Fee Programs and will be responsible for executing trades and seeking best execution for such Wrap Fee Program accounts.

In addition to offering our advisory services through Wrap Fee Programs in the manner described above, certain separately managed accounts are offered to retail investors through what's known as "dual contract arrangements" (a client will pay the Sponsor a fee and will pay us an advisory fee) in which a Sponsor and its client enter into an agreement with regard to the Sponsor's overall management of the client's assets pursuant to which the Sponsor identifies managers that offer particular strategies or products that the Sponsor believes are suitable for each client. Either the Sponsor or the client then selects the particular strategy or product and the applicable manager to manage portions of the client's portfolio.

In a "dual contract" arrangement, MSIM generally has separate agreements with the Sponsor and each applicable client, the latter of which outlines the scope and limitations of the advisory relationship between MSIM and the client. In such arrangements, the Sponsor, who itself has a client relationship with the client, and/or the client are generally responsible for determining whether a strategy offered by MSIM is suitable and appropriate for the client based on its investment objectives, risk tolerance and financial situation. Under these arrangements, the client can impose restrictions on investing in certain securities through the Sponsor or MSIM, if applicable.

For further discussion on the impacts of restrictions on trading, please refer to "Directed, Restricted or Constrained Brokerage Arrangements; Wrap Fee Programs" in Item 12 "Brokerage Practices."

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Fund of Funds and Portfolio Solutions

Our fund of funds advisory and portfolio solutions business focuses on the discretionary and, in certain instances, non-discretionary investment management of accounts across four strategies: (1) hedge funds; (2) private markets ("Private Markets"); (3) risk premia; and (4) portfolio solutions ("Portfolio Solutions").

Our fund of funds advisory business consists primarily of identifying investment opportunities and making investments in diversified portfolios of traditional and non-traditional investment funds. Advisory services of this nature are provided to funds and separate accounts on a discretionary and nondiscretionary basis. The underlying funds or accounts in which we invest are referred to throughout as the "Underlying Investment Funds" and the third-party investment managers who manage the Underlying Investment Funds are referred to as the "Underlying Investment Managers".

Depending on the investment strategy selected, certain clients invest in Underlying Investment Funds managed by an Affiliated Adviser (as defined in Item 10) that invest in a broad set of Risk Premia investments, currently expected under normal market conditions to constitute a diverse set of different strategies or factors, including, without limitation, value, carry, curve, trend/momentum, mean reversion, volatility, congestion opportunistic, hedge and other similar strategies, as well as equity specific low-beta, size, value, quality and momentum strategies. The Affiliated Adviser intends to implement the Risk Premia strategy primarily through total return swaps and intends to gain such exposure through multiple counterparties. In addition, Risk Premia investments, in certain instances, include futures, listed options and common stocks.

The Portfolio Solutions business implements discretionary investment advice by integrating traditional and non-traditional investments through a single portfolio construction, philosophy and approach.

Further Information

For additional information regarding the specific investment strategies we employ please refer to Item 8, "Methods of Analysis, Investment Strategies and Risk of Loss."

Assets Under Management

As of December 31, 2023, we managed approximately \$528,431,469,613 on a discretionary basis and \$6,600,362,940 on a non-discretionary basis, totaling \$535,031,832,553 of assets under management or supervision.

Item 5 Fees and Compensation

Management Fees

Our fees and minimum initial investments for a client could vary from the applicable schedules, attached as Appendix A, due to the particular circumstances of the client or as otherwise negotiated with particular clients, including clients in certain funds and pooled investment vehicles. In certain instances, we provide investment advisory or research services to clients for negotiated fixed fees based on the value of the services rendered and, from time to time, receive performance-based fees from clients in accordance with the particular client's agreement, except in those jurisdictions that do not allow fees based on performance. Depending upon the account's investment objectives, strategies and restrictions, holdings in a client's account could include real estate investment trusts ("REITS"), investment companies (including exchange traded funds or "ETFs"), collateralized loan obligations ("CLOs") and other pooled vehicles for which a separate management fee is charged, including investment companies and other pooled vehicles advised by us or a related person.

Fees are generally billed quarterly in arrears based on current or quarter-average market values. Certain accounts, however, are billed quarterly in advance. The timing of fee payments and method of calculation for particular clients can vary in accordance with client preferences. Typically, our services are terminable by either party upon written notification in accordance with the applicable contractual notice provision. Upon termination the fees described above (including performance fees, if any) generally will be prorated to take account of contributions and withdrawals during a quarter and where MSIM does not manage the account for the entire calendar quarter.

The fees described herein are only the advisory fees charged by us and do not reflect custodial or other fees that could be applicable to your account. Further discussion of such expenses appears below under "Other Expenses Charged to Clients/Fee Discounts".

Separately Managed Accounts

The fees we charge for separate account management services vary based on the particular circumstances of the client or as otherwise negotiated. Our services are terminable by either party in accordance with the applicable contractual notice provision. Generally, fees on separately managed accounts ("SMA") are billed quarterly in arrears, however, in some cases they are billed quarterly in advance. The timing of fee payments will vary in accordance with clients' preferences. In addition to being subject to the fees we charge, the portion of each client account that is invested in a fund will also bear a proportionate share of the advisory fees and other expenses of the fund; however, such fees and expenses can be waived and/or rebated at our discretion. In the case of certain SMAs, additional fees are charged by us for additional reporting or consulting services requested by the client. In certain circumstances, SMAs are invested in products sponsored or advised by our affiliates that carry product-level management fees and other expenses.

Wrap Fee Programs

The fees described herein do not include information about fees for advisory services we provide through Wrap Fee Programs, and we would direct the client to the documents specific to their Wrap Fee Program. The terms of each client's separately managed account in a Wrap Fee Program are governed by the client's agreement with the Sponsor and disclosure document for each Wrap Fee Program. Wrap Fee Program clients are urged to refer to the appropriate disclosure document and client agreement for more information about the Wrap Fee Program and advisory services. Similarly, dual-contract clients should refer to their agreement with their program Sponsor, as applicable, the disclosure document for the applicable program, and the client's agreement with us, which will vary depending on the strategy selected. The fees for a Wrap Fee Program can result in higher costs than a client would otherwise realize by paying standard fees and negotiating separate arrangements for trade execution, custodial and consulting services. Our advisory services are offered through Wrap Fee Programs that are sponsored by MSIM affiliates, as well as through unaffiliated Wrap Fee Programs. MSIM and its affiliates will generally earn more compensation for advisory services

offered through an affiliated Wrap Fee Program than offering the same services through a Wrap Fee Program with an unaffiliated Sponsor.

Item 12, "Brokerage Practices", further describes the factors that we consider in selecting or recommending broker-dealers for client transactions and determining the reasonableness of their compensation.

Asset Allocation

MSIM provides asset allocation advice for fees that are negotiated and vary depending on your particular circumstances. The fee we charge for asset allocation advice is in addition to the fees we and our affiliates receive as adviser and/or administrator to certain open and closed end registered funds (the "Morgan Stanley Funds") and other pooled vehicles in which we could invest your portfolio's assets. Clients receiving asset allocation services should refer to their advisory agreement for more information regarding their specific arrangement.

Except as agreed, we generally do not charge advisory fees on separately managed client assets that are invested in the Morgan Stanley Funds in addition to the advisory fees that we charge to such Morgan Stanley Funds. Generally, fees billed to a separately managed account client under the client's investment management contract will be reduced by the amount of any investment advisory fees (but not other fund level fees) that we receive from the Morgan Stanley Funds as a result of the client's investment in the Morgan Stanley Funds. However, in certain instances and/or in connection with investments by you in certain portfolios, assets invested in such portfolios will be excluded from your total assets for purposes of calculating your separate account fee. In those instances, you will pay the advisory fee payable by the applicable Morgan Stanley Fund portfolio, which could be higher than the fee generally payable under your investment management contract. In certain instances, we include the value of closed-end funds we manage, for purposes of determining the investment management fee payable to us.

In certain instances, we can choose to waive, reimburse or rebate all or a portion of certain fund level fees or expenses, including advisory fees or operating expenses, to eligible separately managed account clients or Wrap Fee Program clients, that have invested in a Morgan Stanley Fund as part of a contractual arrangement with us or our affiliates, such as an investment management agreement or a Wrap Fee Program arrangement, to the extent that we or the Sponsor determines, in its discretion, that it is appropriate to allocate separately managed client assets or Wrap Fee Program's client's assets to a designated share class of a Morgan Stanley Fund and waiver, reimbursement or rebate of such fund-level fees is permissible with respect to investment in such Morgan Stanley Fund. In such instances, fees and expenses attributable to a client's separately managed account assets or Wrap Fee Program account assets would still be assessed.

Hedge Funds and Opportunistic Investments

For advisory services rendered to the funds pursuing a hedge fund or opportunistic investment strategy, we generally are entitled to a management fee in an amount (on an annualized basis) of up to (i) 1.25% of the net asset value of the applicable fund or SMA, or (ii) 1.25% of the aggregate capital commitment to the applicable fund or SMA. In the case of certain funds, the fees we charge could decrease over time upon the occurrence of certain events, as described in the governing documents of such funds or SMAs. In some cases, we or our affiliates are also entitled to and receive performance-based fees or allocations which, depending on the particular arrangement, can be up to 10% of the investor's net profits, and might be subject to a minimum hurdle rate and/or high water mark. In addition, for certain funds managed by us or an affiliate, we are generally entitled to carried interest with respect to each investor equal to 10% of such investor's profits, subject to satisfaction of an 8% internal rate of return, compounded annually.

Funds pursuing a hedge fund or opportunistic investment strategy generally book fees (and as applicable, incentive allocation estimates) on a monthly basis or quarterly basis. Clients or investors should refer to the governing documents for the applicable fund or the investment advisory agreement governing their SMA relationship, for additional information regarding services and fees associated with the fund or SMA.

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Private Markets

For investment advisory services rendered to the funds pursuing a Private Markets investment strategy, we are generally entitled to a management fee in an amount (on an annualized basis) of up to 1.75% of either (i) the investor's aggregate capital commitments to a fund, (ii) the investor's attributable share of the aggregate capital commitments made by the fund to its Underlying Investment Funds (based on the acquisition costs of such investments), (iii) the investor's attributable share of the aggregate capital contributions made by the fund to its Underlying Investment Funds (excluding amounts constituting a return of a capital contribution by such underlying investments) or (iv) on the investor's aggregate contributions with respect to Underlying Investment Funds plus the investor's attributable share of the aggregate unfunded capital commitments made by the applicable fund to its Underlying Investment Funds. In the case of certain funds, the fees charged by us could decrease over time upon the occurrence of certain events, as described in the governing documents of such funds.

For funds that pursue a Private Markets strategy, the management fee will be charged in addition to an investor's capital commitment. In most cases, an Affiliated Adviser is also entitled to receive performance-based fees, which vary.

MSIM or its affiliates are generally entitled to carried interest with respect to each investor generally ranging from 5% - 20% of such investor's profits, subject to satisfaction of an internal rate of return ranging from 6% - 10%, compounded annually.

Funds pursuing a Private Markets investment strategy generally book fees on a quarterly basis and some of the funds are required to pay the management fee quarterly in advance. We do not provide refunds for such fees paid in advance.

Clients or investors should refer to the governing documents for the applicable fund for additional information regarding services and fees associated with the fund.

Risk Premia

For advisory services rendered to clients pursuing risk premia strategies, an Affiliated Adviser is generally entitled to a management fee in an amount (on an annualized basis) of up to 1.00% of the net asset value of the applicable Fund or SMA. In the case of certain SMAs, additional fees are charged for additional reporting or consulting services requested by the Client. Fees from clients pursuing a risk premia investment strategy generally book on a monthly or quarterly basis.

Other Expenses Charged to Clients/Fee Discounts

MSIM's fees are exclusive of brokerage commissions, transaction fees, and other related costs and expenses. Such expenses will be assessed to the client. Clients are responsible for certain charges imposed by custodians, broker-dealers and other third parties, including but not limited to: fees charged by third-party managers, custodial fees, deferred sales charges, odd-lot differentials, transfer taxes, withholding fees, country tax or delivery fees, wire transfer and electronic funds fees, and other fees and taxes on brokerage accounts and securities transactions. Certain MSIM investment strategies invest in mutual funds, closed-end funds, exchange-traded notes and ETFs which charge shareholders with management fees. These fees are disclosed in the fund's or ETF's prospectus or offering memorandum. For more information about MSIM's brokerage practices, please refer to Item 12 Brokerage Practices.

Fees and expenses investors in Funds should expect to incur include, but are not limited to, management fees, operating expenses and performance-based incentive fees or allocation of expenses of Underlying Investment Funds. Operating expenses typically consist of administration fees, professional fees (i.e., audit and legal fees), and other operating expenses. With respect to Funds that pursue a private markets fund of funds strategy, the management fee will be in addition to an investor's capital commitment. Expenses vary depending on the particular Fund. Accordingly, Fund investors should refer to each particular Fund's governing documents for a detailed discussion of the expenses the Fund and its investors will or could bear.

Depending upon the terms of particular arrangements with clients, we could select or recommend that certain service providers (including accountants, administrators, lenders, bankers, brokers, agents, attorneys, consultants, and

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investment or commercial banking firms) and/or their affiliates perform services for clients, the cost of which generally will be borne by the advisory client. These service providers, in some cases, also provide goods or services to or have business, personal, political, financial or other relationships with us or our affiliates. Such service providers could be investors in a Fund, our affiliates, sources of investment opportunities or co-investors. These other services and relationships have the potential to influence us in deciding whether to select or recommend such a service provider to perform services for clients. Notwithstanding the foregoing, if we have discretion when making investment transactions on behalf of clients that require the use of a broker-dealer, we have a duty to seek "best execution" (i.e., the most favorable overall price and execution) and select broker-dealers for the execution of transactions accordingly as detailed in "Best Execution and Brokerage Selection Factors" section of Item 12 "Brokerage Practices". In certain circumstances, service providers, or their affiliates charge different rates or have different arrangements for services provided to Morgan Stanley, us or our affiliates as compared to services provided to the clients, which, from time to time, result in more favorable rates or arrangements for Morgan Stanley or our affiliates than those payable by our clients. From time to time, we will be required to decide whether and to what extent costs and expenses are borne by a client, us, allocated among more than one client, or allocated among one or more clients and us. When expenses apply to more than one client, we will exercise our reasonable judgment when making allocation determinations.

Clients and investors in Funds advised by us are generally required to bear out-of-pocket costs and expenses incurred in connection with deals that are not ultimately completed. Typically, these expenses include (i) legal, accounting, advisory, consulting or other third-party expenses in connection with making an investment that is not ultimately consummated, (ii) all fees (including commitment fees), costs and expenses of lenders, investment banks and other financing sources in connection with arranging financing for a proposed investment that is not ultimately made, and (iii) any break-up fees, deposits or down payments of cash or other property which are forfeited in connection with a proposed investment that is not ultimately made (in each case, to the extent such investment is not ultimately made by another advisory client).

Subject to applicable law and the relevant governing documents, we enter into arrangements with certain investors that have the effect of altering or supplementing the terms of such investors' investments in a Fund, including with respect to waivers or reductions of the management fee. Except as otherwise agreed, or as required by law, we are not obligated to inform other investors of the terms of any particular arrangement or to offer another investor equally favorable terms. In particular, when we negotiate, rebate or waive fees for one investor, we are not required to inform, or offer similar terms to, other investors, except as agreed with such other investors or as required by applicable law.

The fees and expenses borne by clients and investors will generally reduce returns.

Item 6 Performance-Based Fees and Side-by-Side Management

In some cases, we have entered into performance fee arrangements with qualified clients. Such fees are subject to individualized negotiation with each such client.

Because portfolio managers often manage assets for other investment companies, pooled investment vehicles and/or other accounts (including accounts of institutional clients and pension plans) with different fee schedules, the portfolio manager has an incentive to favor higher paying clients or accounts where we or an affiliate receive a performance-based fee over other accounts. In addition, a conflict exists in situations where we have proprietary investments in certain accounts, where portfolio managers have personal investments in certain accounts or when certain accounts are investment options in our employee benefits and/or deferred compensation plans. Although this does not impact individual compensation, in such instances, the portfolio manager has an incentive to favor these accounts over others. A conflict of interest also exists with regard to the allocation of investment opportunities across accounts that pay performance-based fees as opposed to accounts that do not pay performance-based fees.

If, within the same investment team, we manage accounts that establish short exposure to a security, as well as accounts that maintain long exposure to the same security, and the short exposure causes the market value of the security to fall, we could be seen as benefitting the accounts with short exposure at the expense of harming the performance of other accounts that maintain long exposure in the security. The same conflict also exists at the asset class level.

To address these types of conflicts, we have adopted policies and procedures reasonably designed to assure that allocation decisions are not influenced by fee arrangements and investment opportunities will be allocated in a manner that we believe to be consistent with our obligations as an investment adviser. To further manage these types of conflicts, we have implemented Side-by-Side Management guidelines, which are designed to set out specific requirements regarding the side-by-side management of traditional investment portfolios (e.g., long-only portfolios) and alternative investment portfolios (e.g., hedge fund portfolios) in order to manage conflicts of interest, including without limitation, those conflicts associated with: any differences in fee structures; investments in the alternative investment portfolios by MSIM or its employees; and trading-related conflicts (including conflicts of interest that could also be raised when MSIM investment teams take conflicting (i.e., opposite direction) positions in the same or related securities for different accounts). In addition, we have established a Side-by-Side Management Subcommittee to help ensure that such conflicts are reviewed and managed appropriately. The Side-by-Side Management Subcommittee meets on a regular basis and is comprised of representatives from business areas and control functions. The responsibilities and duties of the Side-by-Side Management Subcommittee include, among other things, establishing and reviewing appropriate reporting to monitor and review investment and related activities.

For more information about how MSIM addresses certain conflicts of interest, please refer to Item 11 "Code of Ethics, Participation or Interest in Client Transactions and Personal Trading." For additional information on portfolio transactions and trade allocation, please refer to Item 12 "Brokerage Practices".

Item 7 Types of Clients

MSIM provides advice to: corporate entities, corporate pension and profit-sharing plans; individual investors (including high net worth and other retail investors); intermediaries; insurance companies; state, local and foreign government entities and pension plans (including foreign pension funds); central banks; sovereign wealth funds; supra-national organizations; educational institutions; endowments, foundations, charitable institutions; consultant partners; funds of one; and registered mutual funds, unregistered funds, collective investment trusts, closed-end funds and foreign regulated funds such as SICAVs and SIFs. Certain advisory accounts and funds impose minimum investment requirements, which are generally described in the relevant governing or disclosure documents or, with respect to advisory accounts, in Appendix A. We (or with respect to funds, the general partner or managing member) generally will have discretion to waive or reduce such minimums for certain clients or investors. We generally will not, unless required by agreement with a client or investor or by applicable law, disclose any particular waiver or reduction that is offered to a client or investor, or offer comparable waivers or reductions, to other clients or investors.

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

MSIM offers a variety of investment strategies to address the particular investment objectives of its clients. In pursuing these strategies, MSIM invests in a wide range of financial instruments and asset classes. The different investment strategies offered by MSIM are described below along with the material risks associated with different investment approaches. The lines between different strategies are not always distinct; a particular investment strategy could involve some of the investment approaches or exhibit some of the risks associated with other strategies. In addition, certain investment strategies involve a combination of multiple other strategies. MSIM recognizes that no single investment strategy will ensure rewarding investment results in every political, economic and market environment. Investing in securities and other financial instruments involves a risk of loss (which can be substantial) that clients should be prepared to bear.

The investment approaches and material risks described below are not comprehensive. A particular investment strategy can involve additional investment selection criteria and be subject to additional risks not described below. The principal investment strategies and associated risks for the Funds are disclosed in the offering documents for such Funds. The investment strategies and associated risks for Wrap Fee Programs are described in the offering materials provided by the wrap fee program sponsor. Institutional Account clients should contact their MSIM account manager for additional information about the specific investment strategies they have selected and the risks associated with those strategies.

MSIM engages in the following significant Equity Investment Strategies:

Emerging Markets Equity

The Global Emerging Markets Equity Strategy is a core strategy with a growth bias that seeks attractive long-term, risk-adjusted returns by investing in emerging market equities. To achieve its objective, the strategy combines top-down country allocation with bottom-up stock selection and disciplined risk management. The strategy exists on a global basis as well as within regional and country specific emerging markets.

The *Emerging Markets Leaders Strategy* is a benchmark agnostic concentrated strategy of 25-40 stocks that seeks to invest in companies operating in emerging markets with superior business fundamentals, quality management, strong brands and the ability to deliver consistent earnings growth and increasing and consistent returns on invested capital. The team looks to diversify risk with balanced country and thematic exposures.

The *China A-Shares Equity Strategy* is a concentrated strategy focusing on long-term fundamental investment ideas. It seeks to invest in high-quality growth compounders at attractive valuations. We look to derive strong long-term returns from companies that benefit from structural growth, competitive industry advantage and financial strength. The strategy has strong bottom-up stock selection focus with deep-dive qualitative assessment and rigorous financial analysis.

The Sustainable Global Emerging Markets Strategy seeks to invest in equity securities located in emerging market countries while integrating the consideration of ESG (environmental, social and governance) and sustainable themes in its investment decision making. Sustainability themes include, but are not limited to, climate change, natural capital, sustainable economic growth, human capital, access and affordability, and innovation/infrastructure. The strategy has a focus on companies that the team believes will remain proactive and resilient and will continue to generate sustainable earnings growth in the face of critical environmental and social challenges globally.

The Passport Overseas Equity Strategy actively selects among developed and emerging countries applying its investment process to determine a country's future economic growth and equity return potential. This approach combines a top-down country process with sector allocation and bottom-up stock selection. The team analyzes the global economic environment and each country's fundamentals and actively allocate assets among countries and sectors located throughout the world (the investment universe is developed markets, including the United States, and emerging markets, including frontier markets). Investment decisions can be implemented through sector, industry and stock-specific allocations within and across markets that best capture the top-down view. Country and sector weightings are based on relative economic, political and social fundamentals, stock valuations and investor sentiment and are a function of

the Adviser's conviction levels, the size of the economy and liquidity. The investment process considers analysis of sustainability with respect to financial strength, environmental and social factors and governance (also referred to as ESG). Investments are based on fundamental analysis in an effort to identify those equities that stand to benefit most from the team's current and prospective macro views and that are likely to experience attractive earnings growth prospects as a result of exposure and gearing to those top-down conditions. Investment decisions are implemented by equity positions in sectors, industries, customized baskets and/or individual stocks.

Counterpoint Global

The Advantage Strategy seeks long-term capital appreciation. To achieve its objective, the investment team emphasizes a bottom-up stock selection process, seeking attractive investments on an individual company basis. In selecting securities for investment, the investment team typically invests in companies it believes have strong name recognition and sustainable competitive advantages with above average business visibility, the ability to deploy capital at high rates of return, strong balance sheets and an attractive risk/reward profile.

The *Growth Strategy* seeks long-term capital appreciation. To achieve its objective, the investment team seeks attractive investments on an individual company basis. In selecting securities for investment, the investment team typically invests in unique companies it believes have sustainable competitive advantages with above average business visibility, the ability to deploy capital at high rates of return, strong balance sheets and an attractive risk/reward profile. The strategy exists across market capitalizations (e.g., Inception, Discovery, Insight, Global Insight and Growth).

The *Permanence Strategy* seeks long-term capital appreciation. To achieve its objective, the investment team emphasizes a bottom-up stock selection process, seeking attractive investments on an individual company basis. In selecting securities for investment, the investment team typically invests in companies it believes have strong name recognition and sustainable competitive advantages with above average business visibility, the ability to deploy capital at high rates of return, strong balance sheets and an attractive risk/reward. The strategy will make long-term investments in companies that the investment team believes have the most durable long-term competitive advantages. The strategy could also invest in more moderate growth companies, companies with lower earnings volatility and/or companies with some cyclicality in their end markets. This strategy exists on a U.S. and global basis (e.g., Permanence and Global Permanence).

The Global Endurance Strategy seeks long-term capital appreciation. To achieve its objective, the investment team emphasizes a bottom-up stock selection process, seeking attractive investments on an individual company basis. In selecting securities for investment, the investment team typically invests in companies it believes have durable competitive advantages, long-term growth opportunities, valuable business models and strong management teams and an attractive risk/reward profile.

The *Tailwinds Strategy* seeks long-term growth. To achieve its objective, the investment team emphasizes a bottom-up stock selection process seeking attractive investments on an individual company basis. In selecting securities for investment, the investment team typically invests in companies it believes have competitive advantages and an attractive risk/reward profile. The strategy will make investments in companies it believes have business strategies that are aligned with environmental or social trends (Tailwinds) and could benefit from sustainability-related business activities in the form of enhanced growth rates, profitability, or competitive advantages.

The *Vitality Strategy* seeks long-term capital appreciation. To achieve its objective, the investment team seeks attractive investments on an individual company basis. In selecting securities for investment, the investment team typically invests in healthcare companies it believes are principally engaged in the discovery, development, production, or distribution of products or services related to advances in healthcare, and it believes have sustainable competitive advantages, strong research and development and productive new product flow, financial strength, and an attractive risk/reward profile.

The Counterpoint Ventures Strategy seeks to generate attractive risk-adjusted returns primarily through direct investments in equity (and other securities that are expected to have equity-like returns) of private companies that the investment team believes are high-quality, emerging-growth private companies likely to achieve a liquidity event, such as

an initial public offering or sale, within three to five years of investment. This strategy invests primarily in private companies based and operating in North America but can also invest outside of North America.

Global Opportunity

The Global Opportunity Team strategies seek long-term capital appreciation by investing in high quality companies that the investment team believes are undervalued at the time of purchase. To achieve its objective, the investment team seeks companies with sustainable competitive advantages that can be monetized through growth. The investment process integrates analysis of sustainability with respect to disruptive change, financial strength, environmental and social externalities and governance (also referred to as ESG). The strategies are available on a *Global*, *Regional* and *Customizable* basis.

International Equity

The *Global Franchise Strategy* is a concentrated portfolio of high quality, well managed companies at reasonable prices located throughout the world. Characterized by sustainable competitive advantages and powerful intangible assets, notable brands, networks, and licenses, these companies have high returns on operating capital which the team believes can be sustained for the long term. Utilizing fundamental analysis and bottom-up stock selection, the strategy seeks to generate attractive long-term performance with reduced downside participation in challenging markets. This strategy is also available excluding issuers which invest in, or derive income from, tobacco products.

The *Global Quality Strategy* is a relatively concentrated, portfolio of high quality, well managed companies at reasonable prices located throughout the world. Characterized by sustainable competitive advantages and powerful intangible assets, notably brands, networks and licenses, these companies have high returns on operating capital which the team believes can be sustained for the long term. Utilizing fundamental analysis and bottom-up stock selection, the strategy seeks to generate attractive long-term performance with reduced downside participation in challenging markets. This strategy is also available excluding issuers which invest in, or derive income from, tobacco products.

The *International Equity Strategy* invests primarily in equity securities domiciled outside of the U.S. The strategy invests in two types of stocks: reasonably priced high quality compounders, companies characterized by high returns on capital and strong free cash flow generation and value opportunities, companies with attractive valuations with reasonable and/or improving fundamentals; the mix of the two types of stocks varies over time based on company valuation and prospects. The International Equity Strategy seeks to provide attractive returns over the long term by providing reasonable absolute returns in rising markets while offering a measure of reduced downside participation in challenging markets. This strategy is also available with limited US exposure.

The *Global Sustain Strategy* is a high quality, ESG-integrated global equity portfolio that is strong on engagement, light on carbon and built on quality. The strategy invests in high-quality companies at reasonable valuations that can sustain their high returns on operating capital over the long term. The strategy typically invests in intrinsically carbon-light companies and has a significantly lower carbon footprint than the broader market, with a robust carbon-related exclusions policy and filtering process. It has a number of exclusions including fossil fuels, tobacco, alcohol and weapons. The investment team views long-term portfolio manager-led engagement as a critical underpinning to an active investment process. The strategy seeks to provide attractive long-term returns with less long-term volatility than the broader market.

The American Resilience Strategy is a concentrated portfolio of high quality, well managed, predominantly U.S. companies, at reasonable prices. Characterized by powerful intangible assets, notably brands, networks, licenses and patents, these companies have high returns on operating capital employed and strong free cash flow generation, which the team believes can be sustained over the long term. The strategy seeks to generate attractive long-term returns with reduced downside participation in challenging markets.

The *International Resilience Strategy* is a concentrated portfolio of high quality, well managed, predominantly non-U.S. companies, at reasonable prices. Characterized by sustainable competitive advantages and powerful

intangible assets, notably brands, networks and licenses, these companies have high returns on operating capital which the team believes can be sustained over the long term. The strategy seeks to generate attractive long-term returns with reduced downside participation in challenging markets.

Applied Equity Advisors

The Applied Equity Advisors team is an unconstrained, flexible global core equity manager seeking to drive excess returns, regardless of style or regional market leadership. The team believes that individual stock and overall portfolio performance can be maximized by using both: 1) Style Positioning and 2) Stock Selection Engines. Regarding the Style Positioning engine, they believe the best outcomes are derived from a combination of quantitative output and qualitative overlay to determine whether the timing is right to bias the portfolio toward or away from a particular style (value, growth, quality) for any given region. The Stock Selection Engine begins its work once the desired factor positioning is understood, first looking for the stocks that are most representative of the desired style biases, then performing comprehensive fundamental research including a sustainability analysis.

The Applied Equity Advisors team believes in alpha generation through a limited number of positions relative to its core benchmarks. The strategies exist on a *Global Concentrated*, *Global Concentrated ESG-Screened*, *Global Core* and *US Core* basis. The Global Concentrated ESG-Screened portfolio is a concentrated portfolio seeking to outperform the MSCI World benchmark, with a negative screen for certain sectors and increased focus on the sustainability analysis.

The Applied Equity Advisors team also manages *Enhanced Index strategies* that rely fully on the team's Style Positioning engine. The strategies seek to achieve performance of the benchmark net of fees. The strategies hold a representative basket of securities, closely aligned from a sector, style, and capitalization perspective with the underlying benchmark. The strategy exists on an Enhanced Index Russell 1000 basis.

Global Listed Real Assets

The Global Real Estate Securities Strategy seeks attractive long-term, risk-adjusted returns by utilizing internal proprietary research to invest primarily in public real estate companies that we believe offer the best value relative to their underlying assets and earnings. The strategy utilizes a bottom-up approach, valuing each security within the investment universe to arrive at an estimate of net asset value and forward cash flows. The team assesses real estate specific factors, broader equity factors, as well as environmental, social and governance ("ESG") factors in its fundamental analysis to calculate appropriate valuation metrics. The team incorporates top-down considerations into the portfolio construction process and seeks to achieve diversified exposure across regions, countries and/or sectors and integrate forecasted fundamental inflections, macroeconomic considerations, geopolitical and country risk assessments, among other factors. This strategy is available on a global, international and regional basis (e.g., U.S., North America, Europe, and Asia) and on a sustainable basis with an increased emphasis on ESG considerations integration and engagement.

The *Global Focus Real Estate Securities* strategy invests in a high-conviction, focused portfolio of primarily equity securities of companies in the global real estate industry that can offer the best expected total returns. The strategy implements a disciplined, bottom-up, fundamentally driven investment methodology and invests in companies which the team believes have the best forward total return potential based upon relative valuation. The team assesses real estate specific factors, broader equity factors, as well as ESG factors in its fundamental analysis to calculate appropriate valuation metrics. The team incorporates top-down considerations into the portfolio construction process and seeks to achieve exposure across regions, countries and/or sectors and integrate forecasted fundamental inflections, macroeconomic considerations, geopolitical and country risk assessments, among other factors. The team actively selects positions in a limited number of equity securities. The strategy is available on a global, international and regional basis (e.g., U.S., North America, Europe and Asia) and on a sustainable basis with an increased emphasis on ESG considerations, integration and engagement.

The Global Infrastructure Securities Strategy seeks attractive long-term, risk-adjusted returns by investing in publicly traded infrastructure securities that offer exposure to the direct infrastructure markets at the best value relative to underlying asset values and growth prospects worldwide. The investment team utilizes proprietary research to drive a

long-term, value-oriented, bottom-up driven investment process and also incorporates top-down analyses and ESG considerations.

The Energy Transition and Innovation Opportunities Strategy seeks attractive long-term, risk-adjusted returns by investing in publicly traded securities that offer exposure to energy transition and other innovation opportunities at the best value relative to underlying intrinsic value and growth prospects worldwide. The investment team utilizes proprietary research to drive a long-term, bottom-up oriented investment process and also incorporates top-down analyses, as well as a positive environmental impact.

Global Multi-Asset

The Absolute Return Strategy seeks to achieve absolute returns by investing in a blend of equity and fixed income securities of U.S. and non-U.S. issuers. It is a global macro strategy that seeks to identify and exploit inefficiencies between markets, regions and sectors to deliver returns in excess of a customized financial benchmark. In seeking to achieve this investment objective, the strategy utilizes a global tactical approach to achieving total return, and to control risk and volatility.

The Global Tactical Asset Allocation Strategy seeks to achieve total return by investing in a blend of equity and fixed income securities of U.S. and non-U.S. issuers. It is a global macro strategy that seeks to identify and exploit inefficiencies between markets, regions, and sectors to deliver returns in excess of a customized financial benchmark. In seeking to achieve this investment objective, the strategy utilizes a global tactical approach to achieving total return, and to control risk and volatility.

The *Dynamic Value Strategy* seeks capital appreciation by investing primarily in equity securities within the Russell 1000 Index universe. The strategy utilizes the Global Multi-Asset team's assessment of the macroeconomic environment to determine the attractiveness of Value stocks in both absolute and relative terms and constructs portfolio exposures based on multiple factors to identify the most attractively valued Value stocks and the least attractively valued Value stocks ("Anti-Value" stocks) within the Russell 1000 Index universe. Depending on the team's conviction level related to the attractiveness of Value stocks at any point in time, the strategy's exposures could range from long exposures to both Value and Anti-Value stocks (when conviction to Value stocks is low) to a fully invested long position in Value stocks with an additional relative position creating long exposure to Value and short exposure to Anti-Value (when conviction to Value stocks is at its highest).

We engage in the following significant Fixed Income Investment Strategies:

The Fixed Income Strategies combine a top-down assessment of the bond universe with rigorous bottom-up fundamental and/or quantitative analysis.

The process begins with a top-down value assessment of the bond universe, including a consideration of macroeconomic conditions, business cycles, and relative valuations. The team seeks first to identify areas where implied market forecasts are out of line relative to historic trends and second, to identify what the catalyst will be for the market to adjust, and for the sector to revalue. From these assessments, the team sets the broad overall investment direction. Portfolio managers subsequently work with our research analysts to implement these ideas across fixed income portfolios, in accordance with each portfolio's objectives and guidelines.

Macro Analysis - The team seeks to determine which themes are driving asset prices across rates, countries, and currencies and to evaluate the investment opportunity set based on a thematic investment thesis. The top-down process uses a combination of fundamental and quantitative analysis to identify and evaluate these investment opportunities.

Asset Allocation - The team identifies the key drivers of fixed income markets and determines the relative attractiveness of each sector of the fixed income market, together with interest rate and currency positions. The team seeks first to identify areas where implied market forecasts are out of line relative to historic trends and second, to identify the catalyst for the market to adjust. Internal debate is a key feature of the team's investment philosophy, ensuring investment ideas are tested thoroughly. The team debates relative value across sectors and recommends broad strategy. The team

believes this creates a balanced and complete approach, ensuring that all fixed income asset classes are evaluated. Crucially, the team examines correlations and risks across fixed income markets. Ultimately, the team aims to identify the investments with the best risk/reward profile to implement our investment themes.

Research - Research is conducted by dedicated teams specializing in a particular sector of the fixed income market. The research teams use in-depth fundamental analysis, complemented by quantitative tools, to generate bottom-up investment ideas and are responsible for security selection.

The teams' commitment to research is exemplified by the integration of the research and portfolio management teams, which ensures that the research findings are incorporated in portfolio management activities. The portfolio managers and research analysts interact daily through informal meetings and regularly scheduled formal meetings throughout the week. This provides a robust forum for debate, review and implementation of investment ideas. Research analysts provide support to the portfolio managers, as well as critical input to the investment decision- making process.

Portfolio Construction - Portfolio managers are responsible for implementing the investment strategies. They work to construct each portfolio in a way that conforms to individual client/strategy guidelines and objectives. The portfolio managers work with the research analysts to fill the sector buckets with bottom-up security selection ideas. This ensures that portfolios are both consistently benefiting from the team's best investment ideas and adhering to client guidelines and risk/return objectives.

Broad Markets Fixed Income

The Core/Core Plus Fixed Income Strategy seeks above-average total return over a market cycle of 3-5 years, using a disciplined, research-driven approach to identify attractive value and is index aware. Many mandates are customized to client's objectives. The portfolio team strives to balance these risks to shape the portfolio by monitoring interest rates, inflation, the shape of the yield curve, credit risk, prepayment risk, country risk and currency valuations. The strategy focuses on U.S. markets.

The European Fixed Income Opportunities Strategy seeks attractive total returns from income and price appreciation by investing in a globally diversified portfolio of government, corporation, and nongovernment debt denominated in euro and non-euro currencies. To achieve this objective, the strategy combines a top-down assessment of macroeconomic conditions and the corporate bond universe with rigorous bottom-up fundamental analysis.

The Global Aggregate Fixed Income Strategy seeks attractive total returns from income and price appreciation by investing in a globally diversified portfolio of multicurrency debt issued by government and non- government issuers. To help achieve this objective, the strategy combines a top-down macroeconomic assessment, with rigorous bottom-up fundamental analysis and active currency management (where appropriate).

The *Global Credit Strategy* seeks attractive total returns from income and price appreciation by investing in a globally diversified portfolio of multi-currency debt issued by corporations and nongovernment related issuers. To help achieve this objective, the strategy combines a top-down macroeconomic assessment to determine optimal beta positioning for the portfolio with rigorous bottom-up fundamental analysis.

The Global Fixed Income Opportunities Strategy seeks attractive total return in any marketcycle. The strategy maximizes the benefits of its global approach across all the sub-asset classes in Fixed Income to ensure "best ideas" are included. It focuses on absolute and risk-adjusted return over tracking error and benchmark, investing across currency, credit and interest rate markets. The strategy includes exposures to asset classes such as emerging markets, high yield, ABS/MBS, and convertibles.

The Global Limited Duration Strategy seeks to offer clients an attractive risk-adjusted return with low volatility. Many mandates are customized to client's specific objectives. The strategy focuses on global markets.

The Global Opportunistic Credit Strategy seeks attractive total returns from income and price appreciation by investing in a globally diversified portfolio of multicurrency debt issued by government issuers. To help achieve this objective, the

strategy combines a top-down macroeconomic assessment, with rigorous bottom-up fundamental analysis and active currency management (where appropriate). The strategy will invest opportunistic in non-government debt.

The *Global Sovereign Strategy* seeks attractive total returns from income and price appreciation by investing in a globally diversified portfolio of multicurrency debt issued by government issuers. To help achieve this objective, the strategy combines a top-down macroeconomic assessment, with rigorous bottom-up fundamental analysis and active currency management (where appropriate).

The Government Bond Strategy seeks to offer clients a high level of income through value-oriented investing in U.S. government securities.

The Strategic Income Strategy invests in fixed income securities across a spectrum of asset classes including, investment-grade, emerging markets, high yield, ABS/MBS, and convertibles. The Portfolio's unconstrained approach provides the flexibility to allocate across these fixed income sectors and seek the best ideas through bottom-up security selection globally. It focuses on absolute and risk-adjusted return over tracking error and benchmark, investing across currency, credit and interest rate markets. The aim is also to construct a portfolio with less sensitivity to interest rate movements and the potential to capture positive returns across varying interest rate environments.

The Sustainable Fixed Income Opportunities Strategy seeks to provide an attractive rate of return, measured in GBP, through an active, flexible approach to investing in global fixed income securities. The investment process of the Fund emphasizes ESG considerations and incorporates active engagement with company management regarding ESG related issues.

The *US Investment Grade Corporate Strategy* is a value-oriented fixed income strategy that seeks attractive total returns from income and price appreciation by investing in a diversified portfolio of predominantly investment grade debt issued by corporations and other non-government issuers. To help achieve this objective, the strategy combines a top-down macroeconomic assessment, to determine optimal beta positioning for the portfolio, with rigorous bottom-up fundamental analysis.

The *U.S. Long Duration Strategy* seeks above-average total return over a market cycle of 3-5 years, using a disciplined, research-driven approach to identify attractive value and is index aware. Mandates can be customized to client's specific objectives.

The *U.S. Short & Limited Duration Strategy* seeks to offer clients an attractive risk-adjusted return with low volatility. Many mandates are customized to client's specific objectives. The strategy focuses on U.S. markets.

Emerging Markets Debt

The *Emerging Markets Corporate Debt Strategy* is a value-oriented fixed income strategy that seeks to maximize total return from income and price appreciation by primarily investing across the credit spectrum in the debt securities of emerging market corporate issuers. Investments are mostly denominated in U.S. currency and include non-U.S. and/or local currencies. To achieve its objective, the team follows a disciplined investment process that combines top-down country allocation with bottom-up credit analysis to identify undervalued emerging market corporate debt securities. All investment recommendations undergo peer review, and final decisions with respect to portfolio construction and market-risk exposure are made on a team basis.

The Emerging Markets Debt Opportunities and Emerging Markets Fixed Income Opportunities Strategy seeks high total return from income and price appreciation by investing in a range of sovereign, quasi-sovereign and corporate debt securities in emerging markets, which can include U.S. dollar-denominated, local currency, and corporate debt securities. We believe that emerging markets experiencing positive fundamental change can present attractive investment opportunities for investors. To help achieve its objective, the strategy combines top-down country allocation with bottom-up security selection.

The *Emerging Markets Local Income Strategy* is a value-oriented fixed income strategy that seeks high total return from income and price appreciation by investing in a range of sovereign, quasi- sovereign and corporate debt securities in

emerging markets. Investments are mostly denominated in emerging market and/or non-U.S. currencies. We believe that emerging markets experiencing positive fundamental change can present attractive investment opportunities for investors. To help achieve its objective, the strategy combines top-down country allocation with bottom-up security selection.

High Yield

The *Global Convertible Bond Strategy* is an active, value-oriented strategy that seeks long-term capital appreciation, through investment primarily in convertible bonds issued by companies organized or operating in either the developed or emerging markets which will be denominated in global currencies. To help achieve this objective, the strategy uses a bottom-up, fundamental research approach, integrated with top-down macro analysis. Specific to convertible bond analysis, the strategy seeks to keep a neutral delta, typically in a range of 30-50 in normal market environments.

The Global High Yield Strategy is an active, value-oriented fixed income strategy that seeks to maximize total returns from income and price appreciation by investing in a globally diversified portfolio of debt issued by corporations and non-government issuers, predominantly with below investment grade credit ratings. To help achieve this objective, the strategy utilizes a bottom-up credit intensive approach that looks for relative value opportunities, integrated with top-down macro analysis.

The *U.S. High Yield Strategy* is an active, value-oriented fixed income strategy that seeks to maximize total returns from income and price appreciation by investing in a diversified portfolio of U.S. high yield debt issued by corporations and non-government issuers, predominantly with below investment grade credit ratings. To help achieve this objective, the strategy uses a bottom-up, credit-intensive approach that looks for relative value opportunities.

Mortgage and Securitized

The *U.S. Mortgage Securities Strategy* seeks to provide an attractive rate of return through investments in mortgage related securities. The strategy maintains an investment-grade average credit quality, and it primarily invests in residential mortgage-backed securities issued by government agencies, asset-backed securities, commercial mortgage-backed securities and residential mortgage-backed securities issued by private institutions.

Municipals

The *Taxable Municipal Strategy* is an actively managed, income-oriented approach which seeks to take advantage of relative value opportunities in the asset class. The Strategy maximizes its opportunity set by utilizing the entire taxable municipal universe and investing across the yield curve. To help achieve this objective, the strategy uses fundamental credit research to manage risk and capitalize on market inefficiencies, as well add adding value by maintaining a long-term perspective and utilizing our significant experience.

Liquidity Separate Account Strategy

The Liquidity Separate Account Strategy seeks preservation of capital, liquidity, and current income as its objective. The strategy invests in liquid, high quality U.S. dollar-denominated money market eligible instruments of U.S. and foreign corporations (both financial and nonfinancial) and obligations issued or guaranteed by the U.S. Government and its agencies and instrumentalities, foreign securities, asset-backed securities, repurchase agreements and local authority obligations. The investment team utilizes proprietary research to drive a value-oriented, fundamental investment process that combines bottom-up and top-down analysis.

Alternative Investment Strategy

The core of our investment approach is a research intensive strategy and manager selection process intended to exploit market inefficiencies and other situations outside the mainstream of conventional investing while minimizing risk. Investments managed on a discretionary basis are selected opportunistically and managed dynamically from the complete range of liquid and private market strategies appropriate for each account. The offering documents and/or governing documents and, in applicable cases, the client's investment management agreement provide a fuller description

of the types of Underlying Investment Funds in which we cause an account to invest. Our personnel use a wide range of resources to identify attractive Underlying Investment Funds and promising investment strategies for consideration in connection with investments by the accounts. Our main sources of information include contacts with industry executives, established business relationships, and research materials prepared by others.

Hedge Funds Strategy

Our hedge funds investment process consists of (i) investing in funds managed by Underlying Investment Managers who employ a variety of non-traditional liquid market investment strategies; and (ii) investing in certain investment funds managed in a traditional style.

These strategies allow Underlying Investment Managers the flexibility to use leverage or short- sale positions to take advantage of perceived inefficiencies across capital markets and are referred to as "alternative investment strategies". "Traditional" investment companies are characterized generally by long only investments and limits on the use of leverage. Underlying Investment Funds following alternative investment strategies (whether hedged or not) are often described as "hedge funds". We, from time to time, also seek to gain investment exposure, on behalf of an account, to certain Underlying Investment Funds or to adjust market or risk exposure by, among other things, entering into derivative transactions such as total return swaps, options and futures, and investments in the Risk Premia fund.

For certain funds that employ a hedge funds investment strategy we manage a portion of such fund's assets in overlay strategies related to portable alpha applications of its alternative investments. Portable alpha is the process whereby alpha (defined as the return in excess of the risk-free rate) is transported onto a traditional asset class return (such as equities or fixed income) to enhance the return of the monies allocated to the underlying asset class without necessitating an alteration in the investor's asset allocation. For example, we could enter into a total return swap (with an external counterparty) on behalf of the fund for the total return on the S&P 500 Index in exchange for payments of Libor + 50 basis points. The net return to the investor = (hedge funds return + S&P 500) - (Libor + 50 basis points).

In some situations, an Underlying Investment Manager will agree to accept direct investments from our clients or the clients of our affiliate into an Underlying Investment Fund. We provide investment recommendations and/or portfolio construction advisory services focusing on such Underlying Investment Funds in arrangements where the clients retain investment discretion. For these client-direct investments, we do not utilize leverage.

Opportunistic Investments

The hedge fund Opportunistic Investments strategy focuses the allocation of assets to investing in funds managed by Underlying Investment Managers who employ a variety of non-traditional investment strategies; (ii) direct co-investments, which are generally minority investments in operating companies, primarily alongside existing Underlying Investment Managers and (c) secondary market purchases of interests in Underlying Investment Funds or single companies. Furthermore, a client can invest in privately held companies or publicly traded companies in which, in some cases, the client invests alongside an Underlying Investment Fund that is typically an Underlying Investment Fund in which a client has also invested directly.

Risk Premia Strategy

Depending on the investment strategy selected, certain clients invest in Underlying Investment Funds managed by an Affiliated Adviser that invest in a broad set of Risk Premia Investments, currently expected under normal market conditions to constitute a diverse set of different strategies or factors, including, without limitation value, carry, curve, trend/momentum, mean reversion, volatility, congestion opportunistic, hedge and other similar strategies, as well as equity specific low-beta, size, value, quality and momentum strategies.

A risk budgeting layer is implemented to adjust the Risk Premia strategy's portfolio based on the Affiliated Adviser's fundamental understanding of the premia. The Affiliated Adviser intends to implement the Risk Premia strategy primarily through total return swaps, and intends to gain such exposure through multiple counterparties. It is expected that these

total return swaps will be based on custom risk premia indices, each with a published methodology containing the indexspecific rulebook regarding construction.

The Risk Premia strategy also, in certain instances, buys and sells futures, listed options and common stocks. The Affiliated Adviser will generally invest in Risk Premia Investments directly, but can also invest indirectly, through Underlying Investment Funds who invest in Risk Premia strategies.

Risk Premia Investments seek to generate returns through particular investments in the broader securities markets that are designed to give exposure to independent risk factors, such as price momentum, size risk, commodity carry risk, and currency carry risk. These strategies call for investments in securities possessing one or more attributes that have historically been associated with, or are otherwise believed to offer, attractive investor returns as a result of their exposure to a particular risk factor.

Private Markets

Our Private Markets strategies consist of the Private Markets Solutions business, which invests in: (i) primary commitments to Underlying Investment Funds; (ii) co-investments, and the Private Markets secondary business, primarily alongside our existing primary Underlying Investment Managers; and (iii) secondary market purchases of existing private markets Underlying Investment Funds and other private markets assets. Our Private Markets strategies, in some cases, make investments in other Underlying Investment Funds (both on a primary or secondary basis) or Co-Investments, such as illiquid private assets sourced from other alternative investment vehicles and/or publicly traded securities of private markets businesses or funds ("Other Investments").

The Private Markets investment process generally consists of making primary or secondary commitments to and coinvesting alongside private markets funds managed by Underlying Investment Funds who employ a variety of nontraditional private markets investment strategies, including buyouts, growth capital, venture capital, distressed companies, special situations, mezzanine, real assets, emerging markets and other categories. A client's investment strategy can focus on one of the aforementioned strategies or can include a mix of strategies. Certain clients can opt to include as a part of their investment strategy a focus on investments in Underlying Investment Funds or Co-investments that are expected to have positive social and/or environmental impact.

Portfolio Solutions Group

The Portfolio Solutions Group ("PSG") has developed proprietary approaches for measuring the risk and return of alternative investments and incorporating them within a broader portfolio. PSG designs and manages highly customized multi-asset investment portfolios and advises its clients on all aspects of portfolio construction, including: (i) analyzing manager performance (both hedge funds and traditional managers); and (ii) creating strategic portfolios that include equities, fixed income, alternative investments; and developing commitment strategies for private equity and real estate investments and portfolio transition plans.

PSG specializes in designing and managing multi-asset, multi-manager investment solutions within an open architecture framework. PSG custom product offerings span from broadly diversified (including traditional and alternative assets), multi-alternative to focused portfolios (e.g., privates-only portfolio, public/private credit portfolio). The multi-asset portfolios could include the following broad range of strategies: equities; fixed income; liquid alternatives; hedge funds; private credit; real assets; and private equity.

PSG has developed proprietary approaches to measure risk and return across asset classes that is fully integrated with the asset allocation framework to account for a portfolio's evolution over time. The end result is a portfolio that has been carefully tailored to the Clients' investment objectives and the investment team's outlook. PSG's investment process is comprised of three key components, each of which is expected to add value over the long-term: 1) Strategic Asset Allocation (SAA); 2) Manager/Investment Selection; and 3) Medium-Term Asset Allocation (MTAA). The SAA will form the anchor portfolio related to the IPS/Investment Guidelines and the MTAA provides the framework for tactical deviations from the SAA based on the investment outlook. PSG's approach to manager selection is fully integrated with asset allocation and is rooted in our open architecture philosophy. This affords PSG the ability to implement strategies in

an efficient manner through a wide range of vehicles, and an unconstrained approach to identifying and investing in managers that consistently generate attractive alpha.

PSG specializes in partnering with investors to understand their needs and craft solutions to help them achieve their overall investment objectives. As a fiduciary advisor, key responsibilities include, but are not limited to: design and review of the Investment Policy Statement (IPS); strategic asset allocation design; investment selection, due diligence and monitoring; portfolio implementation; dynamic portfolio management across asset classes; and customized reporting and client service.

PSG also offers liquid solutions to clients which include risk-targeting portfolios under the Global Balanced Risk Control ("GBaR") strategies. The GBaR strategies follow a top-down global asset allocation approach, investing in equities, fixed income, commodity-linked investments and cash, within a clearly defined, risk-controlled framework. They aim to provide capital growth over time, while actively managing total portfolio risk, which is defined in terms of volatility or value-at-risk (VaR). Customized strategies for the team are available across a range of risk targets, including the following:

Morgan Stanley Active Fixed Income - The investment objective of this portfolio is to generate an attractive level of total return over the medium to long-term by way of actively managed and diversified holdings that integrates asset allocation strategies across global capital markets and invest dynamically based on a predominately fixed income only allocation.

Morgan Stanley Conservative Flex - The investment objective of this portfolio is to generate an attractive level of total return over the medium to long-term by way of actively managed and diversified holdings that integrates asset allocation strategies across global capital markets and investing dynamically based on an ex-ante risk target of 4% as measured by the investment manager's methodology.

Morgan Stanley Moderate Flex - The investment objective of this portfolio is to generate an attractive level of total return over the medium to long-term by way of actively managed and diversified holdings that integrates asset allocation strategies across global capital markets and investing dynamically based on an ex-ante risk target of 7% as measured by the investment manager's methodology.

Morgan Stanley High Flex - The investment objective of this portfolio is to generate an attractive level of total return over the medium to long-term by way of actively managed and diversified holdings that integrates asset allocation strategies across global capital markets and investing dynamically based on an ex-ante risk target of 10% as measured by the investment manager's methodology.

Morgan Stanley Active Equity - The investment objective of this portfolio is to generate an attractive level of total return over the medium to long-term by way of actively managed and diversified holdings that integrates asset allocation strategies across global capital markets and investing dynamically based on a predominately equity only allocation.

MSIM Global Model Solutions - Defensive Core Equity Investment Solutions Suite

The MSIM MSG Defensive Core Equity strategies are comprised of multiple individual strategies including, without limitation, the *Defensive U.S. Large Cap Core Equity Strategy*; the *Defensive European Large Cap Core Equity Strategy*; the *Defensive All World Core Equity Strategy*, which are currently offered to retail and institutional investors through wrap fee sponsor platforms and direct separate managed account mandates.

The strategies are enhanced beta offerings designed to provide outcome-oriented solutions that seek to provide investors with core equity market exposure but in a more defensive way and with lower volatility than traditional equity investments across different major global equity indices. These strategies are meant to be used as a strategic allocation, seeking to complement diversification as an additional risk management tool for client portfolios. During muted and down markets, the strategies seek to outperform the associated underlying equity index by designing and implementing a portfolio with partial downside protection as well as amplified upside participation to a predefined level.

The portfolio management team will use both a qualitative and a systematic approach when constructing and maintaining the structured notes ladder for client accounts. For seasoned accounts, the maturity dates of the structured notes held

will be staggered such that approximately one structured note will mature each month with the anticipation that proceeds will be rolled into a new structured note, creating a diversified ladder of structured notes that lasts in perpetuity.

Clients investing in these strategies should understand that there will be periods of time, in particular, when initially investing the account, where the client's assets will not be fully invested and therefore, will have limited market exposure. Un-invested cash within the account could occasionally be invested in Exchange Traded Funds (ETFs). As with all managed investment strategies, transaction costs will be borne by the client at the account's net asset value. These costs, which are not reflected in the investment management fee, will affect the strategy's performance. These strategies offer daily liquidity on a best-efforts basis under normal market conditions.

MSIM Global Model Solutions - Access Zero Equity Investment Solutions Suite

The MSIM MSG Access Zero Equity strategies are comprised of multiple individual strategies including, without limitation, the Access Zero U.S. Large Cap Blend Equity Strategy; the Access Zero U.S. Large Cap Value Equity Strategy; and the Access Zero International Developed ADR Strategy.

The investment objective of the strategies is to deliver the broad risk and return characteristics of each strategy's respective benchmark index seeking to provide clients with access to cost-efficient domestic or international equity market beta exposure. The strategies are managed using a quantitative investment approach for security selection, which is further complimented by the analytical rigor and investment acumen of the MSIM MSG Access Zero Portfolio Management Team.

Clients investing in these strategies should understand that the strategies do not fully replicate associated benchmark indices and instead each hold a subset of stocks or ADRs from a broad universe of domestic or international equities. As such, there will be a continuous trade-off between the securities held in each investment strategy and the level of performance deviation vs. each strategy's associated benchmark index. To manage and quantify this trade-off from an ongoing model portfolio construction perspective, the team maintains a focus on active risk to continuously measure success in delivering on the stated investment objective of de-minimis deviation vs. the associated benchmark index over a strategic long-term investment horizon.

MSIM Global Model Solutions - Enhanced Yield Investment Solution

The primary investment objective of the MSIM MSG Enhanced Yield Sub-Advised strategy is to generate additional yield relative to comparable fixed income indices, while seeking to potentially limit the loss of capital primarily through investments in equity-linked structured notes.

The portfolio management team expects to maintain broad flexibility to pursue yield opportunities across structured note securities linked to major global equity markets and will employ both a qualitative and a systematic approach when constructing and managing the strategy. Under normal market conditions, the team will seek to strategically invest approximately all of the strategy's assets in a diversified set of structured notes. On a periodic basis, and as markets permit, the team expects to opportunistically rebalance the strategy, as appropriate, to maintain this strategic allocation to structured notes. During periods before or after such rebalancing, the strategy could deviate from its strategic allocation.

Sustainable Investing Strategies and ESG Integration

MSIM's investment teams incorporate the assessment of material ESG risks and opportunities into investment decision-making processes, as appropriate, and according to investment teams' particular investment strategies. Incorporation of such ESG risks and opportunities can occur at various stages of the investment lifecycle including due diligence and research, valuation, asset selection, portfolio construction, and ongoing engagement and investment monitoring. Certain investment teams deploy a variety of analytical and portfolio construction approaches that extend beyond ESG considerations, as appropriate. Those can include the use of exclusionary screens (e.g., "sin" stocks, fossil fuels) and inclusionary screens (e.g., minimum sustainability standards, intentional tilts toward sustainability factors,

and/or minority allocations to thematic labeled/certified securities), as well as pure-play impact investing strategies that seek to achieve measurable positive social and/or environmental objectives alongside market-rate financial return and strive for portfolio-wide transformational targets.

The specific approaches to incorporating ESG considerations vary considerably across the broad investment strategies summarized above and could also be different among products within any single strategy. The approach to ESG and sustainable investing depends on multiple factors including, but not limited to, the objectives of the product, asset class and investment time horizon, as well as the specific research and portfolio construction, philosophy and process used by that team. Some investment strategies do not incorporate ESG considerations where it is not currently feasible or appropriate to do so (e.g., passive investment strategies, certain asset allocation strategies, or where requested by clients). Clients and investors should consult their product description, offering documentation, investment guidelines or other product-specific information, or should otherwise confer with their contact at MSIM, in order to understand the specific nature of how ESG considerations are incorporated into each particular investment strategy that MSIM manages for them.

Risk Considerations

All investing and trading activities risk the loss of capital. Although we will attempt to moderate these risks, no assurance can be given that the investment activities of an account or fund we advise will achieve the investment objectives of such account or fund or avoid losses. Direct and indirect investing in securities involves risk of loss that you should be prepared to bear.

Set forth below are some of the material risk factors that are often associated with the types of investment strategies and techniques and types of securities relevant to many of our clients. The information included in this Brochure does not include every potential risk associated with an investment strategy, technique or type of security applicable to a particular client account. An account or fund could be exposed to one or many of the following risks directly or through an Underlying Investment Fund. Clients are urged to ask questions regarding risks applicable to a particular strategy or investment product, read all product-specific risk disclosures and consult with their own legal, tax and financial advisors to determine whether a particular investment strategy or type of security is suitable for their account in light of their specific circumstances, investment objectives and financial situation.

Risk Considerations Associated with Investing - In General. The following is a non-exhaustive description of risks associated with investments generally and/or could apply to one or more type of security or investment technique.

General Economic, Geopolitical, and Market Risks. The success of our investment strategies, processes, and methods of analysis, as well as any account's activities, can be affected by general economic, geopolitical, and market conditions, such as changes in interest rates, availability of credit, inflation rates, global demand for particular products or resources, natural disasters, supply chain disruptions, cybersecurity events, economic uncertainty, pandemics, epidemics, terrorism, social and political discord, war (including regional armed conflict), debt crises and downgrades, regulatory events, governmental or quasi-governmental actions, changes in laws, and national and international political circumstances.

These factors create uncertainty, and can ultimately result in, among other things: increased volatility in the financial markets for securities, derivatives, loans, credit and currency; a decrease in the reliability of market prices and difficulty in valuing assets, greater fluctuations in spreads on debt investments and currency exchange rates; increased risk of default (by both government and private obligors and issuers); further social, economic, and political instability; nationalization of private enterprise; greater governmental involvement in the economy or in social factors that impact the economy; changes to governmental regulation and supervision of the securities, loan, derivatives and currency markets and market participants, and decreased or revised monitoring of such markets by governments or self-regulatory organizations and reduced enforcement of regulations; limitations on the activities of investors in such markets; controls or restrictions on foreign investment, capital controls and limitations on repatriation of invested capital; the significant loss of liquidity and the inability to purchase, sell and otherwise fund investments or settle transactions (including, but not limited to, a market freeze); unavailability of currency hedging techniques; substantial, and in some periods extremely high, rates of

inflation, which can last many years and have substantial negative effects on credit and securities markets as well as the economy as a whole; recessions; and difficulties in obtaining and/or enforcing legal judgments. These conditions can adversely affect the level and volatility of prices and liquidity of an account's investments. Unexpected volatility or lack of liquidity, such as the general market conditions that have prevailed recently, could impair an account's profitability or result in losses.

Economies and financial markets worldwide are becoming increasingly interconnected, which increases the likelihood that events or conditions in one country or region will adversely impact markets or issuers in other countries or regions. The impacts of these events can be exacerbated by failures of governments and societies to respond adequately to an emerging event or threat. For example, local or regional armed conflicts have led to significant sanctions against certain countries and persons and companies connected with certain counties by the United States, Europe and other countries. Such armed conflicts and sanctions and other local or regional developments can exacerbate global supply and pricing issues, particularly those related to oil and gas, and result in other adverse developments and circumstances, as well as increased general uncertainty, for markets, economies, issuers, businesses and societies globally. Although these types of events have occurred and could also occur in the future, it is difficult to predict when similar events or conditions affecting the U.S. or global financial markets and economies might occur, the effects of such events or conditions, potential retaliations in response to sanctions or similar actions and the duration or ultimate impact of those events. Any such events or conditions could have a significant adverse impact on the value and risk profile of client portfolios and the liquidity of an account's investments, even for clients without direct exposure to the specific geographies, markets, countries or persons involved in an armed conflict or subject to sanctions.

Public Health Emergencies. Many countries have experienced outbreaks of infectious illnesses in recent
decades, including swine flu, avian influenza, SARS and the Coronavirus, and could experience similar
outbreaks in the future. For example, the Coronavirus outbreak has resulted in numerous deaths and the
imposition of both local and more widespread "work from home" and other quarantine measures, border closures
and other travel restrictions, causing social unrest and commercial disruption on a global scale and significant
volatility in financial markets.

The Coronavirus has had, and is expected to continue to have, a material adverse impact on local economies in the affected jurisdictions and also on the global economy, as cross border commercial activity and market sentiment are increasingly impacted by the Coronavirus and government and other measures seeking to contain its spread. The global impact of the Coronavirus has continued to evolve and has, at times, created disruption in supply chains, and adversely impacted a number of industries, including but not limited to retail, transportation, hospitality and entertainment. In addition to these developments having adverse consequences for certain companies and other issuers in which an a portfolio invests and the value of a portfolio's investments therein, the operations of MSIM (including those relating to a portfolio) could be impacted adversely, including through quarantine measures and travel restrictions imposed on MSIM or service providers' personnel located in affected countries, regions or local areas, or any related health issues of such personnel. Any of the foregoing events could materially and adversely affect MSIM's ability to source, manage and divest investments on behalf of a portfolio and pursue a portfolio's investment objectives and strategies. Similar consequences could arise with respect to other infectious diseases. Given the significant economic and financial market disruptions and general uncertainty associated with the Coronavirus pandemic, the valuation and performance of a portfolio's investments could be impacted adversely.

Volatility Risk. The prices of commodities contracts and all derivatives, including futures and options, can be
highly volatile. Accounts that trade in commodities contracts and derivatives are subject to the risk that trading
activity in such securities could be dramatically reduced or cease at any time, whether due to general market
turmoil, problems experienced by a single issuer or a market sector or other factors. If trading in particular
securities or classes of securities is impaired, it might be difficult for an account to properly value any of its assets
represented by such securities.

- Inadequate Return Risk. No assurance can be given that the returns will be commensurate with the risk of your investment. You should not commit money to an account unless you have the resources to sustain the loss of your entire investment. Any losses are borne solely by you and not by us or our affiliates.
- Inside Information Risk. From time to time, we could come into possession of material, non-public information ("MNPI") concerning an entity in which an account has invested or proposes to invest. Possession of that information could limit our ability to buy or sell securities of the entity on your behalf. For example, if we come into possession of information (i) that out of an abundance of caution, MSIM can restrict on the basis of nonpublic information without first determining that it is material, (ii) that certain types of MNPI might not become public, and could restrict trading for extended periods of time, and (iii) that MSIM seeks to establish information barriers among certain affiliates to mitigate this risk, but those barriers might be ineffective.
- Principal Investment Activities. Morgan Stanley generally invests directly in private equity and real estate
 private equity through other divisions. As a consequence, other than co-investments made by certain accounts
 alongside those private equity or private equity real estate fund managers into whose funds an investment team
 has invested on a primary basis, not every direct private equity or private equity real estate investment that
 meets an account's investment objectives could be made available to our accounts.
- Cyber Security-Related Risk. We are susceptible to cybersecurity-related risks that include, among other things, unauthorized access attacks; mishandling, loss, theft or misuse of information; computer viruses or malware; cyberattacks designed to obtain confidential information, destroy data, disrupt or degrade service, sabotage systems or networks or cause other damage; ransomware; denial of service attacks; data breaches; social engineering attacks; phishing attacks; and other events. A cyberattack, information or security breach or a technology failure of ours or a third party could adversely affect our ability to conduct our business or manage our exposure to risk, or result in disclosure or misuse of personal, confidential or proprietary information and otherwise adversely impact our results of operations, liquidity and financial condition, as well as cause reputational harm. In addition, cybersecurity risks can also impact issuers of securities in which we invest on behalf of our clients, which could cause our clients' investment in such issuers to lose value.

We are subject to cybersecurity legal and regulatory requirements enacted by U.S. federal and state governments and other non-U.S. jurisdictions. These requirements impose mandatory privacy and data protection obligations, including providing for individual rights, enhanced governance and accountability requirements, and significant fines and litigation risk for noncompliance. We have adopted measures designed to comply with these and related applicable requirements in all relevant jurisdictions.

We benefit from our affiliation with Morgan Stanley which has made and continues to make substantial investments in cybersecurity and fraud prevention technology. As part of its enterprise risk management framework, Morgan Stanley has implemented and maintains a program to assess, identify and manage risks arising from the cybersecurity threats confronting the Firm ("Cybersecurity Program"). The Cybersecurity Program helps protect our clients, customers, employees, property, products, services and reputation by seeking to preserve the confidentiality, integrity and availability of information, enable the secure delivery of financial services, and protect the business and the safe operation of our technology systems. Morgan Stanley continually adjusts the Cybersecurity Program to address the evolving cybersecurity threat landscape and comply with extensive legal and regulatory expectations.

There can be no assurance that our business contingency and security response plans fully mitigate all potential risks to us, and we or our service providers, if applicable, will not suffer losses relating to cyber-attacks or other information security breaches in the future.

• Business Continuity Risk. Our critical processes and businesses could be disrupted by events including cyber attacks, failure or loss of access to technology and/or associated data, military conflicts, acts of terror, natural disasters, severe weather events and infectious disease. We maintain a resilience program designed to provide for operational resilience and enable it to respond to and recover critical processes and supporting assets in the event of a disruption impacting our people, technology, facilities and third parties. The key elements of the resilience program include business continuity and technical recovery planning and testing both internally and

with critical third parties to validate recovery capability in accordance with business requirements. The resilience program is applied consistently firmwide and is aligned with regulatory requirements. In the occurrence of a business continuity event at MSIM or a vendor/service provider that does not adequately address all contingencies, client portfolios could be negatively affected as there might be an inability to process transactions, calculate net asset values, value client investments, or disruptions to trading in client accounts. A client's ability to recover any losses or expenses it incurs as a result of a disruption of business operations could be limited by the liability, standard of care, and related provisions in its contractual agreements with MSIM and other service providers.

Data Source Risk. MSIM subscribes to a variety of third-party data sources that are used to evaluate, analyze
and formulate investment decisions. If a third party provides inaccurate data, client accounts could be negatively
affected. While MSIM believes the third-party data sources are reliable, there are no guarantees that data will
be accurate, that errors will be detected, or that erroneous data will be timely updated.

Legal and Regulatory Risks

- U.S. and non-U.S. governmental agencies and other regulators regularly implement additional regulations and legislators pass new laws that affect the investments held by MSIM's clients, the strategies used by MSIM, or the level of regulation or taxation applying to a portfolio or client (such as regulations related to investments in derivatives and other transactions). These regulations and laws impact the investment strategies, performance costs, operations or taxation of MSIM and its clients.
- The regulation of the U.S. and non-U.S. securities and futures markets has undergone substantial change over the past decade and such change could continue. In particular, in light of market turmoil there have been numerous proposals, including bills that have been introduced in the U.S. Congress, for substantial revisions to the regulation of financial institutions generally. In addition, regulatory change in the past few years has significantly altered the regulation of commodity interests and comprehensively regulated the OTC derivatives markets for the first time in the United States. Further, the practice of short selling has been the subject of numerous temporary restrictions, and similar restrictions could be promulgated at any time. Such restrictions could adversely affect the returns of accounts that utilize short selling. The effect of such regulatory change on the accounts, while impossible to predict, could be substantial and adverse.
- Section 13 of the Bank Holding Company Act (commonly referred to as the "Volcker Rule"), along with
 regulations issued by the Federal Reserve, Office of the Comptroller of the Currency, Securities and Exchange
 Commission, Federal Deposit Insurance Corporation, and Commodity Futures Trading Commission
 ("Implementing Regulations") generally prohibit "banking entities" (which term includes bank holding companies
 and their affiliates and subsidiaries) from investing in, sponsoring, or having certain types of relationships with,
 certain private investment funds (referred to in the Implementing Regulations as "covered funds").

The Volcker Rule and the Implementing Regulations impose a number of restrictions on Morgan Stanley and its affiliates and subsidiaries that affect us, a covered fund offered by us, the general partner of those funds, and the limited partners of such funds. For example, to sponsor and invest in certain covered funds, Morgan Stanley must comply with the Implementing Regulations' "asset management" exemption to the Volcker Rule's prohibition on sponsoring and investing in covered funds. Under this exemption, the investments made by Morgan Stanley (aggregated with certain affiliate and employee investments) in a covered fund must not exceed 3% of the covered fund's outstanding ownership interests and Morgan Stanley's aggregate investment in covered funds must not exceed 3% of Morgan Stanley's Tier I capital. In addition, the Volcker Rule and the Implementing Regulations generally prohibit Morgan Stanley and its affiliates from entering in certain other transactions (including "covered transactions" as defined in Section 23A of the U.S. Federal Reserve Act, as amended) with or for the benefit of, covered funds that it sponsors and/or advises. For example, Morgan Stanley cannot provide loans, hedging transactions with extensions of credit or other credit support to covered funds it sponsors and/or advises. While we endeavor to minimize the impact on our covered funds and the assets held by them, Morgan Stanley's interests in determining what actions to take in complying with the Volcker Rule and the Implementing Regulations could conflict with our interests and the interests of the private funds, the general

- partner and the limited partners of the private funds, all of which could be adversely affected by such actions. The foregoing is not an exhaustive discussion of the potential risks the Volcker Rule poses for us.
- Referendum on the UK's EU Membership. In an advisory referendum held in June 2016, the United Kingdom ("UK") electorate voted to leave the EU, an event widely referred to as "Brexit". On January 31, 2020, the UK officially withdrew from the EU and the UK entered a transition period which ended on December 31, 2020. On December 30, 2020, the EU and UK signed the EU-UK Trade and Cooperation Agreement ("TCA"), an agreement on the terms governing certain aspects of the EU's and the UK's relationship following the end of the transition period. Notwithstanding the TCA, following the transition period, there is likely to be considerable uncertainty as to the UK's post-transition framework. The impact on the UK and the EU and the broader global economy is still unknown but could be significant and could result in increased volatility and illiquidity and potentially lower economic growth. Brexit could have a negative impact on the economy and currency of the UK and the EU as a result of anticipated, perceived or actual changes to the UK's economic and political relations with the EU. The impact of Brexit, and its ultimate implementation, on the economic, political and regulatory environment of the UK and the EU could have global ramifications. Accounts and pooled investment vehicles advised by MSIM could make investments in the UK, other EU members and in non- EU countries that are directly or indirectly affected by the exit of the UK from the EU. Adverse legal, regulatory or economic conditions affecting the economies of the countries in which an MSIM client conducts its business (including making investments) and any corresponding deterioration in global macro-economic conditions could have a material adverse effect on the MSIM client's prospects and/or returns. Potential consequences to which an MSIM client could be exposed, directly or indirectly, as a result of the UK referendum vote include, but are not limited to, market dislocations, economic and financial instability in the UK and in other EU members, increased volatility and reduced liquidity in financial markets, reduced availability of capital, an adverse effect on investor and market sentiment, Sterling and Euro destabilization, reduced deal flow in the MSIM client's target markets, increased counterparty risk and regulatory, legal and compliance uncertainties. Any of the foregoing or similar risks could have a material adverse effect on the operations, financial condition, investment returns, or prospects of the MSIM client, MSIM and/or sub-advisers, if any, in general. The effects on the UK, European and global economies of the exit of the UK (and/or other EU members during the term of the MSIM client) from the EU, or the exit of other EU members from the European monetary area and/or the redenomination of financial instruments from the Euro to a different currency, are difficult to predict and to protect fully against. Many of the foregoing risks are outside of the control of an MSIM client or MSIM. These risks could affect an MSIM client, MSIM and/or other sub-advisers given economic, political and regulatory uncertainty created by Brexit.
- In light of current market conditions, until recently interest rates and bond yields in the United States and many other countries were at or near historic lows, and in some cases, such rates and yields were negative. During periods of very low or negative interest rates, a client's susceptibility to interest rate risk (i.e., the risks associated with changes in interest rates) could be magnified, its yield and income could be diminished and its performance could be adversely affected (e.g., during periods of very low or negative interest rates, a client might be unable to maintain positive returns). These levels of interest rates (or negative interest rates) can magnify the risks associated with rising interest rates. Changing interest rates, including rates that fall below zero, can have unpredictable effects on markets, including market volatility and reduced liquidity, and could adversely affect a portfolio's yield, income and performance. In addition, government actions (such as changes to interest rates) could have unintended economic and market consequences that adversely affect a client's investments. Government and other public debt can be adversely affected by large and sudden changes in local and global economic conditions that result in increased debt levels. Although high levels of government and other public debt do not necessarily indicate or cause economic problems, high levels of debt could create certain systemic risks if sound debt management practices are not implemented. A high debt level could increase market pressures to meet an issuer's funding needs, which can increase borrowing costs and cause a government or public or municipal entity to issue additional debt, thereby increasing the risk of refinancing. A high debt level also raises concerns that the issuer could be unable or unwilling to repay the principal or interest on its debt, which can adversely impact instruments held by the clients that rely on such payments. Governmental and quasi-

governmental responses to certain economic or other conditions could lead to increasing government and other public debt, which heighten these risks. Unsustainable debt levels can lead to declines in the value of currency and can prevent a government from implementing effective counter-cyclical fiscal policy during economic downturns, can generate or contribute to an economic downturn or cause other adverse economic or market developments, such as increases in inflation or volatility. Increasing government and other public debt could adversely affect issuers, obligors, guarantors or instruments across a variety of asset classes.

• Recently proposed rules by the SEC related to private funds would, if adopted, impose significant additional burdens and requirements on private funds and their managers (including us, our private funds and any funds in which they invest and their managers). In particular, the SEC recently adopted the "Private Fund Adviser Rules" which, among other things, impose (i) significant disclosure and reporting obligations for registered investment advisers to private funds, as well as (ii) meaningful restrictions on certain activities of private fund advisers subject to consent-based and/or disclosure-based exceptions. Our compliance with the Private Fund Adviser Rules, in connection with the investment advisory services we provide to private funds, is likely to be complex and will entail various legal and compliance costs and expenses, which will be allocated to the funds. The SEC and other US regulators might adopt additional rules in the future that could have an impact on client portfolios.

Risk Considerations Associated with Equity Securities—In General. In general, prices of equity securities are more volatile than those of fixed income securities. The value of equity securities and related instruments can decline in response to adverse changes in the economy or the economic outlook; deterioration in investor sentiment; interest rate, currency, and commodity price fluctuations; adverse geopolitical, social or environmental developments; issuer and sector-specific considerations, which are more significant in a concentrated or focused client portfolio that invests in a limited number of securities; or other factors. Market conditions can affect certain types of stocks to a greater extent than other types of stocks. If the stock market declines in value, the value of a client portfolio's equity securities will also likely decline. Although prices can rebound, there is no assurance that values will return to previous levels.

Risk Considerations Associated with Fixed Income Securities-In General. Fixed income securities are subject to the risk of the issuer's inability to meet principal and interest payments on its obligations (i.e., credit risk) and are subject to price volatility resulting from, among other things, interest rate sensitivity (i.e., interest rate risk), market perception of the creditworthiness of the issuer and general market liquidity (i.e., market risk). A client could face heightened level of interest rate risk in times of monetary policy change and/or uncertainty, such as when the Federal Reserve Board adjusts its quantitative easing program and/or changes rates. A changing interest rate environment increases certain risks, including the potential for periods of volatility, increased redemptions, shortened durations (i.e., prepayment risk) and extended durations (i.e., extension risk). Clients might or might not be limited as to the maturities (when a debt security provides its final payment) or durations (measure of interest rate sensitivity) of the securities in which they invest. Securities with longer durations are likely to be more sensitive to changes in interest rates, generally making them more volatile than securities with shorter durations. Lower-rated fixed income securities have greater volatility because there is less certainty that principal and interest payments will be made as scheduled. In addition, an account might or might not invest in securities that are rated below investment grade, commonly known as "junk bonds," and have speculative risk characteristics. Changes in economic conditions or other circumstances typically have a greater effect on the ability of issuers of lower rated investments to make principal and interest payments than they do on issuers of higher rated investments. An economic downturn generally leads to a higher non-payment rate, and a lower rated investment can lose significant value before a default occurs. Lower rated investments typically are subject to greater price volatility and illiquidity than higher rated investments. An account might be subject to certain liquidity risks that can result from, among other things, the lack of an active market and the reduced number and capacity of traditional market participants to make a market in fixed income securities.

Credit Risk. Credit risk refers to the possibility that the issuer or guarantor of a security will be unable or unwilling
or perceived to be unable or unwilling to make interest payments and/or repay the principal on its debt. Debt
obligations are subject to the risk of non-payment of scheduled principal and interest. Changes in economic
conditions or other circumstances might reduce the capacity of the party obligated to make principal and interest

payments on such instruments and could lead to defaults. Such non-payments and defaults could reduce the value of, or income distributions from, a client portfolio. The risk of defaults across issuers and/or counterparties increases in adverse market and economic conditions. The value of a fixed income security also can decline because of concerns about the issuer's ability to make principal and interest payments. In addition, the credit ratings of debt obligations might be lowered if the financial condition of the party obligated to make payments with respect to such instruments changes. Credit ratings assigned by rating agencies are based on a number of factors and do not necessarily reflect the issuer's current financial condition or the volatility or liquidity of the security. In the event of bankruptcy of the issuer of debt obligations, a client portfolio could experience delays or limitations with respect to its ability to realize the benefits of any collateral securing the instrument. In order to enforce its rights in the event of a default, bankruptcy or similar situation, a client could be required to retain legal or similar counsel at their own expense.

- Interest Rate Risk. Interest rate risk is the risk that fixed income investments and other instruments in an account will decline in value because of changes in interest rates. As interest rates rise, the value of a client portfolio invested primarily in fixed-income securities or similar instruments is likely to decline. Conversely, when interest rates decline, the value of such a client portfolio is likely to rise. A low interest rate environment could prevent an account from providing a positive yield or paying expenses out of current income. During periods when interest rates are low or there are negative interest rates, an account's yield (and total return) also could be low or otherwise adversely affected or the account could be unable to maintain positive returns. Securities with longer maturities are more sensitive to changes in interest rates than securities with shorter maturities, making them more volatile. A rising interest rate environment can extend the average life of mortgages or other asset-backed receivables underlying mortgage-backed or asset-backed securities. This extension increases the risk of depreciation due to future increases in market interest rates. In a declining interest rate environment, prepayment of certain types of securities could increase. In such circumstances, the portfolio manager might have to reinvest the prepayment proceeds at lower yields. A strategy that is managed toward an income objective could hold securities with longer maturities and therefore be more exposed to interest rate risk than a strategy focused on total return. Clients might or might not be limited as to the maturities (when a debt security provides its final payment) or durations (measure of interest rate sensitivity) of the securities in which they invest.
- Inflation Risk. Certain investments are subject to inflation risk, which is the risk that the value of assets or income from investments will be less in the future as inflation decreases the value of money (i.e., as inflation increases, the values of assets can decline). Inflation rates can change frequently and significantly as a result of various factors, including unexpected shifts in the domestic or global economy and changes in economic policies, and a client's investments might not keep pace with inflation, which can result in losses to investors. Fixed income securities with longer maturities will therefore be more volatile than other fixed income securities with shorter maturities.
- Duration Risk. Duration measures the expected life of a fixed-income security, which can determine its
 sensitivity to changes in the general level of interest rates. Securities with longer durations tend to be more
 sensitive to interest rate changes than securities with shorter durations. A portfolio with a longer dollar-weighted
 average duration can be expected to be more sensitive to interest rate changes than a portfolio with a shorter
 dollar-weighted average duration. Duration differs from maturity in that it considers a security's coupon payments
 in addition to the amount of time until the security matures. As the value of a security changes over time, so will
 its duration.
- LIBOR Discontinuance or Unavailability Risk. The client's investments, payment obligations and investments, payment obligations and financing terms could be based on floating rates, such as the London Interbank Offered Rates (collectively, "LIBOR"), Euro Interbank Offered Rate, Secured Overnight Financing Rate ("SOFR") and other similar types of reference rates (each, a "Reference Rate"). These Reference Rates are generally intended to represent the rate at which contributing banks could obtain short-term borrowings from each other within certain financial markets. London Interbank Offered Rate ("LIBOR") was the basic rate of interest used in lending transactions between banks on the London interbank market and has been widely used as a reference for setting the interest rate on loans globally. As a result of benchmark reforms, publication of

most LIBOR settings has ceased. However, the publication of certain other LIBORs will continue to be published on a temporary, synthetic and non-representative basis (e.g., the 1-month, 3-month, and 6-month USD LIBOR settings which are expected to be continued to be published until the end of September 2024). As these synthetic LIBOR settings are expected to be published for a limited period of time and are considered non-representative of the underlying market, regulators have advised that these settings should be used only in limited circumstances. Various financial industry groups have been planning for the transition from LIBOR and certain regulators and industry groups have taken actions to establish alternative reference rates (e.g., the SOFR, which measures the cost of overnight borrowings through repurchase agreement transactions collateralized with U.S. Treasury securities and is intended to replace U.S. dollar LIBORs with certain adjustments). It is expected that a substantial portion of future floating rate investments will be linked to SOFR or benchmark rates derived from SOFR (or other Alternative Reference Rates based on SOFR). There is no assurance that the composition or characteristics of any such alternative reference rate will be similar to or produce the same value or economic equivalence as LIBOR or that it will have the same volume or liquidity as did LIBOR. These relatively new and developing rates could also behave differently than LIBOR would have or could not match the reference rate applicable to the underlying assets related to these investments. Investments in structured finance investments, loans, debt instruments or other investments tied to reference rates are also subject to operational risk associated with the alternative reference rate, such as errors in the input data or in the calculation of reference rates. Additionally, the transition away from LIBOR and certain other Reference Rates could, among other negative consequences (i) adversely impact the pricing, liquidity, value of, return on and trading for a broad array of financial products, including any Reference Rate-linked securities, loans and derivatives in which the client can invest; (ii) require extensive negotiations of and/or amendments to agreements and other documentation governing Reference Rate-linked investments products; (iii) lead to disputes, litigation or other actions with counterparties or portfolio companies regarding the interpretation and enforceability of "fallback" provisions that provide for an alternative reference rate in the event of Reference Rate unavailability; and/or (iv) cause the client to incur additional costs in relation to any of the above factors. The risks associated with the above factors, including decreased liquidity, could be heightened with respect to investments in so-called "tough legacy" Reference Rate-based products that do not include effective fallback provisions to address how interest rates will be determined if LIBOR and certain other Reference Rates stop being published. In addition, when a Reference Rate is discontinued, the alternative Reference Rate could be lower than market expectations, which could have an adverse impact on the value of preferred and debt securities with floating or fixed-to-floating rate coupons. These developments could negatively impact financial markets in general and present heightened risks, including with respect to the client's investments. As a result of the uncertainty and developments relating to the transition process, performance, price volatility, liquidity and value of the client and its assets could be adversely affected.

Additional Risk Considerations Associated with Particular Markets, Security Types, Investment Techniques and Strategies. The following provides information on risks associated with different types of securities and investment techniques that could be used by accounts and pooled investment vehicles we advise. Additional information is available upon request. Investors in pooled investment vehicles and funds-of-funds should review the prospectuses, offering memoranda and constituent documents for additional information relating to the risk associated with investments in those pooled investment vehicles and funds-of-funds, respectively.

• Absolute Return Strategy Risk. An "absolute return" investment approach is generally benchmarked to an index of cash instruments and seeks to achieve returns that are largely independent of broad movements in stocks and bonds. Unlike client portfolios managed in equity strategies, client portfolios managed in an absolute return strategy should not be expected to benefit from general equity market returns. Different from fixed income funds, client portfolios managed in an absolute return strategy might not generate current income and should not be expected to experience price appreciation as interest rates decline. Although the investment adviser seeks to maximize absolute return, client portfolios managed in an absolute return strategy might not generate positive returns.

- Active Management Risk. The success of a client's account that is actively managed depends upon the investment skills and analytical abilities of the portfolio manager to develop and effectively implement strategies that achieve the client's investment objective. Subjective decisions made by the portfolio manager can cause a client portfolio to incur losses or to miss profit opportunities on which it might have otherwise capitalized.
- Allocation and Position Limits Risk. A client account's performance depends upon how its assets are allocated and reallocated, and an investor could lose money as a result of these allocation decisions and related constraints. MSIM could be subject, by applicable regulation or issuer limitations, to restrictions on the percentage of an issuer that can be held. For purposes of calculating positions, MSIM normally aggregates its positions with those of its affiliates. In such situations, MSIM might be limited in its ability to purchase further securities for its clients, even if the applicable position limits are not exceeded by positions MSIM has purchased on behalf of its clients. In addition, the Commodity Futures Trading Commission ("CFTC") and the exchanges on which commodity interests (futures, options on futures and swaps) are traded can impose limitations governing the maximum number of positions on the same side of the market and involving the same underlying instrument held by a single investor or group of related investors, whether acting alone or in concert with others (regardless of whether such contracts are held on the same or different exchanges or held or written in one or more accounts or through one or more brokers). When a portfolio manager trades for multiple accounts, the commodity interest positions of all such accounts will generally be required to be aggregated for purposes of determining compliance with position limits, position reporting and position "accountability" rules imposed by the CFTC or the various exchanges. Swaps positions in physical commodity swaps that are "economically equivalent" to futures and options on futures held by an account and similar accounts could also in the future be included in determining compliance with federal position rules, and the exchanges can impose their own rules covering these and other types of swaps. These trading and position limits, and any aggregation requirement, could materially limit the commodity interest positions the portfolio manager takes for an account and could cause the portfolio manager to close out an account's positions earlier than it might otherwise choose to do so.
- Bank Loan Risk. Bank loans are subject to the risk of default. Default in the payment of interest or principal on a loan will result in a reduction of income to the account, a reduction in the value of the loan, and a potential decrease in the account's balance. The risk of default will increase in the event of an economic downturn or a substantial increase in interest rates. Bank loans are subject to the risk that the cash flow of the borrower and property securing the loan or debt, if any, are insufficient to meet scheduled payments. In addition, bank loans could be subject to additional risks including subordination to other creditors, no collateral or limited rights in collateral, lack of a regular trading market, extended settlement periods, liquidity risks, prepayment risks, potentially less protection under the federal securities laws and lack of publicly available information. As discussed above, however, because bank loans reside higher in the capital structure than high yield bonds, default losses have been historically lower in the bank loan market. Bank loans that are rated below investment grade share the same risks of other below investment grade securities.
- Bank Obligation Risk. The activities of U.S. banks, including Morgan Stanley, and most foreign banks, are subject to comprehensive regulations. The enactment of new legislation or regulations, as well as changes in interpretation and enforcement of current laws, could affect the manner of operations and profitability of domestic and foreign banks. In addition, banks, including Morgan Stanley, could be particularly susceptible to certain economic factors.
- Buy-Out Transaction Risk. Certain accounts can invest directly or indirectly through investment funds, in leveraged buyouts that by their nature require companies to undertake a high ratio of leverage to available income. Leveraged investments are inherently more sensitive to declines in revenues and to increases in expenses.
- Call Risk. Fixed income securities are subject to the risk that an issuer exercises its right to redeem a fixed income security earlier than expected (a call). Issuers can call outstanding securities prior to their maturity for a number of reasons (e.g., declining interest rates, changes in credit spreads and improvements in the issuer's credit quality). If an issuer calls a security that a client holds, the client might not recoup the full amount of its

- initial investment or not realize the full anticipated earnings from the investment, and could be forced to reinvest in lower-yielding securities, securities with greater credit risks, or securities with other, less favorable features.
- Collateralized Loan Obligations ("CLOs") Risk. Structured finance securities such as CLOs entail a variety of unique risks. The performance of a CLO is affected by a variety of factors, including its priority in the capital structure of the issuer thereof, the availability of any credit enhancement, the level and timing of payments and recoveries on and the characteristics of the underlying receivables, loans or other assets that are being securitized, remoteness of those assets from the originator or transferor, the adequacy of and ability to realize upon any related collateral and the capability of the servicer of the securitized assets. The value of CLOs can be difficult to determine and generally will fluctuate with, among other things, the financial condition of the obligors or issuers of the underlying portfolio of assets of the related CLO, general economic conditions, the condition of certain financial markets, political events, developments or trends in any particular industry and changes in prevailing interest rates. CLOs are also subject to, among others, operational, credit, liquidity, legal, regulatory, tax, risk retention and interest rate risks.
- Collateralized Mortgage Obligations ("CMOs") Risk. CMOs are comprised of various tranches, the expected
 cash flows on which have varying degrees of predictability as compared with the underlying mortgage assets.
 Generally, the less predictable the cash flow, the higher the yield and the greater the risk. In addition, if the
 collateral securing CMOs or any third-party guarantees are insufficient to make payments, an account could
 sustain aloss.
- commodities Risk. The value of commodities investments will generally be affected by overall market movements and factors specific to a particular industry or commodity, such as weather, embargoes, tariffs, health, and political, international and regulatory developments. Economic and other events (whether real or perceived) can reduce the demand for commodities, which could reduce market prices and cause the value of a client portfolio to fall. The frequency and magnitude of such changes cannot be predicted. Exposure to commodities and commodities markets can subject a client portfolio to greater volatility than investments in traditional securities. There might be no active trading market for certain commodities investments, which could impair the ability to sell or to realize the full value of such investments in the event of the need to liquidate such investments. In addition, adverse market conditions can impair the liquidity of actively traded commodities investments. Certain types of commodities instruments (such as total return swaps and commodity-linked notes) are subject to the risk that the counterparty to the instrument will not perform or will be unable to perform in accordance with the terms of the instrument.
- Concentration Risk. A strategy that concentrates its investments in a particular sector of the market (such as
 the utilities or financial services sectors) or a specific geographic area (such as a country or state) could be
 impacted by events that adversely affect that sector or area, and the value of a portfolio using such a strategy
 might fluctuate more than a less concentrated portfolio.
- Contingent Convertible Bonds ("CoCos") Risk. CoCos are issued primarily by non-U.S. financial companies and have complex features and unique risk considerations that differentiate them from traditional convertible, preferred or debt securities. Depending upon the terms of the particular issue, upon the occurrence of certain triggering events the securities could be mandatorily converted into common equity of the issuer (at either a predetermined fixed rate or variable rate), or the principal of the securities could be temporarily or permanently written down. As a result, investors in CoCos could lose all or part of their principal investment. The triggering events will be described in the offering documents for each particular issue. However, they generally include the issuer failing to maintain a minimum capital ratio—a subjective determination by a regulator—that triggers the conversion or the write-down; and/or there could be other circumstances adverse to the issuer. In addition, market value will be affected by many unpredictable factors, including but not limited to: the market value of the issuer's common equity, the issuer's creditworthiness and capital ratios, any indication that the securities are trending toward a trigger event, supply and demand for the securities, and events that affect the issuer or the financial markets generally. There might be no active secondary market for the securities, and there is no guarantee that one will develop. Payment of interest or dividends could be at the sole discretion of the issuer,

including prior to the occurrence of any trigger event. In most cases, the issuer is under no obligation to accrue or pay skipped payments (i.e., payments could be noncumulative). Thus, the dividend or interest payments can be deferred or cancelled at the issuer's discretion or upon the occurrence of certain events. The issuer could have the right to substitute or vary the terms of the securities in certain instances. The issuer could also have the right, but not the obligation, to redeem all or part of the securities in its sole discretion upon the occurrence of certain events.

- Control Position Risk. Certain accounts can directly, or indirectly through investment funds, take control
 positions in companies. The exercise of control over a company imposes additional risks of liability for
 environmental damage, product defects, failure to supervise and other types of related liability. If such liabilities
 were to arise, such accounts and investment funds would likely suffer a loss, which could be complete, on their
 investments.
- Convertible and Other Hybrid Securities Risk. Convertible and other hybrid securities (including preferred and convertible instruments) generally possess certain characteristics of both equity and debt securities. In addition to risks associated with investing in income securities, such as interest rate and credit risks, hybrid securities can be subject to issuer-specific and market risks generally applicable to equity securities. Convertible securities might also react to changes in the value of the common stock into which they convert, and are thus subject to equity investing and market risks. A convertible security converted at an inopportune time could decrease a client's return.
- Corporate Debt Risk. Corporate debt securities are subject to the risk of the issuer's inability to meet principal and interest payments on the obligation and can also be subject to price volatility due to such factors as interest rate sensitivity, market perception of the creditworthiness of the issuer and general market liquidity. When interest rates rise, the value of corporate debt securities can be expected to decline. Debt securities with longer maturities tend to be more sensitive to interest rate movements than those with shorter maturities. Company defaults can impact the level of returns generated by corporate debt securities. An unexpected default can reduce income and the capital value of a corporate debt security. Furthermore, market expectations regarding economic conditions and the likely number of corporate defaults could impact the value of corporate debt securities.
- Counterparty Risk. A financial institution or other counterparty with whom an investor does business (such as trading or securities lending), or that underwrites, distributes or guarantees any investments or contracts that an investor owns or is otherwise exposed to, might decline in financial condition and become unable to honor its commitments. This could cause the value of an investor's portfolio to decline or could delay the return or delivery of collateral or other assets to the investor. Although there can be no assurance that an investor will be able to do so, the investor might be able to reduce or eliminate its exposure under a swap agreement either by assignment or other disposition, or by entering into an offsetting swap agreement with the same party or another creditworthy party. The investor could have limited ability to eliminate its exposure under a credit default swap if the credit of the referenced entity or underlying asset has declined.
- Cryptocurrency Risk. Cryptocurrencies (also referred to as "virtual currencies" and "digital currencies") are digital assets designed to act as a medium of exchange. Although cryptocurrency is an emerging asset class, there are thousands of cryptocurrencies, the most well-known of which is bitcoin. From time to time, certain of MSIM's clients will obtain indirect exposure to cryptocurrencies through funds, futures, and other investment products. The value of these products is often intended to reflect the value of one or more cryptocurrencies, and the risks of investing in these products are similar to the risks of investing in cryptocurrencies generally (discussed further below), as well as the risks specific to investing in the applicable investment product (e.g., if an investment is made through a private fund, the risks of investing in a private fund will apply).

Cryptocurrencyfacilitates decentralized, peer-to-peer financial exchange and value storage that is used like money, without the oversight of a central authority or banks. The value of cryptocurrency is not backed by any government, corporation, or other identified body. Similar to fiat currencies, cryptocurrencies are susceptible to theft, loss and destruction.

The value of investments in cryptocurrency is subject to fluctuations in the value of the cryptocurrency, which have been and could in the future be highly volatile. The value of cryptocurrencies is determined by the supply and demand for cryptocurrency in the global market for the trading of cryptocurrency, which consists primarily of transactions on electronic exchanges. The price of a cryptocurrency could drop precipitously for a variety of reasons, including, but not limited to, regulatory changes, a crisis of confidence, flaw or operational issue in the cryptocurrency's network or a change in user preference to competing cryptocurrencies. A client's exposure to cryptocurrency could result in substantial losses to such client.

Cryptocurrencies trade on exchanges, which are largely unregulated and, therefore, are more exposed to fraud and failure than established, regulated exchanges for securities, derivatives and other currencies. These exchanges have in the past, and could in the future, cease operating temporarily or even permanently, resulting in the potential loss of users' cryptocurrency or other market disruptions. Cryptocurrency exchanges are more exposed to the risk of market manipulation than exchanges for traditional assets. Cryptocurrency exchanges that are regulated typically must comply with minimum net capital, cybersecurity, and anti-money laundering requirements, but are not typically required to protect customers or their markets to the same extent that regulated securities exchanges or futures exchanges are required to do so. Furthermore, many cryptocurrency exchanges lack certain safeguards established by traditional exchanges to enhance the stability of trading on the exchange and, as a result, the prices of cryptocurrencies on these exchanges could be subject to larger and more frequent sudden declines than assets traded on traditional exchanges. In addition, cryptocurrency exchanges are also subject to the risk of cybersecurity threats and breaches, resulting in the theft and/or loss of cryptocurrencies, and/or an adverse effect on value of cryptocurrencies. If a cyber or other security breach or a business failure of a cryptocurrency exchange were to occur, there would likely be an adverse impact to the price of a particular cryptocurrency or cryptocurrencies generally. A risk also exists with respect to malicious actors or previously unknown vulnerabilities, which could adversely affect the value of cryptocurrencies.

Factors affecting the further development of cryptocurrency include, but are not limited to: continued worldwide growth or possible cessation or reversal in the adoption and use of cryptocurrency and other digital assets; government and quasi-government regulation or restrictions on or regulation of access to and operation of digital asset networks; changes in consumer demographics and public preferences; maintenance and development of open-source software protocol; availability and popularity of other forms or methods of buying and selling goods and services; the use of the networks supporting digital assets, such as those for developing smart contracts and distributed applications; general economic conditions and the regulatory environment relating to digital assets; negative consumer or public perception; and general risks tied to the use of information technologies, including cyber risks.

Currently, there is relatively limited use of cryptocurrency in the retail and commercial marketplace, which contributes to price volatility. A lack of expansion by cryptocurrencies into retail and commercial markets, or a contraction of such use, could result in increased volatility or a reduction in the value of cryptocurrencies, either of which could adversely impact a client's investment in cryptocurrency. In addition, to the extent market participants develop a preference for one cryptocurrency over another, the value of the less preferred cryptocurrency would likely be adversely affected. Cryptocurrency is a new technological innovation with a limited history; it is a highly speculative asset and future regulatory actions or policies could limit, perhaps to a materially adverse extent, the value of a client's direct or indirect investment in cryptocurrency and the ability to exchange a cryptocurrency or utilize it for payments.

• Currency Risk. In general, the value of investments in, or denominated in, foreign currencies increases when the U.S. dollar is weak (i.e., is losing value relative to foreign currencies) or when foreign currencies are strong (i.e., are gaining value relative to the U.S. dollar). When foreign currencies are weak or the U.S. dollar is strong, such investments generally will decrease in value. The value of foreign currencies as measured in U.S. dollars can be unpredictably affected by changes in foreign currency rates and exchange control regulations, application of foreign tax laws (including withholding tax), governmental administration of economic or monetary policies (in the U.S. or abroad), intervention (or the failure to intervene) by U.S. or foreign governments or central banks, and relations between nations. A devaluation of a currency by a country's government or banking authority will

have a significant impact on the value of any investments denominated in that currency. Currency markets generally are not as regulated as securities markets and currency transactions are subject to settlement, custodial and other operational risks. Exposure to foreign currencies through derivative instruments will also be subject to the Derivatives Risks described below

Derivatives Risk Generally. Certain accounts can use derivative instruments for a variety of purposes, including hedging, risk management, portfolio management or to earn income. A derivative is a financial instrument whose value is based, in part, on the value of an underlying asset, interest rate, index or financial instrument ("reference instrument" or "underlying asset"). In this context, derivatives include but are not limited to: futures, forwards, options, participatory notes, warrants, and other similar instruments that are normally valued based upon another or related asset. The use of derivatives can lead to losses because of adverse movements in the price or value of the reference instrument, including due to failure of the counterparty or tax or regulatory constraints. Prevailing interest rates and volatility levels, among other things, also affect the value of derivative instruments. A derivative instrument often has risks similar to its underlying asset and can have additional risks, including imperfect correlation between the value of the derivative and the underlying asset, risks of default by the counterparty to certain transactions, magnification of losses incurred due to changes in the market value of the securities, instruments, indices or interest rates to which the derivative instrument relates, risks that the transactions might not be liquid and risks arising from margin requirements. The use of derivatives involves risks that are different from, and possibly greater than, the risks associated with other portfolio investments. Derivatives can involve the use of highly specialized instruments that require investment techniques and risk analyses different from those associated with other portfolio investments.

Certain derivative transactions give rise to a form of leverage, which magnifies the portfolio's exposure to the underlying asset. Leverage associated with derivative transactions could cause an account to liquidate portfolio positions when it might not be advantageous to do so or could cause an account's value to be more volatile than might have been the case absent such leverage. Derivatives risk could be more significant when derivatives are used to enhance return or as a substitute for a position or security, rather than solely to hedge the risk of a position or security held by a client portfolio. Derivatives for hedging purposes might not reduce risk if they are not sufficiently correlated to the position being hedged. A decision as to whether, when and how to use derivatives involves the exercise of specialized skill and judgment, and a transaction could be unsuccessful in whole or in part because of market behavior or unexpected events. Derivative instruments can be difficult to value, can be illiquid, and can be subject to wide swings in valuation caused by changes in the value of the underlying instrument. If a derivative counterparty is unable to honor its commitments, the value of a client portfolio could decline and/or the portfolio could experience delays in the return of collateral or other assets held by the counterparty. The loss on derivative transactions can substantially exceed the initial investment. Certain strategies use derivatives extensively. Derivative investments also involve the risks relating to the reference instrument. Although certain strategies seek to use derivatives to further a client's investment objectives, there is no assurance that the use of derivatives will achieve this result.

Futures. A futures contract is a standardized, exchange-traded agreement to buy or sell a specific quantity of an underlying asset, reference rate or index at a specific price at a specific future time. While the value of a futures contract tends to increase or decrease in tandem with the value of the underlying instrument, differences between the futures market and the market for the underlying asset can result in an imperfect correlation. Depending on the terms of the particular contract, futures contracts are settled through either physical delivery of the underlying instrument on the settlement date or by payment of a cash settlement amount on the settlement date. A decision as to whether, when and how to use futures contracts involves the exercise of skill and judgment and even a well-conceived futures transaction could be unsuccessful because of market behavior or unexpected events. In addition to the derivatives risks discussed above, the prices of futures contracts can be highly volatile, using futures contracts can lower total return, and the potential loss from futures contracts can exceed an account's initial investment in such contracts. No assurance can be given that a liquid market will exist for any particular futures contract at any particular time. There is also the risk of loss by an account of margin deposits in the event of bankruptcy of a broker with which an account has open positions in the futures contract.

Options. Certain client portfolios employ an options strategy. If an account buys an option, it buys a legal contract giving it the right to buy or sell a specific amount of the underlying instrument, foreign currency or contract, such as a swap agreement or futures contract, on the underlying instrument or foreign currency at an agreed-upon price typically in exchange for a premium paid by the account. If an account sells an option, it sells to another person the right to buy from or sell to an account a specific amount of the underlying instrument, swap, foreign currency, or futures contract on the underlying instrument or foreign currency at an agreed-upon price during a period of time or on a specific date typically in exchange for a premium received by a client. The use of options by accounts can entail additional risks. When options are purchased OTC, the buyer bears the risk that the counterparty that wrote the option will be unable or unwilling to perform its obligations under the option contract. Options can also be illiquid and a holder could have difficulty closing out its position. A decision as to whether, when and how to use options involves the exercise of skill and judgment and even a well-conceived option transaction could be unsuccessful because of market behavior or unexpected events. The prices of options can be highly volatile and the use of options can lower total returns.

Certain options strategies seek to take advantage of a general excess of option price-implied volatilities for a specified stock or index over the stock or index's subsequent realized volatility. This market observation is often attributed to the unknown risk to which an option seller is exposed to in comparison to the fixed risk to which an option buyer is exposed. There can be no assurance that this imbalance will apply in the future over specific periods or generally. It is possible that the imbalance could decrease or be eliminated by actions of investors that employ strategies seeking to take advantage of the imbalance, which would have an adverse effect on the client portfolio's ability to achieve its investment objective. Further, directional movements of the underlying index or stock can overwhelm the volatility differential for any given option resulting in a loss, regardless of the volatility relationship during that specific option's term. Call spread and put spread selling strategies employed by certain strategies are based on a specified index or on exchange-traded funds that replicate the performance of certain indexes. If the index or an ETF appreciates or depreciates sufficiently over the period to offset the net premium received, the client portfolio will incur a net loss. The amount of potential loss in the event of a sharp market movement is subject to a cap defined by the difference in strike prices between written and purchased call and put options. The value of the specified exchange-traded fund is subject to change as the values of the component securities fluctuate. Also, it might not exactly match the performance of the specified index.

Investments in foreign currency options can substantially change an account's exposure to currency exchange rates and could result in losses if currencies do not perform as expected. There is a risk that such transactions could reduce or preclude the opportunity for gain if the value of the currency should move in the direction opposite to the position taken. The value of a foreign currency option is dependent upon the value of the underlying foreign currency relative to the U.S. dollar or other applicable foreign currency. The price of the option could vary with changes in the value of either or both currencies and has no relationship to the investment merits of a foreign security. Options on foreign currencies are affected by all of those factors that influence foreign exchange rates and foreign investment generally. Unanticipated changes in currency prices can result in losses to a client and poorer overall performance for the client than if it had not entered into such contracts. Options on foreign currencies are traded primarily in the OTC market but can also be traded on U.S. and foreign exchanges.

Foreign currency options contracts can be used for hedging purposes or non-hedging purposes in pursuing a client's investment objective, such as when MSIM anticipates that particular non-U.S. currencies will appreciate or depreciate in value, even though securities denominated in those currencies are not then held in the client's investment portfolio. Investing in foreign currencies for purposes of gaining from projected changes in exchange rates, as opposed to only hedging currency risks applicable to an account holding, further increases the account's exposure to foreign securities losses. There is no assurance that MSIM's use of currency derivatives will benefit the related accounts or that they will be, or can be, used at appropriate times.

Swaps. A client could enter into OTC swap contracts or cleared swap transactions. An OTC swap contract is an agreement between two parties pursuant to which the parties exchange payments at specified dates on the basis of a specified notional amount, with the payments calculated by reference to specified securities, indices, reference rates, currencies or other instruments. Typically swap agreements provide that when the period

payment dates for both parties are the same, the payments are made on a net basis (i.e., the two payment streams are netted out, with only the net amount paid by one party to the other). A party's obligations or rights under a swap contract entered into on a net basis will generally be equal only to the net amount to be paid or received under the agreement, based on the relative values of the positions held by each party. Cleared swap transactions can help reduce counterparty credit risk. In a cleared swap, the ultimate counterparty is a clearinghouse rather than a swap dealer, bank or other financial institution. OTC swap agreements are not entered into or traded on exchanges and often there is no central clearing or guaranty function for swaps. These OTC swaps are often subject to credit risk or the risk of default or non-performance by the counterparty. Certain swaps have begun trading on exchanges called swap execution facilities. Exchange trading is expected to increase liquidity of swaps trading. Both OTC and cleared swaps could result in losses if interest rates, foreign currency exchange rates or other factors are not correctly anticipated by a client or if the reference index, security or investments do not perform as expected. The Dodd-Frank Wall Street Reform and Consumer Protection Act and related regulatory developments require the clearing and exchange trading of certain standardized swap transactions. Mandatory exchange-trading and clearing is occurring on a phased-in basis.

The client's use of swaps could include those based on the credit of an underlying security, commonly referred to as "credit default swaps." Where a client is the buyer of a credit default swap contract, it would typically be entitled to receive the par (or other agreed-upon) value of a referenced debt obligation from the counterparty to the contract only in the event of a default or similar event by a third-party on the debt obligation. If no default occurs, the client would have paid to the counterparty a periodic stream of payments over the term of the contract and received no benefit from the contract. When a client is the seller of a credit default swap contract, it typically receives the stream of payments but is obligated to pay an amount equal to the par (or other agreed-upon) value of a referenced debt obligation upon the default or similar event of the issuer of the referenced debt obligation.

Total Return Swaps. Total return swaps are contracts in which one party agrees to make periodic payments to another party based on the change in market value of the assets underlying the contract, which can include, but is not limited to, a specified security, basket of securities or securities indices during the specified period, in return for periodic payments based on a fixed or variable interest rate or the total return from other underlying assets. Total return swaps can be used to obtain long or short exposure to a security or market without owning or taking physical custody of such security or investing directly in such market. A client could incur a theoretically unlimited loss on short exposures. In comparison, a client can incur losses on long exposures, but such losses are limited by the fact that the underlying security's price cannot fall below zero. Based on the strategy and depending on the then-current positioning, an account could experience losses as a result of both its long and short exposures to value and anti-value stocks at the same time. Total return swaps can effectively add leverage to a client's account because, in addition to its total net assets, the account would be subject to investment exposure on the notional amount of the swap. Total return swaps are subject to the risk that a counterparty will default on its payment obligations to a client thereunder, and conversely, that a client will not be able to meet its obligation to the counterparty.

- **Differing Classes of Securities Risk.** Different classes of securities have different rights as creditor if the issuer files for bankruptcy or reorganization. For example, bondholders' rights generally are more favorable than shareholders' rights in a bankruptcy or reorganization. In some circumstances, the interests of clients that invest in a company might not be aligned with the interests of other clients that invest in a different loan investment or security issued by the same company, which could create conflicts of interest. The interests of clients investing in different parts of the capital structure of a company are particularly likely to conflict in the case of financial distress of the company, such as enforcement of credit rights or bankruptcy proceedings. This can result in a loss or substantial dilution of one client's investment, while another client receives a full or partial recovery on its investment. For these reasons, MSIM might take certain actions on behalf of one client that are adverse to others.
- Dividend Strategy Risk. Clients invested in strategies designed to invest in dividend paying securities are subject to certain risks. These include issuers which have historically paid dividends reducing or ceasing to pay dividends in the future, which could additionally negatively impact the price of the security. In times of economic

- stress, a large number of issuers could reduce or eliminate dividends, impacting the ability of MSIM to execute its desired strategy.
- General ESG Risk. Strategies that seek to incorporate financially material ESG factors could lose value or otherwise underperform for a variety of reasons. ESG considerations tend to prioritize the longer-term prospects of issuers, which are not necessarily predictive of short-term fluctuations in security prices or overall market dynamics in the shorter term. Incorporation of ESG factors into the investment process can cause an investment strategy to underweight or exclude certain sectors, industries or geographies relative to benchmarks or competitors, which can result in underperformance during periods when those sectors, industries or geographies are being more broadly favored by the overall market. Assessment of ESG factors is subjective by nature, and there is no assurance that an investment team will correctly or consistently identify the financially material ESG attributes of individual investments. Furthermore, MSIM is dependent on the quality and completeness of ESGrelated information and data obtained through voluntary reporting by issuers, as well as on analysis provided by third parties, including from MSIM affiliates, in seeking to incorporate financially material ESG factors into the selection process for investments. The risk associated with this dependency is especially pronounced for markets, geographies and asset classes where the quality and extent of available information and reporting are lower. All of the risks described above are present both where MSIM integrates ESG factors into its research process for individual security selection and where it applies formal exclusionary screens as part of its investment process.
- ESG Focused Strategy Risks. MSIM could manage certain accounts and strategies for which, in addition to incorporating financially material ESG factors into the investment process, MSIM adopts an explicit emphasis on ESG and/or sustainability attributes of the portfolio. This type of strategy tends to augment the risks associated with incorporated ESG investing and can expose client accounts to additional risks over and above the General ESG Risk described above. In certain situations, environmental and social factors can outweigh financial considerations. For example, MSIM could choose to make an investment that has a lower expected financial return when compared to other possible investments due to ESG considerations, such as where the investment has the potential to have a greater environmental and/or social impact. In addition, MSIM could reject an opportunity to increase the financial return of an existing investment in order to preserve the environmental and/or social impact of such investment. Further, MSIM could refrain from disposing of an underperforming investment for a period of time in order to minimize the negative environmental and/or social impact of such disposition. As a result of the foregoing, these portfolios or accounts are subject to the risk that they achieve lower returns than if MSIM did not adopt an explicit focus on ESG and/or sustainability considerations, including the environmental and/or social impact of investments and investment-related decisions. Clients should also be aware that their perception of the ESG attributes, or the social and environmental impact, of their investment portfolio could differ from MSIM's or a third party's assessment of how that portfolio adheres to ESG principles.
- ETF Risk. Shares of ETFs have many of the same risks as direct investments in common stocks or bonds and their market value is expected to rise and fall as the value of the underlying securities or index rises and falls. As a shareholder in an ETF, a portfolio would bear its ratable share of that entity's expenses while continuing to pay its own investment management fees and other expenses. As a result, the account or the fund and its shareholders will, in effect, be absorbing duplicate levels of fees. There can be a lack of liquidity in certain ETFs which can lead to a large difference between the bid-ask prices (increasing the costs of buying or selling the ETF). A lack of liquidity also could cause an ETF to trade at a large premium or discount to its net asset value. Additionally, an ETF might suspend issuing new shares, which could result in an adverse difference between the ETF's publicly available share price and the actual value of its underlying investment holdings. At times when underlying holdings are traded less frequently, or not at all, an ETF's returns also could diverge from the benchmark it is designed to track. In addition, certain ETFs in which an account could invest are leveraged. While leveraged ETFs can offer the potential for greater return, the potential for loss and the speed at which losses can be realized also are greater. Leveraged ETFs can deviate substantially from the performance of their underlying benchmark over longer periods of time, particularly in volatile periods.

- ETN Risk. An exchange-traded note (ETN) is a debt obligation and its payments of interest or principal are linked to the performance of a referenced investment (typically an index). ETNs are subject to the performance of their issuer and can lose all or a portion of their entire value if the issuer fails or its credit rating changes. An ETN that is tied to a specific index might not be able to replicate and maintain exactly the composition and weighting of the components of that index. ETNs also incur certain expenses not incurred by the referenced investment and the cost of owning an ETN could exceed the cost of investing directly in the referenced investment. The market trading price of an ETN can be more volatile than the referenced investment it is designed to track. ETNs can often be purchased at prices that exceed net asset value and be sold at prices below such value. A client account might not be able to liquidate ETN holdings at the time and price desired, which could impact performance.
- Exchange-Listed Equities via Stock Connect Program Risk. The Shanghai-Hong Kong Stock Connect program and the Shenzhen-Hong Kong Stock Connect programs ("Stock Connect") allow non-Chinese investors (such as accounts or pooled investment vehicles) to purchase certain listed equities via brokers in Hong Kong. Although Stock Connect allows non-Chinese investors to trade Chinese equities without a license, purchases of securities through Stock Connect are subject to daily market-wide quota limitations, which could prevent an investor from purchasing Stock Connect securities when it is otherwise advantageous to do so. An investor cannot purchase and sell the same security on the same trading day, which could restrict an investor's ability to invest in China A-shares through Stock Connect and to enter into or exit trades where it is advantageous to do so on the same trading day. Because Stock Connect trades are routed through Hong Kong brokers and the Hong Kong Stock Exchange, these limitations could prevent an investor from purchasing Stock Connect securities when it is otherwise advantageous to do so. Stock Connect is affected by trading holidays in either China or Hong Kong, and there are trading days in China when Stock Connect investors will not be able to trade. As a result, prices of securities purchased through Stock Connect could fluctuate at times when an investor is unable to add to or exit its position. Only certain China A-shares are eligible to be accessed through Stock Connect. Such securities could lose their eligibility at any time, in which case they could be sold but could no longer be purchased through Stock Connect. Because Stock Connect is relatively new, its effects on the market for trading China A-shares are uncertain. In addition, the trading, settlement and IT systems required to operate Stock Connect are relatively new and continuing to evolve. In the event that the relevant systems do not function properly, trading through Stock Connect could be disrupted.

Stock Connect is subject to regulation by both Hong Kong and China. There can be no assurance that further regulations will not affect the availability of securities in the program, the frequency of redemptions or other limitations. For defaults by Hong Kong brokers occurring on or after January 1, 2020, the Hong Kong Investor Compensation Fund will cover losses incurred by investors with a cap of HK\$500,000 per investor for securities traded on a stock market operated by the Shanghai Stock Exchange and/or Shenzhen Stock Exchange and in respect of which an order for sale or purchase is permitted to be routed through the northbound link of the Stock Connect. In China, Stock Connect securities are held on behalf of ultimate investors by the Hong Kong Securities Clearing Company Limited ("HKSCC") as nominee. The investor could therefore depend on HKSCC's ability or willingness as record-holder of Stock Connect securities to enforce the investor's shareholder rights. While Chinese regulators have affirmed that the ultimate investors hold a beneficial interest in Stock Connect securities, the law surrounding such rights is in its early stages and the mechanisms that beneficial owners could use to enforce their rights are untested and therefore pose uncertain risks. Further, courts in China have limited experience in applying the concept of beneficial ownership and the law surrounding beneficial ownership will continue to evolve as they do so. Accordingly, there is a risk that as the law is tested and developed, an investor's ability to enforce its ownership rights could be negatively impacted. An investor could not be able to participate in corporate actions affecting Stock Connect securities due to time constraints or for other operational reasons. The investor will not be able to attend shareholders' meetings. Stock Connect trades are settled in RMB, the Chinese currency, and investors must have timely access to a reliable supply of RMB in Hong Kong, which cannot be guaranteed.

Stock Connect trades are either subject to certain pre-trade requirements or must be placed in special segregated accounts that allow brokers to comply with these pre-trade requirements by confirming that the selling shareholder has sufficient Stock Connect securities to complete the sale. If an investor does not utilize a special segregated account, it will not be able to sell the shares on any trading day where it fails to comply with the pre-trade checks. In addition, these pre- trade requirements could, as a practical matter, limit the number of brokers that an investor could use to execute trades. While an investor could use special segregated accounts in lieu of the pre-trade check, some market participants have yet to fully implement IT systems necessary to complete trades involving securities in such accounts in a timely manner. Market practice with respect to special segregated accounts is continuing to evolve. Investments via Stock Connect are subject to regulation by Chinese authorities. Chinese law could require aggregation of an investor's holdings of Stock Connect securities with securities of other clients of the Adviser for purposes of disclosing positions held in the market, acquiescing to trading halts that could be imposed until regulatory filings are completed or complying with China's short-term trading rules.

Since the inception of Stock Connect, foreign investors investing in China A-shares through Stock Connect have been temporarily exempt from Chinese corporate income tax and value-added tax on the gains on disposal of such China A- shares. Dividends are subject to Chinese corporate income tax on a withholding basis at 10% unless reduced under a double tax treaty with China upon application to and obtaining approval from the competent tax authority. Additionally, uncertainties in permanent Chinese tax rules governing taxation of income and gains from investments in Stock Connect China A-shares could result in unexpected tax liabilities for the investor. The risks related to investments in China A shares through Stock Connect are heightened to the extent that the investor invests in China A shares listed on the Science and Technology Innovation Board on the Shanghai stock exchange ("STAR market") and/or the ChiNext market of the Shenzhen stock exchange ("ChiNext market"). Listed companies on the STAR market and ChiNext market are usually of an emerging nature with smaller operating scale. They are subject to higher fluctuation in stock prices and liquidity. China A shares listed on ChiNext market and STAR market could be overvalued and such exceptionally high valuation could not be sustainable. Further, stock prices could be more susceptible to manipulation due to fewer circulating shares. It could be more common and faster for companies listed on the STAR market and ChiNext market to delist. In particular, ChiNext market and STAR market have stricter criteria for delisting compared to other boards. Investments through the ChiNext market and/or STAR market could result in significant losses for the investor.

Foreign and Emerging Markets Risk. Investments in foreign markets entail special risks such as currency, political, economic and market risks. There also could be greater market volatility, less reliable financial information, less stringent investor protections and disclosure standards, higher transaction and custody costs, decreased market liquidity and less government and exchange regulation associated with investments in foreign markets. As a result, the risks of investing in emerging market countries are greater than risks associated with investments in foreign developed countries. In addition, if investments by an account are denominated in foreign currencies, changes in the value of a country's currency compared to the U.S. dollar could affect the value of the account's investments.

Investments in foreign markets could also be adversely affected by governmental actions such as the imposition of capital controls, tariffs, sanctions, nationalization of companies or industries, expropriation of assets, the imposition of punitive taxes or threatened or active armed conflict. The governments of certain countries could prohibit or impose substantial restrictions on foreign investing in their capital markets or in certain sectors or industries.

Also, as a result of economic sanctions, MSIM could be forced to sell or otherwise dispose of investments at inopportune times or prices, which could result in losses to clients and increased transaction costs. In addition, a foreign government could limit or cause delay in the convertibility or repatriation of its currency which would adversely affect the U.S. dollar value and/or liquidity of investments denominated in that currency. Certain foreign investments might become less liquid in response to market developments or adverse investor

perceptions or become illiquid after purchase by an investor, particularly during periods of market turmoil. When an investor holds illiquid investments, its portfolio could be harder to value.

Certain emerging market countries are subject to less stringent requirements regarding accounting, auditing, financial reporting and record keeping and therefore, material information related to an investment might not be available or reliable. In addition, an account is limited in its ability to exercise its legal rights or enforce a counterparty's legal obligations in certain jurisdictions outside of the United States, in particular, in emerging markets countries. In addition, investments in foreign issuers could be denominated in foreign currencies and therefore, to the extent unhedged, the value of those investments will fluctuate with U.S. dollar exchange rates. To the extent hedged by the use of foreign currency forward exchange contracts, the precise matching of the foreign currency forward exchange contract amounts and the value of the securities involved will not generally be possible because the future value of such securities in foreign currencies will change as a consequence of market movements in the value of those securities between the date on which the contract is entered into and the date it matures. There is additional risk that such transactions could reduce or preclude the opportunity for gain if the value of the currency should move in the direction opposite to the position taken and that foreign currency forward exchange contracts create exposure to currencies in which an account's securities are not denominated. The use of foreign currency forward exchange contracts involves the risk of loss from the insolvency or bankruptcy of the counterparty to the contract or the failure of the counterparty to make payments or otherwise comply with the terms of the contract. As discussed above, economic sanctions could be, and have been, imposed against certain countries, organizations, companies, entities and/or individuals. Economic sanctions and other similar governmental actions could, among other things, effectively restrict or eliminate an account's ability to purchase or sell securities or groups of securities, and thus could make an account's investments in such securities less liquid or more difficult to value.

Economic sanctions or other similar measures could be, and have been, imposed against certain countries, organizations, companies, entities and/or individuals. Investments in foreign securities are subject to economic sanctions and trade laws in the United States and other jurisdictions. These laws and related governmental actions, including counter-sanctions and other retaliatory measures, can, from time to time, prevent or prohibit an investor from investing in certain foreign securities. In addition, economic sanctions could prohibit an investor from transacting with particular countries, organizations, companies, entities and/or individuals by banning them from global payment systems that facilitate cross-border payments, restricting their ability to settle securities transactions, and freezing their assets. The imposition of sanctions and other similar measures could, among other things, cause a decline in the value of securities issued by the sanctioned country or companies located in or economically linked to the sanctioned country, downgrades in the credit ratings of the sanctioned country or companies located in or economically linked to the sanctioned country, devaluation of the sanctioned country's currency, and increased market volatility and disruption in the sanctioned country and throughout the world. Economic sanctions or other similar measures could, among other things, effectively restrict or eliminate an investor's ability to purchase or sell securities, negatively impact the value or liquidity of a portfolio of investments, significantly delay or prevent the settlement of securities transactions, force an investor to sell or otherwise dispose of investments at inopportune times or prices, or impair MSIM's ability to meet a client's investment objective or invest in accordance with a client's investment strategy. These conditions could be in place for a substantial period of time and enacted with limited advanced notice.

- Foreign Money Market Securities Risks. Investing in money market securities of foreign issuers involves some
 risks additional to those involved in investing in comparable US money market securities, including higher cost
 of investing and the possibility of adverse political, economic or other developments affecting the issuers of
 these securities.
- Growth Investing Risk. Growth investing attempts to identify companies that will experience rapid earnings
 growth relative to value or other types of stocks. Growth stocks could trade at higher multiples of current earnings
 compared to other types of stock or styles of investing (e.g., value), leading to inflated prices and thus potentially
 greater declines in value. The performance of growth strategies could be better or worse than the performance
 of equity strategies that focus on value stocks or that have a broader investment style.

- Hedge Correlation Risk. Certain strategies seek to maintain substantially offsetting exposures and follow a
 generally market-neutral approach. Hedging instruments utilized for these strategies might not maintain the
 intended correlation to the investment being hedged or otherwise fail to achieve their intended purpose. Failure
 of the hedge instruments to track a client portfolio's investments could result in the client portfolio having
 substantial residual exposure to market risk.
- Hedging Strategy Risks. Certain client accounts, portfolios, and pooled investment vehicles could, but are not required, to engage in transactions designed to reduce the risk or to protect the value of their investments, including securities and currency hedging transactions. These hedging strategies could involve a variety of derivative transactions, including transactions in forward, swap and option contracts or other financial instruments with similar characteristics, including, without limitation, forward foreign currency exchange contracts, currency and interest rate swaps, options and short sales (collectively "Hedging Instruments"). Certain risks associated with Hedging Instruments are further detailed under "Derivative Risks." Hedging against a decline in the value of a portfolio position does not eliminate fluctuations in the values of portfolio positions or prevent losses if the values of those positions decline, but establishes other positions designed to gain from those same developments, thus offsetting the decline in the portfolio positions' value. While these transactions can reduce the risks associated with an investment, the transactions themselves entail risks that are different from and possibly greater than, the risks associated with other portfolio investments. The use of Hedging Instruments could require investment techniques and risks analyses different from those associated with other portfolio investments. The risks posed by these transactions include, but are not limited to, interest rate risk, market risk, the risk that these complex instruments and techniques will not be successfully evaluated, monitored or priced, the risk that counterparties will default on their obligations, liquidity risk and leverage risk. Changes in liquidity can result in significant, rapid and unpredictable changes in the prices for derivatives. Thus, while the accounts might benefit from the use of Hedging Instruments, unanticipated changes in interest rates, securities prices or currency exchange rates could result in a poorer overall performance for the accounts than if they had not used such Hedging Instruments.
- High Yield Securities ("Junk Bonds") Risk. An account's investments in high yield securities, investments typically rated below investment grade and comparable unrated investments have speculative characteristics which expose such investments to a substantial degree of credit risk associated with their issuers. Some high yield securities are issued by companies that are restructuring, are smaller and less creditworthy or are more highly indebted than other companies, and therefore they could have more difficulty making scheduled payments of principal and interest. High yield securities are subject to greater risk of loss of income and principal than higher rated securities and could be considered speculative. High yield securities might experience reduced liquidity, and sudden and substantial decreases in price. An economic downturn, or other circumstances typically have a greater effect on the ability of issuers of high yield securities to make principal and interest payments than they do on issuers of higher rated investments. An economic downturn affecting an issuer of high yield securities can result in an increased incidence of default, which could cause certain accounts to incur additional expense to seek recovery.
- Income Risk. A portfolio's ability to generate income will depend on the yield available on the securities held by the portfolio. In the case of equity securities, changes in the dividend policies of companies held by a client portfolio could make it difficult for the portfolio to generate a predictable level of income. The use of dividendcapture strategies to generate income will generally expose a client portfolio to higher portfolio turnover, increased trading costs and the potential for capital loss or gain, particularly in the event of significant short-term price movements of stocks subject to dividend capture trading.
- Inflation-Linked Security Risk. Inflation-linked debt securities are subject to the effects of changes in market interest rates caused by factors other than inflation (real interest rates). In general, the price of an inflation-linked security tends to decrease when real interest rates increase and can increase when real interest rates decrease. Interest payments on inflation-linked securities can vary widely and will fluctuate as the principal and interest are adjusted for inflation. Any increase in the principal amount of an inflation-linked debt security will likely be considered taxable ordinary income, even though the portfolio will not receive the principal until maturity. There

can be no assurance that the inflation index used will accurately measure the real rate of inflation in the prices of goods and services. A portfolio's investments in inflation-linked securities could lose value in the event that the actual rate of inflation is different than the rate of the inflation index.

- **Issuer Diversification Risk**. A Fund or strategy could be "non-diversified," which means it invests a greater percentage of its assets in the securities of a single issuer than a fund that is "diversified." Non-diversified Funds and strategies focus their investments in a small number of issuers, making them more susceptible to risks affecting such issuers than a more diversified fund might be.
- Lending Portfolio Securities Risk. Certain clients are permitted to lend their securities to brokers, dealers and other financial institutions needing to borrow securities to complete certain transactions. The client continues to be entitled to payments in amounts equal to the interest, dividends or other distributions payable in respect of the loaned securities, which affords the client an opportunity to earn interest on the amount of the loan and on the loaned securities' collateral. In connection with any such transaction, the client will receive collateral consisting of liquid, unencumbered assets, U.S. Government securities or irrevocable letters of credit that will be maintained at all times in an amount equal to at least 100% of the current market value of the loaned securities. The client might experience loss if the institution with which the client has engaged in a portfolio loan transaction breaches its agreement with the client.

Loans of securities involve a risk that the borrower fails to return the securities or to maintain the proper amount of collateral, which could result in losses. There can be risks of delay and costs involved in recovery of securities or even loss of rights in the collateral should the borrower of the securities fail financially. These delays and costs could be greater for foreign securities. However, loans will be made only to borrowers deemed to be creditworthy and when the income that can be earned from such securities loans justifies the attendant risk. The account also bears the risk that the reinvestment of collateral will result in a principal loss. Finally, there is the risk that the price of the securities will increase while they are on loan and the collateral will not be adequate to cover their value. The account might also experience loss if the institution with which the account has engaged in a portfolio loan transaction breaches its agreement with the account.

- Leverage Risk. Certain accounts, such as pooled investment vehicles, are permitted to borrow money (and/or establish a line of credit) to provide for opportunistic asset allocation, facilitate payments on withdrawal and to remain fully invested in anticipation of future contributions. Additionally, these accounts can enter into various derivatives (such as options, futures and swaps) that have implicit or internal leverage in that the notional value of the derivative instrument is much larger than the cash needed to establish and maintain the derivative instrument. Although leverage will increase the account's investment return if the investment purchased with borrowed funds earns a greater return than the interest expense the pooled investment vehicle pays for the use of those funds, the use of leverage will decrease the return on the pooled investment vehicle if the pooled investment vehicle fails to earn as much on its investment purchased with borrowed funds as it pays for the use of those funds. Leverage and borrowing can cause the value of a client portfolio to be more volatile than if it had not been leveraged, as certain types of leverage exaggerate the effect of any increase or decrease in the value of securities in a client portfolio. The use of leverage will in this way magnify the volatility of changes in the value of an investment in the pooled investment vehicle, especially in times of a "credit crunch" or during general market turmoil. An account might be required to segregate liquid assets or otherwise cover the obligation created by a transaction that gives rise to leverage. To satisfy the account's obligations or to meet segregation requirements, an account could be forced to liquidate portfolio positions when it is not advantageous to do so. Leverage and borrowing can lead to additional costs to clients, including interest and fees. Losses on leveraged transactions can substantially exceed the initial investment.
- Line of Credit. Certain accounts could obtain a line of credit for bridge purposes to facilitate their investment activities. Should an account obtain such a line of credit, it could be required to pledge all of its assets as collateral and could also be required to pay commitment fees and non-use fees, even if such line of credit is never used. The risks associated with such a line of credit include interest expense risk, and, in the unlikely event that the

- value of the collateral pledged to secure such a line of credit were to decline significantly, the pooled investment vehicle could be forced to liquidate its assets to satisfy its repayment obligations under such line of credit.
- Liquidity Risk. A client portfolio is exposed to liquidity risk when trading volume, lack of a market maker or trading partner, large position size, market conditions, or legal restrictions impair its ability to sell particular investments or to sell them at advantageous market prices. Consequently, the client portfolio might have to accept a lower price to sell an investment or continue to hold it or keep the position open, sell other investments to raise cash or abandon an investment opportunity, any of which could have a negative effect on the portfolio's performance. These effects can be exacerbated during times of financial or political stress.
- Loans Risks. Loans are traded in a private, unregulated inter-dealer or inter-bank resale market and are generally subject to contractual restrictions that must be satisfied before a loan can be bought or sold. These restrictions can impede the client portfolio's ability to buy or sell loans (thus affecting their liquidity) and negatively impact the transaction price. It also can take longer than seven days for transactions in loans to settle. Due to the possibility of an extended loan settlement process, an investor that holds loan might hold cash, sell investments or temporarily borrow from banks or other lenders to meet short-term liquidity needs, such as to satisfy redemption requests from fund shareholders The types of covenants included in loan agreements generally vary depending on market conditions, the creditworthiness of the issuer, the nature of the collateral securing the loan and possibly other factors. Loans with fewer covenants that restrict activities of the borrower can provide the borrower with more flexibility to take actions that could be detrimental to the loan holders and provide fewer investor protections in the event of such actions or if covenants are breached. The client portfolio could experience relatively greater realized or unrealized losses or delays and expense in enforcing its rights with respect to loans with fewer restrictive covenants. Loans to entities located outside of the U.S. can have substantially different lender protections and covenants as compared to loans to U.S. entities and could involve greater risks. An investor that holds loan might have difficulties and incur expense enforcing its rights with respect to non-U.S. loans and such loans could be subject to bankruptcy laws that are materially different than in the U.S. Loans can be structured such that they are not securities under securities law, and in the event of fraud or misrepresentation by a borrower, lenders might not have the protection of the anti-fraud provisions of the federal securities laws. Loans are also subject to risks associated with other types of income investments, including credit risk and risks of lower rated investments.
- Maturity Risk. Interest rate risk will generally affect the price of a fixed income security more if the security has a longer maturity. Fixed income securities with longer maturities will therefore be more volatile than other fixed income securities with shorter maturities. Conversely, fixed income securities with shorter maturities will be less volatile but generally provide lower returns than fixed income securities with longer maturities. The average maturity of a client portfolio's investments will affect the volatility of the portfolio's rate of return.
- Mezzanine Loans. Certain loans could be in a junior or subordinate position to senior financing either because the loans are a second lien on the asset or are secured by a direct or indirect lien on the equity of the owner of the underlying asset (i.e., mezzanine debt). In certain circumstances, in order to protect its investment, an MSIM client could decide to repay all or a portion of the senior indebtedness relating to the particular loan or to cure defaults with respect to such senior indebtedness. Mezzanine investments are also expected to be a highly illiquid investment. In a bankruptcy of a borrower, those loans that are not secured by a lien on the underlying asset would have a priority no greater than other general creditors of the borrower. In addition to repayment risks, these subordinate positions might be "soft," meaning subject to restrictions on enforcement rights prior to maturity or foreclosure of the senior position. These restrictions could adversely affect the MSIM client's rights to realize upon or control the underlying assets.
- Model and Quantitative Risk. Some strategies can include the use of various proprietary or third-party
 quantitative or investment models. There could be deficiencies in the design or operation of these models,
 including as a result of shortcomings or failures of processes, people or systems. Investments selected using
 models could perform differently than expected as a result of the factors used in the models, the weight placed
 on each factor, changes from the factors' historical trends, and technical issues in the construction and

implementation of the models (including, for example, data problems and/or software issues). Moreover, the effectiveness of a model can diminish over time, including as a result of changes in the market and/or changes in the behavior of other market participants. A model's return mapping is based on historical data regarding particular asset classes. Certain strategies can be dynamic and unpredictable, and a model used to estimate asset allocation might not yield an accurate estimate of the then current allocation. Operation of a model could result in negative performance, including returns that deviate materially from historical performance, both actual and pro-forma. Additionally, commonality of holdings across quantitative money managers can amplify losses. There is no guarantee that the use of these models will result in effective investment decisions for clients. In the case of third-party models, such techniques have not been independently tested or validated, and there can be no assurance that these techniques will achieve the desired results. If these techniques have errors or are flawed or incomplete and such issues are not identified, such models could have an adverse effect on client investment performance.

- Money Market Funds Risk. An investment in a money market fund is neither insured nor guaranteed by the Federal Deposit Insurance Corporation ("FDIC") or any other government agency. Money market funds could lose money. Although many money market funds classified as government funds (i.e., money market funds that invest 99.5% of total assets in cash and/or securities backed by the U.S. government) and retail funds (i.e., money market funds open to natural person investors only) seek to maintain a stable \$1.00 per share, they cannot guarantee they will do so. The price of other money market funds will fluctuate and when an account sells shares, they could be worth more or less than originally paid. Some money market funds impose, or are permitted to impose, a fee upon sale or temporarily suspend sales if liquidity falls below required minimums. During suspensions, shares would not be available for withdrawals. Moreover, in some circumstances, money market funds could cease operations when the value of a fund drops below \$1.00 per share. In that event, the fund's holdings could be liquidated and distributed to the fund's shareholders. This liquidation process can be prolonged in nature and last for months. During this time, these funds would not be available for withdrawal.
- Mortgage- and Asset-Backed Securities Risk. Mortgage-backed and asset-backed securities represent interests in "pools" of commercial or residential mortgages or other assets, including consumer loans or receivables. The purchase of mortgage- and asset-backed securities issued by non-government entities can entail greater risk than such securities that are issued or guaranteed by a government entity. Mortgage- and asset-backed securities issued by non-government entities might offer higher yields than those issued by government entities but can be subject to greater volatility than government issues and can also be subject to greater credit risk and the risk of default on the underlying mortgages or other assets. Investments in mortgageand asset-backed securities are subject to both extension risk, where borrowers pay off their debt obligations more slowly in times of rising interest rates, and prepayment risk, where borrowers pay off their debt obligations sooner than expected in times of declining interest rates. Movements in interest rates (both increases and decreases) can quickly and significantly reduce the value of certain types of mortgage- and asset-backed securities. Although certain mortgage- and asset-backed securities are guaranteed as to timely payment of interest and principal by a government entity, the market price for such securities is not guaranteed and will fluctuate. Asset-backed securities are subject to the risk that various federal and state consumer laws and other legal and economic factors could result in the collateral backing the securities being insufficient to support payment on the securities. In addition, an unexpectedly high rate of defaults on the mortgages and assets held by a pool or mortgages or other assets could adversely affect the value of a mortgage- or asset-backed security and could result in losses to the account. The risk of such defaults is generally higher in the case of mortgage pools that include subprime mortgages. Leverage can cause an account to be more volatile than if an account had not been leveraged. The risks associated with mortgage- and asset-backed securities typically become elevated during periods of distressed economic, market, health and labor conditions. In particular, increased levels of unemployment, delays and delinquencies in payments of loan, mortgage, and rent obligations, and uncertainty regarding the effects and extent of government intervention with respect to debt payments and other economic matters can adversely affect investments in mortgage- and asset-backed securities.

- Municipal Securities Risk. The income of municipal securities is generally exempt from federal income tax at the time of issuance, however, a client could purchase municipal securities that pay interest that is subject to the federal alternative minimum tax, and municipal securities on which the interest payments are taxable. These securities typically are "general obligation" or "revenue" bonds, notes or commercial paper including participation in lease obligations and installment purchase contracts of municipalities. General obligation bonds are secured by the issuer's full faith and credit as well as its taxing power for payment of principal or interest. Thus, these bonds can be vulnerable to limits on a government's power or ability to raise revenue or increase taxes and its ability to maintain a fiscally sound budget. The timely payments could also be influenced by any unfunded pension liabilities or other post-employee benefit plan liabilities. These bonds could also depend on legislative appropriation and/or funding or other support from other governmental bodies in order to make payments. Revenue bonds, however, are generally payable from a specific revenue source, and therefore involve the risk that the tax or other revenues so derived will not be sufficient to meet interest and or principal payment obligations. These obligations could have fixed, variable or floating rates. As a result, these bonds historically have been subject to a greater risk of default than general obligation bonds because investors can look only to the revenue generated by the project or other revenue source backing the project, rather than to the general taxing authority of the state or local government issuer of the obligations. Municipal securities involve the risk that an issuer calls securities for redemption, which could force the account to reinvest the proceeds at a lower rate of interest. The amount of public information available about municipal bonds is generally less than for corporate equities or bonds, meaning that the investment performance of municipal bonds could depend more on the analytical abilities of the investment adviser than stock or corporate bond investments. The secondary market for municipal bonds also tends to be less well-developed and less liquid than many other securities markets, which can limit a client portfolio's ability to sell its municipal bonds at attractive prices. The differences between the price at which a bond can be purchased and the price at which it can be sold could widen during periods of market distress. Less liquid bonds can become more difficult to value and be subject to erratic price movements. The increased presence of nontraditional participants (such as proprietary trading desks of investment banks and hedge funds) or the absence of traditional participants (such as individuals, insurance companies, banks and life insurance companies) in the municipal markets could lead to greater volatility in the markets because non-traditional participants might trade more frequently or in greater volume.
- Option Strategy Risk. Certain client portfolios can employ an option strategy that seeks to take advantage of a general excess of option price-implied volatilities for a specified stock or index over the stock or index's subsequent realized volatility. This market observation is often attributed to the unknown risk to which an option seller is exposed to in comparison to the fixed risk to which an option buyer is exposed. There can be no assurance that this imbalance will apply in the future over specific periods or generally. It is possible that the imbalance could decrease or be eliminated by actions of investors that employ strategies seeking to take advantage of the imbalance, which would have an adverse effect on the client portfolio's ability to achieve its investment objective. Further, directional movements of the underlying index or stock could overwhelm the volatility differential for any given option resulting in a loss, regardless of the volatility relationship during that specific option's term. Call spread and put spread selling strategies employed by certain strategies are based on a specified index or on exchange-traded funds that replicate the performance of certain indexes. If the index or an ETF appreciates or depreciates sufficiently over the period to offset the net premium received, the client portfolio will incur a net loss. The amount of potential loss in the event of a sharp market movement is subject to a cap defined by the difference in strike prices between written and purchased call and put options. The value of the specified exchange-traded fund is subject to change as the values of the component securities fluctuate. Also, it might not exactly match the performance of the specified index.
- Pooled Investment Vehicles Risk. Pooled investment vehicles include open- and closed-end investment
 companies, ETFs, and private funds. Pooled investment vehicles are subject to the risks of investing in the
 underlying securities or other investments. Shares of closed-end investment companies and ETFs can trade at
 a premium or discount to net asset value and are subject to secondary market trading risks. In addition, except

as otherwise noted in this Form ADV Part 2A, the client portfolio will bear a pro rata portion of the operating expenses of a pooled investment vehicle in which it invests.

- **Portfolio Turnover Risk**. The annual portfolio turnover rate of certain strategies or investment funds can exceed 100%. High turnover rates could generate more capital gains and involve greater expenses (which would reduce return) than a trading strategy with a lower turnover rate. Capital gains distributions will be made to investors even if offsetting capital loss carry forwards do not exist.
- Preferred Stock Risk. Although preferred stocks represent an ownership interest in an issuer, preferred stocks generally do not have voting rights or have limited voting rights and have economic characteristics similar to fixed-income securities. Preferred stocks are subject to issuer-specific risks generally applicable to equity securities and credit and interest rate risks generally applicable to fixed-income securities. The value of preferred stock generally declines when interest rates rise and can react more significantly than bonds and other debt instruments to actual or perceived changes in the company's financial condition or prospects.

Private Equity Real Assets Risks (Generally)

Real Estate Market Conditions Risk. Some of the Underlying Investment Funds' real estate investment strategies could be based, in part, upon the premise that real estate businesses and assets will become available for purchase by such Underlying Investment Fund at prices that the investment manager of the Underlying Investment Fund considers more favorable. Further, the strategy of certain Underlying Investment Funds for its real estate investments could rely, in part, upon the continuation of existing market conditions (including, for example, supply and demand characteristics) or, in some circumstances, a recovery or improvement in market conditions over the projected holding period for the real estate investments. No assurance can be given that real estate investments can be acquired or disposed of at favorable prices or that the market for such investments will remain stable or, as applicable, recover or improve, since this will depend upon events and factors outside the control of the managers of the Underlying Investment Funds.

Acquisition and Development Risk. Acquisitions entail risks that investments might not perform in accordance with expectations and that anticipated costs of improvements to bring an acquired property up to the necessary standard for the market position intended for that property could exceed budgeted amounts, as well as general investment risks associated with any new real estate investment. Certain Underlying Investment Funds might not be successful in identifying suitable real estate properties or other assets that meet their investment criteria or in consummating acquisitions or investments on satisfactory terms.

Effecting Operating Improvements Risk. In some cases, the success of an Underlying Investment Fund's real estate investment strategy will depend, in part, on the ability of such Underlying Investment Fund to restructure and effect improvements in the operations of a portfolio company or its properties. The activity of identifying and implementing restructuring programs and operating improvements at portfolio companies entails a high degree of uncertainty. There can be no assurance that such Underlying Investment Fund will be able to successfully identify and implement such restructuring programs and improvements.

Commercial/Business Risk. It is anticipated that certain of our private equity real estate fund of funds will make investments in some Underlying Investment Funds that have a limited operating history, a manager with limited private equity real estate fund management experience, or both. Such investments have inherently greater risk than more established private equity real estate funds. Accordingly, the growth of these Underlying Investment Funds could require significant time and effort resulting in a longer investment horizon than can be expected with lower risk investment alternatives. Such investments can experience failure or substantial declines in value at any stage. There is no assurance that such investments by the accounts will be successful.

Ability of Underlying Investment Funds to Finance, Consummate and Dispose of Investment Risk. The Underlying Investment Funds' ability to generate attractive investment returns for their investors can be adversely affected to the extent the Underlying Investment Funds are unable to obtain favorable financing terms for their real estate investments and can also affect certain of our accounts' and the Underlying Investment Funds' ability to exit the investment. Certain marketplace events could have an adverse impact on the availability of credit to businesses generally and could lead to an overall weakening of the global economies. Certain

economic downturns could adversely affect the financial resources of corporate borrowers in which the Underlying Investment Funds have invested, in addition to the resources of operating partners and investment projects in which the Underlying Investment Funds participate, and result in the inability of such borrowers, partners and projects to make principal and interest payments on outstanding debt when due. In the event of such defaults, the Underlying Investment Funds could suffer a partial or total loss of capital invested in such companies, which could, in turn, have an adverse effect on the Underlying Investment Funds' and of the accounts' returns. Such marketplace events also could restrict the ability of the Underlying Investment Funds to sell or liquidate real estate investments at favorable times or for favorable prices.

- Privately Placed and Restricted Securities Risks. An account's investments could include privately placed securities, which are subject to resale restrictions. It is likely that such securities will not be listed on a stock exchange or traded in the OTC market. These securities will have the effect of increasing the level of an account's illiquidity to the extent the account is unable to sell or transfer these securities due to restrictions on transfers or on the ability to find buyers interested in purchasing the securities. The illiquidity of the market, as well as the lack of publicly available information regarding these securities, can also adversely affect the ability to arrive at a fair value for certain securities at certain times and could make it difficult for the account to sell certain securities (or to sell such securities at the prices at which they are currently held). Furthermore, companies whose securities are not publicly traded are often not subject to the same or comparable disclosure and other investor protection requirements that might be applicable if their securities were publicly traded and/or listed on a stock exchange. An account could be obligated to pay all or part of the legal and/or other fees incurred in negotiating the purchase and or sale of a private placement security. When registration is required to sell a security, an account could be obligated to pay all or part of the registration expenses, and a considerable period might elapse between the decision to sell and the time the account is permitted to sell a security under an effective registration statement. If adverse market conditions developed during this period, an account might obtain a less favorable price than the price that prevailed when the account decided to sell.
- Real Estate Risk. Real estate investments are subject to risks associated with owning real estate, including declines in real estate values, increases in property taxes, fluctuations in interest rates, limited availability of mortgage financing, decreases in revenues from underlying real estate assets, declines in occupancy rates, changes in government regulations affecting zoning, land use, and rents, environmental liabilities, and risks related to the management skill and creditworthiness of the issuer. Companies in the real estate industry could also be subject to liabilities under environmental and hazardous waste laws, among others.
- REITs, Real Estate Operating Companies ("REOCs") and Foreign Real Estate Company Risks. Investing in REITs, REOCs and foreign real estate companies exposes investors to the risks of owning real estate directly, as well as to risks that relate specifically to the way in which REITs, REOCs and foreign real estate companies are organized and operated. In addition, investments in REITs and similar non-U.S. entities could involve duplication of management fees and certain other expenses. REITs are also subject to certain provisions under federal tax law and the failure of a company to qualify as a REIT could have adverse consequences for a portfolio. In addition, foreign real estate companies could be subject to the laws, rules and regulations governing those entities and their failure to comply with those laws, rules and regulations could negatively impact the performance of those entities. Operating REITs and foreign real estate companies requires specialized management skills, and an account indirectly bears management expenses along with the direct expenses of an account. Changes in underlying real estate values can have an exaggerated effect to the extent that investments of an individual REIT or foreign real estate company are concentrated in particular regions or property types and changes in underlying real estate values can have an exaggerated effect to the extent that investments are concentrated in particular geographic regions or property types. Funds are generally not eligible for a deduction from dividends received from REITs that is available to individuals who invest directly in REITs.
- Repurchase Agreements Risk. Repurchase agreements are subject to risks associated with the possibility of
 default by the seller at a time when the collateral has declined in value, or insolvency of the seller, which could
 affect an account's right to control the collateral. In the event of a default or bankruptcy by a selling financial
 institution, an account will seek to liquidate such collateral. However, the exercising of an account's right to

liquidate such collateral could involve certain costs or delays and, to the extent that proceeds from any sale upon a default of the obligation to repurchase were less than the repurchase price, an account could suffer a loss. Repurchase agreements involving obligations other than U.S. government securities could be subject to special risks.

- Residual Interest Bonds Risk. An investment in a residual interest bond exposes a portfolio to leverage and greater risk than an investment in a fixed-rate municipal bond. Residual interest bonds are issued by a trust (the "trust") that holds municipal obligations and the value of residual interest bonds is derived from the value of such obligations. The trust also issues floating-rate notes to third parties that can be senior to the residual interest bonds. Residual interest bonds make interest payments to holders of the residual interest that bear an inverse relationship to both the interest rate paid on the floating-rate notes and short-term interest rates, normally decreasing when short-term rates increase. The value and market for residual interest bonds are volatile and such bonds could have limited liquidity. As required by applicable accounting standards, a Fund that holds these bonds records interest expense as a liability with respect to floating-rate notes and also records offsetting interest income in an amount equal to this expense.
- Reverse Repurchase Agreements Risk. Reverse repurchase agreements involve a sale of a security to a bank or securities dealer and a simultaneous agreement to repurchase the security for a fixed price (reflecting a market rate of interest) on a specific date. These transactions involve a risk that the other party to a reverse repurchase agreement will be unable or unwilling to complete the transaction as scheduled, which could result in losses to an investment portfolio. Furthermore, reverse repurchase agreements involve the risks that (i) the interest income earned in the investment of the proceeds will be less than the interest expense, (ii) the market value of the securities retained in lieu of sale by an account could decline below the price of the securities an account has sold but is obligated to repurchase, (iii) the market value of the securities sold will decline below the price at which an account is required to repurchase them and (iv) the securities will not be returned to an account. Reverse repurchase transactions are a form of leverage that can also increase the volatility of investment portfolios.
- Sector and Geographic Risk. A client portfolio could invest significantly in one or more sectors or geographic
 regions. As such, the value of the client portfolio could be affected by events that adversely affect such sectors
 or geographic regions and fluctuate more than that of a portfolio that invests more broadly.
- Short Sale Risk. In a short sale transaction, an account sells a security that it owns or has the right to acquire at no added cost (i.e., "against the box") or does not own (but has borrowed) in anticipation of a decline in the market value of that security. To deliver the securities to the buyer, an account arranges through a lender (e.g., a broker) to borrow the security and, in so doing, the account becomes obligated to replace the security borrowed at its market price at the time of replacement. An account could have to pay a premium to borrow the security and must pay any dividends or interest payable on the security until it is replaced. An account's obligation to replace the security borrowed in connection with a short sale will be secured by collateral deposited with the lender that consists of cash or other liquid securities. Short sales by an account involve certain risks and special considerations. If we incorrectly predict that the price of a borrowed security will decline, an account will have to replace the security with a security with a greater value than the amount received from the sale, thus, resulting in a loss. Losses from short sales differ from losses that could be incurred from a purchase of a security in that losses from short sales are potentially unlimited because the price of the borrowed security could rise indefinitely. whereas losses from purchases can equal only the total amount invested. Purchasing a security to close out the short position can itself cause the price of the security to rise further, thereby exacerbating the loss. Short selling also involves the risks of: increased leverage, and its accompanying potential for losses; the potential inability to reacquire a security in a timely manner, or at an acceptable price; the possibility of the lender terminating the loan at any time, forcing an account to close the transaction under unfavorable circumstances; the additional costs that can be incurred; and the potential loss of investment flexibility caused by an account's obligation to provide collateral to the lender and set aside assets to cover the open position.

- Small- and Mid-Capitalization Companies Risk. Investments in small- and mid-capitalization companies can involve greater risks than investments in larger, more established companies. The securities issued by small- and mid-cap companies could be less liquid, and such companies could have more limited markets, financial resources and product lines, and could lack the depth of management of larger companies. Small- and mid-capitalization companies are generally subject to greater price fluctuations, less liquidity, higher transaction costs and higher investment risk than larger, more established companies. Such companies often have limited product lines, markets or financial resources, are dependent on a limited management group, and lack substantial capital reserves or an established performance record. There is generally less publicly available information about such companies than for larger, more established companies. Stocks of these companies frequently have lower trading volumes, making them more volatile and potentially more difficult to value.
- Special Purpose Acquisition Companies ("SPACs"). A portfolio could invest in stock, warrants, rights and other securities of special purpose acquisition companies which typically are publicly traded companies that raise investment capital for the purpose of acquiring or merging with an existing company that is identified subsequent to the SPAC's initial public offering ("IPO"). Typically, the acquisition target is an existing privately held company that wants to trade publicly, which it accomplishes through a combination with a SPAC rather than by conducting a traditional initial public offering ("IPO"). SPACs and similar entities are blank check companies and do not have any operating history or ongoing business other than seeking acquisitions. The long-term value of a SPAC's securities is particularly dependent on the ability of the SPAC's management to identify a merger target and complete an attractive acquisition. Some SPACs pursue acquisitions only within certain sectors, industries or regions, which can increase the time horizon for an acquisition as well as other risks associated with these investments, including price volatility. Conversely, other SPACs can invest without such limitations, in which case management could have limited experience or knowledge of the market sector or region in which the transaction is contemplated. In addition, certain securities issued by a SPAC, particularly in private placements conducted by the SPAC after its IPO, could be classified as illiquid and/or be subject to restrictions on resale, which restrictions might be imposed for at least a year or possibly a more extended time, and could potentially be traded only in the over-the-counter market.

Until an acquisition or merger is completed, a SPAC generally invests its assets, less a portion retained to cover expenses, in U.S. government securities, money market securities and cash and does not typically pay dividends in respect of its common stock. To the extent a SPAC is invested in these securities or cash, this could impact the Fund's ability to meet its investment objective. SPAC shareholders might not approve any proposed acquisition or merger, or an acquisition or merger, once effected, could prove unsuccessful. If an acquisition or merger that meets the requirements of the SPAC is not completed within a pre-established period of time (typically, two years), the funds invested in the SPAC plus any interest paid on such funds while held in trust (less any permitted expenses and any losses experienced by the SPAC) are returned to its shareholders. As a result, an account investing in a SPAC could be subject to opportunity costs to the extent that alternative investments would have produced higher returns. Any warrants or other rights with respect to a SPAC held by a client could expire worthless or could be repurchased or retired by the SPAC at an unfavorable price.

In connection with a proposed acquisition, a SPAC could raise additional funds in order to fund the acquisition, post-acquisition working capital, redemptions or some combination of those purposes. This additional fundraising might be in the form of a private placement of a class of equity securities or debt. The debt could be secured by the assets of the SPAC or the operating company existing after the acquisition or it could be unsecured. The debt could also be investment grade debt or below investment grade debt.

A client could invest in stock, warrants, rights and other securities of SPACs or similar special purpose entities in a private placement transaction or as part of a public offering. If the client purchases securities in the SPAC's IPO, typically it will receive publicly-traded securities called "units" that include one share of common stock and one right or warrant (or partial right or warrant) conveying the right to purchase additional shares of common stock. At a specified time, the rights and warrants can be separated from the common stock at the election of the holder, after which each security typically is freely tradeable. An investment in the IPO securities of a SPAC could be diluted by additional, later offerings of securities by the SPAC or by other investors exercising existing

rights to purchase securities of the SPAC. If a client invests in equity securities issued in a private placement after the IPO, those shares will not be publicly tradable unless and until there is a registration statement filed by the SPAC and approved by the SEC or if an exemption from registration is available, which exemptions typically become available at least a year after the date of the business combination. Equity investments in the SPAC made in connection with a proposed business combination will be diluted by the acquisition itself and further fundraising by the ongoing operating business.

If there is no market for the shares of the SPAC or only a thinly traded market for shares or interests in the SPAC develops, a client might not be able to sell its interest in a SPAC or it might only be able to sell its interest at a price below what the client believes is the SPAC interest's value. If not subject to a restriction on resale, a client can sell its investments in a SPAC at any time, including before, at or after the time of an acquisition or merger. Generally, SPACs provide the opportunity for common shareholders who hold publicly traded shares to have some or all of their shares redeemed by the SPAC at or around the time of a proposed acquisition or merger. However, there is often a limit to the number of shares that can be redeemed in connection with a business combination. If a client holds shares of publicly traded SPAC stock, this means that a client might not be able to redeem those shares prior to an acquisition and could have to hold those shares until after the completion of the acquisition. If a client purchases shares in a private placement, those shares will not be redeemable in connection with a transaction. In addition, a client could elect not to participate in a proposed SPAC transaction or could be required to divest its interests in the SPAC due to regulatory or other considerations.

An investment in a SPAC is subject to the risks that any proposed acquisition or merger does not obtain the requisite approval of SPAC shareholders, requires governmental or other approvals that it fails to obtain or that an acquisition or merger, once effected, could prove unsuccessful and lose value. In addition, among other conflicts of interest, the economic interests of the management, directors, officers and related parties of a SPAC can differ from the economic interests of public shareholders, which could lead to conflicts as they evaluate, negotiate and recommend business combination transactions to shareholders. For example, because the sponsor, directors and officers of a SPAC could directly or indirectly own interests in a SPAC, the sponsor, directors and officers could have a conflict of interest in determining whether a particular target business is an appropriate business with which to effectuate a business combination. This risk can become more acute as the deadline for the completion of a business combination nears or in the event that attractive acquisition or merger targets become scarce. In addition, the requirement that a SPAC complete a business combination within a prescribed time frame could give potential target businesses leverage over the SPAC in negotiating a business combination and could limit the time the SPAC has in which to conduct due diligence on potential business combination targets, which could undermine the SPAC's ability to complete a business combination on terms that would produce value for its shareholders.

An investment in a SPAC is also subject to the risk that a significant portion of the funds raised by the SPAC could be expended during the search for a target acquisition or merger. The value of investments in SPACs can be highly volatile and can depreciate over time.

In addition, investments in SPACs can be subject to the same risks as investing in any initial public offering, including the risks associated with companies that have little operating history as public companies, including unseasoned trading, small number of shares available for trading and limited information about the issuer. In addition, the market for IPO issuers can be volatile, and share prices of newly public companies have fluctuated significantly over short periods of time. Although some IPOs produce high returns, such returns are not typical and might not be sustainable.

• Special Situations Investment Risks. Certain of the companies in whose securities an account invests could be involved in (or are the target of) acquisition attempts or tender offers, in transition, out of favor, financially leveraged or troubled, or potentially troubled, and could be or have recently been involved in major strategic actions, restructurings, bankruptcy, reorganization or liquidation. These characteristics of these companies can cause their securities to be particularly risky, although they also can offer the potential for high returns. Additionally, these types of transactions present the risk that the transaction could be unsuccessful, take considerable time or result in a distribution of cash or a new security, the value of which is less than the purchase

price. These companies' securities could be considered speculative, and the ability of the companies to pay their debts on schedule could be affected by adverse interest rate movements, changes in the general economic climate, economic factors affecting a particular industry or specific developments within the companies. An investment by an account in any instrument is subject to no minimum credit standard and a significant portion of the obligations and preferred stock in which an account could invest might be less than investment grade (commonly referred to as junk bonds), which can result in greater risks experienced by the account, as applicable, than it would if investing in higher rated instruments.

- Stripped Securities Risk. Stripped Securities ("Strips") are usually structured with classes that receive different proportions of the interest and principal distributions from an underlying asset or pool of underlying assets. Classes can receive only interest distributions (interest-only "IO") or only principal (principal-only "PO"). Strips are particularly sensitive to changes in interest rates because this can increase or decrease prepayments of principal. A rapid or unexpected increase in prepayments can significantly depress the value of IO Strips, while a rapid or unexpected decrease can have the same effect on PO Strips.
- Structured Management Risk. MSIM can use rules-based, proprietary investment techniques and analyses in
 making investment decisions. These strategies seek to take advantage of certain quantitative and/or behavioral
 market characteristics identified by MSIM, utilizing rules-based country, sector and commodity weighting
 processes, structured allocation methodologies and disciplined rebalancing models. These investment
 strategies have not been independently tested or validated, and there can be no assurance they will achieve the
 desired results.
- Tax-Managed Investing Risk. Investment strategies that seek to enhance after-tax performance might be unable to fully realize strategic gains or harvest losses due to various factors. Market conditions could limit the ability to generate tax losses. A tax-managed strategy could cause a client portfolio to hold a security in order to achieve more favorable tax treatment or to sell a security in order to create tax losses. A tax loss realized by a U.S. investor after selling a security will be negated if the investor purchases the security within thirty days. Although MSIM avoids "wash sales" whenever possible and temporarily restricts securities it has sold at a loss to prevent them, a wash sale can occur inadvertently because of trading by a client in portfolios not managed by MSIM. A wash sale can also be triggered by MSIM when it has sold a security for loss harvesting and shortly thereafter the firm is directed by the client to invest a substantial amount of cash resulting in a repurchase of the security.
- Tax Risk. The tax treatment of investments held in a client portfolio could be adversely affected by future tax legislation, Treasury Regulations and/or guidance issued by the Internal Revenue Service regarding the character, timing, and/or amount of taxable income or gains attributable to an account. Income from tax-exempt municipal obligations could be declared taxable because of unfavorable changes in tax laws, adverse interpretations by the Internal Revenue Service or non-compliant conduct of a bond issuer.
- Tax-Straddle Risk. Investment strategies that utilize off-setting positions on a security or a portfolio of securities
 must adhere to specific rules and provisions under the Internal Revenue Code in order to avoid negative tax
 consequences. These provisions apply to an investor's entire investment portfolio including accounts not
 managed by MSIM. While MSIM seeks to avoid "tax straddles", an investor's ability to realize tax benefits (e.g.,
 defer gains, deduct interest, convert short term gains into long term gains) could be negated by transactions and
 holdings of which MSIM is not aware.
- Tracking Error Risk. Tracking error risk refers to the risk that the performance of a client portfolio does not match or correlate to that of the index it attempts to track, either on a daily or aggregate basis. Factors such as fees and trading expenses, client-imposed restrictions, imperfect correlation between the portfolio's investments and the index, changes to the composition of the index, regulatory policies, high portfolio turnover and the use of leverage all contribute to tracking error. Tracking error risk can cause the performance of a client portfolio to be less or more than expected.
- Underlying Investment Funds Risk. Certain of the Underlying Investment Funds are not registered as investment companies under the Investment Company Act of 1940, as amended (the "1940 Act"). Investors in

such Underlying Investment Funds do not have the benefit of the protections afforded by the 1940 Act to investors in registered investment companies. In addition, the investment managers of Underlying Investment Funds that are not registered as investment companies under the 1940 Act might not be registered as investment advisers under the Investment Advisers Act of 1940 (the "Advisers Act"). Although we periodically receive information from each Underlying Investment Fund regarding its investment performance and investment strategy, we might have little or no means of independently verifying this information. An Underlying Investment Fund could use proprietary investment strategies that are not fully disclosed to us, which could involve risks under some market conditions that are not anticipated by us. Underlying Investment Managers could change their investment strategies (i.e., could experience style drift) at any time. In addition, we have no direct control over any Underlying Investment Funds' investment management, brokerage, custodial arrangements or operations and must rely on the experience and competency of the Investment Manager in these areas. The performance of our accounts investing in Underlying Investment Funds depends on our success in selecting Underlying Investment Funds for investment and the allocation and reallocation of assets among those Underlying Investment Funds.

The Underlying Investment Funds typically do not maintain their securities and other assets in the custody of a bank or a member of a securities exchange, as is generally required of registered investment companies. It is anticipated that the Underlying Investment Funds in which clients invest generally will maintain custody of their assets with brokerage firms that do not separately segregate such customer assets as is required in the case of registered investment companies. Under the provisions of the Securities Investor Protection Act of 1970, as amended, the bankruptcy of any such brokerage firm could have a greater adverse effect on the funds than would be the case if custody of assets were maintained in accordance with the requirements applicable to registered investment companies. There is also a risk that an Investment Manager could convert assets committed or paid to it by investors for its own use or that a custodian could convert assets committed to it by an Underlying Investment Manager to its own use.

Each Underlying Investment Manager can receive any incentive-based fees to which it is entitled irrespective of the performance of the other Underlying Investment Funds and a fund generally. As a result, an Investment Manager with positive performance could receive compensation from the fund, in the form of the asset-based fees, incentive-based fees and other expenses payable by you as an investor in the relevant Investment Fund, even if the fund's overall returns are negative. The investment decisions of the Underlying Investment Funds are made by the Underlying Investment Managers independently of each other so that, at any particular time, one Investment Fund could be purchasing shares in an issuer that at the same time are being sold by another Investment Fund. Transactions of this sort could result in an account directly or indirectly incurring certain transaction costs without accomplishing any net investment result, which could result in the pursuit of opposing investment strategies or result in performance that correlates more closely with broader market performances. Because an account can make additional investments in or redemptions from Underlying Investment Funds only at certain times according to limitations set out in the governing documents of each such fund, an account from time to time could have to invest some of its assets temporarily in money market securities or money market funds, among other similar types of investments.

Underlying Investment Funds might permit or require that redemptions of interests be made in kind. Upon its redemption of all or a portion of its interest in an Underlying Investment Fund, an account could receive securities that are illiquid or difficult to value. In such a case, we would seek to cause the account to dispose of these securities in a manner that is in the best interest of the account. An account might not be able to withdraw from an Underlying Investment Fund except at certain designated times (if at all), limiting our ability to redeem assets from an Underlying Investment Fund based on performance or for other reasons. By investing in the Underlying Investment Funds indirectly through the accounts, you bear asset- based fees and performance-based fees or allocations at the Underlying Investment Fund level, in addition to those payable to us in our capacity as investment adviser to your account. Similarly, you bear a proportionate share of the other operating expenses of (i) the Underlying Investment Funds in which your account is invested; and (ii) of the accounts themselves. If

you meet the conditions imposed by the Underlying Investment Managers, you could invest directly with such Underlying Investment Managers.

- Unrated Fixed Income Securities. Unrated securities (which are not rated by a rating agency) could be less
 liquid than comparable, rated securities and involve the risk that purchasers might not accurately evaluate the
 security's comparative credit rating. To the extent that a pooled investment vehicle or investor's account invests
 in unrated securities, success in achieving the investment objective of such vehicle or account could depend more
 heavily on the investment manager's analysis of the creditworthiness of the issuer than if the vehicle or account
 invested exclusively in rated securities.
- U.S. Government Securities Risk. With respect to U.S. government securities that are not backed by the full faith and credit of the U.S. Government, there is the risk that the U.S. Government will not provide financial support to such U.S. government agencies, instrumentalities or sponsored enterprises if it is not obligated to do so by law. For example, a U.S. government-sponsored entity, such as Federal National Mortgage Association or Federal Home Loan Mortgage Corporation, although chartered or sponsored by an Act of Congress, could issue securities that are neither insured nor guaranteed by the U.S. Treasury and, therefore, are not backed by the full faith and credit of the United States. U.S. Treasury securities generally have a lower return than other obligations because of their higher credit quality and market liquidity.
- Variable Interest Entities. An account could gain economic exposure to certain operating companies in China through legal structures known as variable interest entities ("VIEs"). From time to time, an account's investments in U.S.-listed shell companies relying on VIE structures to consolidate China-based operations could be significant. In a VIE structure, a China-based operating company ("Operating Company") typically establishes an offshore shell company ("Shell Company") in another jurisdiction, such as the Cayman Islands, which then enters into service and other contracts with the Operating Company and issues shares on a foreign exchange, like the New York Stock Exchange or Hong Kong Exchange. Investors in VIE structures hold stock in the Shell Company rather than directly in the Operating Company and the Shell Company might not own stock or other equity in the Operating Company. Thus, VIE structures and these contractual arrangements are not equivalent to equity ownership in the Operating Company, which presents additional risks. Certain Chinese companies have used VIEs to facilitate foreign investment because of Chinese governmental prohibitions or restrictions on non-Chinese ownership (e.g., by U.S. persons and entities) of companies in certain industries in China. Through a VIE arrangement, the Operating Companies indirectly raise capital from non-Chinese investors (such as a Fund) without distributing ownership of the Operating Companies to such non-Chinese investors.

Investments in VIEs are subject to unique risks in addition to those generally associated with investments in China. For example, breaches of the contractual arrangements, changes in Chinese law or regulation with respect to enforceability or permissibility of these arrangements or failure of these contracts to function as intended would likely adversely affect an investment through a VIE structure. In addition, VIE structures are also subject to the risk of inconsistent and unpredictable application of Chinese law and regulations, that the Shell Company could be limited in its ability to control, or could lose control over, the Operating Company and that the equity owners of the Operating Company might have interests conflicting with those of the Shell Company's investors. There is also uncertainty related to the Chinese taxation of VIEs and the Chinese tax authorities could take positions that result in increased tax liabilities. Thus, investors face risks and uncertainty about future actions or intervention by the government of China or other similar developments (such as changes in regulations, laws and judicial decisions or interpretations), which could occur at any time and without notice and which could suddenly and significantly affect VIE structures, the Operating Companies and the enforceability of the Shell Company's contractual arrangements with the Operating Company. If any of these or similar risks materialize, the value and liquidity of an account's investments in the Shell Company could be significantly adversely affected and an account could incur significant losses with no recourse available.

Although the China Securities Regulatory Commission published that it does not object the use of VIE structures for Operating Companies to raise capital from non-Chinese investors, there is no guarantee that the Chinese government or another Chinese regulator will not determine that these arrangements are inconsistent with Chinese laws or regulations or otherwise interfere with the operation of or disallow VIE structures or that this

published position will remain unchanged. Intervention by the Chinese government with respect to VIE structures could materially adversely affect the Operating Company's performance, the enforceability of the Shell Company's contractual arrangements with the Operating Company and the value of the Shell Company's shares. Further, if the Chinese government or other regulatory or judicial authority determines that the agreements establishing the VIE structure do not comply with Chinese law and regulations, including those related to prohibitions on foreign ownership, the Operating Company could be subject to penalties, revocation of business and operating licenses or forfeiture of ownership interests. The Shell Company's ability to exert any control over the Operating Company could also be jeopardized if certain legal formalities are not observed in connection with the agreements, if the agreements are breached or if the agreements are otherwise determined not to be enforceable. If any of the foregoing or similar developments were to occur, the market value and liquidity of the associated investments would fall, causing substantial investment losses for an account with no recourse available.

- Variable Rate Demand Notes ("VRDNs") Risks. VRDNs are subject to a variety of risks, including but not limited to: (1) Renewal Risk: The risk of the inability to obtain an appropriate liquidity bank facility at an acceptable price to replace a facility upon termination or expiration of the contract period; (2) Liquidity Risk: The risk that in the event of a failed remarketing, the bank that has agreed to provide the letter of credit fails to honor its obligation to support the VRDNs; and (3) Default Risk: VRDNs typically are not secured by the assets of the issuer or the bank but are subject to the letter of credit provider honoring its obligations.
- Venture Capital Investment Risks. Certain accounts will directly, or indirectly through Underlying Investment Funds, make venture capital investments. Such investments involve a high degree of business and financial risk that can result in substantial losses. The most significant risks are the risks associated with investments in: (i) companies in an early stage of development or with little or no operating history; (ii) companies operating at a loss or with substantial fluctuations in operating results from period to period; and (iii) companies with the need for substantial additional capital to support or to achieve a competitive position. Investments in emerging growth companies involve substantial risks, as these companies often experience unexpected problems in the areas of product development, manufacturing, marketing, financing and general management, which, in some cases, cannot be adequately solved. In addition, such companies typically have obtained capital in the form of debt and/or equity to expand rapidly, reorganize operations, acquire other businesses or develop new products and markets. These activities by definition involve a significant amount of change in a company and could give rise to significant problems in sales, manufacturing and general management of these activities.

In addition, these companies could (a) be operating at a loss or have significant variations in operating results, (b) require substantial additional capital to support their operations, finance expansion or maintain their competitive position, (c) rely on the services of a limited number of key individuals, and the loss of any could significantly adversely affect a company's performance, (d) 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 management and technical personnel, and (e) otherwise have a weak financial condition or be experiencing financial difficulties that could result in insolvency, liquidation, dissolution, reorganization or bankruptcy of the relevant company.

• When-Issued and Forward Commitment Risk. Securities purchased on a when-issued or forward commitment basis are subject to the risk that when delivered they will be worth less than the agreed upon payment price.

Item 9 Disciplinary Information

On December 22, 2015, we settled charges by the SEC relating to prearranged trades by a former portfolio manager/trader. The settlement covers the period from late 2011 through early 2012, during which time the SEC found that a former MSIM portfolio manager/trader engaged in six pairs of unlawful prearranged sales and buybacks of fixed income securities with a trader at an unaffiliated broker-dealer, which resulted in the undisclosed favorable treatment of certain MSIM advisory clients over others. The MSIM portfolio manager/trader was terminated by MSIM in May 2014.

Without admitting or denying the findings, we consented to the entry of an administrative cease and desist order finding violations of Section 17(a)(3) of the Securities Act of 1933, Sections 203(e)(6), 206(2) and 206(4) of the Investment Advisers Act of 1940 and Rule 206(4)-7 thereunder, and aiding and abetting violations of Section 17(a)(2) of the Investment Company Act of 1940. We were censured and also agreed to pay a civil money penalty in the amount of \$8,000,000 to the SEC.

We also agreed to distribute a sum total payment in the amount of \$857,534 to compensate certain pooled investment vehicles and separately managed accounts, and to certify, in writing, compliance with the distribution of funds, which certification was supported by written evidence of compliance and exhibits.

Item 10 Other Financial Industry Activities and Affiliations

We are a wholly owned subsidiary of Morgan Stanley, a corporation whose shares are publicly held and traded on the New York Stock Exchange under the symbol "MS". Morgan Stanley is a financial holding company under the Bank Holding Company Act of 1956, as amended. As a result, we are part of a large global financial services and banking group and you could have relationships with our affiliates beyond your relationship with us. In addition, we participate in Wrap Fee Programs in which our affiliates are Sponsors. These relationships can cause conflicts of interest.

Broker-Dealer Affiliates

We are the parent company of Morgan Stanley Distribution, Inc. ("MSDI"), a broker-dealer registered under the Securities Exchange Act of 1934 (the "34 Act") and a member firm of the Financial Industry Regulatory Authority ("FINRA"). MSDI is the principal underwriter and distributor of certain Morgan Stanley Funds. In addition, we are affiliated with Eaton Vance Distributors, Inc. ("EVD"), a broker-dealer registered with the SEC and a FINRA member firm. EVD is a wholly owned subsidiary of Morgan Stanley and is the principal underwriter and distributor of certain Eaton Vance Funds. Certain of our management persons are registered representatives of MSDI and/or EVD.

We are also affiliated with Morgan Stanley & Co. LLC ("MS & Co."), Morgan Stanley Smith Barney LLC ("MSSB"), Prime Dealer Services Corp., and E*Trade Securities LLC, each a broker-dealer registered with the SEC and a FINRA member firm. In addition, we are affiliated with other intermediaries, foreign broker-dealers and financial services companies, including, among others, Morgan Stanley & Co. International PLC, Morgan Stanley MUFG Securities Co., Ltd., Morgan Stanley India Company Private Ltd., Morgan Stanley Capital Group Inc., Morgan Stanley Senior Funding Inc., and Morgan Stanley Capital Services LLC. (hereinafter, together with affiliated broker-dealers registered under the 34 Act, collectively referred to as "Affiliated Broker-Dealers").

When permitted by applicable law and subject to the considerations set forth in Item 12 "Brokerage Practices", we utilize Affiliated Broker-Dealers to effect portfolio securities, currency exchange, futures and other transactions for our managed accounts. The "Participation or Interest in Client Transactions" subsection in Item 11, "Code of Ethics, Participation or Interest in Client Transactions and Personal Trading", describes in greater detail the manner in which we utilize Affiliated Broker-Dealers to effect client transactions and the conflicts of interest that can arise. We pay placement fees to affiliated U.S. and non-U.S. broker-dealers.

MSDI serves as distributor, placement agent and/or underwriter for certain registered and unregistered funds for which we act as investment adviser and in certain instances, we receive distribution fees from the funds pursuant to Rule 12b-1 under the 1940 Act or placement agent fees. Where applicable, MSDI pays such fees, in whole or in part, to MSSB and to any other selected dealer, including any other Affiliated Broker-Dealer, with whom MSDI has entered into a selected dealer or placement agent agreement. In addition, any sales charges derived from the purchase or redemption of an investment company managed by us are paid directly to MSSB, or to any of those other selected dealers, including any other Affiliated Broker-Dealer, from which such dealer pays its sales representatives and other costs of distribution.

Commodity Trading Advisor/Commodity Pool Operator Registration

We are registered with the Commodity Futures Trading Commission ("CFTC") as a commodity trading advisor and a commodity pool operator. We are also a member of the National Futures Association ("NFA"). The NFA and CFTC each administer a comparable regulatory system covering futures contracts, swaps and various other financial instruments in which certain clients and pooled vehicles can invest.

Certain of our management persons are registered with the NFA as our Associated Persons.

Material Arrangements or Relationships with Affiliates

Investment Adviser Affiliates

We are part of a group of investment advisers within the Morgan Stanley Investment Management business, including: (1) Mesa West Capital, LLC; (2) Morgan Stanley Investment Management Company; (3) Morgan Stanley Investment Management Limited; (4) Morgan Stanley AIP GP LP; (5) Morgan Stanley Infrastructure, Inc.; (6) Morgan Stanley Private Equity Asia, Inc.; (7) MS Capital Partners Adviser, Inc.; (8) Morgan Stanley Real Estate Advisor, Inc.; (9) MSREF Real Estate Advisor, Inc.; (10) MSREF V, LLC; (11) MSRESS III Manager, LLC; (12) Eaton Vance Management; (13) Calvert Research and Management; (14) Parametric Portfolio Associates LLC; (15) Atlanta Capital Management Company LLC; (16) Boston Management and Research; (17) Eaton Vance Advisers International Ltd.; (18) Morgan Stanley Eaton Vance CLO Manager LLC; and (19) Morgan Stanley Eaton Vance CLO CM LLC (the "Affiliated Advisers").

Morgan Stanley Investment Management Private Limited, Morgan Stanley Asia Limited, MSIM Fund Management (Ireland) Limited, and Morgan Stanley Investment Management (Australia) Pty Limited (together, the "Participating Affiliates") indirectly provide investment advice or research to certain of our accounts. Certain personnel employed by the Participating Affiliates indirectly provide investment advice to certain of our accounts in specialties in which they have particular expertise. The Participating Affiliates are subject to our supervision in respect of their provision of services to us and our accounts.

From time to time and with prior client consent, we delegate some or all of our responsibilities, duties and authority under an investment management agreement to one or more of the Affiliated Advisers to the extent permitted by applicable law. The Affiliated Advisers, in certain instances, likewise delegate some or all of their responsibilities, duties and authority to us.

Investment Companies and Other Pooled Investment Vehicles

MSIM serves as investment adviser to the Morgan Stanley Funds, a U.S. mutual fund complex comprised of several stand-alone mutual funds, as well as the following series Funds: Morgan Stanley Institutional Fund, Inc. ("MSIF"), Morgan Stanley Institutional Fund Trust ("MSIF Trust"), Morgan Stanley Variable Insurance Fund, Inc. ("VIF"), Morgan Stanley Variable Investment Series ("VIS") and the Morgan Stanley Institutional Liquidity Funds, each an open- end investment company registered under the 1940 Act. VIF and VIS can offer their shares only to insurance companies for separate accounts that they establish to fund variable life insurance and variable annuity contracts, and to other entities under qualified pension and retirement plans. MSIM has an arrangement with Morgan Stanley Institutional Liquidity Funds (mutual funds we advise) pursuant to which un-invested free cash balances in certain client accounts are automatically invested in shares of the portfolios of the Morgan Stanley Institutional Liquidity Funds at the end of each day. Prior to initiating this "sweep" mechanism for a particular client, we disclose the fact that we receive a fee in our capacity as adviser and administrator for the Morgan Stanley Institutional Liquidity Funds. Assets invested in the Morgan Stanley Institutional Liquidity Funds. Assets invested in the Morgan Stanley Institutional Liquidity Funds though the "sweep" mechanism will be reduced, to the extent allowed by applicable law, in determining both the fee charged by us for managing the client's account and in determining our fee as adviser and administrator for the Morgan Stanley Institutional Liquidity Funds. MSIM is also the investment adviser to the Morgan Stanley ETF Trust, an investment company registered under the 1940 Act.

MSIM is the investment adviser and administrator to the following closed-end investment companies registered under the 1940 Act:

- Morgan Stanley China A Share Fund, Inc.
- Morgan Stanley Emerging Markets Debt Fund, Inc.
- Morgan Stanley Emerging Markets Domestic Debt Fund, Inc.
- Morgan Stanley India Investment Fund, Inc.

In addition, we or our affiliate serve as the administrator for certain of the Morgan Stanley Funds and serve as co-transfer agent for the Morgan Stanley Institutional Liquidity Funds.

MSIM and certain of its affiliates also act as a sub-adviser to registered investment companies which are not sponsored by us in addition to serving as adviser or a sub-adviser to off-shore funds, group trusts, limited partnerships and limited liability companies, among others, that are sponsored by our affiliates.

In certain instances, we (or our related persons) act as general partner or special limited partner of a limited partnership or managing member or special member of a limited liability company to which we serve as adviser or sub-adviser and in which our clients have been solicited to invest. In some cases, the general partner of a limited partnership is entitled to receive an incentive allocation from a partnership.

Along with Morgan Stanley, we have established procedures intended to identify and mitigate conflicts of interest related to business activities on a worldwide basis. A conflict management officer for each business unit and/or region acts as a focal point to identify and address conflicts of interest in their business area. When appropriate, there is an escalation process to senior management within the business unit, and ultimately if necessary to firm management or the firm's franchise committees, for potentially significant conflicts that cannot be resolved by the conflict management officers or that otherwise require senior management review.

Banking Affiliates

As mentioned above, we are a wholly owned subsidiary of Morgan Stanley. We are also affiliated with Morgan Stanley Bank, N.A., an insured depository institution headquartered in Salt Lake City, Utah, which has businesses concentrated in institutional lending and securities-based lending for clients of its affiliated broker-dealers. In addition, we are affiliated with Morgan Stanley Private Bank, N.A., a U.S. insured depository institution and a federally chartered national association whose activities are subject to regulation and examination by the Office of the Comptroller of the Currency.

MSIM is also affiliated with Eaton Vance Trust Company, a limited purpose non-depository trust company, organized and operating under the laws of Maine, which serves as trustee to common trust funds and collective investment trusts.

Electronic Communication Networks and Alternative Trading Systems

Our affiliates have ownership interests in and/or Board seats on electronic communication networks ("ECNs") or other alternative trading systems ("ATSs"). In certain instances our affiliates could be deemed to control one or more of such ECNs or ATSs based on the level of such ownership interests and whether such affiliates are represented on the Board of such ECNs or ATSs. Consistent with our fiduciary obligation to seek best execution, we, from time to time, directly or indirectly, effect client trades through ECNs or other ATSs in which our affiliates have or could acquire an interest or Board seat. These affiliates might receive an indirect economic benefit based upon their ownership in the ECNs or other ATSs. We will, directly or indirectly, execute through an ECN or other ATS in which an affiliate has an interest only in situations where we or the broker dealer through whom we are accessing the ECN or ATS reasonably believes such transaction will be in the best interest of our clients and the requirements of applicable law have been satisfied. Our affiliates own over 5% of the outstanding voting securities and/or have a member on the Board of certain trading systems (or their parent companies), including (i) Copeland Markets LLC, (ii) MEMX Holdings LLC, (iii) OTCderiv Limited, (iv) Creditderiv Limited, (v) Equilend, (vi) FXglobalclear Limited, (vii) EOS Precious Metals Limited, (viii) Yensai.com Co., Ltd, and (ix) Octaura Holdings LLC.

Our affiliates could acquire interests in and/or take Board seats on other ECNs or other ATSs (or increase ownership in the ATSs listed above) in the future.

Our affiliates receive cash credits from certain ECNs and ATSs for certain orders that provide liquidity to their books. In certain circumstances, such ECNs and ATSs also charge explicit fees for orders that extract liquidity from their books. From time to time, the amount of credits that our affiliates receive from one or more ECN or ATS exceed the amount that is charged. Under these limited circumstances, such payments would constitute payment for order flow.

EquiLend also provides securities loan transaction processing and reporting services to State Street, which serves as securities lending agent for certain clients. Because an affiliate of ours owns a non-controlling interest in EquiLend, we and our affiliates receive an indirect benefit from State Street's use of EquiLend's services.

Miscellaneous

MSIM outsources certain operations functions to State Street Bank and Trust Company ("State Street"). State Street provides a full range of investment operations outsourcing services including trade settlement, portfolio administration, reporting and reconciliation services. The agreement with State Street demonstrates our continued commitment to delivering best-in-class service to our clients, while allowing us to concentrate on our core competency, institutional investment management.

For more information about how MSIM addresses certain conflicts of interest, please refer to Item 11 "Code of Ethics, Participation or Interest in Client Transactions and Personal Trading" below. For more information about conflicts of interest related to portfolio transactions and trade allocations, please refer to Item 12 "Brokerage Practices".

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

Code of Ethics

MSIM has adopted the MSIM Code of Ethics and Personal Trading Policy (the "Code of Ethics") pursuant to Rule 204A-1 under the Advisers Act. Each of our employees is required to acknowledge the Code of Ethics at the inception of his/her employment and annually thereafter. The Code of Ethics is designed to make certain that all acts, practices and courses of business engaged in by our employees are conducted in accordance with the highest possible standards and to prevent abuse, or even the appearance of abuse, by employees with respect to their personal trading and other business activities.

Additionally, all MSIM employees are subject to firm-wide policies and procedures found in the Morgan Stanley Code of Conduct (the "Code of Conduct") that sets forth, among other things, restrictions regarding confidential and proprietary information, information barriers, information security, privacy and data protection, private investments, outside business interests and personal trading. All Morgan Stanley employees, including MSIM employees, are required to acknowledge that they have read, understand, are in compliance with and agree to abide by the Code of Conduct's terms as a condition of continued employment.

The Code of Ethics requires all employees to pre-clear trades for covered securities, as defined under the Code of Ethics, in a personal securities account. A pre-clearance request generally will be denied if there is an open order for a client in the same security. The Code of Ethics also imposes holding periods and reporting requirements for covered securities, which includes affiliated and sub-advised U.S. mutual funds. Our employees are prohibited from acquiring any security in an initial public offering or any other public underwriting. Investments in private placements or an employee's participation in an outside business activity must be pre-approved by Compliance and the employee's manager. Certain of our employees who, in connection with job functions, make or participate in making recommendations regarding the purchase or sale of securities or who have real-time knowledge of such recommendations, are held to more stringent standards when placing trades in personal accounts. Violations of the Code of Ethics are subject to sanction, including reprimand, restricting trading privileges, reducing employees' discretionary bonus, if any, potential reversal of a trade made in violation of the Code of Ethics or other applicable policies, suspension or termination of employment.

We will provide you with a copy of the Code of Ethics upon request.

Investment Restrictions Arising from Possession of Material Non-Public Information

MSIM is not permitted to use material non-public information ("MNPI") in effecting purchases and sales in public securities transactions. In the ordinary course of our operations, we obtain access to MNPI. At times, the acquisition of MNPI prohibits us from rendering investment advice to clients regarding the securities of an issuer of which we have MNPI, and thereby limits the universe of securities that we can purchase or sell. Similarly, where we decline access to or otherwise do not receive or share MNPI regarding an issuer, we would base our investment decisions with respect to assets of such issuer solely on public information, thereby limiting the amount of information available to us in connection with such investment decisions. The occurrence of either situation could disadvantage some client accounts if we are unable to make an intended purchase or sale, or if we decline information that might have benefited our management. For additional discussion related to MNPI, please see "Services to Issuers Activities" and "Investment Banking Activities" in this Item.

Participation or Interest in Client Transactions

The following sections address our trading activities, the various conflicts of interest that can arise, and how such conflicts have been addressed.

Morgan Stanley Securities

MSIM will generally prohibit transactions in securities, including equity and debt, issued by Morgan Stanley and certain of its affiliates.

Broker-Dealer Affiliations

MSIM does not act as principal or broker in connection with client transactions. We do, however, in the exercise of our discretion under an investment management agreement with a client, in certain instances, effect transactions in securities or other instruments for clients through Affiliated Broker-Dealers, including where such Affiliated Broker-Dealer acts as a principal in connection with the client transaction where there is a material financial interest, which perform all of the activities set forth below.

In connection with transactions in which Affiliated Broker-Dealers will act as principal, we will disclose to you that the trade will be conducted on a principal basis and obtain your consent in accordance with the provisions of and rules under the Advisers Act and as otherwise or additionally agreed by contract or by other applicable law. We will recommend that you engage in such a transaction only when we believe that the net price for the security is at least as favorable as could have been obtained from another established dealer in such security.

Our recommendations to you could involve securities in which our Affiliated Broker-Dealers, or their officers, employees or other affiliates, have a financial interest. Affiliated Broker-Dealers and their officers, employees and other affiliates, can purchase or sell for their own accounts securities that we recommend to our clients.

If permitted by your investment objectives and guidelines, applicable law, and our policies and procedures concerning conflicts of interest, MSIM could recommend that you purchase, or use our discretion to effect a purchase of, securities during the existence of an underwriting or other public or private offering of such securities involving an Affiliated Broker-Dealer as a manager, underwriter, initial purchaser, or placement agent. Among other things, we must disclose to you that the transaction involves an affiliate and obtain your consent to execute transactions with an affiliate on behalf of your account. Purchases can be from underwriters or placement agents other than an Affiliated Broker-Dealer in distributions in which an Affiliated Broker-Dealer is a manager and/or member of a syndicate or selling group, as a result of which an Affiliated Broker-Dealer will likely benefit from the purchase through receipt of a fee or otherwise. In situations in which you have not permitted, or where it is prohibited by law, rule or regulation, we might be unable to purchase securities for your account in an initial or other public or private offering of securities involving an Affiliated Broker-Dealer.

With your consent, and subject to the restrictions imposed on such transactions by applicable law, MSIM will effect portfolio transactions through an Affiliated Broker-Dealer on an agency basis, including transactions in over-the-counter ("OTC") securities, where the Affiliated Broker-Dealer will act as agent in connection with the purchase and sale of OTC securities from market participants and will charge our clients a commission on the transactions. Since these are agency transactions, there is no mark up or mark down on the price of the security.

MSIM will effect client transactions through an Affiliated Broker-Dealer when, in our judgment, you could obtain best execution of the transaction. Subject to our duty to seek best execution, we could effect such transactions through an Affiliated Broker-Dealer even though the total brokerage commission for the transaction is higher than that which might have been charged by another broker for the same transaction.

Cross and Agency Cross Transactions

From time to time, and where permitted by applicable law and the relevant client agreements, we will effect "agency cross transactions" in which an Affiliated Broker-Dealer acts as agent for both the buyer and seller in the transaction. We will only trade with an Affiliated Broker-Dealer on behalf of a client on an agency cross basis when the client has consented to our effecting such transactions. Any agency cross transaction will be effected in compliance with applicable law, as well as policies and procedures we have designed to prevent and disclose conflicts of interest. The Affiliated Broker-Dealer can receive a commission from the seller and the buyer when it executes transactions on an agency cross basis under certain conditions. In effecting an agency cross transaction, we have potentially conflicting divisions of loyalties and responsibilities regarding the parties to the transaction.

From time to time, MSIM effects internal "cross" transactions between client accounts in which one client will purchase securities held by another client. Such transactions are entered into generally only when we deem the transaction to be in the best interests of both clients and at a price we have determined by reference to independent market indicators and which we believe to constitute "best execution" for both parties.

MSIM will not engage in cross-trade transactions for an advisory client whose investment management agreement does not explicitly permit the account to engage in cross trades and as a result, such clients will generally pay higher transaction costs and might not receive the most favorable execution than had a cross-trade been effected for a particular portfolio trade.

While we will seek to ensure that the terms of cross trades are fair and reasonable, and the transactions are executed in a manner that is in the best interest of the clients involved in the cross trade, clients should be aware that the price of a security bought or sold through a cross trade, in some cases, will not be as favorable as it might have been had the trade been executed on the open market. Neither we nor any related party receives any compensation in connection with such "cross" transactions.

MSIM along with related persons of ours will effect portfolio transactions through an Affiliated Broker-Dealer on behalf of clients in respect of which we are a "fiduciary" as defined in the Employee Retirement Income Security Act of 1974, as amended ("ERISA") only on an agency basis and with prior written approval from an independent fiduciary in accordance with the terms of exemptions available from the Department of Labor, as well as in accordance with the restrictions imposed on such transactions by applicable law.

Fixed income instruments typically trade at a bid/ask spread and without an explicit brokerage charge. While there is not a formal trading expense or commission, clients (including Wrap Fee Program clients) will bear the implicit trading costs reflected in these spreads.

We are generally permitted to purchase securities on behalf of our ERISA clients from an underwriting or selling syndicate where an Affiliated Broker-Dealer participates as manager or syndicate member with prior written approval from an independent fiduciary in accordance with the terms of exemptions available from the Department of Labor

MSIM and the Affiliated Advisers, from time to time, execute client transactions with broker-dealers that do not have their own clearing facilities and who clear such transactions through an Affiliated Broker-Dealer. In such instances, the Affiliated Broker-Dealer will receive a clearing fee for these transactions.

Services to Issuers Activities

MSIM and its affiliates provide a variety of services for, and render advice to, various clients, including issuers of securities that we also recommend for purchase or sale by clients. In the course of providing these services, we and our affiliates could come into possession of material, nonpublic information which might affect our ability to buy, sell, or hold a security for a client account. Investment research materials disclose that our related persons might own, and could effect transactions in, securities of companies mentioned in such materials and also can perform or seek to perform investment banking services for those companies. In addition, directors, officers and employees of our affiliates could have Board seats and/or have Board observer rights with private and/or publicly traded companies in which we invest on behalf of our client accounts. Along with our affiliates, we have adopted policies and procedures and created information barriers that are reasonably designed to prevent the flow of any material, nonpublic information regarding these companies between us and our affiliates. Directors, officers and employees of ours could also take Board seats or have Board observer rights with companies in which we invest on behalf of our clients. Generally, we only do so with respect to private (not publicly traded) companies. To the extent a director, officer or employee were to take a Board seat or have Board observer rights in a public company, we (or certain of our investment teams) would be limited and/or restricted in our ability to trade in the securities of the company to the extent we (or certain of our investment teams) possessed or were deemed to possess material, nonpublic information regarding the company.

Investment Banking Activities

Morgan Stanley advises its clients on a variety of mergers, acquisitions and financing transactions. Morgan Stanley could act as an advisor to clients that could compete with our clients and with respect to our clients' investments. In certain instances, Morgan Stanley gives advice and takes action with respect to its clients or proprietary accounts that can differ from the advice MSIM provides, or involves an action of a different timing or nature than the action taken or advised by MSIM. At times, Morgan Stanley will give advice and provide recommendations to persons competing with our clients and/or any of our clients' investments, contrary to the client's best interests and/or the best interests of any of its investments.

Morgan Stanley could be engaged in financial advising, whether on the buy-side or sell-side, or in financing or lending assignments that could result in Morgan Stanley's determining in its discretion or being required to act exclusively on behalf of one or more third parties, which could limit our clients' ability to transact with respect to one or more existing or potential investments. Morgan Stanley could have relationships with third-party funds, companies or investors who have invested in or could look to invest in portfolio companies, and there could be conflicts between our clients' best interests, on the one hand, and the interests of a Morgan Stanley client or counterparty, on the other hand. To the extent that Morgan Stanley advises creditor or debtor companies in the financial restructuring of companies either prior to or after filing for protection under Chapter 11 of the Bankruptcy Code or similar laws in other jurisdictions, our flexibility in making investments in such restructurings on a client's behalf could be limited.

From time to time, different areas of Morgan Stanley will come into possession of MNPI as a result of providing investment banking services to issuers of securities. In an effort to prevent the mishandling of MNPI, Morgan Stanley will, at times, restrict trading of these issuers' securities by MSIM and our clients during the period such MNPI is held by Morgan Stanley, which period could be substantial. In instances where trading of an investment is restricted, our clients might not be able to purchase or sell such investment, in whole or in part, resulting in our clients' inability to participate in certain desirable transactions and/or a lack of liquidity concerning our clients' existing portfolio investments. This inability to buy or sell an investment could have an adverse effect on our client's portfolio due to, among other things, changes in an investment's value during the period its trading is restricted.

Morgan Stanley could provide investment banking services to competitors of our clients' portfolio companies, as well as to private equity and/or private credit funds, and such activities could present Morgan Stanley with a conflict of interest visar-vis a client's investment and also result in a conflict in respect of the allocation of investment banking resources to portfolio companies. To the extent permitted by applicable law, Morgan Stanley can provide a broad range of financial services to companies in which a client invests, including strategic and financial advisory services, interim acquisition financing and other lending and underwriting or placement of securities, and Morgan Stanley generally will be paid fees (that can include warrants or other securities) for such services. Morgan Stanley will not share any of the foregoing interest, fees and other compensation received by it (including, for the avoidance of doubt, amounts received by us) with our client, and any advisory fees payable will not be reduced thereby.

Morgan Stanley could be engaged to act as a financial advisor to a company in connection with the sale of such company, or subsidiaries or divisions thereof, could represent potential buyers of businesses through its mergers and acquisition activities and could provide lending and other related financing services in connection with such transactions. Morgan Stanley's compensation for such activities is usually based upon realized consideration and is usually contingent, in substantial part, upon the closing of the transaction. Our clients might be precluded from participating in a transaction with or relating to the company being sold under these circumstances.

We believe that the nature and range of clients to whom our Affiliated Broker-Dealers render investment banking and other services is such that it would be inadvisable to exclude these companies from a client's portfolio. Accordingly, unless you advise us to the contrary, it is likely that your holdings will include the securities of corporations for whom our Affiliated Broker Dealers perform investment banking and other services. Moreover, your portfolios could include the securities of companies in which our Affiliated Broker-Dealers make a market or in which we, our officers and employees and our Affiliated Broker-Dealers or other related persons and their officers or employees have positions.

To meet applicable regulatory requirements, there are periods when we will not initiate or recommend certain types of transactions in the securities of companies for which an Affiliated Broker-Dealer is performing investment banking services. You will not be advised of that fact. In particular, when an Affiliated Broker-Dealer is engaged in an underwriting or other distribution of securities of a company, we could be prohibited from purchasing or recommending the purchase of certain securities of that company for our clients. Notwithstanding the circumstances described above, you, on your own initiative, can direct us to place orders for specific securities transactions in your account. In addition, we generally will not initiate or recommend transactions in the securities of companies with respect to which our affiliates have controlling interests or are affiliated.

Investment Limits

Various federal, state or foreign laws, rules and regulations, as well as certain corporate charters adopted by issuers in which we could invest, limit the percentage of an issuer's securities that can be owned by us and our affiliates. We are more likely to run into these limitations than investment advisers with fewer assets under management and/or that are not affiliated with a large financial institution or financial holding company. In certain instances, for purposes of these ownership limitations, our holdings on behalf of our client accounts will be aggregated with the holdings of our affiliates. These ownership limitations can be in the form of, among others: (i) a strict prohibition against owning more than a certain percentage of an issuer's securities (the "threshold"); (ii) a "poison pill" that would have a material dilutive impact on our holdings in that issuer should we and our affiliates exceed the threshold; (iii) provisions that would cause us and our affiliates to be considered "interested stockholders" of an issuer if we and our affiliates exceed the threshold; and (iv) provisions that could cause us and our affiliates to be considered an "affiliate" or "control person" of the issuer. We will generally avoid exceeding the threshold in these situations. With respect to situations in which we and our affiliates could be considered "interested stockholders" (or a similar term), we will generally avoid exceeding the threshold because if we were considered an interested stockholder, we, along with our affiliates would be prohibited (in some cases absent Board and/or shareholder approval) from entering into certain transactions or performing certain services (including investment banking, financial advisory and securities lending) with or for the issuer. We will also generally avoid exceeding a threshold in situations in which we might be considered an affiliate of the issuer for the reasons set forth above, as well as the fact that should we be considered an affiliate of an issuer, our ability to trade in the issuer's securities would become limited. For additional information on certain regulatory risks and limitations, including as a result of the Volcker Rule, please see the "Legal and Regulatory Risks" sub-section in Item 8, "Methods of Analysis, Investment Strategies and Risk of Loss".

Investments in Affiliated Investment Funds

We can recommend, buy or sell for a client account, securities in which we or our related persons have a material financial interest, including because we or our affiliates act as an investment adviser to an investment company that is recommended to a client. When permitted by applicable law and the investment guidelines applicable to individual client accounts, and considered by us to be in the best interests of a client, we could recommend to you, and invest the assets of your accounts in various closed-end and open-end investment companies or other pooled investment vehicles for which we or our affiliates receive compensation for advisory, administrative, or other services. This presents a conflict of interest, for example, to the extent that a similar security is available from another manager that is a better performer or available at a lower price.

In certain circumstances, when required by applicable law or by agreement with you, we will waive our investment management fee with respect to assets invested in pooled investment vehicles to the extent of some or all of the compensation received by us and our affiliates for services rendered with respect to such pooled investment vehicles. We do not, in all instances, waive such investment management fees.

Certain limitations are imposed on our ability to invest, on behalf of our clients, in products sponsored or advised by an affiliated entity, including the Eaton Vance Funds.

Investment Management Activities and Managing Advisory Client Accounts

It is possible that our officers or employees buy or sell the same securities or other instruments that we have purchased on behalf of or recommended to clients. Moreover, we from time to time will purchase and sell on behalf of or recommend to clients the purchase or sale of securities in which we or our officers, employees or related persons have a financial interest. Accordingly, if we or our related persons hold the same security as a client account, then we and our related persons have a conflict in that we or our related persons could seek to put our own interests ahead of the clients, however, we are prohibited from doing so because we have a fiduciary duty to our clients. These transactions are subject to our policies and procedures regarding personal securities trading, as well as to the requirements of the Advisers Act, the 1940 Act and other applicable laws. Our policies and procedures, the Advisers Act and the 1940 Act require that we put your interests before our own. To the extent our personnel seek to buy or sell a security at or about the same time that MSIM is seeking to buy or sell that security for a client account, as discussed in the "Code of Ethics" section above, a pre-clearance request generally will be denied if there is an open order for a client in the same security.

From time to time, various conflicts of interest arise from the overall advisory, investment and other activities of MSIM, and our affiliates, and personnel (each, an "Advisory Affiliate" and, collectively, the "Advisory Affiliates").

The Advisory Affiliates manage long and short portfolios. The simultaneous management of long and short portfolios creates conflicts of interest in portfolio management and trading in that opposite directional positions could be taken in client accounts managed by the same investment team, and creates risks such as: (i) the risk that short sale activity could adversely affect the market value of long positions in one or more portfolios (and vice versa) and (ii) the risks associated with the trading desk receiving opposing orders in the same security simultaneously. The Advisory Affiliates have adopted policies and procedures that are reasonably designed to mitigate these conflicts.

In certain circumstances, Advisory Affiliates invest on behalf of themselves in securities and other instruments that would be appropriate for, held by, or that fall within the investment guidelines of the mutual funds and/or managed accounts managed by them (collectively, the "Advisory Clients"). At times, the Advisory Affiliates will give advice or take action for their own accounts that differs from, conflicts with, or is adverse to advice given or action taken for any of the Advisory Clients.

From time to time, conflicts also arise due to the fact that certain securities or instruments are held in some Advisory Clients but not in others, or the Advisory Clients could have different levels of holdings in certain securities or instruments, and because the Advisory Clients pay different levels of fees to us. In addition, at times an Advisory Affiliate will give advice or take action with respect to the investments of one or more Advisory Clients that is not given or taken with respect to other Advisory Clients with similar investment programs, objectives, and strategies. Accordingly, Advisory Clients with similar strategies will not always hold the same securities or instruments or achieve the same performance. Advisory Affiliates also advise Advisory Clients with conflicting programs, objectives or strategies.

Any of the foregoing activities could adversely affect the prices and availability of other securities or instruments held by or potentially considered for one or more Advisory Clients. Finally, the Advisory Affiliates could have conflicts in allocating their time and services among their Advisory Clients. We will devote as much time to each of our Advisory Clients as we deem appropriate to perform our duties in accordance with our respective management agreements.

Different clients of MSIM, including funds advised by us or an affiliate, could invest in different classes of securities of the same issuer, depending on their respective clients' investment objectives and policies. As a result, we, at times, will seek to satisfy our fiduciary obligations to certain clients owning one class of securities of a particular issuer by pursuing or enforcing rights on behalf of those clients with respect to such class of securities, and those activities could have an adverse effect on another client, which owns a different class of securities of such issuer. For example, if one client holds debt securities of an issuer and another client holds equity securities of the same issuer, if the issuer experiences financial or operational challenges, we could seek a liquidation of the issuer on behalf of the client that holds the debt securities, whereas the client holding the equity securities might benefit from a reorganization of the issuer. Thus, in such situations, the actions taken on behalf of one client can negatively impact securities held by another client. We have adopted

procedures pursuant to which conflicts of interest, including those resulting from the receipt of material, nonpublic information about an issuer, are managed by our employees through information barriers and other practices.

We, or our affiliates, from time to time will pursue acquisitions of assets and businesses and identify an investment opportunity in connection with its existing businesses or a new line of business without first offering the opportunity to clients. Such an opportunity could include a business that competes with a client or an investment fund or a co-investment in which a client has invested or proposes to invest.

From time to time, we could be retained to manage assets on behalf of a client that is a public or private company in which we have invested or could invest on behalf of our mutual funds and other client accounts.

Investments by Separate Investment Departments

The entities and individuals that provide investment-related services can differ by client, investment function, or business line (each, an "Investment Department" and collectively, the "Investment Departments"). Nonetheless, Investment Departments (with certain exceptions) can engage in discussions and share information and resources with another Investment Department (or a team within the other Investment Department) regarding investment-related matters. The sharing of information and resources between the Investment Departments is designed to further increase the knowledge and effectiveness of each Investment Department. However, an investment team's decisions as to the use of shared research and participation in discussions with another Investment Department could adversely impact a client. Certain investment teams within one Investment Department could make investment decisions and execute trades together with investment teams within other Investment Departments. Other investment teams make investment decisions and execute trades independently. This could cause the quality and price of execution, and the performance of investments and accounts, to vary. Internal policies and procedures set forth the guidelines under which securities and securities trades can be crossed, aggregated, and coordinated between accounts serviced by different Investment Departments. Internal policies and procedures take into consideration a variety of factors, including the primary market in which such security trades. If a security or securities trade is ineligible for crossing, aggregation, or other coordinated trading, then each Investment Department will execute such trades independently of the other.

General Process to Address Conflicts

All of the transactions described above involve conflicts of interest between us or related persons of ours and our clients. The Advisers Act, the 1940 Act and ERISA impose certain requirements designed to decrease the possibility of conflicts of interest between an investment adviser and its clients. In some cases, transactions could be permitted subject to fulfillment of certain conditions. Certain other transactions could be prohibited. In addition, we have instituted policies and procedures designed to prevent conflicts of interest from arising and, when they do arise, to ensure that we effect transactions for clients in a manner that is consistent with our fiduciary duty to our clients and in accordance with applicable law. We seek to ensure that conflicts of interest are appropriately resolved taking into consideration the best interest of the client.

We have adopted policies and procedures and established controls such as the MSIM Conflicts of Interest and Franchise Committee designed to require review of transactions in which conflicts of interest could exist, including those described above, to ensure that applicable policies and legal and regulatory requirements are followed.

Item 12 Brokerage Practices

Best Execution and Brokerage Selection Factors

When we have the authority to select brokers for client accounts, we select broker-dealers consistent with our duty to seek "best execution" (i.e., to seek the most favorable overall price and execution quality under the circumstances existing at the time of the transaction). In seeking best execution, we are not obligated to choose the broker-dealer offering the lowest available commission rate if, in our reasonable judgment, (i) we believe that the total costs or proceeds from the transaction might be less favorable than could be obtained elsewhere; (ii) a higher commission is justified by the products and research services (soft dollar benefits) other than execution provided by the broker- dealer that fall within the safe harbor of Section 28(e) of the 34 Act ("Section 28(e)") or otherwise is permitted under applicable law, rules, and regulations of the relevant jurisdictions in which we operate, and under applicable agreements; or (iii) other considerations, such as the order size, the time required for execution, the depth and breadth of the market for the security, minimum credit quality requirements to transact business with a particular broker-dealer, or the quality of the broker-dealer's back office or other considerations support our decision to use a different broker-dealer.

With certain exceptions, when effecting transactions on behalf of clients, we can select any broker- dealer on our list of approved broker-dealers. Approved broker-dealers have met criteria as established by our Trading and Research Governance team ("TRG"). TRG reviews and approves broker-dealers periodically to determine whether broker-dealers on our approved list continue to meet such criteria. Changes to the approved brokers list are reported quarterly to the Counterparty Governance Committee ("CGC"), as well as other Committees and forums, where relevant.

When selecting an approved broker-dealer (including an affiliate) to execute securities transactions, the trading desk considers some or all of the following factors:

- Best available price;
- Reliability, integrity, financial responsibility, and reputation in the industry (which can include a review of financial information and creditworthiness);
- Trade limitation and/or execution capabilities, including block positioning, speed of execution and quality and responsiveness of its trading desk;
- Knowledge of and access to the relevant markets for the securities being traded;
- Potential ability to obtain price improvement;
- Ability to maintain confidentiality;
- Ability to handle non-traditional or complex trades;
- Commission and commission-equivalent rates;
- Proprietary and third-party research (but only to the extent permissible under applicable law and under applicable agreements);
- Technology infrastructure;
- Clearance and settlement capabilities;
- The size of the trade relative to other trades in the same instrument;
- Ability of the counterparty to commit its capital and its access to liquidity, including product liquidity;
- Counterparty restrictions associated with a portfolio, including regulatory trading, documentation requirement, or any specific clearing broker-dealer requirements;
- Client directed execution;
- Client specific restrictions;
- Assignment fees;
- Agent bank considerations (i.e., whether to trade with or away from the administrative agent); and
- Such other factors as we determine to be appropriate.

Research and Other Soft Dollar Benefits

Subject to our duty to seek best execution, we and certain of our Affiliated Advisers use a portion of the commissions generated when executing client transactions to acquire brokerage and research services that aid us in fulfilling our investment decision-making responsibilities in accordance with Section 28(e) and applicable law. This means we can cause a client 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). Commissions paid to broker-dealers providing us brokerage and research services at times will be higher than those charged by other broker- dealers. We receive a benefit when we use client commissions to obtain brokerage and research services because we do not have to produce or pay for the brokerage research services ourselves. Therefore, we have an incentive to select or recommend a broker-dealer based on our interest in receiving brokerage and research services, rather than solely on our clients' interest in obtaining the most favorable execution.

We have adopted policies and procedures designed to help us track and evaluate the benefits we receive from brokerage and research services, as well as to track how much our clients pay above the amount that broker-dealers from which we receive brokerage and research services would have charged solely for execution of such trades. MSIM and the Affiliated Advisers utilize a voting system to assist us in making a good faith determination of the value of brokerage and research services we receive in accordance with Section 28(e) and applicable law. In many cases, these involve subjective judgments or approximations.

MSIM and the Affiliated Advisers have established a process for budgeting research costs and allocating such costs across client accounts. Each of our portfolio management ("PM") teams establishes a research budget at the start of each calendar year that sets the expected cost to be spent by the team on external research services for the same year. These research budgets are reviewed and approved by our Research Committee, allocated across all accounts managed by the PM team in accordance with our policies. We and certain of the Affiliated Advisers have entered into client commission arrangements ("CCAs") with executing brokers ("CCA Partners") and a third party vendor ("CCA Aggregator") that assist us with administration of research payments and commissions. Pursuant to these arrangements, and under our supervision, the CCA Partners and the CCA Aggregator track execution and research commissions separately and pool and distribute research credits in accordance with the policies and procedures discussed above to approved research providers (which include executing brokerage firms or independent research providers ("Approved Research Providers")) that provide us with brokerage and research services. The CCA Aggregator also reconciles research credits from trades with CCA Partners that are payable to Approved Research Providers and provides other related administrative functions. In addition, from time to time a CCA Partner will provide us and the Affiliated Advisers with proprietary research it has developed and, upon our instruction, retain research commission credits as compensation for the provision of such proprietary research services.

Transactions that generate research credits include equity transactions executed on an agency and riskless principal basis where the executing broker-dealer receives a commission.

Where a product or service has a mixed use, we will make a reasonable allocation of its cost according to its use and will use client commissions to pay only for the portion of the product or service that assists us in our investment decision-making process. MSIM and the Affiliated Advisers have an incentive to allocate the costs to uses that assist us in our investment decision-making process because, in such instances, we pay for such costs with client commissions rather than our own resources. To the extent we receive "mixed use" products and services, MSIM and the Affiliated Advisers will allocate the anticipated costs of a mixed use product or service in good faith and maintain records concerning our allocations in order to mitigate such conflicts.

Client accounts that pay a greater amount of commissions relative to other accounts generally bear a greater share of the cost of brokerage and research services than such other accounts. We, at times, will use brokerage and research services obtained with brokerage commissions from some clients for the benefit of other clients whose brokerage commissions do not pay for such brokerage and research services. Please see "Directed, Restricted or Constrained Brokerage Arrangements; Wrap Fee Programs" for additional disclosure related to the impact of such arrangements on the remaining clients. For example, to the extent that a client has such an arrangement, they might benefit from the

products and research services but not share in the costs of doing so. We also, from time to time, share brokerage and research services with the Affiliated Advisers, and the clients of the Affiliated Advisers receive the benefits of such brokerage and research services. These arrangements remain subject to our overall obligation to seek best execution for our client trading.

MiFID II Affiliated Advisers

Certain of the Affiliated Advisers are subject to the European Union's Markets in Financial Instruments Directive II ("MiFID II" and such Affiliated Advisers, "MiFID II Affiliated Advisers"), which is a European regulation governing conduct by investment advisers, among others. Under MiFID II, our MiFID II Affiliated Advisers are permitted to receive research (other than research that qualifies as a "Minor Non-Monetary Benefit" under MiFID II ("MNB")) without it constituting an unlawful inducement if they pay for the research directly from their own resources or from research payment accounts funded by their clients. Our MiFID II Affiliated Advisers engage us as sub-adviser or otherwise delegate to us authority to manage their client accounts ("MiFID II Accounts"). While we are not directly subject to the provisions of MiFID II, in accordance with those arrangements, we make a reasonable valuation and allocation of the cost of the research as between MiFID II Accounts and other accounts that participate in CCAs and will pay for any research we receive with respect to MiFID II Accounts (other than research that qualifies as a MNB) from our own resources. We and our MiFID II Affiliated Advisers could separately pay for fixed income research from their own resources. As a result, MiFID II Accounts at times will pay commission rates that are below the total commission rates paid by other client accounts.

Fixed Income Trading

MSIM and the Affiliated Advisers do not use CCAs or otherwise have arrangements to pay for brokerage and research services with client commissions in connection with trading fixed income securities. Consistent with long-standing industry practice in the fixed income markets, however, MSIM and the Affiliated Advisers, subject to applicable law, receive brokerage and research services and other information, including access to fixed income trading platforms that dealers provide for no charge to their customers in the ordinary course of business. Fixed income instruments typically trade at a bid/ask spread and without an explicit brokerage charge. While there is not a formal trading expense or commission, clients will bear the implicit trading costs reflected in these spreads.

Trade Aggregations

When permitted under applicable law, each Portfolio Management team generally will aggregate orders of its clients (and, in some cases, clients managed by other Portfolio Management teams) for the same securities in a single order so that such orders are executed simultaneously in order to facilitate best execution and to reduce brokerage costs. We can aggregate client orders with the orders of clients of the Affiliated Advisers and accounts in which we'or our officers, employees or related persons have a financial interest. However, we effect aggregated orders in a manner designed to ensure that no participating client is favored over any other client.

In general, accounts that participate in an aggregated order will participate on a pro rata or other objective basis. Pro rata allocation of securities and other instruments will generally consist of allocation based on the order size of a participating client account in proportion to the size of the orders placed for other accounts participating in the aggregated order. However, we, at times and where we deem appropriate, allocate such securities and other instruments using a method other than pro rata if their supply is limited, based on differing portfolio characteristics among accounts, because of counterparty preferences or requirements, or to avoid odd lots or small allocations, among other reasons. These allocations are made in our good faith judgment with a goal of ensuring that fair and equitable allocation will occur over time. There are times that we are not able to aggregate orders because of applicable law or other considerations when doing so might otherwise be advantageous in which case a client might face higher costs. Please see "Directed, Restricted or Constrained Brokerage Arrangements; Wrap Fee Programs" for additional disclosure related to the impact of such arrangements on the remaining clients. For example, to the extent that a client has such an arrangement, their account could be excluded from such aggregation unless MSIM maintains trading discretion.

MSIM and the Affiliated Advisers are subject to differing requirements governing aggregation of orders, including provisions of the 1940 Act that restrict joint transactions and MiFID II that govern the circumstances under which MiFID II Accounts are permitted to pay for research. As a result, MiFID II Accounts at times will pay commission rates that are below the total commission rates paid by other client accounts included in the order.

When appropriate, we rotate trades among client accounts in accordance with our policy to treat all accounts fairly and equitably over time. Trade rotation processes can result in trading for accounts occurring before, after, or simultaneously with trading for other accounts. Accounts in a rotation could experience market impact costs with respect to certain transactions relative to other accounts in the rotation. Approved rotation methodologies are in place where appropriate to provide fair placement and execution to all client accounts over time.

Directed, Restricted or Constrained Brokerage Arrangements; Wrap Fee Programs

Depending on the particular program selected or contractual arrangement, clients can limit our authority to advise accounts or execute transactions in a number of ways, including by:

- (1) requiring that certain securities transactions be authorized by them in advance;
- (2) prohibiting or limiting the purchasing of certain securities or industry groups;
- (3) seeking to require a designated broker-dealer ("Designated Broker") to execute all or a portion of their transactions ("Directed Trades"), which can be structured as "directed brokerage" arrangements; and/or
- (4) restricting us from executing transactions through a particular broker-dealer and/or imposing restrictions, conditions or other constraints on the terms of a trade or broker arrangement to which a particular broker-dealer might not agree ("Restricted/Constrained Trades").

In addition, a Wrap Fee Program client is permitted to impose reasonable restrictions on the management of their account. In most Wrap Fee Programs, the Sponsor or overlay manager is responsible for implementing client restrictions and guidelines. In those Wrap Fee Programs in which we are responsible for implementing client restrictions and guidelines, the client is responsible for identifying any security or group of securities which are restricted within the account. If a client identifies a category of restricted securities without identifying the underlying companies of which the category is comprised or a source for identifying such underlying companies, we can utilize outside service providers to identify the universe of companies that will be considered in such category. When a security is required to be sold or is restricted from being purchased for an account, this could adversely affect the account's performance and cause it not to track the performance of the managers' investment strategies. The change of the classification of a company, the grouping of an industry or the credit rating of a security could force us to sell securities in a client's account at an inopportune time, possibly causing a taxable event to the client. Clients will still be exposed to securities they restrict if they hold in their account commingled vehicles that invest in such securities.

In certain instances, Wrap Fee Program accounts bear additional costs as compared to our other client accounts. For example, Wrap Fee Program accounts that hold fixed income instruments will bear the implicit costs of such instruments' bid/ask spread that are in addition to the "wrap" fee paid to the Sponsor. With respect to certain Wrap Fee Programs, rather than "wrap" our fees for investment advisory services together with the Sponsor's fees for brokerage, custody and other services, we enter into an investment advisory contract directly with the Wrap Fee Program Sponsor's clients and receive our investment advisory fee directly from those clients. Because the clients have also entered into an agreement with the Sponsor to provide for brokerage and other services at a fixed cost or rate, we will typically send the trades to the Sponsor for the Sponsor to execute but typically also retain the right to execute trades for those clients directly through other broker-dealers. We also enter into arrangements with certain Wrap Fee Programs where we have discretion to select broker-dealers to execute trades for accounts. In instances where we are executing the trades directly for the accounts, if we select a broker-dealer other than the Sponsor to execute a trade, the Wrap Fee Program accounts typically will bear any execution costs charged by that other broker-dealer in addition to the "wrap" fee paid to the Sponsor.

The restrictions imposed by Designated Broker arrangements and Wrap Fee Programs could cause us to trade the securities held by these accounts differently from how we trade for client accounts for which we are not so restricted in the instances where we retain the right to execute. In these cases, Directed Trades, Restricted/Constrained Trades and

Wrap Fee Program trades are generally not aggregated for execution with transactions in the same securities for other clients, and we might be unable to obtain the same quality of execution on Directed Trades, Restricted/Constrained Trades, or Wrap Fee Program trades for a number of reasons, which include, but are not limited to:

- A client direction, restriction or constraint will frequently restrict our ability to obtain as favorable a transaction price or commission rate as we might otherwise be able to obtain on an unconstrained trade;
- The account might forego benefits from savings on execution costs that could otherwise be obtained, most
 notably commission savings and/or price improvement that derive from aggregating orders for various client
 accounts;
- If a Designated Broker or Wrap Fee Program Sponsor is not on our approved list of brokers, there could be additional credit and/or settlement risk for such trades;
- MSIM will not be obligated to, and in most cases will not, negotiate with a Designated Broker or Wrap Fee Program Sponsor to obtain commission rates more favorable or otherwise different from those to which the client has agreed;
- A Directed Trade, Restricted/Constrained Trade or Wrap Fee Program trade could result in a client account
 paying higher or otherwise different commissions than other clients of ours for transactions in the same security;
 and
- MSIM could effect a Directed Trade or a Restricted/Constrained Trade or provide the applicable models, recommendations or updates to one or more Wrap Fee Program Sponsors after another broker has effected transactions in the same security for client accounts for which we have discretion to select the broker and trading venue, which also could negatively affect the prices received by clients that direct, restrict or otherwise constrain trades or Wrap Fee Program clients.

Notwithstanding the foregoing, when a client has directed brokerage for its account and maintains that we remain subject to best execution, if eligible, and we are executing trades on behalf of those clients, we can aggregate those Directed Trades, or Restricted/Constrained Trades along with trades executed for other client accounts through the broker-dealer that we believe will offer the best execution for such transaction and, thereafter, in the case of a directed brokerage arrangement, instruct such executing broker-dealer to "step-out" or allocate a portion of the trades to the client's Designated Broker to perform other non-execution portions of the trade.

With respect to Wrap Fee Programs, the terms of each client's account in a Wrap Fee Program are governed by the client's agreement with the Sponsor and the disclosure document for each Wrap Fee Program. Wrap Fee Program clients are urged to refer to the appropriate disclosure document and client agreement for more information about the Wrap Fee Program, MSIM's advisory services and fees. The fees for a Wrap Fee Program could result in higher costs than a client would otherwise realize by paying our standard advisory fees and negotiating separate arrangements for trade execution, custodial and consulting services.

Designated Brokers, including those participating in "step-out" arrangements, and broker-dealers executing trades for our Wrap Fee Program clients generally do not provide us with brokerage and research services other than trade execution for the client account. As a result, the soft dollar benefits obtained with brokerage commissions from our clients that do not participate in Designated Brokerage arrangements or Wrap Fee Programs can be used for the benefit of our clients who do so participate, which could result in such other client accounts bearing a greater share of research costs than clients participating in Designated Broker arrangements and Wrap Fee Programs. These arrangements remain subject to our overall obligation to obtain best execution for our client trading.

Account Errors and Error Resolution

MSIM has policies and procedures to help it assess and determine, consistent with applicable standards of care and client documentation, when a client will be reimbursed in connection with a trading error. Pursuant to these policies, an error will generally be reimbursable when MSIM has executed a transaction that is an error that, in MSIM's reasonable view, resulted from MSIM's failure to observe the applicable standard of care, subject to materiality and other

considerations. MSIM could determine to treat an error as compensable for a variety of reasons and the payment of any compensation should not be viewed as a determination of fault or violation of a standard of care.

Item 13 Review of Accounts

Our portfolio managers generally review all accounts on a daily basis. Accounts are reviewed for a number of factors, including but not limited to, performance, sector and asset allocation, adherence to investment policies and strategies and specific security ownership, all within the context of client guidelines and objectives.

If MSIM manages your money as a separate account, you are provided reports of transactions as they are effected (if you request), portfolio valuations and summaries of portfolio changes on a quarterly basis or as otherwise negotiated with you. Additionally, we will meet with you quarterly, annually or as requested to discuss the performance of your account, our management of your account, and any other issues of concern to you. We will provide additional reports or information to you upon request.

With respect to model portfolios offered through our Wrap Fee Program, models are generally reviewed on a daily basis.

With respect to single contract Wrap Account, the portfolio managers generally review all accounts on a daily basis.

Investors in private funds are provided such information and reports as provided in the fund's governing and disclosure documents. In some cases, MSIM could agree with a particular investor to provide additional reporting or more detailed or timely reporting. Except as otherwise agreed or required by applicable law, MSIM is not required to inform other investors of such arrangements or to offer similar reporting to other investors. To comply with the Custody Rule, as discussed below, investors generally will receive audited financial statements for the private fund within 120 days (or 180 days or longer for certain funds of funds) following the fund's fiscal year end. Investors can also receive Forms K-1 and other tax reporting information, as provided in the fund's governing and disclosure documents.

Item 14 Client Referrals and Other Compensation

MSIM has compensated, and expects to continue to compensate, affiliates and unrelated third parties for client referrals in accordance with relevant rules under the Advisers Act. The compensation paid to any such entity will typically consist of a cash payment stated as a percentage of our advisory fee, but also include cash payments determined in other ways.

MSIM is also referred advisory clients by affiliated and unaffiliated parties/consultants that are retained by clients or prospective clients. While we do not make payments for solicitations or client referrals to these consultants, we make cash payments to participate in conferences sponsored by such consultants to obtain information about industry trends and client investment needs. We can also purchase products or services from the consultants and/or their affiliates.

These arrangements could cause referrals to us by these affiliates and other third parties for reasons other than the client's best interest.

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Item 15 Custody

MSIM is deemed to have "custody" of client assets in a variety of circumstances, and in each case we will comply with the custody requirements under the Advisers Act. We have custody of client assets any time that we have authority or ability to obtain possession of client assets. We would thus be deemed to have custody of the assets of the funds for which we or an affiliate serves as general partner or for which we or an affiliate serves as the managing member or otherwise has the authority or ability to obtain possession of fund assets. In those cases, the funds generally provide audited financial statements on an annual basis in accordance with applicable law. Additionally, where MSIM is deemed to have custody over other advisory client accounts, clients will receive quarterly account statements from the qualified custodian for such account. Clients should carefully review the account statements received from the qualified custodian and compare them to statements received from us. If a client elects to retain our affiliate, MSSB, to act as qualified custodian of its account we will generally be deemed to have "custody" of the funds and securities held in such accounts as well. We also will be deemed to have "custody" over our client accounts from which we are authorized to deduct fees or other expenses.

With respect to Wrap Fee Program clients, we could be deemed to have custody of assets if we contract directly with the Wrap Fee Program clients for services and if an affiliate of MSIM acts as Sponsor of the Wrap Fee Program. In such cases, the Sponsor or a qualified custodian will send required periodic account statements to the Wrap Fee Program client.

Item 16 Investment Discretion

MSIM typically receives discretionary authority to select the securities and other instruments to be bought or sold at the time we establish an advisory relationship with you by entering into an investment management agreement. In all cases, however, such discretion is exercised in a manner consistent with your stated investment objectives and guidelines. As discussed under Item 12, "Brokerage Practices", in this Brochure, you can impose certain limitations on our use of broker dealers.

For registered investment companies, our authority to trade securities is limited, in certain circumstances, by certain federal securities and tax laws that require, among other things, diversification of investments.

Item 17 Voting Client Securities

Voting Proxies for Equity Securities

We use our best efforts to vote proxies as part of our authority to manage, acquire and dispose of account assets. We and our affiliates generally vote proxies for equity securities and corporate actions under the MSIM Equity Proxy Voting Policies and Procedures (the "Policy") pursuant to authority granted under the applicable investment advisory agreement or, in the absence of such authority, as authorized by the Board of Directors/Trustees of the Morgan Stanley Funds. We will not vote proxies unless the investment advisory agreement or Board of Directors/Trustees explicitly authorizes us to vote proxies.

MSIM and its affiliates will vote proxies in a prudent and diligent manner and in the best interests of clients, including beneficiaries of and participants in a client's benefit plan(s) for which we manage assets, consistent with the objective of maximizing long-term investment returns (the "Client Proxy Standard"). In certain situations, you can provide us with a proxy voting policy. In these situations, we will comply with your policy. In addition to voting proxies at portfolio companies, MSIM generally engages with the management, and at times also engages with the board, of companies in which we invest on a range of governance issues. We consider governance to be a window into management and board quality. MSIM typically engages with companies where we have larger positions, voting issues are material or where we believe we can make a positive impact on the governance structure. We believe that MSIM's engagement process, through private communication with companies, allows us to understand the governance structures at investee companies and better inform our voting decisions.

The Policy addresses a broad range of issues and provides general voting parameters on proposals that arise most frequently. However, details of specific proposals vary, and those details affect particular voting decisions, as do factors specific to a given company. We endeavor to integrate governance and proxy voting policy with investment goals, using the vote to encourage portfolio companies to enhance long-term shareholder value and to provide a high standard of transparency such that equity markets can value corporate assets appropriately.

MSIM seeks to follow the Client Proxy Standard for each client. At times, this could result in split votes, for example when different clients have varying economic interests in the outcome of a particular voting matter (such as a case in which varied ownership interests in two companies involved in a merger result in different stakes in the outcome). We also split votes at times based on differing views of portfolio managers.

MSIM could determine to abstain on matters for which disclosure is inadequate. We usually support routine management proposals except for certain "other business" and "meeting adjournment" proposals.

From time to time, MSIM retains third-party advisers to provide a variety of proxy-related services, including in-depth research, global issuer analysis, and voting recommendations ("Research Providers"). While MSIM can review and utilize the recommendations of such Research Providers, MSIM is in no way obligated to follow such recommendations, and votes all proxies based on the Policy and Client Proxy Standard.

Votes on board nominees can involve balancing a variety of considerations, including those related to board and board committee independence, term length, whether nominees could be overcommitted, director attendance and diligence, financial knowledge and experience, executive and director remuneration practices, board diversity, and board responsiveness. We consider withholding support from or voting against a nominee if it believes a direct conflict exists between the interests of the nominee and the public shareholders, including failure to meet fiduciary standards of care and/or loyalty. We can oppose directors where we conclude that actions of directors are unlawful, unethical or negligent. We consider opposing individual board members or an entire slate if we believe the board is entrenched and/or dealing inadequately with performance problems; if we believe the board is acting with insufficient independence between the board and management; or if we believe the board has not been sufficiently forthcoming with information on key governance or other material matters.

MSIM examines a range of issues, including proxy contests and proposals relating to mergers, acquisitions and other special corporate transactions, on a case-by-case basis in the interests of each client. We support substantial management/board discretion on capital structure, but within limits that take into consideration articulated uses of capital, existence of preemptive rights, and certain shareholder protections provided by market rules and practices. We are generally supportive of reasonable shareholder rights.

MSIM votes on advisory votes on executive pay on a case-by-case basis. We generally support equity compensation plans if we view potential dilution/cost as reasonable, and if plan provisions sufficiently protect shareholder interests. We also support appropriately structured bonus and employee stock purchase plans. We support proposals that if implemented would enhance useful disclosure, but we generally vote against proposals requesting reports that we believe are duplicative, related to matters not material to the business, or that would impose unnecessary or excessive costs.

MSIM considers social and environmental shareholder proposals on a case-by-case basis, but generally support proposals that seek to enhance useful disclosure.

Process: An MSIM Proxy Review Committee (the "Committee") has overall responsibility for the Policy. Because proxy voting is an investment responsibility and impacts shareholder value, and because of their knowledge of companies and markets, portfolio managers and other members of investment staff play a key role in proxy voting, and individual investment teams are responsible for determining decisions on proxy votes with consultation from the Global Stewardship Team.

The Committee meets at least quarterly and reviews and considers changes to the Policy at least annually. If the Director of our Global Stewardship Team determines that an issue raises a material conflict of interest, the Director can request a special committee to review, and recommend a course of action with respect to, the conflict(s) in question.

MSIM generally will not make any filings in connection with any shareholder class action lawsuits and similar matters involving securities held or that were held in separate accounts and will not be required to notify custodians or clients in separate managed accounts of shareholder class action lawsuits and similar matters. We will not be responsible for any failure to make such filings or, if we determine to make such filings, to make such filings in a timely manner. Upon client request, we will consider on a case-by-case basis participation in non-US class action lawsuits.

Morgan Stanley Funds or any other investment vehicle sponsored, managed or advised by an MSIM affiliate could participate in a securities lending program through a third-party provider. The voting rights for shares that are out on loan are transferred to the borrower and therefore, the lender (i.e., a Morgan Stanley Fund or another investment vehicle sponsored, managed or advised by an MSIM affiliate) is not entitled to vote the lent shares at the company meeting. However, in certain circumstances a portfolio manager could seek to recall shares for the purposes of voting. In this event, the handling of such recall requests would be on a best efforts basis.

Further Information: You can contact your Client Representative or Financial Advisor for information on how to obtain a copy of the Policy or proxy voting records. In the case of registered investment companies that we advise, the fund's proxy voting records filed with the SEC are available (i) without charge by accessing the Mutual Fund Center on our web site at www.morganstanley.com/funds and (ii) on the SEC's web site at www.sec.gov.

Related, but supplemental, to MSIM's formal proxy voting policy, MSIM's investment teams – in particular, those teams acting for client strategies that are responsive to ESG considerations – have the ability to employ the shareholder rights and stakeholder influence that MSIM exercises on behalf of its clients to encourage, where relevant, strong ESG practices with issuers, borrowers and counterparties. MSIM seeks to engage in these types of stewardship and engagement practices in a manner that is consistent with its role as a responsible long-term investor, its fiduciary obligations, and any specific client directions.

Voting Consents for Fixed Income Instruments

While loans, bonds and other fixed income or debt investments ("Fixed Income Instruments") held by MSIM's clients are not expected to solicit proxies, a client could, from time to time, own interests in Fixed Income Instruments that grant other voting rights or solicit consents. Unless otherwise stated under the terms of our agreements with our clients, MSIM has authority to exercise certain decision-making rights associated with Fixed Income Instruments ("Consents"). In these cases, we could be called upon to provide or withhold consent to proposed modifications to the terms and covenants of a Fixed Income Instrument. To the extent that a client grants us authority to act in these circumstances, we will seek to make consent decisions in a prudent and diligent manner, and in the best interest of the client from which consent is sought, subject at all times to each such client's investment objectives. In some cases, we could determine that refraining from exercising a consent is appropriate.

Although MSIM aims to exercise Consents in a manner consistent with the best interest of our clients, the details or the circumstances of a particular Consent could present conflicts of interest. Conflicts of interest regarding our decision to exercise or withhold Consents currently exist and can arise under a wide range of scenarios. For example, we face conflicts of interest in making a Consent decision as to a loan where Morgan Stanley has a business relationship with or interests in the obligor, a related sponsor, or another party with an interest in the outcome of a Consent request. In addition, conflicts exist where one or more clients hold or acquire interests in an obligor that are of a different class than, are junior or senior to or otherwise have different rights than interests in the same obligor that are held by one or more other clients or accounts. In these situations, the interests of one or more clients could diverge from those of other clients or accounts with respect to the voting of proxies or exercise of Consents to the extent the different rights and features of the interests held by one or more clients or other accounts create an interest in obtaining an outcome that is contrary to the interests of others. Conflicts also can arise if a senior executive of, or other person connected with, the obligor or another party with an interest in the outcome of a Consent request has a significant relationship with our personnel or those of Morgan Stanley.

MSIM also face conflicts of interest to the extent that we hold Fixed Income Instruments and are called upon to exercise rights under those Fixed Income Instruments where the outcome of the exercise of such rights could benefit us or an affiliate or operate to the detriment of other holders of the Fixed Income Instruments. Investors should understand that we can exercise our rights under any Fixed Income Instruments in which we hold an interest in such a manner as we determine to be in our best interest (which could be contrary to the interests of other investors in the instrument), except to the extent limited by the governing documents of the instrument. In some cases, we might determine to exercise (or withhold) a Consent on behalf of one or more clients while taking the opposite action (or no action) on behalf of one or more other clients, when we believe that doing so reflects the particular best interest of each party holding such right.

Our portfolio managers are generally responsible for identifying Consent solicitations and for making decisions as to the exercise of Consents. Morgan Stanley has, and we follow, a variety of policies and procedures intended to assist in identifying and addressing conflicts. Prior to exercising a consent, a determination is made as to whether there is a material conflict of interest. Where a conflict of interest is identified that implicates Morgan Stanley generally, we will generally discuss the conflict with Morgan Stanley's Global Conflicts Office and seek their assistance in addressing the conflict.

Once a material conflict is identified, we will take such steps as we believe to be necessary in order to determine how to exercise the related Consent in good faith and in accordance with our fiduciary duties, which could include, but is not limited to, consulting internally with investment professionals, risk management professionals, business unit heads, our compliance and/or legal department, as appropriate under the particular circumstances, exercising the consent in accordance with instructions from, or following consent of, the client after providing disclosure regarding the conflict, or taking other actions that we believe appropriate under the circumstance in furtherance of the client's best interest.

Further Information: You can contact your Client Representative or Financial Advisor for information on how to obtain a copy of relevant policies and procedures or information regarding how we exercised Consents on your behalf.

Item 18 Financial Information

Registered investment advisers are required in this Item to provide you with certain financial information or disclosures about our financial condition. We are not aware of any financial condition that impairs our ability to meet contractual and fiduciary commitments to you and have not been the subject of a bankruptcy proceeding.

Appendix A

Fee Schedules

Investment Team	Strategy	Attribute	Schedule
Counterpoint Global	Advantage	Minimum Initial Investment	USD \$50M
		Management Fee	0.750% on the first \$50 M
			0.650% on the next \$50 M
			0.500% in excess of \$100 M
	Discovery	Minimum Initial Investment	USD \$50M
		Management Fee	0.750% on the first \$50 M
			0.650% on the next \$50 M
			0.550% in excess of \$100 M
	Global Insight	Minimum Initial Investment	USD \$50M
		Management Fee	0.750% on the first \$100 M
			0.650% in excess of \$100 M
	Growth	Minimum Initial Investment	USD \$50M
		Management Fee	0.750% on the first \$50 M
			0.650% on the next \$50 M
			0.500% in excess of \$100 M
	Inception	Minimum Initial Investment	USD \$50M
		Management Fee	1.000% on the first \$50 M
			0.900% on the next \$50 M
			0.850% in excess of \$100 M
	Insight	Minimum Initial Investment	USD \$50M
		Management Fee	Asset Based Fee: 1.00% on total assets unde management or Performance Based Fee: 0.80% on all assets plus 10% of alpha over benchmark per annum, no high water mark
	Global Permanence	Minimum Initial Investment	USD \$50M
		Management Fee	0.750% on the first \$100 M
			0.650% in excess of \$100 M
	Permanence	Minimum Initial Investment	USD \$50M
		Management Fee	0.750% on the first \$50 M
			0.650% on the next \$50 M
			0.500% in excess of \$100 M
	Global Endurance	Minimum Initial Investment	USD \$50M
		Management Fee	0.750% on the first \$100 M
			0.650% in excess of \$100 M
	Vitality	Minimum Initial Investment	USD \$50M
		Management Fee	0.750% on the first \$50 M
			0.650% on the next \$50 M
			0.550% in excess of \$100 M

Investment Team	Strategy	Attribute	Schedule
Counterpoint Global	Tailwinds	Minimum Initial Investment	USD \$50M
		Management Fee	0.750% on the first \$50 M
			0.650% on the next \$50 M
			0.500% in excess of \$100 M
Global Opportunity	Asia Opportunity	Minimum Initial Investment	USD \$100M
		Management Fee	0.750% on the first \$200 M
			0.700% in excess of \$200 M
	Developing Opportunity	Minimum Initial Investment	USD \$100M
		Management Fee	0.750% on the first \$200 M
			0.700% in excess of \$200 M
	Established Opportunity	Minimum Initial Investment	USD \$100M
		Management Fee	0.750% on the first \$200 M
			0.700% in excess of \$200 M
	Global Change	Minimum Initial Investment	USD \$100M
		Management Fee	0.750% on the first \$200 M
			0.700% in excess of \$200 M
	Global Opportunity	Minimum Initial Investment	USD \$200M
		Management Fee	0.750% on the first \$200 M
			0.700% in excess of \$200 M
	International Opportunity	Minimum Initial Investment	USD \$100M
		Management Fee	0.750% on the first \$200 M
			0.700% in excess of \$200 M
	Europe Opportunity	Minimum Initial Investment	USD \$100M
		Management Fee	0.750% on the first \$200 M
			0.700% in excess of \$200 M
	International Advantage	Minimum Initial Investment	USD \$100M
		Management Fee	0.750% on the first \$200 M
			0.700% in excess of \$200 M
merging Markets Equity	Passport Overseas Equity	Minimum Initial Investment	USD \$25M
		Management Fee	0.650% on the first \$100 M
			0.600% on the next \$100 M
			0.550% in excess of \$200 M
	Passport Global Equity	Minimum Initial Investment	USD \$25M
		Management Fee	0.650% on the first \$100 M
			0.600% on the next \$100 M
			0.550% in excess of \$200 M
	Sustainable Asia Equity	Minimum Initial Investment	USD \$50M
		Management Fee	0.700% on the first \$50 M
		-	0.650% in excess of \$50 M
	China A Equity	Minimum Initial Investment	USD \$50M
		Management Fee	0.900% on total assets
	Emerging Markets Leaders	Minimum Initial Investment	USD \$100M
		Management Fee	0.750% on total assets

Investment Team	Strategy	Attribute	Schedule
Emerging Markets Equity	Global Emerging Markets Equity	Minimum Initial Investment	USD \$100M
		Management Fee	0.800% on the first \$100 M
			0.750% on the next \$100 M
			0.700% in excess of \$200 M
	Sustainable Emerging Markets	Minimum Initial Investment	USD \$100M
		Management Fee	0.800% on the first \$100 M
			0.750% on the next \$100 M
			0.700% in excess of \$200 M
	Emerging Markets ex China	Minimum Initial Investment	USD \$100M
		Management Fee	0.800% on the first \$100 M
			0.750% on the next \$100 M
			0.700% in excess of \$200 M
	India Equity	Minimum Initial Investment	USD \$50M
		Management Fee	0.900% on total assets
	Latin America Equity	Minimum Initial Investment	USD \$50M
		Management Fee	0.950% on the first \$50 M
			0.900% on the next \$50 M
			0.850% in excess of \$100 M
	Next Gen Emerging Markets	Minimum Initial Investment	USD \$50M
		Management Fee	1.200% on total assets
nternational Equity	American Resilience	Minimum Initial Investment	USD \$50M
		Management Fee	0.550% on the first \$50 M
			0.500% on the next \$50 M
			0.450% in excess of \$100 M up to \$200M, flat on all assets
			0.400% in excess of \$200 M up to \$350M, flat on all assets
			0.350% in excess of \$350 M flat on all assets
	Global Franchise	Minimum Initial Investment	USD \$50M
		Management Fee	0.800% on the first \$25 M
			0.750% on the next \$25 M
			0.700% on the next \$50 M
			0.650% in excess of \$100 M
			Fee Schedule available for mandates over \$200M
	Global Quality	Minimum Initial Investment	USD \$50M
		Management Fee	0.800% on the first \$25 M
			0.750% on the next \$25 M
			0.700% on the next \$50 M
			0.650% in excess of \$100 M
			Fee Schedule available for mandates over \$200M

Investment Team	Strategy	Attribute	Schedule
International Equity	Global Sustain	Minimum Initial Investment	USD \$50M
		Management Fee	0.725% on the first \$50 M
			0.650% on the next \$50 M
			0.600% in excess of \$100 M up to \$200M, flat on all assets
			0.530% in excess of \$200 M up to \$350M, flat on all assets
			0.500% in excess of \$350 M flat on all assets
	International Equity	Minimum Initial Investment	USD \$100M
		Management Fee	0.800% on the first \$25 M
			0.600% on the next \$25 M
			0.500% on the next \$25 M
			0.400% in excess of \$75 M
	International Resilience	Minimum Initial Investment	USD \$50M
		Management Fee	0.700% on the first \$50 M
			0.500% on the next \$25 M
			0.400% on balance
lobal Listed Real Assets	Asian Real Estate Securities	Minimum Initial Investment	USD \$20M
		Management Fee	0.600% on the first \$100 M
			0.500% on the next \$300 M
			0.400% in excess of \$400 M
	Energy Transition and Innovation Opportunities	Minimum Initial Investment	USD \$50M
		Management Fee	0.700% on the first \$50 M
			0.600% on the next \$50 M
			0.500% on the next \$300 M
			0.400% in excess of \$400 M
	European Real Estate Securities	Minimum Initial Investment	USD \$20M
		Management Fee	0.600% on the first \$100 M
			0.500% on the next \$300 M
			0.400% in excess of \$400 M
	Global Focus Real Estate Securities	Minimum Initial Investment	USD \$20M
		Management Fee	0.750% on the first \$100 M
			0.650% on the next \$300 M
			0.550% in excess of \$400 M
	Global Sustainable Real Estate Securities	Minimum Initial Investment	USD \$20M
		Management Fee	0.750% on the first \$100 M
			0.500% on the next \$300 M
			0.400% in excess of \$400 M
	Global Infrastructure Securities	Minimum Initial Investment	USD \$50M
		Management Fee	0.700% on the first \$50 M
			0.600% on the next \$50 M
			0.500% on the next \$300 M
			0.400% in excess of \$400 M

Investment Team	Strategy	Attribute	Schedule
Global Listed Real Assets	Global Real Estate Securities	Minimum Initial Investment	USD \$20M
		Management Fee	0.700% on the first \$100 M
			0.500% on the next \$300 M
			0.400% in excess of \$400 M
	North American Real Estate Securities	Minimum Initial Investment	USD \$20M
		Management Fee	0.600% on the first \$100 M
			0.500% on the next \$300 M
			0.400% in excess of \$400 M
	U.S. Real Estate Securities	Minimum Initial Investment	USD \$20M
		Management Fee	0.600% on the first \$100 M
			0.500% on the next \$300 M
			0.400% in excess of \$400 M
Applied Equity Advisors	Applied Enhanced Index	Minimum Initial Investment	USD \$25M
		Management Fee	0.250% on the first \$25 M
			0.230% on the next \$25 M
			0.200% on the next \$50 M
			0.180% in excess of \$100 M
			Negotiable if over \$200 M
	Applied Global Concentrated Equity	Minimum Initial Investment	USD \$25M
		Management Fee	0.550% on the first \$25 M
			0.500% on the next \$25 M
			0.450% on the next \$50 M
			0.400% in excess of \$100 M
			Negotiable if over \$200 M
	Applied Global Concentrated ESG-Screened Equity	Minimum Initial Investment	USD \$25M
		Management Fee	0.550% on the first \$25 M
			0.500% on the next \$25 M
			0.450% on the next \$50 M
			0.400% in excess of \$100 M
			Negotiable if over \$200 M
	Applied Global Core Equity	Minimum Initial Investment	USD \$25M
		Management Fee	0.550% on the first \$25 M
			0.500% on the next \$25 M
			0.450% on the next \$50 M
			0.400% in excess of \$100 M
			Negotiable if over \$200 M
	Applied US Core Equity	Minimum Initial Investment	USD \$25M
		Management Fee	0.450% on the first \$25 M
			0.400% on the next \$25 M
			0.350% on the next \$50 M
			0.300% in excess of \$100 M
			Negotiable if over \$200 M

Investment Team	Strategy	Attribute	Schedule
Global Multi-Asset	Absolute Return	Minimum Initial Investment	USD \$100M
		Management Fee	0.850% on the first \$100 M
			0.750% on the next \$150 M
			0.650% on the next \$250 M
			0.550% in excess of \$500 M
	Global Tactical Asset Allocation	Minimum Initial Investment	USD \$100M
		Management Fee	0.750% on the first \$100 M
			0.650% on the next \$150 M
			0.550% on the next \$250 M
			0.450% in excess of \$500 M
	Multi-Asset Real Return (MARRS)	Minimum Initial Investment	USD \$50M
		Management Fee	0.800% on the first \$50 M
			0.700% on the next \$50 M
			0.600% on the next \$200 M
			0.500% thereafter
	U.S. Value	Minimum Initial Investment	USD \$50M
		Management Fee	0.450% on the first \$100 M
			0.350% on the next \$200 M
			0.250% thereafter
Broad Markets Fixed	Core Fixed Income	Minimum Initial Investment	USD \$75M
		Management Fee	0.250% on the first USD \$100 M
			0.200% on the next USD \$150 M
			0.125% in excess of USD \$250 M
	Core Plus Fixed Income	Minimum Initial Investment	USD \$75M
		Management Fee	0.250% on the first USD \$50 M
			0.200% on the next USD \$50 M
			0.150% in excess of USD \$100 M
	European Fixed Income Opportunities	Minimum Initial Investment	EUR €50 M
		Management Fee	0.300% on the first EUR €50 M
			0.250% in excess of EUR €50 M
	Global Aggregate Fixed Income	Minimum Initial Investment	USD \$100 M
		Management Fee	0.300% on the first USD \$100 M
			0.250% in excess of USD \$100 M
	Global Credit	Minimum Initial Investment	USD \$50 M
		Management Fee	0.300% on the first USD \$50 M
			0.300% on the next USD \$50 M
			0.250% in excess of USD \$100 M
	Global Fixed Income Opportunities	Minimum Initial Investment	USD \$100 M
		Management Fee	0.350% on the first \$100 M
			0.300% in excess of \$100 M

Investment Team	Strategy	Attribute	Schedule
Broad Markets Fixed Income	Global Limited Duration	Minimum Initial Investment	USD \$50 M
		Management Fee	0.250% on the first USD \$50 M
			0.150% on the next USD \$50 M
			0.100% in excess of USD \$100 M
	Global Opportunistic Credit	Minimum Initial Investment	\$100 M
		Management Fee	0.350% on the first \$100 M
			0.300% in excess of \$100 M
	Global Sovereign	Minimum Initial Investment	USD \$100 M
		Management Fee	0.200% on the first USD \$100 M
			0.150% in excess of USD \$100 M
	Government Bond	Minimum Initial Investment	USD \$ 100 M
		Management Fee	0.200 % on the first USD \$ 100 M
			0.150 % in excess of USD \$ 100 M
	Strategic Income	Minimum Initial Investment	USD \$100 M
		Management Fee	0.350% on the first USD \$100 M
			0.300% in excess of USD \$100 M
	Sustainable Fixed Income Opportunities	Minimum Initial Investment	USD \$100 M
		Management Fee	0.350% on the first USD \$100 M
			0.300% in excess of USD \$100 M
	U.S. Investment Grade Corporate	Minimum Initial Investment	USD \$50 M
	<u> </u>	Management Fee	0.300% on the first USD \$50 M
			0.250% on the next USD \$50 M
			0.200% in excess of USD \$100 M
	U.S. Limited Duration	Minimum Initial Investment	USD \$100 M
		Management Fee	0.140% on the first USD \$150 M
			0.120% on the next USD \$350 M
			0.100% in excess of USD \$500 M
	U.S. Long Duration	Minimum Initial Investment	USD \$75M
		Management Fee	0.200% on the first USD \$50 M
			0.150% on the next USD \$50 M
			0.125% in excess of USD \$100 M
	U.S. Short Duration	Minimum Initial Investment	USD \$100M
		Management Fee	0.140% on the first \$150 M
			0.120% on the next \$350 M
			0.100% in excess of \$500 M
merging Markets Debt	Emerging Markets Corporate Debt	Minimum Initial Investment	USD \$50 M
		Management Fee	0.600% on the first USD \$50 M
			0.550% on the next USD \$50 M
			0.500% in excess of USD \$100 M

Investment Team	Strategy	Attribute	Schedule
Emerging Markets Debt	Emerging Markets Debt Opportunities	Minimum Initial Investment	USD \$200 M
		Management Fee	0.55% First \$250 M
			0.50% Next \$250 M
			0.450% Thereafter
	Emerging Markets Fixed Income Opportunities	Minimum Initial Investment	USD \$200 M
		Management Fee	0.55% First \$250 M
			0.50% Next \$250 M
			0.450% Thereafter
	Emerging Markets Local Income	Minimum Initial Investment	USD \$200 M
		Management Fee	0.55% on the first \$250 M
			0.50% on the next \$250 M
			0.45% Thereafter
ligh Yield	Global Convertible Bond	Minimum Initial Investment	EUR €50 M
		Management Fee	0.500 % on the first EUR €50 M
			0.450 % on the next EUR €50 M
			0.400 % in excess of EUR €100 M
	Global High Yield	Minimum Initial Investment	USD \$50 M
		Management Fee	0.500% on the first \$100 M
			0.450% on the next \$100 M
			0.400% in excess of \$200 M
	U.S. High Yield	Minimum Initial Investment	USD \$50 M
		Management Fee	0.50% First \$50 M
			0.45% Next \$50 M
			0.40% Next \$100 M
			0.35% Thereafter
Mortgage & Securitized	U.S. Mortgage	Minimum Initial Investment	USD \$50M
		Management Fee	0.150% on the first USD \$250 M
			0.125% in excess of USD \$250 M
f unicipals	Taxable Municipal	Minimum Initial Investment	US \$50 M
		Management Fee	0.30% First \$100 M
			0.25% Next \$100 M
			0.22% Next \$100 M
			0.20% Thereafter
iquidity	Taxable USD MM - Institutional	Minimum Initial Investment	USD \$150M
		Management Fee	0.130% on the first \$300 M
			0.110% on the next \$200 M
			0.090% on the next \$300 M
			0.080% in excess of \$800 M

Investment Team	Strategy	Attribute	Schedule
Liquidity	Tax-Exempt USD MM - Institutional	Minimum Initial Investment	USD \$150M
		Management Fee	0.130% on the first \$300 M
			0.110% on the next \$200 M
			0.090% on the next \$300 M
			0.080% in excess of \$800 M
	Ultra-Short Income	Minimum Initial Investment	USD \$150M
		Management Fee	0.130% on the first \$300 M
			0.110% on the next \$200 M
			0.090% on the next \$300 M
			0.080% in excess of \$800 M

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FACTS

WHAT DOES MSIM DO WITH YOUR PERSONAL INFORMATION?

Why?	Financial companies choose how they share your personal information. Federal law gives consumers the right to limit some but not all sharing. Federal law also requires us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand what we do.
What?	The types of personal information we collect and share depend on the product or service you have with us. This information can include: Social Security number and income investment experience and risk tolerance checking account information and wire transfer instructions
How?	All financial companies need to share customers' personal information to run their everyday business. In the section below, we list the reasons financial companies can share their customers' personal information; the reasons MSIM chooses to share; and whether you can limit this sharing.

Reasons we can share your personal information	Does MSIM share?	Can you limit this sharing?
For our everyday business purposes— such as to process your transactions, maintain your account(s), respond to court orders and legal investigations, or report to credit bureaus	Yes	No
For our marketing purposes— to offer our products and services to you	Yes	No
For joint marketing with other financial companies	No	We don't share
For our affiliates' everyday business purposes— information about your transactions and experiences	Yes	No*
For our affiliates' everyday business purposes—information about your creditworthiness	Yes	Yes*
For our affiliates to market to you	Yes	Yes*
For nonaffiliates to market to you	No	We don't share

Please note:

If you are a *new* customer, we can begin sharing your information 30 days from the date we sent this notice. When you are *no longer* our customer, we continue to share your information as described in this notice. However, you can contact us at any time to limit our sharing.

Questions?

Call toll-free (844) 312-6327 or email: imprivacyinquiries@morganstanley.com

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Who we are	
Who is providing this notice?	Morgan Stanley Investment Management Inc. and its investment management affiliates ("MSIM") (See Affiliates definition below.)
What we do	
How does MSIM protect my personal information?	To protect your personal information from unauthorized access and use, we use security measures that comply with federal law. These measures include computer safeguards and secured files and buildings. We have policies governing the proper handling of customer information by personnel and requiring third parties that provide support to adhere to appropriate security standards with respect to such information.
How does MSIM collect	We collect your personal information, for example, when you
my personal information?	 open an account or make deposits or withdrawals from your account buy securities from us or make a wire transfer give us your contact information
	We also collect your personal information from others, such as credit bureaus, affiliates, or other companies.
Why can't I limit all sharing?	Federal law gives you the right to limit only
	 sharing for affiliates' everyday business purposes—information about your creditworthiness
	 affiliates from using your information to market to you sharing for nonaffiliates to market to you
	State laws and individual companies may give you additional rights to limit sharing. (See below for more on your rights under state law.)
What happens when I limit sharing for an account I hold jointly with someone else?	Your choices will apply to everyone on your account.
Definitions	<u>'</u>
Affiliates	Companies related by common ownership or control. They can be financial and nonfinancial companies.
	Our affiliates include registered investment advisers such as Eaton Vance Management and Calvert Research and Management, registered broker- dealers such as Morgan Stanley Distributors Inc. and Eaton Vance Distributors, Inc., and registered and unregistered funds sponsored by Morgan Stanley Investment Management such as the registered funds within Morgan Stanley Institutional Fund, Inc. (together, the "Investment Management Affiliates"); and companies with a Morgan Stanley name and financial companies such as Morgan Stanley Barney LLC and Morgan Stanley & Co. (the, "Morgan Stanley Affiliates").
Nonaffiliates	Companies not related by common ownership or control. They can be financial and nonfinancial companies. • MSIM does not share with nonaffiliates so they can market to you.
Joint marketing	A formal agreement between nonaffiliated financial companies that together market financial products or services to you. • MSIM doesn't jointly market

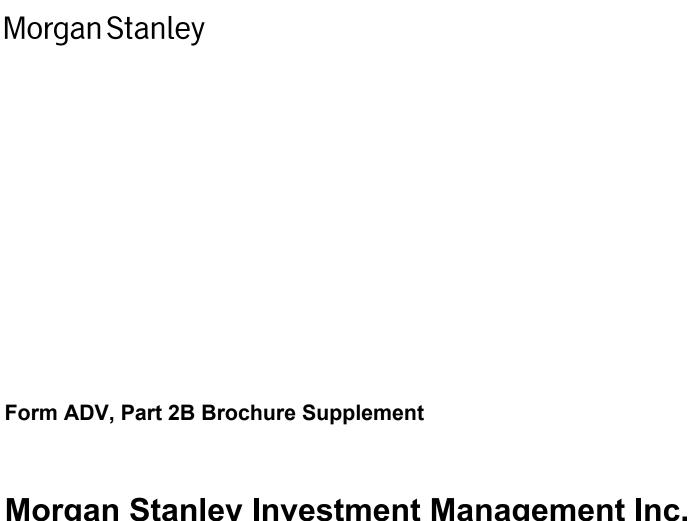
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Other important information

*PLEASE NOTE: MSIM does not share your creditworthiness information or your transactions and experiences information with the Morgan Stanley Affiliates, nor does MSIM enable the Morgan Stanley Affiliates to market to you. Your opt outs will prevent MSIM from sharing your creditworthiness information with the Investment Management Affiliates and will prevent the Investment Management Affiliates from marketing their products to you.

Vermont: Except as permitted by law, we will not share personal information we collect about Vermont residents with Nonaffiliates unless you provide us with your written consent to share such information.

California: Except as permitted by law, we will not share personal information we collect about California residents with Nonaffiliates and we will limit sharing such personal information with our Affiliates to comply with California privacy laws that apply to us.



Morgan Stanley Investment Management Inc.

1585 BROADWAY NEW YORK, NEW YORK 10036 212-761-4000

March 31, 2024

This brochure supplement provides information about the supervised persons of Morgan Stanley Investment Management Inc. ("MSIM" or the "Adviser") that supplements the MSIM brochure. You should have received a copy of that brochure. Please contact your account representative if you did not receive MSIM's brochure or if you have any questions about the contents of this supplement.

None of the individuals listed in the Equity & Multi Asset Strategies, Fixed Income Strategies, and Global Liquidity Team sections have been the subject of any material legal proceedings or disciplinary actions in the past 10 years. No individuals are actively engaged in any investment related business or occupation and none are compensated for providing advisory services outside of their positions with MSIM and its affiliates.

	Equity & Multi A	Asset Strategies	
nvestment Team	Strategy	Portfolio Manager	Office Location
Applied Equity Advisors	Applied Enhanced Index	Andrew Slimmon	Chicago
		Phillip Kim	Chicago
	Applied Global Concentrated Equity	Andrew Slimmon	Chicago
		Phillip Kim	Chicago
	Applied Global Concentrated ESG-Screened Equity	Andrew Slimmon	Chicago
		Phillip Kim	Chicago
	Applied Global Core Equity	Andrew Slimmon	Chicago
		Phillip Kim	Chicago
	Applied U.S. Core Equity	Andrew Slimmon	Chicago
		Phillip Kim	Chicago
nerging Markets Equity	Asia Ex Japan Equity	Leon Sun	Hong Kong
	Asia Pacific Ex Japan Equity	Leon Sun	Hong Kong
	China A Equity	Leon Sun	Hong Kong
	Emerging Markets Ex China	Paul Psaila	New York
		Eric Carlson	New York
	Global Emerging Markets Equity	Paul Psaila	New York
		Eric Carlson	New York
	Integrated International Equity	Jitania Kandhari	New York
		Paul Psaila	New York
	Integrated Global Equity	Paul Psaila	New York
	Latin America Equity	Eric Carlson	New York
		Paul Psaila	New York
	Next Gen Emerging Markets	Steven Quattry	New York
	Passport Global Equity	Ben Rozin	New York
		Jitania Kandhari	New York
	Passport Overseas Equity	Ben Rozin	New York
		Jitania Kandhari	New York
	Sustainable Asia Equity	Leon Sun	Hong Kong

Eric Carlson New York	Emerging Markets Equity	Sustainable Emerging Markets	Paul Psaila	New York
Sandeep Chainani New York David Cohen New York Armistead Nash New York Alex Norton New York Jason Yeung New York Counterpoint Global Dennis Lynch New York Sandeep Chainani New York David Cohen New York Alex Norton New York Counterpoint Ventures Dennis Lynch New York Sandeep Chainani New York Armistead Nash New York Alex Norton New York Jason Yeung New York Discovery Dennis Lynch New York Sandeep Chainani New York David Cohen New York Armistead Nash New York Counterpoint Ventures New York Discovery Dennis Lynch New York Armistead Nash New York David Cohen New York Armistead Nash New York Alex Norton New York Alex Norton New York Global Endurance Manas Gautam New York Sandeep Chainani New York Global Insight Dennis Lynch New York Armistead Nash New York Sandeep Chainani New York Global Insight Dennis Lynch New York Armistead Nash New York Sandeep Chainani New York Sandeep Chainani New York Sandeep Chainani New York David Cohen New York Armistead Nash New York Alex Norton New York Alex Norton New York Alex Norton New York David Cohen New York			Eric Carlson	New York
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Alex Norton New York Jason Yeung New York Global Permanence Dennis Lynch New York Sandeep Chainani New York David Cohen New York Manas Gautam New York Armistead Nash New York Alex Norton New York			David Cohen	New York
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David Cohen New York Manas Gautam New York Armistead Nash New York Alex Norton New York		Global Permanence	Dennis Lynch	New York
Manas Gautam New York Armistead Nash New York Alex Norton New York			Sandeep Chainani	New York
Armistead Nash New York Alex Norton New York			David Cohen	New York
Alex Norton New York			Manas Gautam	New York
			Armistead Nash	New York
Jason Yeung New York			Alex Norton	New York
			Jason Yeung	New York

Counterpoint Global	Growth	Dennis Lynch	New York
		Sandeep Chainani	New York
		David Cohen	New York
		Armistead Nash	New York
		Alex Norton	New York
		Jason Yeung	New York
	Inception	Dennis Lynch	New York
		Sandeep Chainani	New York
		David Cohen	New York
		Armistead Nash	New York
		Alex Norton	New York
		Jason Yeung	New York
	Integrated Global Equity	Dennis Lynch	New York
	Insight	Dennis Lynch	New York
		Sandeep Chainani	New York
		David Cohen	New York
		Armistead Nash	New York
		Alex Norton	New York
		Jason Yeung	New York
	Permanence	Dennis Lynch	New York
		Sandeep Chainani	New York
		David Cohen	New York
	-	Manas Gautam	New York
	-	Armistead Nash	New York
		Alex Norton	New York
	_	Jason Yeung	New York
	Tailwinds	Thomas Kamei	New York
		Sandeep Chainani	New York
		David Cohen	New York
		Dennis Lynch	New York
		Armistead Nash	New York
		Alex Norton	New York
		Jason Yeung	New York
	Vitality	Anne Edelstein	New York
	-	Jenny Leeds	New York
Global Opportunity	Asia Opportunity	Kristian Heugh	Miami
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Global Opportunity	Asia Opportunity	Alastair Pang	Hong Kong
		Jeremy Wu	Hong Kong
	Developing Opportunity	Kristian Heugh	Miami
	Established Opportunity	Kristian Heugh	Miami
		Jeremy Wu	Hong Kong
	Europe Opportunity	Kristian Heugh	Miami
	Global Change	Kristian Heugh	Miami
		Marc Fox	Miami
	Global Opportunity	Kristian Heugh	Miami
	International Advantage	Kristian Heugh	Miami
	International Opportunity	Kristian Heugh	Miami
Managed Solutions Group	Access Zero International Developed ADR	William Littleton	New York
	Access Zero U.S. Large Cap Equity	William Littleton	New York
	Access Zero U.S. Large Cap Growth Equity	William Littleton	New York
	Access Zero U.S. Large Cap Value Equity	William Littleton	New York
	Defensive All World Core Equity	William Littleton	New York
		Nathan Sheldon	New York
	Defensive European Large Cap Core Equity	William Littleton	New York
		Nathan Sheldon	New York
	Defensive International Core Equity	William Littleton	New York
		Nathan Sheldon	New York
	Defensive U.S. Large Cap Core Equity	William Littleton	New York
		Nathan Sheldon	New York
	Enhanced Yield	William Littleton	New York
		Nathan Sheldon	New York
Global Listed Real Assets	Asian Real Estate Securities	Laurel Durkay	New York
	Energy Transition and Innovation Opportunities	Matthew King	New York
		Hasan Ali Goncu	New York
	European Real Estate Securities	Laurel Durkay	New York
	Global Focus Real Estate Securities	Laurel Durkay	New York
	Global Infrastructure Securities	Matthew King	New York
	Global Real Estate Securities	Laurel Durkay	New York
	Global Sustainable Real Estate Securities	Laurel Durkay	New York
	North American Real Estate Securities	Laurel Durkay	New York
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Global Listed Real Assets	U.S. Focus Real Estate Securities	Laurel Durkay	New York
	U.S. Real Estate Securities	Laurel Durkay	New York
Global Multi Asset	Absolute Return	Cyril Moulle-Berteaux	New York
		Mark Bavoso	San Francisco
	Global Tactical Asset Allocation	Cyril Moulle-Berteaux	New York
		Mark Bavoso	San Francisco
	Integrated Global Equity	Cyril Moulle-Berteaux	New York
	Multi-Asset Real Return (MARRS)	Cyril Moulle-Berteaux	New York
		Mark Bavoso	San Francisco
	U.S. Value	Cyril Moulle-Berteaux	New York
		Mark Bavoso	San Francisco
		Doug Rentz	New York
Portfolio Solutions Group	Global Balanced (GB)	Jim Caron	New York
		Rui De Figueiredo	New York
		Ryan Meredith	New York
		Damon Wu	Hong Kong
	Global Balanced Defensive (GBD)	Jim Caron	New York
		Rui De Figueiredo	New York
		Ryan Meredith	New York
		Damon Wu	Hong Kong
	Global Balanced Income (GBI)	Jim Caron	New York
		Rui De Figueiredo	New York
		Ryan Meredith	New York
		Damon Wu	Hong Kong
	Global Balanced Risk Control (GBaR)	Jim Caron	New York
		Rui De Figueiredo	New York
		Ryan Meredith	New York
		Damon Wu	Hong Kong
	Global Balanced Sustainable (GBS)	Jim Caron	New York
		Rui De Figueiredo	New York
		Ryan Meredith	New York
		Damon Wu	Hong Kong

	Fixed ilicoli	ne Strategies	
nvestment Team	Strategy	Portfolio Manager	Office Location
Broad Markets Fixed ncome	Sustainable Fixed Income Opportunities	Michael Kushma	New York
		Vishal Khanduja	Boston
	Core Fixed Income	Stella Ma	New York
		Matthew Dunning	New York
		Brian Ellis	Boston
		Vishal Khanduja	Boston
		Jason DesLauriers	Boston
	Core Plus Fixed Income	Stella Ma	New York
		Matthew Dunning	New York
	Global Aggregate Fixed Income	Michael Kushma	New York
		Utkarsh Sharma	New York
	Global Credit	Joseph Mehlman	New York
		Stella Ma	New York
	Global Fixed Income Opportunities	Michael Kushma	New York
		Utkarsh Sharma	New York
	Global Limited Duration	Michael Kushma	New York
	-	Utkarsh Sharma	New York
	Global Opportunistic Credit	Joseph Mehlman	New York
	Global Sovereign	Alexander Bouzalis	New York
		Michael Kushma	New York
		Utkarsh Sharma	New York
	Strategic Income	Michael Kushma	New York
		Utkarsh Sharma	New York
	U.S. Investment Grade Corporate	Eric Jesionowski	New York
		Joseph Mehlman	New York
	_	Angie Salam	New York
		Stella Ma	New York
	U.S. Limited Duration	Eric Jesionowski	New York
		Joseph Mehlman	New York
		Stella Ma	New York
	U.S. Long Duration	Angie Salam	New York
		Matthew Dunning	New York
		Stella Ma	New York

Broad Markets Fixed Income	U.S. Short Duration	Eric Jesionowski	New York
		Joseph Mehlman	New York
		Stella Ma	New York
Emerging Markets	Emerging Markets Corporate Debt	Akbar Causer	Boston
	Emerging Markets Fixed Income Opportunities	Akbar Causer	Boston
		Brian Shaw	Boston
	Emerging Markets Local Income	Brian Shaw	Boston
		Patrick Campbell	Boston
High Yield	Global Convertible Bond	Andrew Cohen	Boston
		Tom Wills	New York
	Global High Yield	Jack Cimarosa	New York
		Joe Hurley	New York
		Kelley Gerrity	Boston
		Steve Concannon	Boston
	U.S. High Yield	Steve Concannon	Boston
		Kelley Gerrity	Boston
Mortgage & Securitized	U.S. Mortgage	Gregory Finck	New York
		Christian Jones	New York
Municipals	Taxable Municipal	Craig Brandon	Boston
		Cynthia Clemson	Boston
		Paul Metheny	Boston

Global Liquidity Team			
Strategy Name	Portfolio Manager	Office Location	
Taxable USD MM	Jonas Kolk	New York	
	David Schoenfeld	New York	
	Michael Cha	New York	
Taxable USD MM (Govt / Treasury)	Jonas Kolk	New York	
	Kendal Cehanowicz	New York	
Tax-Exempt USD MM	Julie Callahan	New York	
Ultra-Short Income	Jonas Kolk	New York	
	David Schoenfeld	New York	
	Michael Cha	New York	

Applied Equity Advisors Team

Phillip Kim Year of birth: 1973

Phillip Kim is an Executive Director and Portfolio Manager on the Applied Equity Advisors Team at Morgan Stanley Investment Management. Mr. Kim joined Morgan Stanley in 2006.

Mr. Kim received a B.S. at University of Virginia in 1996, a M.S. at Johns Hopkins University in 2001, and an M.B.A. from the University of Chicago in 2006.

Andrew H. Slimmon, Managing Director, is responsible for supervising the advisory activities of Mr. Kim and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Kim is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Kim's supervisor is available at 212-761-4000.

Andrew Slimmon Year of birth: 1963

Andrew Slimmon is a Managing Director and the Head of Applied Equity Advisors Team at Morgan Stanley Investment Management. Andrew joined Morgan Stanley in 1991.

Mr. Slimmon received a B.A. at University of Pennsylvania in 1986 and an M.B.A. at University of Chicago in 1991.

Chris Dyer, Managing Director, is responsible for supervising the advisory activities of Mr. Slimmon and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Slimmon is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Slimmon's supervisor is available at (212) 761-4000.

Emerging Markets Equity Team

Eric Carlson Year of birth: 1969

Eric Carlson is a Managing Director and Portfolio Manager on the Emerging Markets Equity Team at Morgan Stanley Investment Management. Mr. Carlson joined Morgan Stanley in 1997.

Mr. Carlson received a B.A. from Harvard University in 1991 and a J.D. from Harvard University in 1995.

Amy Oldenburg, Managing Director, is responsible for supervising the advisory activities of Mr. Carlson and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Carlson is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Carlson's supervisor is available at 212-761-4000.

Jitania Kandhari Year of birth: 1973

Jitania Kandhari is a Managing Director and Portfolio Manager on the Emerging Markets Equity Team at Morgan Stanley Investment Management. Ms. Kandhari joined Morgan Stanley in 2006.

Ms. Kandhari received a Bachelor of Commerce degree in advanced financial and management accounting in 1992 and an M.M.S. in finance in 1996, both from the University of Mumbai.

Amy Oldenburg, Managing Director, is responsible for supervising the advisory activities of Ms. Kandhari and monitoring the investment advice that she provides to the clients of the Adviser. Ms. Kandhari is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Ms. Kandhari's supervisor is available at (212) 761-4000.

Paul Psaila, CFA¹ Year of birth: 1967

Paul Psaila is a Managing Director and Portfolio Manager on the Emerging Markets Equity Team at Morgan Stanley Investment Management. Mr. Psaila joined Morgan Stanley in 1994.

Mr. Psaila received a B.A. from Brandeis University in 1989 and an MBA from John Hopkins University in 1993.

Amy Oldenburg, Managing Director, is responsible for supervising the advisory activities of Mr. Psaila and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Psaila is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Psaila's supervisor is available at 212-761-4000.

Steven Quattry Year of birth: 1982

Steve Quattry is an Executive Director and Portfolio Manager on the Emerging Markets Equity Team at Morgan Stanley Investment Management. Mr. Quattry joined Morgan Stanley in 2011.

Mr. Quattry received a M.A. from Columbia University in 2004 and a B.A. from University of Florida in 2009.

Amy Oldenburg, Managing Director, is responsible for supervising the advisory activities of Mr. Quattry and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Quattry is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Quattry's supervisor is available at 212-761-4000.

Ben Rozin Year of birth: 1980

Ben Rozin is an Executive Director and Portfolio Manager on the Emerging Markets Equity Team at Morgan Stanley Investment Management. Mr. Rozin joined Morgan Stanley in 2017. Prior to that, he was a co-Portfolio Manager and senior investment strategist and international economist at Manning & Napier from 2005 to 2016.

Mr. Rozin received a B.A. from Indiana University in 2002 and an M.S. from the Universiteit Maastricht in the Netherlands in 2004.

Amy Oldenburg, Managing Director, is responsible for supervising the advisory activities of Mr. Rozin and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Rozin is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Rozin's supervisor is available at (212) 761-4000.

Leon Sun, CFA¹ Year of birth: 1975

Leon Sun is a Managing Director and Portfolio Manager on the Emerging Markets Equity Team at Morgan Stanley Investment Management. Mr. Sun joined Morgan Stanley in 2021. Prior to then, Mr. Sun was a Portfolio Manager at Nomura Asset Manage from 2012 until 2021.

Mr. Sun received a BA from Shanghai International Studies University in 1997 and an Msc from The University of Edinburgh in 2005.

Amay Hattangadi, Managing Director, is responsible for supervising the advisory activities of Mr. Sun and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Sun is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Sun's supervisor is available at +852 2848 5200.

Counterpoint Global Team

Sandeep Chainani, CFA¹

Sandeep Chainani is a Managing Director and Portfolio Manager on Counterpoint Global at Morgan Stanley Investment Management. Mr. Chainani joined Morgan Stanley in 1996.

Year of birth: 1974

Mr. Chainani received a B.S. from Binghamton University in 1996.

Dennis Lynch, Managing Director, is responsible for supervising the advisory activities of Mr. Chainani and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Chainani is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Chainani's supervisor is available at (212) 761-4000.

David Cohen Year of birth: 1966

David Cohen is a Managing Director and Portfolio Manager on Counterpoint Global at Morgan Stanley Investment Management. Mr. Cohen joined Morgan Stanley in 1993.

Mr. Cohen received a B.S. from Pace University in 2000.

Sandeep Chainani, Managing Director, is responsible for supervising the advisory activities of Mr. Cohen and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Cohen is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Cohen's supervisor is available at (212) 761-4000.

Anne Edelstein Year of birth: 1989

Anne Edelstein is an Executive Director and Portfolio Manager on Counterpoint Global at Morgan Stanley Investment Management. Ms. Edelstein joined Morgan Stanley in 2018. Prior to then, Ms. Edelstein was a Vice President and Equity Research Analyst at Bank of America Merrill Lynch.

Ms. Edelstein received a B.A. from Hamilton College in 2011.

Jason Yeung, Managing Director, is responsible for supervising the advisory activities of Ms. Edelstein and monitoring the investment advice that she provides to the clients of the Adviser. Ms. Edelstein is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Ms. Edelstein's supervisor is available at (212) 761-4000.

Manas Gautam Year of birth: 1990

Manas Gautam is an Executive Director and Portfolio Manager on Counterpoint Global at Morgan Stanley Investment Management. Mr. Gautam joined Morgan Stanley in 2015. Prior to then, Mr. Gautam was an associate at Osmium Partners.

Mr. Gautam received a B.S. from Brown University in 2012.

Dennis Lynch, Managing Director, is responsible for supervising the advisory activities of Mr. Gautam and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Gautam is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Gautam's supervisor is available at (212) 761-4000.

Thomas Kamei Year of birth: 1990

Thomas Kamei is an Executive Director and Portfolio Manager on Counterpoint Global at Morgan Stanley Investment Management. Mr. Kamei joined Morgan Stanley in 2012.

Mr. Kamei received a B.S. from University of Southern California in 2012.

Dennis Lynch, Managing Director, is responsible for supervising the advisory activities of Mr. Kamei and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Kamei is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Kamei's supervisor is available at (212) 761-4000.

Jenny Leeds, Ph.D Year of birth: 1988

Jenny Leeds is an Executive Director and Portfolio Manager on Counterpoint Global at Morgan Stanley Investment Management. Ms. Leeds joined Morgan Stanley in 2019. Prior to then, Ms. Leeds was an associate and Equity Research Analyst at Bank of America Merrill Lynch.

Ms. Leeds received a B.S. from Tufts University in 2010 and a Ph.D from Memorial Sloan Kettering Cancer Center in 2015.

Jason Yeung, Managing Director, is responsible for supervising the advisory activities of Ms. Leeds and monitoring the investment advice that she provides to the clients of the Adviser. Ms. Leeds is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Ms. Leeds supervisor is available at (212) 761-4000.

Dennis Lynch Year of birth: 1970

Dennis Lynch is a Managing Director, Portfolio Manager and head of Counterpoint Global at Morgan Stanley Investment Management. Mr. Lynch joined Morgan Stanley in 1998.

Mr. Lynch received a B.A. from Hamilton College in 1993 and an MBA from Columbia University in 1998.

Eric Kayne, Managing Director, is responsible for supervising the advisory activities of Mr. Lynch and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Lynch is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Lynch's supervisor is available at (212) 761-4000.

Armistead Nash Year of birth: 1972

Armistead Nash is a Managing Director and Portfolio Manager on Counterpoint Global at Morgan Stanley Investment Management. Mr. Nash joined Morgan Stanley in 2002.

Mr. Nash received a B.A. from University of Virginia in 1995 and an MBA from the Darden Graduate School Business at the University of Virginia in 2002.

Sandeep Chainani, Managing Director, is responsible for supervising the advisory activities of Mr. Nash and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Nash is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Nash's supervisor is available at (212) 761-4000.

Alexander Norton Year of birth: 1971

Alexander Norton is an Executive Director and Portfolio Manager on Counterpoint Global at Morgan Stanley Investment Management. Mr. Norton joined Morgan Stanley in 2000.

Mr. Norton received a B.A. from University of Pennsylvania in 1993 and an MBA from Columbia Business School at Columbia University in 2000.

Sandeep Chainani, Managing Director, is responsible for supervising the advisory activities of Mr. Norton and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Norton is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Norton's supervisor is available at (212) 761-4000.

Mark Todtfeld Year of birth: 1967

Mark Todtfeld is a Managing Director, Chief Operating Officer and Portfolio Manager on Counterpoint Global at Morgan Stanley Investment Management. Mr. Todtfeld joined Morgan Stanley in 2005.

Mr. Todtfeld received a B.A. from Emory University in 1989 and an MBA from New York University's Leonard N. Stern School of Business in 1995.

Sandeep Chainani, Managing Director, is responsible for supervising the advisory activities of Mr. Todtfeld and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Todtfeld is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Todtfeld's supervisor is available at (212) 761-4000.

Jason Yeung, CFA¹ Year of birth: 1974

Jason Yeung is a Managing Director and Portfolio Manager on Counterpoint Global at Morgan Stanley Investment Management. Mr. Yeung joined Morgan Stanley in 2002.

Mr. Yeung received a B.A. from Johns Hopkins University in 1995 and an M.Phil from University of Cambridge in 1996.

Dennis Lynch, Managing Director, is responsible for supervising the advisory activities of Mr. Yeung and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Yeung is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Yeung's supervisor is available at (212) 761-4000.

Global Opportunity Team

Marc Fox Year of birth: 1977

Marc Fox is a Managing Director and a Portfolio Manager on the Global Opportunity Team at Morgan Stanley Investment Management. Mr. Fox joined Morgan Stanley in 2016. Prior to joining the Firm, Mr. Fox founded an independent research advisory firm, Snow Fox LLC. Prior to then, Marc was an Executive Director in the Global Investment Research Division at Goldman Sachs.

Mr. Fox received a B.A. from University of Maryland in 1999 and an MBA from University of Cambridge in 2005.

Kristian Heugh, Managing Director, is responsible for supervising the advisory activities of Mr. Fox and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Fox is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Fox's supervisor is available at (212) 761-4000.

Kristian Heugh, CFA¹ Year of birth: 1978

Kristian Heugh is a Managing Director, Portfolio Manager and Head of the Global Opportunity Team at Morgan Stanley Investment Management. Mr. Heugh joined Morgan Stanley in 2001.

Mr. Heugh received a B.A. from Duke University in 2001.

Eric Kayne, Managing Director, is responsible for supervising the advisory activities of Mr. Heugh and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Heugh is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Heugh's supervisor is available at (212) 761-4000.

Alastair Pang Year of birth: 1981

Alastair Pang is a Managing Director and Portfolio Manager on the Global Opportunity Team at Morgan Stanley Investment Management. Mr. Pang joined Morgan Stanley in 2016. Prior to then, Mr. Pang worked as an investment analyst at Legatum, a private investment firm and a vice president at Themes Investment Partners, a Great China private equity firm.

Mr. Pang received a B.A. from University of Cambridge in 2003 and an MBA from Columbia Business School in 2014. Mr. Pang was called to the Bar of England and Wales (Middle Temple) in 2004 and the Bar of Hong Kong in 2005 as a non-practicing barrister.

Kristian Heugh, Managing Director, is responsible for supervising the advisory activities of Mr. Pang and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Pang is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Pang's supervisor is available at (212) 761-4000.

Jeremy Wu, CFA¹ Year of birth: 1987

Jeremy Wu is a Managing Director and Portfolio Manager on the Global Opportunity Team at Morgan Stanley Investment Management. Mr. Wu joined Morgan Stanley in 2019. Prior to then, Mr. Wu was a portfolio manager for a global equity fund at Opus Capital Management. Previously, Mr. Wu was a Vice President at CCB International Asset Management.

Mr. Wu received an M.Chem from the University of Oxford in 2010.

Kristian Heugh, Managing Director, is responsible for supervising the advisory activities of Mr. Wu and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Wu is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Wu's supervisor is available at (212) 761-4000.

Managed Solutions Group Team

William Littleton Year of birth: 1987

William Littleton is an Executive Director and Portfolio Manager on the Managed Solutions Group at Morgan Stanley Investment Management. Mr. Littleton has the same role for Calvert Research and Management, an affiliate of Morgan Stanley Investment Management. Mr. Littleton provides services in both capacities. Mr. Littleton joined Morgan Stanley in 2019. Prior to then, Mr. Littleton was employed at Goldman Sachs since 2010.

Mr. Littleton received a B.A from Amherst College in 2010.

Jim Caron, Managing Director, is responsible for supervising the advisory activities of Mr. Littleton and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Littleton is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Littleton's supervisor is available at (212) 716-4000.

Nathan Sheldon, CFA¹ Year of birth: 1980

Nathan Sheldon is an Executive Director and Portfolio Manager on the Managed Solutions Group at Morgan Stanley Investment Management. Mr. Sheldon joined Morgan Stanley in 2004.

Mr. Sheldon received a B.A. from University of Connecticut in 2002.

Ryan Meredith, Managing Director, is responsible for supervising the advisory activities of Mr. Sheldon and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Sheldon is required to comply with Adviser's

code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Sheldon's supervisor is available at (212) 716-4000.

Global Listed Real Assets Team

Laurel Durkay, CFA¹ Year of birth: 1979

Laurel Durkay is a Managing Director, Portfolio Manager and Head of the Global Listed Real Assets team at Morgan Stanley Investment Management. Ms. Durkay joined Morgan Stanley in 2020. Prior to then, Ms. Durkay was a Senior Vice President and Global Portfolio Manager for Listed Real Estate at Cohen & Steers Capital Management.

Ms. Durkay received a B.S. from Tulane University in 2001.

John Klopp, Managing Director, is responsible for supervising the advisory activities of Ms. Durkay and monitoring the investment advice that she provides to the clients of the Adviser. Ms. Durkay is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Ms. Durkay's supervisor is available at (212) 761-4000.

Hasan Ali Goncu Year of birth: 1981

Hasan Ali Goncu is an Executive Director and Portfolio Manager on the Global Listed Real Assets Team at Morgan Stanley Investment Management. Mr. Goncu joined Morgan Stanley in 2013.

Mr. Goncu received a BS from Hacettepe University in 2004, an MA from Bogazici University in 2010 and an MBA from Columbia University in 2013.

Matthew King, Managing Director, is responsible for supervising the advisory activities of Mr. Goncu and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Goncu is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Goncu's supervisor is available at (212) 761- 4000.

Matthew King Year of birth: 1975

Matthew King is a Managing Director and Portfolio Manager on the Global Listed Real Assets Team at Morgan Stanley Investment Management. Mr. King joined Morgan Stanley in 2008.

Mr. King received a BA from Occidental College in 1997 and an MBA from Columbia Business School in 2007.

Laurel Durkay, Managing Director, is responsible for supervising the advisory activities of Mr. King and monitoring the investment advice that he provides to the clients of the Adviser. Mr. King is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. King's supervisor is available at (212) 761- 4000.

Global Multi Asset Team

Mark Bavoso Year of birth: 1961

Mark Bavoso is a Managing Director and Portfolio Manager on the Global Multi Asset Team at Morgan Stanley Investment Management. Mr. Bavoso joined Morgan Stanley in 1986.

Mr. Bavoso received a BA from University of California in 1979.

Cyril Moulle-Berteaux, Managing Director is responsible for supervising the advisory activities of Mr. Bavoso and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Bavoso is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Bavoso's supervisor is available at (212) 761-4000.

Cyril Moulle-Berteaux Year of birth: 1969

Cyril Moulle-Berteaux is a Managing Director, Portfolio Manager and Head of the Global Multi Asset Team at Morgan Stanley Investment Management. Mr. Moulle-Berteaux joined Morgan Stanley in 2011. Prior to then, Mr. Moulle-Berteaux was a co-founder as Traxis Partners.

Mr. Moulle-Berteaux received a BA from Harvard University in 1991.

Rui de Figueiredo, Managing Director, is responsible for supervising the advisory activities of Mr. Moulle-Berteaux and

monitoring the investment advice that he provides to the clients of the Adviser. Mr. Moulle-Berteaux is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Moulle-Berteaux's supervisor is available at (212) 761-4000.

Doug Rentz Year of birth: 1971

Doug Rentz is an Executive Director and Portfolio Manager on the Global Multi Asset Team at Morgan Stanley Investment Management. Mr. Rentz joined Morgan Stanley in 2011. Prior to then, he was an analyst at Traxis Partners.

Mr. Rentz received a BA and BS from Brown University in 1994.

Cyril Moulle-Berteaux, Managing Director, is responsible for supervising the advisory activities of Mr. Rentz and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Rentz is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Rentz supervisor is available at (212) 761-4000.

Portfolio Solutions Group Team

Jim Caron

Year of birth: 1969

Jim Caron is a Managing Director and Portfolio Manager within the Portfolio Solutions Group ("PSG") at Morgan Stanley Investment Management. Mr. Caron joined Morgan Stanley in 2006.

Mr. Caron received a B.S. from Bowdoin College in 1991. He received a B.A. from California Institute of Technology in 1992. Mr. Caron also received an MBA from New York University in 2001.

Ryan Meredith, Managing Director, is responsible for supervising the advisory activities of Mr. Caron and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Caron is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Caron's supervisor is available at (44) 207 425 8000.

Rui de Figueiredo Year of birth: 1967

Rui de Figueiredo is a Managing Director, Co-Head and Chief Investment Officer of Morgan Stanley Investment Management Solutions and Multi-Asset Group and a Portfolio Manager within the Portfolio Solutions Group ("PSG") at Morgan Stanley Investment Management.

Mr. de Figueiredo joined Morgan Stanley in 2007. Prior to then, Mr. de Figueiredo led research on behalf of Citigroup Alternative Investments.

Mr. de Figueiredo received a A.B. from Harvard University in 1989 and a Ph.D. and M.A. from Stanford University in 1997.

Related to other business activities, Mr. de Figueiredo is a Professor of the Graduate School and Professor Emeritus (Associate) at the Haas School of Business at the University of California at Berkeley.

Jacques Chappuis and Ben Huneke, Managing Directors, are responsible for supervising the advisory activities of Mr. de Figueiredo and monitoring the investment advice that he provides to the clients of the Adviser. Mr. de Figueiredo is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. de Figueiredo's supervisors are available at (212) 761-4000.

Ryan Meredith, CFA¹ Year of birth: 1978

Ryan Meredith is a Managing Director and a Portfolio Manager within the Portfolio Solutions Group ("PSG") at Morgan Stanley Investment Management. Mr. Meredith joined Morgan Stanley in 2007. Previously, Mr. Meredith was a director in the quantitative research group at Citigroup Alternative Investments.

Mr. Meredith received a B.S. from the University of Witwatersrand in South Africa in 1998 and an M.Sc. from the Courant Institute at New York University in 2008.

Rui de Figueiredo, Managing Director, is responsible for supervising the advisory activities of Mr. Meredith and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Meredith is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Meredith's supervisor is available at (212) 761-4000.

Damon Wu Year of birth: 1978

Damon Wu is a Managing Director and Portfolio Manager within the Portfolio Solutions Group ("PSG") at Morgan Stanley Investment Management. Mr. Wu joined Morgan Stanley in 2008. Prior to then, Mr. Wu was an associate at Merrill Lynch in the hedge fund development and management team.

Mr. Wu received a B.S. from National Taiwan University in 2000 and an MBA and MS joint degree from Case Western Reserve University in 2005. Mr. Wu also holds a M.S. from Carnegie Mellon University received in 2006.

Ryan Meredith, Managing Director, is responsible for supervising the advisory activities of Mr. Wu and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Wu is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Wu's supervisor is available at (212) 761-4000.

Broad Markets Fixed Income Team

Alexander Bouzalis Year of birth: 1968

Alexander Bouzalis is a Managing Director and Portfolio Manager of Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the emerging markets team. Alexander has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Alexander joined Morgan Stanley Investment Management Inc. in 2007. Prior to joining Morgan Stanley Investment Management Inc. he worked as an FX Trader at Bankers Trust and NatWest Bank. Previously, Alexander was the Head of Equity and Listed Derivative Trading for Emporiki Investment Bank.

Alexander earned an B.S. in finance from Northeastern University and an M.B.A. from Duke University.

Richard Ford, Managing Director, is responsible for supervising the advisory activities of Alexander and monitoring the investment advice that he provides to the clients of the Adviser. Alexander is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Alexander's supervisor is available at (44) 207 425 8000.

Jason DesLauriers, CFA1

Year of birth: 1981

Jason DesLauriers is an Executive Director and Portfolio Manager at Eaton Vance Management. He is responsible for buy and sell decisions, portfolio construction and risk management on the broad markets fixed income team. Jason has the same role for Eaton Vance Management Investment, Calvert Research and Management and Boston Management and Research, affiliates of Morgan Stanley Investment Management, Inc.

Jason began his career in the investment management industry in 2009. Prior to joining the industry, he spent 7 years in the United States Army.

Jason earned a B.S. in finance from Bridgewater State University.

Vishal Khanduja, Managing Director, is responsible for supervising the advisory activities of Jason and monitoring the investment advice that he provides to the clients of the Adviser. Jason is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Jason's supervisor is available at (617) 482-8260.

Matthew Dunning Year of birth: 1965

Matthew Dunning is an Executive Director and Portfolio Manager at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the broad markets fixed income team. Matthew has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Matthew joined Morgan Stanley Investment Management Inc. in 1988. In 2010 he joined BVAL Group at Bloomberg as a Senior Taxable Municipal bond analyst. Matthew rejoined Morgan Stanley Investment Management Inc. in 2014.

Matthew earned an M.B.A. from St. John's University in 1992 and a B.A. from Lycoming College in 1987.

Vishal Khanduja, Managing Director, is responsible for supervising the advisory activities of Matthew and monitoring the investment advice that he provides to the clients of the Adviser. Matthew is required to comply with Adviser's code of

ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Matthew's supervisor is available at (617) 482-8260.

Brian S. Ellis, CFA¹ Year of birth: 1984

Brian Ellis is a Managing Director and Portfolio Manager at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the broad markets fixed income team. Brian has the same role for Eaton Vance Management, Calvert Research and Management and Boston Management and Research, affiliates of Morgan Stanley Investment Management Inc.

Brian joined both Eaton Vance Management and Calvert Research and Management in 2017. Prior to that, he was a member of the fixed income team at Calvert Investment Management Inc. where he was a business analyst.

Before joining Calvert Investment Management Inc. in 2009, Brian was a software engineer and analyst at Legg Mason Capital Management in Baltimore, MD.

Brian earned a B.S. in Finance from Salisbury University.

Vishal Khanduja, Managing Director, is responsible for supervising the advisory activities of Brian and monitoring the investment advice that he provides to the clients of the Adviser. Brian is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Brian's supervisor is available at (617) 482-8260.

Eric Jesionowski Year of birth: 1971

Eric Jesionowski is an Executive Director and Portfolio Manager at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the broad markets fixed income team. Eric has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Eric joined Morgan Stanley Investment Management Inc. in 1997.

Eric earned a B.S. from Rider University in 1995.

Joseph Mehlman, Managing Director is responsible for supervising the advisory activities of Eric and monitoring the investment advice that he provides to the clients of the Adviser. Eric is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Eric's supervisor is available at (212) 761-4000.

Vishal Khanduja, CFA¹

Year of birth: 1978

Vishal Khanduja is a Managing Director, Portfolio Manager and Co-Head Broad Markets Fixed Income at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the broad markets fixed income team. Vishal has the same role for Eaton Vance Management, Calvert Research and Management and Boston Management and Research, affiliates of Morgan Stanley Investment Management Inc.

Prior to joining Eaton Vance Management and Calvert Research and Management in January 2017, Vishal was affiliated with Calvert Investment Management, Inc. from 2012-2016, where he served as a lead portfolio manager and the head of the company's fixed income group. Before that, Vishal was with Columbia Threadneedle Investments (formerly known as, Columbia Management), where he held various positions, including vice president, portfolio manager, and senior securities analyst. Earlier in his career, he was an associate director of fixed-income analytics at Galliard Capital Management.

Vishal holds an M.B.A. from the Henry B. Tippie School of Management (University of Iowa), and a Bachelor of Electrical Engineering degree from Veermata Jijabai Technological Institute, Mumbai in India. He is a member of the CFA Institute and CFA Society Boston. He is a CFA charterholder.

Jeff Mueller, Managing Director, is responsible for supervising the advisory activities of Vishal and monitoring the investment advice that he provides to the clients of the Adviser. Vishal is required to comply with the Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Vishal's supervisor is available at (44) 20 3207-1900.

Michael Kushma

Year of birth: 1957

Michael Kushma is a Managing Director and Portfelia Manager at Margan Stanley Investment Management Inc. He is

Michael Kushma is a Managing Director and Portfolio Manager at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the broad markets fixed income

team. Michael has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Michael joined Morgan Stanley Investment Management Inc. in 1987.

Michael earned an A.B. from Princeton University in 1979 as well as an M.Sc. from London School of Economics in 1981, and an M.Phil. from Columbia University in 1983.

Richard Ford, Managing Director, is responsible for supervising the advisory activities of Michael and monitoring the investment advice that he provides to the clients of the Adviser. Michael is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Michael's supervisor is available at (44) 20 7425 8000.

Stella Ma, CFA¹ Year of birth: 1993

Stella Ma is a Vice President and Portfolio Manager at Morgan Stanley Investment Management Inc. She is responsible for buy and sell decisions, portfolio construction and risk management on the broad markets fixed income team. Stella has the same role for Eaton Vance Advisors International Ltd, an affiliate of Morgan Stanley Investment Management Inc.

Stella joined Morgan Stanley Investment Management Inc. In 2016.

Stella earned a B.S.E. from Princeton University in 2016.

Joseph Mehlman, Managing Director, is responsible for supervising the advisory activities of Stella and monitoring the investment advice that he provides to the clients of the Adviser. Stella is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Stella's supervisor is available at (212) 761-4000.

Joseph Mehlman, CFA1

Year of birth: 1980

Joseph Mehlman is a Managing Director and Portfolio Manager of Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on broad markets fixed income team. Joseph has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Joseph joined Morgan Stanley Investment Management Inc. in 2002.

Joseph earned a B.A. from Trinity College in 2002 and is a member of the New York Society of Security Analysis.

Vishal Khanduja, Managing Director, is responsible for supervising the advisory activities of Joseph and monitoring the investment advice that he provides to the clients of the Adviser. Joseph is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Joseph's supervisor is available at (617) 482-8260.

Angie Salam Year of birth: 1978

Angie Salam is a Managing Director and Portfolio Manager at Morgan Stanley Investment Management Inc.'s broad markets fixed income team. She is responsible for buy and sell decisions, portfolio construction and risk management on the broad markets fixed income team. Angie has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Angie joined Morgan Stanley Investment Management Inc. in 2019.

Angle earned a B.S in Business Administration from American University in 2000.

Vishal Khanduja, Managing Director, is responsible for supervising the advisory activities of Angie and monitoring the investment advice that she provides to the clients of the Adviser. Angie is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Angie's supervisor is available at (617) 482-8260.

Utkarsh Sharma Year of birth: 1987

Utkarsh Sharma is an Executive Director and Portfolio Manager at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the broad markets fixed income

team. Utkarsh has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Utkarsh joined Morgan Stanley Investment Management Inc. in 2014. Prior to joining Morgan Stanley Investment Management, he served as a Risk and Quantitative Analyst for BlackRock.

Utkarsh earned an M.S. from Columbia University in 2010 and a B. Tech from Indian Institute of Technology Guwahait in 2009.

Richard Ford, Managing Director, is responsible for supervising the advisory activities of Utkarsh and monitoring the investment advice that he provides to the clients of the Adviser. Utkarsh is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Utkarsh's supervisor is available at (44) 207 425 8000.

Emerging Markets Team

Patrick Campbell, CFA¹

Patrick Campbell is an Executive Director and Portfolio Manager at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the emerging markets team. Patrick has the same role for Eaton Vance Management, Calvert Research and Management and Boston Management and Research, affiliates of Morgan Stanley Investment Management Inc.

Year of birth: 1986

Patrick began his career in the investment management industry joining Morgan Stanley Investment Management Inc. in 2008.

Patrick earned a B.A. in History from Boston College in 2008.

Marshall Stocker and Kyle Lee, Managing Directors, are responsible for supervising the advisory activities of Patrick and monitoring the investment advice that he provides to the clients of the Adviser. Patrick is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Patrick's supervisors are available at (617) 482-8260.

Akbar Causer Year of birth: 1982

Akbar Causer is a Managing Director and Portfolio Manager at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the emerging markets team. Akbar has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Akbar joined Morgan Stanley Investment Management Inc. in 2017. Prior to joining Morgan Stanley Investment Management Inc. he worked as a Research Analyst at DDJ Capital Management.

Akbar earned a B.A. in Mathematics & Economics from the University of Pennsylvania in 2005 and an M.B.A. from the Harvard Business School in 2013.

Kyle Lee and Marshall Stocker, Managing Directors, are responsible for supervising the advisory activities of Akbar and monitoring the investment advice that he provides to the clients of the Adviser. Akbar is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Akbar's supervisors are available at (617)482-8260.

Brian Shaw, CFA¹

Year of birth: 1984

Brian Shaw is an Executive Director and Portfolio Manager at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the emerging markets team. Brian has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Brian began his career in the investment management industry in 2007. Prior to joining Eaton Vance Management, he was affiliated with Graham Capital Management, LP.

Brian earned a B.A. from Vanderbilt University in 2007 and an M.B.A. from University of Chicago in 2014.

Marshall Stocker and Kyle Lee, Managing Directors, are responsible for supervising the advisory activities of Brian and monitoring the investment advice that he provides to the clients of the Adviser. Brian is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Brian's supervisors are available at 617-482-8260.

High Yield Team

Jack Cimarosa Year of birth: 1983

Jack Cimarosa is a Managing Director and Portfolio Manager at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the high yield team. Jack has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Jack began his career in the investment management industry in 2009. Prior to joining Morgan Stanley Investment Management Inc, he was a leveraged debt trader at Guggenheim Partners.

Jack earned a B.A. from New School University.

Jeff Mueller and Steve Concannon, Managing Directors, are responsible for supervising the advisory activities of Mr. Cimarosa and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Cimarosa is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Cimarosa's supervisors are available at (44) 20 3207-1900 and 617-482-8260.

Andrew Cohen, CFA¹ Year of birth: 1979

Andrew Cohen is an Executive Director and Portfolio Manager of Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the high yield team. Andrew has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Andrew joined Eaton Vance in 2018. He began his career in the investment industry in 2002. Prior to joining Eaton Vance, he was a portfolio manager at Pentwater Capital Management as well as a high yield analyst at T. Rowe Price.

Andrew earned a B.S. from Indiana University and an M.B.A. from the University of Chicago. He is a member of the CFA Society of Chicago and holds the Chartered Financial Analyst designation.

Jeff Mueller and Steve Concannon, Managing Directors, are responsible for supervising the advisory activities of Andrew and monitoring the investment advice that he provides to the clients of the Adviser. Andrew is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Andrew's supervisors are available at (44) 20 3207-1900 and 617-482-8260.

Stephen Concannon Year of birth: 1970

Steve Concannon is a Managing Director, Portfolio Manager, and Co-Head of High Yield at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the high yield team. Steve has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Steve joined Eaton Vance Management in 2000 as a credit analyst. Prior to joining Eaton Vance Management, he worked as a research assistant and then research analyst in the high-yield group at Wellington Management Company. Previously, he was a portfolio accountant at State Street Bank & Trust Company.

Steve earned a B.A. from Bates College in 1992.

Jeff Mueller, Managing Director, is responsible for supervising the advisory activities of Steve and monitoring the investment advice that he provides to the clients of the Adviser. Steve is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Steve's supervisor is available at (44) 20 3207 1900.

Kelley Gerrity Year of birth: 1978

Kelley Gerrity is a Managing Director and portfolio manager of Morgan Stanley Investment Management Inc. She is responsible for buy and sell decisions, portfolio construction and risk management on the high yield team. Kelley has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Kelley joined Eaton Vance Management in 2005. Prior to joining Eaton Vance Management as a credit analyst in 2005, Kelley was a director of high-yield and distressed research at Fieldstone Capital Group. She was previously associated with Scotia Capital Markets, Inc. from 2001 to 2004 and ING Barings, LLC from 2000 to 2001.

Kelley earned a B.A. in international relations and French from Boston College where she graduated magna cum laude in 2000. She also earned a credit analysis diploma from New York University in 2003.

Jeff Mueller and Stephen Concannon, Managing Directors, are responsible for supervising the advisory activities of Kelley and monitoring the investment advice that she provides to the clients of the Adviser. Kelley is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Kelley's supervisors are available at (44) 20 3207-1900 and (617) 482-8260.

Joseph F. Hurley Year of birth: 1979

Joseph F. Hurley is an Executive Director and Portfolio Manager at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the high yield team. Joseph has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Joseph joined Morgan Stanley Investment Management Inc. in 2014. Prior to joining Morgan Stanley Investment Management Inc. Joseph was a Vice President on the corporate banking team focusing on real estate, gaming, and leisure sectors at Scotiabank. Prior to that, he was a business and systems consultant with Deloitte Consulting.

Joseph earned a B.S. in computer science and operations & strategic management from Boston College in 2001.

Jeff Mueller and Steve Concannon, Managing Directors, are responsible for supervising the advisory activities of Joseph and monitoring the investment advice that he provides to the clients of the Adviser. Joseph is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Joseph's supervisors are available at (44) 20 3207-1900 and (617) 482-8260.

Tom Wills, CFA¹ Year of birth: 1966

Tom Wills is an Executive Director and Portfolio Manager at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the high yield team. Tom has the same role for Eaton Vance Management, Calvert Research and Management and Boston Management and Research, affiliates of Morgan Stanley Investment Management Inc.

Tom joined Morgan Stanley in 2010. He began his career in the investment industry in 1998. Prior to joining Morgan Stanley, he was a senior fund manager of global convertibles at Aviva Investors.

Tom earned a B.Comm. in finance from the University of Toronto, and an M.B.A. from Oxford University. Tom is also a Canadian Chartered Accountant and holds the Chartered Financial Analyst designation.

Steve Concannon, Managing Director, is responsible for supervising the advisory activities of Tom and monitoring the investment advice that he provides to the clients of the Adviser. Tom is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Tom's supervisor is available at (617) 482-8260.

Mortgage & Securitized Team

Gregory Finck Year of birth: 1969

Gregory Finck is a Managing Director and Head of Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the mortgage and securitized team. Gregory has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Gregory joined Morgan Stanley Investment Management Inc. in 2014. Before joining Morgan Stanley Investment Management Inc. he was a Managing Director and Portfolio Manager at Fortress Investment Group.

Gregory earned a B.S.E. from Princeton University in 1991.

Jeff Mueller, Managing Director, is responsible for supervising the advisory activities of Mr. Finck and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Finck is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Finck's supervisor is available at (44) 20 3207-1900.

Christian Jones Year of birth: 1971

Christian Jones is an Executive Director and Portfolio Manager at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the mortgage and securitized team. Christian has the same role for Eaton Vance Management, an affiliate of Morgan Stanley Investment Management Inc.

Christian joined Morgan Stanley Investment Management Inc. in 2011. He began his career in the investment industry in 1992. Prior to that, Christian worked at SEI as a fixed income portfolio manager, at Highland Financial Holdings as an MBS portfolio manager, and in a series of investment roles with Tudor Investment Corporation and SBC.

Christian earned a B.A. from the University of Manchester and an M.B.A. in finance and economics from New York University. He holds a Certification in Quantitative Finance (CQF).

Gregory Finck and Andrew Szczrurowski, Managing Directors, are responsible for supervising the advisory activities of Christian and monitoring the investment advice that he provides to the clients of the Adviser. Christian is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Christian's supervisors are available at (212) 761-4000.

Municipals Team

Craig R. Brandon, CFA1

Year of birth: 1966

Craig Brandon is a Managing Director, Portfolio Manager and Co-Head of Municipal Investments for Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the municipal team. Craig has the same role for Eaton Vance Management, Calvert Research and Management, and Boston Management and Research, affiliates of Morgan Stanley Investment Management Inc.

Craig joined Eaton Vance Management in 1998 as a research analyst covering both high-yield and high-grade bonds. He was responsible for state and local government obligation, hospital, industrial development and tobacco-backed sectors. Prior to joining Eaton Vance Management, he was a senior budget and capital finance analyst with the New York State Assembly Ways and Means Committee responsible for negotiating that state's debt service budget and its various capital financing programs.

Craig earned a B.S. in finance in 1989 from Canisius College and an M.B.A. from the University of Pittsburgh in 1991. He is a member of the Boston Security Analysts Society, the Boston Municipal Analysts Forum, and the National Federation of Municipal Analysts.

Jeff Mueller, Managing Director, is responsible for supervising the advisory activities of Craig and monitoring the investment advice that he provides to the clients of the Adviser. Craig is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Craig's supervisor is available at (44) 20 3207-1900.

Cynthia J. Clemson Year of birth: 1963

Cindy Clemson is a Managing Director, Portfolio Manager and Co-Head of Municipal Investments for Morgan Stanley Investment Management Inc. She is responsible for buy and sell decisions, portfolio construction and risk management on the municipal team. Cindy has the same role for Eaton Vance Management, Calvert Research and Management and Boston Management and Research, affiliates of Morgan Stanley Investment Management Inc.

Cindy has been in the investment management industry since 1985, when she joined Eaton Vance Management as a client service representative. She became a research assistant in the fixed-income department in 1987. In 1988, she became an investment analyst responsible for lower- and nonrated municipal issues and, in 1991, was named a portfolio manager.

Cindy earned a B.A. in 1985 from Mount Holyoke College and an M.B.A., *cum laude*, from Boston University in 1990. She is a member of the Boston Municipal Analysts Forum, the Boston Security Analysts Society, the Municipal Bond Buyer Conference, and the National Federation of Municipal Analysts.

Jeff Mueller, Managing Director, is responsible for supervising the advisory activities of Cindy and monitoring the investment advice that she provides to the clients of the Adviser. Cindy is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Cindy's supervisor is available at (44) 20 3207-1900.

Paul Metheny, CFA¹ Year of birth: 1990

Paul Metheny is an Executive Director and Portfolio Manager at Morgan Stanley Investment Management Inc. He is responsible for buy and sell decisions, portfolio construction and risk management on the municipals team. Paul has the same role for Eaton Vance Management, Calvert Research and Management and Boston Management and Research, affiliates of Morgan Stanley Investment Management Inc.

Paul began his career in the investment management industry joining Eaton Vance Management in 2015.

Paul earned a B.S. in finance from the University of Connecticut.

Craig Brandon and Cynthia Clemson, Managing Directors, are responsible for supervising the advisory activities of Paul and monitoring the investment advice that he provides to the clients of the Adviser. Paul is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Paul's supervisors are available at (617) 482-8260.

Global Liquidity Team

Julie Callahan, CFA¹

Year of birth: 1972

Julie Callahan is a Managing Director and Portfolio Manager on the Municipals and Global Liquidity Team at Morgan Stanley Investment Management Inc. Ms. Callahan joined Morgan Stanley in 2020.

Ms. Callahan earned a B.S. from Fairfield University in 1994.

Jonas Kolk, Managing Director, is responsible for supervising the advisory activities of Ms. Callahan and monitoring the investment advice that he provides to the clients of the Adviser. Ms. Callahan is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Ms. Callahan's supervisor is available at (212) 761-4000.

Kendal Cehanowicz, CFA¹

Year of birth: 1989

Kendal Cehanowicz is a Portfolio Manager on the Global Liquidity Team at Morgan Stanley Investment Management Inc. Mr. Cehanowicz joined Morgan Stanley in 2022.

Mr. Cehanowicz earned a B.S. & B.A. from Bryant University in 2011.

Jonas Kolk, Managing Director, is responsible for supervising the advisory activities of Mr. Cehanowicz and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Cehanowicz is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Cehanowicz's supervisor is available at (212) 761-4000.

Michael Cha Year of birth: 1967

Michael Cha is a Portfolio Manager on the Global Liquidity Team at Morgan Stanley Investment Management Inc. Mr. Cha joined Morgan Stanley in 2008.

Mr. Cha earned a B.S. from University of California, Davis in 1990.

Jonas Kolk, Managing Director, is responsible for supervising the advisory activities of Mr. Cha and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Cha is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Cha's supervisor is available at (212) 761-4000.

Jonas Kolk Year of birth: 1968

Jonas Kolk is a Managing Director, Chief Investment Officer and Portfolio Manager on the Global Liquidity Team at Morgan Stanley Investment Management Inc. Mr. Kolk joined Morgan Stanley in 2004.

Mr. Kolk earned a BS from State University of New York, Albany in 1990 and an MBA from Fordham University in 1996.

Brian Weinstein, Managing Director, is responsible for supervising the advisory activities of Mr. Kolk and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Kolk is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Kolk's supervisor is available at (212) 761-4000.

David Schoenfeld Year of birth: 1984

David Schoenfeld is a Portfolio Manager on the Global Liquidity Team at Morgan Stanley Investment Management Inc. Mr. Schoenfeld joined Morgan Stanley in 2012.

Mr. Schoenfeld earned a B.A. from University of Maryland in 2006 and an MBA from Baruch College 2011.

Jonas Kolk, Managing Director, is responsible for supervising the advisory activities of Mr. Schoenfeld and monitoring the investment advice that he provides to the clients of the Adviser. Mr. Schoenfeld is required to comply with Adviser's code of ethics, securities disclosure policy, and its compliance policies and procedures and any other policies and procedures adopted by Adviser from time to time. Mr. Schoenfeld's supervisor is available at (212) 761-4000.

Morgan Stanley

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San Francisco 555 California Street San Francisco, CA 94104 415-576-2004

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¹ The Chartered Financial Analyst (CFA) Program is a graduate level self-study program offered by the <u>CFA Institute</u> to investment and financial professionals. The Chartered Financial Analyst Program consists of three levels, each of which culminates in a six hour exam testing the candidate's knowledge of a variety of financial topics. A candidate who successfully completes the program and meets other professional requirements (including minimum related work experience) is awarded a "CFA charter" and becomes a "CFA charterholder".