

MORGAN STANLEY VARIABLE INSURANCE FUND, INC.

Statement of Additional Information

April 28, 2023

Morgan Stanley Variable Insurance Fund, Inc. (the “Company”) is a no-load, open-end management investment company with diversified and non-diversified series (each, a “Fund” and together the “Funds”). The Company currently consists of 10 Funds offering a broad range of investment choices. Each Fund (with the exception of the Global Franchise and Global Real Estate Portfolios) offers Class I shares. In addition, all Funds offer Class II shares. Shares of each Fund are offered with no sales charge or exchange or redemption fee. Following is a list of the Funds:

	Share Class and Ticker Symbol	
	CLASS I	CLASS II
Core Plus Fixed Income Portfolio	MFIPX	MJIIX
Discovery Portfolio	MMGPX	MMGTX
Emerging Markets Debt Portfolio	MEMNX	MBDBX
Emerging Markets Equity Portfolio	MEMEX	MSMBX
Global Franchise Portfolio	—	MBIIX
Global Infrastructure Portfolio	MBGIX	MPIIX
Global Real Estate Portfolio	—	MGETX
Global Strategist Portfolio	MIMPX	MGTPX
Growth Portfolio	MEGIX	MEGTX
U.S. Real Estate Portfolio	MUSRX	MSRBX

This Statement of Additional Information (“SAI”) dated April 28, 2023, as may be supplemented from time to time, relates to the Company’s Class I Prospectuses: Core Plus Fixed Income, Discovery, Emerging Markets Debt, Emerging Markets Equity, Global Infrastructure, Global Strategist, Growth and U.S. Real Estate Portfolios, each dated April 28, 2023, as may be supplemented from time to time; and Class II Prospectuses: Core Plus Fixed Income, Discovery, Emerging Markets Debt, Emerging Markets Equity, Global Franchise, Global Infrastructure, Global Real Estate, Global Strategist, Growth and U.S. Real Estate Portfolios, each dated April 28, 2023, as may be supplemented from time to time.

Shares of each Fund may be purchased only by insurance companies (directly and indirectly) for the purpose of funding variable annuity contracts and variable life insurance policies and by certain tax qualified investors. The variable annuity contract and variable life insurance policyholders incur fees and expenses separate from the fees and expenses charged by the Funds. This SAI addresses Company information applicable to each of the 10 Funds.

The Company was incorporated under the laws of the State of Maryland on March 26, 1996. The Company filed a registration statement with the United States Securities and Exchange Commission (the “SEC”) registering itself as an open-end management investment company under the Investment Company Act of 1940, as amended (the “1940 Act”), and its shares under the Securities Act of 1933, as amended (the “1933 Act”).

The Funds are managed by Morgan Stanley Investment Management Inc. (the “Adviser”).

This SAI is not a prospectus, but should be read in conjunction with the prospectuses for the Funds, each dated April 28, 2023, as may be supplemented from time to time (each, a “Prospectus” and together the “Prospectuses”). This SAI is incorporated by reference into the Prospectuses in its entirety. To obtain a Prospectus, please contact the Company or your insurance company.

The Funds’ most recent Annual Reports to Shareholders are separate documents supplied with this SAI and include the Funds’ audited financial statements, including notes thereto, and the reports of the Funds’ independent registered public accounting firm,

which are incorporated by reference into this SAI. A copy of the Funds' Annual Reports to Shareholders may be obtained without charge by calling 1 (800) 869-6397.

Certain Funds are "non-diversified" and, as such, such Funds' investments are not required to meet certain diversification requirements under federal securities law. Compared with "diversified" funds or portfolios, each such Fund may invest a greater percentage of its assets in the securities of an individual corporation or governmental entity. Thus, the Fund's assets may be focused in securities of fewer issuers than other funds. A decline in the value of those investments may cause the Fund's overall value to decline to a greater degree. The Emerging Markets Debt, Global Franchise, Global Infrastructure and U.S. Real Estate Portfolios are non-diversified funds.

TABLE OF CONTENTS

INVESTMENT POLICIES AND STRATEGIES	1
TAXES	51
PURCHASE OF SHARES	54
REDEMPTION OF SHARES	54
INVESTMENT LIMITATIONS	55
MANAGEMENT OF THE COMPANY	56
COMPENSATION	67
INVESTMENT ADVISORY AND OTHER SERVICES	68
DISTRIBUTION OF SHARES (APPLICABLE TO CLASS II SHARES ONLY)	72
PORTFOLIO MANAGERS	74
CONTROL PERSONS AND PRINCIPAL HOLDERS OF SECURITIES	78
NET ASSET VALUE	83
BROKERAGE PRACTICES	85
PERFORMANCE INFORMATION	89
DISCLOSURE OF PORTFOLIO HOLDINGS	90
GENERAL INFORMATION	93
POTENTIAL CONFLICTS OF INTEREST	93
FINANCIAL STATEMENTS	100
APPENDIX A — MORGAN STANLEY INVESTMENT MANAGEMENT PROXY VOTING POLICY AND PROCEDURES	A-1
APPENDIX B — DESCRIPTION OF RATINGS	B-1

INVESTMENT POLICIES AND STRATEGIES

This SAI provides additional information about the investment policies and operations of the Company and each of its Funds.

Morgan Stanley Investment Management Inc. (“MSIM”) is the adviser (the “Adviser”) to the Funds.

Under the supervision of the Adviser, Morgan Stanley Investment Management Limited (“MSIM Limited”) and Morgan Stanley Investment Management Company (“MSIM Company”) serve as investment sub-advisers to the Global Real Estate Portfolio, MSIM Company serves as investment sub-adviser to the Emerging Markets Equity Portfolio and MSIM Limited serves as investment sub-adviser to the Emerging Markets Debt, Global Franchise and Global Strategist Portfolios (MSIM Limited and MSIM Company are each referred to individually as the “Sub-Adviser” and collectively as the “Sub-Advisers”). References to the Adviser, when used in connection with its activities as investment adviser, include any Sub-Adviser acting under the Adviser’s supervision.

The following tables summarize the permissible investments for each Fund. These tables should be used in conjunction with the investment summaries for each Fund contained in the Prospectus in order to provide a complete description of such Fund’s investment policies.

U.S. EQUITY PORTFOLIOS:

	Discovery Portfolio	Growth Portfolio	U.S. Real Estate Portfolio
Investments:			
Agencies	X	X	X
Asset-Backed Securities			
Bitcoin Exposure	X	X	
Borrowing for Investment Purposes			
Brady Bonds			
Cash Equivalents	X	X	X
China Investments			
Chinese Fixed-Income Investments			
Combined Transactions	X	X	
Commercial Paper	X	X	X
Common Stocks	X	X	X
Contracts for Difference	X	X	
Convertible Securities	X	X	X
Corporates	X	X	X
Depository Receipts	X	X	X
Emerging Market Securities	X	X	X
Eurodollar and Yankee Dollar Obligations		X	
Exchange-Traded Funds	X	X	X
Floaters			
Foreign Currency Transactions	X	X	X
Foreign Equity Securities	X	X	X
Foreign Fixed Income Securities			
Forwards	X	X	
Futures Contracts	X	X	
High Yield Securities			
Illiquid Securities	X	X	X
Inverse Floaters			
Investment Company Securities	X	X	X
Investment Funds		X	X
Investment Grade Securities	X	X	X
IPOs	X	X	X
Lease Obligations			
Limited Partnership and Limited Liability Company Interests	X	X	X
Loan-Related Investments			
Loans of Portfolio Securities	X	X	X

U.S. EQUITY PORTFOLIOS:

	Discovery Portfolio	Growth Portfolio	U.S. Real Estate Portfolio
Money Market Instruments	X	X	X
Mortgage Related Securities			
Municipals			
Non-Publicly Traded Securities, Private Placements and Restricted Securities	X	X	X
Options	X	X	
Preferred Stocks	X	X	X
Real Estate Investing	X	X	X
Repurchase Agreements	X	X	X
Reverse Repurchase Agreements	X		
Rights	X	X	X
Short Sales	X		
Special Purpose Acquisition Companies	X	X	
Structured Investments	X	X	
Swaps	X	X	
Temporary Borrowing	X	X	X
Temporary Investments	X	X	X
U.S. Treasury Securities	X	X	X
Variable Interest Entities			
Warrants	X	X	X
When-Issued and Delayed Delivery Securities	X	X	X
Zero Coupons, Pay-In-Kind Securities or Deferred Payment Securities	X	X	X

U.S. FIXED INCOME PORTFOLIO:

	Core Plus Fixed Income Portfolio
Investments:	
Agencies	X
Asset-Backed Securities	X
Bitcoin Exposure	
Borrowing for Investment Purposes	
Brady Bonds	X
Cash Equivalents	X
China Investments	
Chinese Fixed-Income Investments	
Combined Transactions	X
Commercial Paper	X
Common Stocks	
Contracts for Difference	
Convertible Securities	X
Corporates	X
Depository Receipts	
Emerging Market Securities	X
Eurodollar and Yankee Dollar Obligations	X
Exchange-Traded Funds	X
Floaters	X
Foreign Currency Transactions	X
Foreign Equity Securities	
Foreign Fixed Income Securities	X
Forwards	X
Futures Contracts	X
High Yield Securities	X
Illiquid Securities	X
Inverse Floaters	X
Investment Company Securities	X
Investment Funds	
Investment Grade Securities	X
IPOs	
Lease Obligations	
Limited Partnership and Limited Liability Company Interests	
Loan-Related Investments	X
Loans of Portfolio Securities	X
Money Market Instruments	X
Mortgage Related Securities	X
Municipals	X
Non-Publicly Traded Securities, Private Placements and Restricted Securities	X
Options	X
Preferred Stocks	X
Real Estate Investing	
Repurchase Agreements	X
Reverse Repurchase Agreements	X
Rights	X
Short Sales	X
Special Purpose Acquisition Companies	
Structured Investments	X

U.S. FIXED INCOME PORTFOLIO:

	Core Plus Fixed Income Portfolio
Swaps	X
Temporary Borrowing	X
Temporary Investments	X
Total Return Swaps	X
U.S. Treasury Securities	X
Variable Interest Entities	
Warrants	
When-Issued and Delayed Delivery Securities	X
Zero Coupons, Pay-In-Kind Securities or Deferred Payment Securities	X

GLOBAL PORTFOLIOS:

	Emerging Markets Debt Portfolio	Emerging Markets Equity Portfolio	Global Franchise Portfolio	Global Infrastructure Portfolio	Global Real Estate Portfolio	Global Strategist Portfolio
Investments:						
Agencies	X	X	*	X	X	X
Asset-Backed Securities	X			X		X
Bitcoin Exposure						
Bitcoin Futures						X
Borrowing for Investment Purposes	X					
Brady Fixed Income Securities	X	X		X	X	X
Cash Equivalents	X	X	X	X	X	X
China Investments	X	X	X			X
Chinese Fixed-Income Investments	X					X
Combined Transactions	X	X				X
Commodity-Linked Investments						X
Common Stocks	X	X	X	X	X	X
Contracts for Difference		X				X
Convertible Securities	X	X	X	X	X	X
Corporates	X	X	*	X	X	X
Depository Receipts	X	X	X	X	X	X
Emerging Market Securities	X	X	X	X	X	X
Exchange-Listed Equities via Stock Connect Program		X	X			X
Exchange-Traded Funds	X	X	X	X	X	X
Eurodollar and Yankee Dollar Obligations	X	X	X	X	X	X
Floaters	X				X	
Foreign Currency Transactions	X	X	X	X	X	X
Foreign Equity Securities	X	X	X	X	X	X
Foreign Fixed Income Securities	X	X	X	X	X	X
Foreign Real Estate Companies	X	X	X	X	X	X
Forwards	X	X	X	X	X	X
Futures Contracts	X	X				X
High Yield Securities	X	X		X		X
Illiquid Securities	X	X	X	X	X	X
Inverse Floaters	X				X	
Investment Company Securities	X	X	X	X	X	X
Investment Funds	X	X	X	X	X	X
Investment Grade Securities	X	X	X	X	X	X
IPOs		X	X	X	X	X
Lease Obligations						
Limited Partnership and Limited Liability Company Interests		X	X	X	X	X
Loan-Related Investments	X	X		X		
Loans of Portfolio Securities	X	X	X	X	X	X
Money Market Instruments	X	X	X	X	X	X
Mortgage Related Securities	X			X	X	X
– Mortgage-Backed Securities	X			X	X	X
– Collateralized Mortgage Obligations	X			X	X	X

GLOBAL PORTFOLIOS:

	Emerging Markets Debt Portfolio	Emerging Markets Equity Portfolio	Global Franchise Portfolio	Global Infrastructure Portfolio	Global Real Estate Portfolio	Global Strategist Portfolio
– Stripped Mortgage-Backed Securities	X			X	X	X
– Commercial Mortgage-Backed Securities	X			X		X
Municipals	X		X	X		X
Non-Publicly Traded Securities, Private Placements and Restricted Securities	X	X	X	X	X	X
Options	X					X
Preferred Stocks	X	X	X	X	X	X
Real Estate Investing	X	X	X	X	X	X
—Real Estate Investment Trusts			X	X	X	X
—Foreign Real Estate Companies	X	X	X	X	X	X
—Specialized Ownership Vehicles		X	X	X	X	X
Repurchase Agreements	X	X	X	X	X	X
Reverse Repurchase Agreements	X		X			
Rights	X	X	X	X	X	X
Short Sales	X		X		X	
Special Purpose Acquisition Companies						
Structured Investments	X	X				X
Swaps	X	X				X
Temporary Borrowing	X	X	X	X	X	X
Temporary Investments	X	X	X	X	X	X
Total Return Swaps	X					X
U.S. Treasury Securities	X	X	*	X	X	X
Variable Interest Entities		X				
Warrants	X	X	X	X	X	X
When-Issued and Delayed Delivery Securities	X	X	X	X	X	X
Zero Coupons, Pay-In-Kind Securities or Deferred Payment Securities	X	X		X	X	X

* This Fund may invest in certain U.S. Government Securities, Agencies and Corporates as described under Money Market Instruments and Temporary Investments.

Equity Securities. Equity securities generally represent an ownership interest in an issuer, or may be convertible into or represent a right to acquire an ownership interest in an issuer. While there are many types of equity securities, prices of all equity securities will fluctuate. Economic, political and other events may affect the prices of broad equity markets. For example, changes in inflation or consumer demand may affect the prices of equity securities generally in the United States. Similar events also may affect the prices of particular equity securities. For example, news about the success or failure of a new product may affect the price of a particular issuer's equity securities.

Common Stocks. Common stocks are equity securities representing an ownership interest in a corporation, entitling the stockholder to voting rights and receipt of dividends paid based on proportionate ownership.

Convertible Securities. A convertible security is a bond, debenture, note, preferred stock, right, warrant or other security that may be converted into or exchanged for a prescribed amount of common stock or other security of the same or a different issuer or into cash within a particular period of time at a specified price or formula. A convertible security generally entitles the holder to receive interest paid or accrued on debt securities or the dividend paid on preferred stock until the convertible security matures or is redeemed, converted or exchanged. Before conversion, convertible securities generally have characteristics similar to both debt and equity securities. The value of convertible securities tends to decline as interest rates rise and, because of the conversion feature, tends to vary with fluctuations in the market value of the underlying securities. Convertible securities ordinarily provide a stream of income with generally higher yields than those of common stock of the same or similar issuers. Convertible securities generally rank senior to common stock in a corporation's capital structure but are usually subordinated to comparable nonconvertible fixed-income securities in such capital structure. Convertible securities generally do not participate directly in any dividend increases or decreases of the underlying securities although the market prices of convertible securities may be affected by any dividend changes or other changes in the underlying securities. Certain of the convertible securities in which a Fund may invest are rated below investment grade or are unrated. The prices of such securities are likely to be more sensitive to adverse economic changes than higher-rated securities, resulting in increased volatility of market prices of these securities during periods of economic uncertainty, or adverse individual corporate developments. In addition, during an economic downturn or substantial period of rising interest rates, lower rated issuers may experience financial stress.

Depository Receipts. Depository receipts represent an ownership interest in securities of foreign companies (an "underlying issuer") that are deposited with a depository. Depository receipts are not necessarily denominated in the same currency as the underlying securities. Depository receipts include American depository receipts ("ADRs"), global depository receipts ("GDRs") and other types of depository receipts (which, together with ADRs and GDRs, are hereinafter collectively referred to as "Depository Receipts"). ADRs are dollar-denominated Depository Receipts typically issued by a U.S. financial institution and evidence an ownership interest in a security or pool of securities issued by a foreign issuer. ADRs are listed and traded in the United States. ADRs also include American depository shares. GDRs and other types of Depository Receipts are typically issued by foreign banks or trust companies, although they also may be issued by U.S. financial institutions, and evidence ownership interests in a security or pool of securities issued by either a foreign or a U.S. corporation. Generally, Depository Receipts in registered form are designed for use in the U.S. securities market and Depository Receipts in bearer form are designed for use in securities markets outside the United States.

Depository Receipts may be "sponsored" or "unsponsored." Sponsored Depository Receipts are established jointly by a depository and the underlying issuer, whereas unsponsored Depository Receipts may be established by a depository without participation by the underlying issuer. Holders of unsponsored Depository Receipts generally bear all the costs associated with establishing unsponsored Depository Receipts. In addition, the issuers of the securities underlying unsponsored Depository Receipts are not obligated to disclose material information in the United States and, therefore, there may be less information available regarding such issuers and there may not be a correlation between such information and the market value of the Depository Receipts. For purposes of a Fund's investment policies, a Fund's investments in Depository Receipts will be deemed to be an investment in the underlying securities, except that ADRs may be deemed to be issued by a U.S. issuer.

Illiquid Investments. In accordance with Rule 22e-4 (the "Liquidity Rule") under the 1940 Act, each Fund may invest up to 15% of its net assets in "illiquid investments" that are assets. For these purposes, "illiquid investments" are investments that a Fund reasonably expects cannot be sold or disposed of in current market conditions in seven calendar days or less without the sale or disposition significantly changing the market value of the investment. For each Fund, each portfolio investment must be classified at least monthly into one of four liquidity categories (illiquid, as discussed above, as well as highly liquid, moderately liquid and less liquid), which are defined pursuant to the Liquidity Rule and classified in accordance with the Funds' written liquidity risk management program by the program administrator designated by the Company's Board of Directors. Such classification is to be made using information obtained after reasonable inquiry and taking into account relevant market, trading and investment-specific considerations. In making such classifications, a Fund determines whether trading varying portions of a position in a particular portfolio investment or asset class, in sizes that the Fund would reasonably anticipate trading, is reasonably expected to significantly affect its liquidity. If so, this determination is taken into account when classifying the liquidity of that investment. The Funds may be assisted in classification determinations by one or more third-party service providers. Assets classified according to this process as "illiquid investments" are those subject to the 15% limit on illiquid investments.

In the event that changes in the portfolio or other external events cause a Fund to exceed this limit, the Fund must take steps to bring its illiquid investments that are assets to or below the applicable limit of its net assets within a reasonable period of time. This requirement would not force a Fund to liquidate any portfolio investment.

The SEC has recently proposed amendments to the Liquidity Rule that, if adopted, would result in changes to a Fund's liquidity classification framework and could potentially increase the percentage of a Fund's investments classified as illiquid. In addition, a Fund's operations and investment strategies may be adversely impacted if the proposed amendments are adopted.

Investment Company Securities. Investment company securities are equity securities and include securities of other open-end, closed-end and unregistered investment companies, including foreign investment companies, hedge funds and ETFs. A Fund may, to the extent noted in the Fund's non-fundamental limitations, invest in investment company securities as may be permitted by (i) the 1940 Act; (ii) the rules and regulations promulgated by the SEC under the 1940 Act; or (iii) an exemption or other relief applicable to the Fund from provisions of the 1940 Act. The 1940 Act generally prohibits an investment company from acquiring more than 3% of the outstanding voting shares of an investment company and limits such investments to no more than 5% of a Fund's total assets in any one investment company and no more than 10% in any combination of investment companies. The 1940 Act also prohibits a Fund from acquiring in the aggregate more than 10% of the outstanding voting shares of any registered closed-end investment company. A Fund may invest in investment company securities of investment companies managed by the Adviser or its affiliates to the extent permitted under the 1940 Act or as otherwise authorized by the SEC. To the extent a Fund invests a portion of its assets in investment company securities, those assets will be subject to the risks of the purchased investment company's portfolio securities, and a shareholder in the Fund will bear not only their proportionate share of the expenses of the Fund, but also, indirectly the expenses of the purchased investment company.

Money Market Funds. To the extent permitted by applicable law, a Fund may invest all or some of its short term cash investments in any money market fund advised or managed by the Adviser or its affiliates. In connection with any such investments, a Fund, to the extent permitted by the 1940 Act, will pay its share of all expenses (other than advisory and administrative fees) of a money market fund in which it invests, which may result in the Fund bearing some additional expenses. The rules governing money market funds: (1) permit (and, under certain circumstances, require) certain money market funds to impose a "liquidity fee" (up to 2%), or a "redemption gate" that temporarily restricts redemptions from a money market fund, if weekly liquidity levels fall below the required regulatory threshold, and (2) require "institutional money market funds" to operate with a floating NAV per share rounded to a minimum of the fourth decimal place in the case of a fund with a \$1.0000 share price or an equivalent or more precise level of accuracy for money market funds with a different share price (e.g., \$10.000 per share, or \$100.00 per share). These may affect the investment strategies, performance and operating expenses of money market funds. "Government money market funds," as defined under Rule 2a-7 of the 1940 Act, are exempt from these requirements, though such funds may choose to opt-in to the implementation of liquidity fees and redemption gates.

Exchange-Traded Funds. Certain Funds may invest in ETFs. Investments in ETFs are subject to a variety of risks, including risks of a direct investment in the underlying securities that the ETF holds. For example, the general level of stock prices may decline, thereby adversely affecting the value of the underlying investments of the ETF and, consequently, the value of the ETF. In addition, the market value of the ETF shares may differ from their NAV because the supply and demand in the market for ETF shares at any point is not always identical to the supply and demand in the market for the underlying securities. Also, ETFs that track particular indices typically will be unable to match the performance of the index exactly due to, among other things, the ETF's operating expenses and transaction costs. ETFs typically incur fees that are separate from those fees incurred directly by the Funds. Therefore, as a shareholder in an ETF (as with other investment companies), a Fund would bear its ratable share of that entity's expenses. At the same time, the Fund would continue to pay its own investment management fees and other expenses. As a result, a Fund and its shareholders, in effect, will be absorbing duplicate levels of fees with respect to investments in ETFs. Further, certain of the ETFs in which a Fund may invest are leveraged. Leveraged ETFs seek to deliver multiples of the performance of the index or other benchmark they track and use derivatives in an effort to amplify the returns of the underlying index or benchmark. While leveraged ETFs may offer the potential for greater return, the potential for loss and the speed at which losses can be realized also are greater. Most leveraged ETFs "reset" daily, meaning they are designed to achieve their stated objectives on a daily basis. Leveraged ETFs can deviate substantially from the performance of their underlying benchmark over longer periods of time, particularly in volatile periods. The more a Fund invests in such leveraged ETFs, the more this leverage will magnify any losses on those investments. Furthermore, disruptions in the markets for the securities underlying ETFs purchased or sold by the Fund could result in losses on the Fund's investment in ETFs.

IPOs. Certain Funds may purchase equity securities issued as part of, or a short period after, a company's initial public offering ("IPO"), and may at times dispose of those securities shortly after their acquisition. A Fund's purchase of securities issued in IPOs exposes it to the risks associated with companies that have little operating history as public companies, as well as to the risks inherent in those sectors of the market where these issuers operate. The market for IPO issuers has been volatile, and share prices of newly-public companies have fluctuated significantly over short periods of time.

Limited Partnership and Limited Liability Company Interests. A limited partnership interest entitles a Fund to participate in the investment return of the partnership's assets as defined by the agreement among the partners. As a limited partner, a Fund generally is not permitted to participate in the management of the partnership. However, unlike a general partner whose liability is not limited, a limited partner's liability generally is limited to the amount of its commitment to the partnership. A Fund may invest in limited liability company interests to the same extent it invests in limited partnership interests. Limited liability company interests have similar characteristics as limited partnership interests.

Certain Funds may invest in master limited partnerships ("MLPs"), which are generally organized under state law as limited partnerships or limited liability companies and generally treated as partnerships for U.S. federal income tax purposes. The securities issued by many MLPs are listed and traded on a securities exchange. If publicly traded, to be treated as a partnership for U.S. federal income tax purposes, the entity must receive at least 90% of its income from qualifying sources as set forth in the Internal Revenue Code of 1986, as amended (the "Code"). These qualifying sources include interest, dividends, real estate rents, gain from the sale or disposition of real property, income and gain from mineral or natural resources activities, income and gain from the transportation or storage of certain fuels, gain from the sale or disposition of a capital asset held for the production of income described in the foregoing, and, in certain circumstances, income and gain from commodities or futures, forwards and options with respect to commodities.

Preferred Stocks. Preferred stocks are securities that evidence ownership in a corporation and pay a fixed or variable stream of dividends. Preferred stocks have a preference over common stocks in the event of the liquidation of an issuer and usually do not carry voting rights. Preferred stocks have many of the characteristics of both equity securities and fixed-income securities.

Real Estate Investing. Investments in securities of issuers engaged in the real estate industry entail special risks and considerations. In particular, securities of such issuers may be subject to risks associated with the direct ownership of real estate. These risks include the cyclical nature of real estate values, risks related to general and local economic conditions, overbuilding and increased competition, increases in property taxes and operating expenses, demographic trends and variations in rental income, changes in zoning laws, casualty or condemnation losses, environmental risks, regulatory limitations on rents, changes in neighborhood values, changes in the appeal of properties to tenants, increases in interest rates and other real estate capital market influences. Generally, increases in interest rates will increase the costs of obtaining financing, which could directly and indirectly decrease the value of a Fund's investments.

Real Estate Investment Trusts and Foreign Real Estate Companies. Certain Funds may invest in real estate investment trusts ("REITs") and/or foreign real estate companies, which are similar to entities organized and operated as REITs in the United States. REITs and foreign real estate companies pool investors' funds for investment primarily in real estate properties or real estate-related loans. REITs and foreign real estate companies generally derive their income from rents on the underlying properties or interest on the underlying loans, and their value is impacted by changes in the value of the underlying property or changes in interest rates affecting the underlying loans owned by the REITs and/or foreign real estate companies. REITs and foreign real estate companies are more susceptible to risks associated with the ownership of real estate and the real estate industry in general. These risks can include fluctuations in the value of underlying properties; defaults by borrowers or tenants; market saturation; changes in general and local economic conditions; decreases in market rates for rents; increases in competition, property taxes, capital expenditures or operating expenses; and other economic, political or regulatory occurrences affecting the real estate industry. In addition, REITs and foreign real estate companies depend upon specialized management skills, may not be diversified (which may increase the volatility of a REIT's and/or foreign real estate company's value), may have less trading volume and may be subject to more abrupt or erratic price movements than the overall securities market. Foreign real estate companies may be subject to 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 a Fund indirectly bears REIT and foreign real estate company management expenses along with the direct expenses of the Fund. REITs are generally not taxed on income distributed to shareholders provided they comply with several requirements of the Code. REITs are subject to the risk of failing to qualify for tax-free pass-through income under the Code.

Specialized Ownership Vehicles. Specialized ownership vehicles pool investors' funds for investment primarily in income-producing real estate or real estate-related loans or interests. Such specialized ownership vehicles in which the Funds may invest include property unit trusts, foreign real estate companies, REITs and other similar specialized investment vehicles. Investments in such specialized ownership vehicles may have favorable or unfavorable legal, regulatory or tax implications for a Fund and, to the extent such vehicles are structured similarly to investment funds, a shareholder in the Fund will bear not only their proportionate share of the expenses of the Fund, but also, indirectly the expenses of the specialized ownership vehicle.

Rights. Rights represent the right, but not the obligation, for a fixed period of time to purchase additional shares of an issuer's common stock at the time of a new issuance, usually at a price below the initial offering price of the common stock and before the common stock is offered to the general public. Rights are usually freely transferable. The risk of investing in a right is that the right may expire prior to the market value of the common stock exceeding the price fixed by the right.

Sector Risk. Each Fund may, from time to time, invest more heavily in companies in a particular economic sector or sectors. Economic or regulatory changes adversely affecting such sectors may have more of an impact on a Fund's performance than if the Fund held a broader range of investments.

Warrants. Warrants give holders the right, but not the obligation, to buy common stock of an issuer at a given price, usually higher than the market price at the time of issuance, during a specified period. Warrants are usually freely transferable. The risk of investing in a warrant is that the warrant may expire prior to the market value of the common stock exceeding the price fixed by the warrant.

Fixed-Income Securities. Fixed-income securities generally represent an issuer's obligation to repay to the investor (or lender) the amount borrowed plus interest over a specified time period. A typical fixed-income security specifies a fixed date when the amount borrowed (principal) is due in full, known as the maturity date, and specifies dates when periodic interest (coupon) payments will be made over the life of the security.

Fixed-income securities come in many varieties and may differ in the way that interest is calculated, the amount and frequency of payments, the type of collateral, if any, and the presence of special features (e.g., conversion rights). Prices of fixed-income securities fluctuate and, in particular, are subject to several key risks including, but not limited to, interest rate risk, credit risk, prepayment risk and spread risk.

Interest rate risk arises due to general changes in the level of market rates after the purchase of a fixed-income security. Generally, the values of fixed-income securities vary inversely with changes in interest rates. During periods of falling interest rates, the values of most outstanding fixed-income securities generally rise and during periods of rising interest rates, the values of most fixed-income securities generally decline. The Funds may face a heightened level of interest rate risk in times of monetary policy change and/or uncertainty, such as when the Federal Reserve Board adjusts a 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). Certain Funds are not limited as to the maturities (when a debt security provides its final payment) or duration (measure of interest rate sensitivity) of the securities in which it may invest. While fixed-income securities with longer final maturities often have higher yields than those with shorter maturities, they usually possess greater price sensitivity to changes in interest rates and other factors. Traditionally, the remaining term to maturity has been used as a barometer of a fixed-income security's sensitivity to interest rate changes. This measure, however, considers only the time until the final principal payment and takes no account of the pattern or amount of principal or interest payments prior to maturity. Duration combines consideration of yield, coupon, interest and principal payments, final maturity and call (prepayment) features. Duration measures the likely percentage change in a fixed-income security's price for a small parallel shift in the general level of interest rates; it is also an estimate of the weighted average life of the remaining cash flows of a fixed-income security. In almost all cases, the duration of a fixed-income security is shorter than its term to maturity.

Credit risk represents the possibility that an issuer may be unable to meet scheduled interest and principal payment obligations. It is most often associated with corporate bonds, although it can be present in other fixed-income securities as well. Credit ratings and quantitative models attempt to measure the degree of credit risk in fixed-income securities, and provide insight as to whether prevailing yield spreads afford sufficient compensation for such risk. Other things being equal, fixed-income securities with high degrees of credit risk should trade in the market at lower prices (and higher yields) than fixed-income securities with low degrees of credit risk.

Prepayment risk, also known as call risk, arises due to the issuer's ability to prepay all or most of the fixed-income security prior to the stated final maturity date. Prepayments generally rise in response to a decline in interest rates as debtors take advantage of the opportunity to refinance their obligations. This risk is often associated with mortgage securities where the underlying mortgage loans can be refinanced, although it can also be present in corporate or other types of bonds with call provisions. When a prepayment occurs, a Fund may be forced to reinvest in lower yielding fixed-income securities. Quantitative models are designed to help assess the degree of prepayment risk, and provide insight as to whether prevailing yield spreads afford sufficient compensation for such risk.

Spread risk is the potential for the value of a Fund's assets to fall due to the widening of spreads. Fixed-income securities generally compensate for greater credit risk by paying interest at a higher rate. The difference (or "spread") between the yield of a security and the yield of a benchmark, such as a U.S. Treasury security with a comparable maturity, measures the additional interest paid for credit risk. As the spread on a security widens (or increases), the price (or value) of the security falls. Spread widening may occur, among other reasons, as a result of market concerns over the stability of the market, excess supply, general credit concerns in other markets, security- or market-specific credit concerns or general reductions in risk tolerance.

While assets in fixed-income markets have grown rapidly in recent years, the capacity for traditional dealer counterparties to engage in fixed-income trading has not kept pace and in some cases has decreased. For example, primary dealer inventories of corporate bonds, which provide a core indication of the ability of financial intermediaries to "make markets," are at or near historic lows in relation to market size. This reduction in market-making capacity may be a persistent change, to the extent it is resulting from broader structural changes, such as fewer proprietary trading desks at broker-dealers and increased regulatory capital requirements. Because market makers provide stability to a market through their intermediary services, the significant reduction in dealer

inventories could potentially lead to decreased liquidity and increased volatility in the fixed-income markets. Such issues may be exacerbated during periods of economic uncertainty.

Economic, political and other events also may affect the prices of broad fixed-income markets, although the risks associated with such events are transmitted to the market via changes in the prevailing levels of interest rates, credit risk, prepayment risk or spread risk. From time to time, uncertainty regarding the status of negotiations in the U.S. government to increase the statutory debt ceiling could impact the creditworthiness of the United States and could impact the liquidity of the U.S. Government securities markets and ultimately the Funds.

Certain of the Funds' 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 the Fund's assets can decline). Inflation rates may 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 Fund's investments may not keep pace with inflation, which may result in losses to Fund shareholders. This risk is greater for fixed-income instruments with longer maturities.

Agencies. Agencies refer to fixed-income securities issued or guaranteed by federal agencies and U.S. government sponsored instrumentalities. They may or may not be backed by the full faith and credit of the United States. If they are not backed by the full faith and credit of the United States, the investor must look principally to the agency or instrumentality issuing or guaranteeing the obligation for ultimate repayment, and may not be able to assert a claim against the United States itself in the event the agency or instrumentality does not meet its commitment. Agencies that are backed by the full faith and credit of the United States include the Export-Import Bank, Farmers Home Administration, Federal Financing Bank and others. Certain debt issued by Resolution Funding Corporation has both its principal and interest backed by the full faith and credit of the U.S. Treasury in that its principal is backed by U.S. Treasury zero coupon issues, while the U.S. Treasury is explicitly required to advance funds sufficient to pay interest on it, if needed. Certain agencies and instrumentalities, such as Government National Mortgage Association ("Ginnie Mae"), are, in effect, backed by the full faith and credit of the United States through provisions in their charters that they may make "indefinite and unlimited" drawings on the Treasury if needed to service their debt. Debt from certain other agencies and instrumentalities, including the Federal Home Loan Banks, the Federal National Mortgage Association ("Fannie Mae") and the Federal Home Loan Mortgage Corporation ("Freddie Mac"), are not guaranteed by the United States, but those institutions are protected by the discretionary authority of the U.S. Treasury to purchase certain amounts of their securities to assist them in meeting their debt obligations. Finally, other agencies and instrumentalities, such as the Farm Credit System, are federally chartered institutions under U.S. Government supervision, but their debt securities are backed only by the creditworthiness of those institutions, not the U.S. Government. Some of the U.S. government agencies that issue or guarantee securities include the Export-Import Bank of the United States, Farmers Home Administration, Federal Housing Administration, Maritime Administration, Small Business Administration and the Tennessee Valley Authority ("TVA").

An instrumentality of the U.S. Government is a government agency organized under federal charter with government supervision. Instrumentalities issuing or guaranteeing securities include, among others, Federal Home Loan Banks, the Federal Land Bank, Central Bank for Cooperatives, Federal Intermediate Credit Banks and Fannie Mae.

Asset-Backed Securities. Certain Funds may invest in asset-backed securities. Asset-backed securities utilize the securitization techniques used to develop MBS. These techniques are also applied to a broad range of other assets. Various types of assets, primarily automobile and credit card receivables and home equity loans, are being securitized in pass-through structures similar to the mortgage pass-through structures. These types of securities are known as asset-backed securities. A Fund may invest in any type of asset-backed security. Asset-backed securities have risk characteristics similar to MBS. Like MBS, they generally decrease in value as a result of interest rate increases, but may benefit less than other fixed-income securities from declining interest rates, principally because of prepayments. Also, as in the case of MBS, prepayments generally increase during a period of declining interest rates although other factors, such as changes in credit use and payment patterns, may also influence prepayment rates. Asset-backed securities also involve the risk that various federal and state consumer laws and other legal, regulatory and economic factors may result in the collateral backing the securities being insufficient to support payment on the securities.

Cash Equivalents. Cash equivalents are short-term fixed-income securities comprising:

- Time deposits, certificates of deposit (including marketable variable rate certificates of deposit) and bankers' acceptances issued by a commercial bank or savings and loan association. Time deposits are non-negotiable deposits maintained in a banking institution for a specified period of time at a stated interest rate. Certificates of deposit are negotiable short-term obligations issued by commercial banks or savings and loan associations against funds deposited in the issuing institution. Variable rate certificates of deposit are certificates of deposit on which the interest rate is periodically adjusted prior to their stated maturity based upon a specified market rate. A bankers' acceptance is a time draft drawn on a commercial bank by a borrower, usually in connection with an international commercial transaction (to finance the import, export, transfer or storage of goods);
- Obligations of U.S. banks, foreign branches of U.S. banks (Eurodollars) and U.S. branches of foreign banks (Yankee dollars). Eurodollar and Yankee dollar investments will involve some of the same risks of investing in international securities that are discussed in various foreign investing sections of this SAI;

- Any security issued by a commercial bank if (i) the bank has total assets of at least \$1 billion, or the equivalent in other currencies or, in the case of domestic banks which do not have total assets of at least \$1 billion, the aggregate investment made in any one such bank is limited to \$250,000 principal amount per certificate and the principal amount of such investment is insured in full by the Federal Deposit Insurance Corporation (“FDIC”), (ii) in the case of U.S. banks, it is a member of the FDIC and (iii) in the case of foreign branches of U.S. banks, the security is deemed by the Adviser to be of an investment quality comparable with other debt securities which the Fund may purchase;
- Commercial paper rated at time of purchase by one or more nationally recognized statistical rating organizations (“NRSROs”) in one of their two highest categories (e.g., A-1 or A-2 by S&P Global Ratings Group, a division of S&P Global, Inc. (“S&P”), Prime 1 or Prime 2 by Moody’s Investors Service, Inc. (“Moody’s”) or F1 or F2 by Fitch Ratings, Inc. (“Fitch”)) or, if unrated, determined to be of comparable quality by the Adviser;
- Short-term corporate obligations rated high-grade at the time of purchase by an NRSRO (e.g., A or better by Moody’s, S&P or Fitch);
- U.S. government obligations, including bills, notes, bonds and other debt securities issued by the U.S. Treasury. These are direct obligations of the U.S. Government and differ mainly in interest rates, maturities and dates of issue;
- Government agency securities issued or guaranteed by U.S. government sponsored instrumentalities and Federal agencies. These include securities issued by the Federal Home Loan Banks, Federal Land Bank, Farmers Home Administration, Farm Credit Banks, Federal Intermediate Credit Bank, Fannie Mae, Federal Financing Bank, the TVA and others; and
- Repurchase agreements collateralized by the securities listed above.

China Investments. Investments in securities of Chinese issuers, including A-shares, involve risks and special considerations not typically associated with investments in the U.S. securities markets. These risks include, among others, (i) more frequent (and potentially widespread) trading suspensions and government interventions with respect to Chinese issuers, including the risk that the U.S. government or other governments may sanction Chinese issuers or otherwise prohibit U.S. persons (such as the Fund) from investing in certain Chinese issuers, resulting in lack of liquidity and in price volatility, (ii) currency revaluations and other currency exchange rate fluctuations or blockage, (iii) the nature and extent of intervention by the Chinese government in the Chinese securities markets (including both direct and indirect market stabilization efforts, which may affect valuations of Chinese issuers), whether such intervention will continue and the impact of such intervention or its discontinuation, (iv) the risk of nationalization or expropriation of assets, (v) the risk that the Chinese government may decide not to continue to support economic reform programs, (vi) limitations on the use of brokers (or action by the Chinese government that discourages brokers from serving international clients), (vii) higher rates of inflation, (viii) greater political, economic and social uncertainty, (ix) market volatility caused by any potential regional or territorial conflicts (such as military, diplomatic, or trade conflicts) or natural disasters, (x) the risk of increased trade tariffs, embargoes, sanctions and other trade limitations, (xi) custody risks associated with investing via the Stock Connect program, (xii) both interim and permanent market regulations which may affect the ability of certain stockholders to sell Chinese securities when it would otherwise be advisable and (xiii) foreign ownership limits of any listed Chinese company.

The economy of China differs from the U.S. economy in such respects as structure, general development, government involvement, wealth distribution, rate of inflation, growth rate, interest rates, allocation of resources and capital reinvestment, among others. These differences may have an unfavorable impact on the Fund’s investments. The Chinese central government has historically exercised substantial control over virtually every sector of the Chinese economy through administrative regulation and/or state ownership and actions of the Chinese central and local government authorities continue to have a substantial effect on economic conditions in China. In addition, the Chinese government has from time to time taken actions that influence the prices at which certain goods may be sold, encourage companies to invest or concentrate in particular industries, induce mergers between companies in certain industries and induce private companies to publicly offer their securities to increase or continue the rate of economic growth, control the rate of inflation or otherwise regulate economic expansion. It may do so in the future as well, potentially having a significant adverse effect on economic conditions in China. These and other developments, including government actions, may result in significant liquidity risk or forced disposition for Chinese investments.

The Chinese securities markets are emerging markets characterized by a relatively small number of equity issues and relatively low trading volume, resulting in decreased liquidity, greater price volatility, and potentially fewer investment opportunities for the Fund. Liquidity risks may be more pronounced for the A-share market than for Chinese securities markets generally because the A-share market is subject to greater government restrictions and control. The A-share market is volatile with a risk of suspension of trading in a particular security or government intervention. Securities on the A-share market may be suspended from trading without an indication of how long the suspension will last, which may impair the liquidity of such securities. Price fluctuations of A-shares are limited per trading day. In addition, there is less regulation and monitoring of Chinese securities markets and the activities of investors, brokers and other participants than in the United States. Accounting, auditing and financial reporting standards in China are different from U.S. standards and, therefore, disclosure of certain material information may not be made. In addition, less information may be available to the Fund and other investors than would be the case if the Fund’s investments were restricted to securities of U.S. issuers. There is also generally less governmental regulation of the securities industry in China, and less enforcement of regulatory provisions relating thereto, than in the United States. Moreover, it may be more difficult to obtain a judgment in a court outside the United States.

The Chinese government strictly regulates the payment of foreign currency denominated obligations and sets monetary policy. In addition, the Chinese economy is export-driven and highly reliant on trade. Adverse changes to the economic conditions of its primary trading partners, such as the United States, Japan and South Korea, would adversely impact the Chinese economy and the Fund's investments. International trade tensions involving China and its trading counterparties may arise from time to time which can result in trade tariffs, embargoes, trade limitations, trade wars and other negative consequences. Such actions and consequences may ultimately result in a significant reduction in international trade, an oversupply of certain manufactured goods, devaluations of existing inventories and potentially the failure of individual companies and/or large segments of China's export industry with a potentially severe negative impact to the Fund. Moreover, a slowdown in other significant economies of the world, such as the United States, the European Union and certain Asian countries, may adversely affect economic growth in China. An economic downturn in China would adversely impact the Fund's investments. In addition, certain securities are, or may in the future become restricted, and the Fund may be forced to sell such restricted securities and incur a loss as a result.

Emerging markets such as China can experience high rates of inflation, deflation and currency devaluation. The value of the renminbi ("RMB") may be subject to a high degree of fluctuation due to, among other things, changes in interest rates, the effects of monetary policies issued by China, the United States, foreign governments, central banks or supranational entities, the imposition of currency controls or other national or global political or economic developments.

Events in any one country within Asia may impact other countries in the region as a whole. For example, the actual or potential escalation of hostility between China and Taiwan would likely have a significant adverse impact on the value or liquidity of investments in China. Investments in China and Hong Kong involve risk of a total loss due to government action or inaction. China has committed by treaty to preserve Hong Kong's autonomy and its economic, political and social freedoms for 50 years from the July 1, 1997 transfer of sovereignty from Great Britain to China. Ongoing political tension between the People's Republic of China and the Hong Kong Special Administrative Region will have impacts on the economy of Hong Kong, and these impacts remain uncertain. If China would exert its authority so as to alter the economic, political or legal structures or the existing social policy of Hong Kong, investor and business confidence in Hong Kong could be negatively affected, which in turn could negatively affect markets and business performance. In addition, the Hong Kong dollar trades within a fixed trading band rate to (or is "pegged" to) the USD. This fixed exchange rate has contributed to the growth and stability of the Hong Kong economy. However, some market participants have questioned the continued viability of the currency peg. It is uncertain what affect any discontinuance of the currency peg and the establishment of an alternative exchange rate system would have on capital markets generally and the Hong Kong economy.

China's legal system is substantially different from the legal system in the United States and may raise risks and uncertainties concerning the intent, effect, and enforcement of its laws, rules, and regulations, including those that restrict the inflow and outflow of foreign capital or provide the Chinese government with significant authority to exert influence on a China-based issuer's ability to conduct business or raise capital. This lack of certainty may result in the inconsistent and unpredictable interpretation and enforcement of laws, rules, and regulations, which may change quickly. For example, China-based issuers face risks related to evolving laws and regulations, which could impede their ability to obtain or maintain permits or licenses required to conduct business in China. In the absence of required permits or licenses, governmental authorities may impose material sanctions or penalties on the company. Foreign investors like the Funds may face difficulties in effecting service of legal process, enforcing judgments obtained in U.S. courts, and bringing claims against a company or its directors and officers.

China has often restricted U.S. regulators' access to information and limited regulators' ability to investigate or pursue remedies with respect to China-based issuers, generally citing to state secrecy and national security laws, blocking statutes, or other laws or regulations. In addition, according to Article 177 of the PRC Securities Law, which became effective in March 2020, no overseas securities regulator can directly conduct investigations or evidence collection activities within China and no entity or individual in China may provide documents and information relating to securities business activities to overseas regulators without Chinese government approval. The SEC, U.S. Department of Justice, and other U.S. authorities face substantial challenges in bringing and enforcing actions against China-based issuers and their officers and directors. As a result, a Fund may not benefit from a regulatory environment that fosters effective enforcement of U.S. federal securities laws.

Variable Interest Entities. Chinese operating companies sometimes rely on variable interest entity ("VIE") structures to raise capital from non-Chinese investors, even though such arrangements are not formally recognized under Chinese law, because of Chinese government limitations or prohibitions on direct foreign ownership in certain industries, such as restrictions on foreign ownership of telecommunications companies and prohibitions on ownership of educational institutions. In a VIE structure, a series of contractual arrangements are entered into between a holding company domiciled outside of China and a Chinese operating company or companies, which are intended to mimic direct ownership in the operating company, but in many cases these arrangements have not been tested in court and it is not clear that the contracts are enforceable or that the structures will otherwise work as intended. The offshore holding company, which is not a Chinese operating company but is a holding company formed outside of China and the U.S., then issues exchange-traded shares sold to the public, including non-Chinese investors (such as a Fund). Shares of the offshore entity purchased by a Fund would not be equity ownership interests in the Chinese operating company.

Through these structures, the China-based issuer can consolidate the Chinese operating company in its financial statements, although whether the China-based issuer maintains legal control of the Chinese operating company is a matter of Chinese law. Under this structure, the Chinese operating company, in which the China-based issuer cannot hold an equity interest, typically holds licenses and other assets that the China-based issuer cannot hold directly.

The China Securities Regulatory Commission (“CSRC”) released the “Trial Administrative Measures of Overseas Securities Offering and Listing by Domestic Companies” (the “Trial Measures”). The Trial Measures require Chinese companies that pursue listings outside of mainland China, including those that do so using the VIE structure, to make a filing with the CSRC. The Trial Measures suggest that companies already listed using an existing VIE structure will be grandfathered. While the Trial Measures do not prohibit the use of VIE structures, this does not serve as a formal endorsement either.

The offshore entity’s control over the Chinese operating company is predicated entirely on contracts with the Chinese operating company, not equity ownership. As a result, the VIE structure may not be as effective as direct ownership in controlling entities organized in China, which often hold the licenses necessary to conduct the company’s business in China. Additionally, evolving laws and regulations and inconsistent enforcement, application or interpretation thereof could lead to the VIE’s failure to obtain or maintain licenses and permits to do business in China. There is a risk that the offshore company or the VIE (i) may be unable to receive or maintain any required governmental permissions or approvals or (ii) inadvertently conclude that such permissions or approvals are not required and that applicable laws, regulations, or interpretations change and these entities are required to obtain such permissions or approvals in the future. The VIE structures used by Chinese operating companies pose risks to investors that are not present in other organizational structures. For example, exerting control through contractual arrangements may be less effective than direct equity ownership, and a company may incur substantial costs to enforce the terms of the arrangements, including those relating to the distribution of funds among the entities, because of, among other things, legal uncertainties and jurisdictional limits. Control over, and funds due from, the VIE may be jeopardized if the natural person or persons that hold the equity interest in the VIE breach the terms of the agreement. As a result, the U.S. listed offshore entity could have limited control and lose any control over the VIE.

A Fund’s interest would be subject to legal, operational and other risks associated with a Chinese operating company’s use of the VIE structure. Although the CSRC currently does not object to the use of VIE structures, at any time, the Chinese government could determine that the contractual arrangements constituting part of the VIE structure do not comply with applicable law or regulations, these laws or regulations could change or be interpreted differently in the future, and the Chinese government may otherwise intervene in or exert influence over VIE structures or the related Chinese operating companies. Further, the Chinese government could determine that the agreements establishing the VIE structure do not comply with Chinese law and regulations, including those related to restrictions on foreign ownership, which could subject a China-based issuer to penalties, revocation of business and operating licenses, or forfeiture of ownership interests. A China-based issuer’s control over a VIE may also be jeopardized if a natural person who holds the equity interest in the VIE breaches the terms of the agreements, is subject to legal proceedings, or if any physical instruments, such as chops and seals, are used without the China-based issuer’s authorization to enter into contractual arrangements in China. Additionally, Chinese tax authorities may disregard the VIE structure, resulting in increased tax liabilities.

If any of these or similar risks or developments materialize, a Fund’s investment in the offshore entity may suddenly and significantly decline in value or become worthless because of, among other things, difficulty enforcing (or mobility to enforce) the contractual arrangements or materially adverse effects on the Chinese operating company’s performance. A Fund could experience significant losses with no recourse available in these circumstances.

Chinese Fixed-Income Investments. A Fund may invest in Chinese fixed-income securities traded in the China Interbank Bond Market (“CIBM”) through the Bond Connect program (“Bond Connect”), which allows non-Chinese-domiciled investors (such as a Fund) to purchase certain fixed-income investments available in China’s interbank bond market. Bond Connect utilizes the trading infrastructure of both Hong Kong and China. Bond Connect therefore is not available when there are trading holidays in Hong Kong. As a result, prices of securities purchased through Bond Connect may fluctuate at times when a Fund is unable to add to or exit its position. Securities offered via Bond Connect may lose their eligibility for trading through the program at any time, in which case they may be sold but could no longer be purchased through Bond Connect. Because Bond Connect is relatively new, its effects on the Chinese interbank bond are uncertain. In addition, the trading, settlement and information technology systems required for non-Chinese investors in Bond Connect are relatively new and continuing to evolve. In the event that the relevant systems do not function properly, trading via Bond Connect could be disrupted, adversely affecting the ability of a Fund to acquire or dispose of securities through Bond Connect in a timely manner, which in turn could adversely impact the Fund’s performance.

Bond 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. In China, Bond Connect securities are held on behalf of ultimate investors (such as a Fund) by the Hong Kong Monetary Authority Central Money Markets Unit via accounts maintained with China’s two clearinghouses for fixed-income securities. While Chinese regulators have affirmed that the ultimate investors hold a beneficial interest in Bond Connect securities, the law surrounding such rights continues to develop, and the mechanisms that beneficial owners may use to enforce their rights are untested and therefore pose uncertain risks,

with legal and regulatory risks potentially having retroactive effect. 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. There is accordingly a risk that, as the law is tested and developed, a Fund's ability to enforce its ownership rights may be negatively impacted, which could expose the Fund to the risk of loss on such investments. A Fund may not be able to participate in corporate actions affecting Bond Connect securities due to time constraints or for other operational reasons, and payments of distributions could be delayed. Market volatility and potential lack of liquidity due to low trading volume of certain bonds may result in prices of those bonds fluctuating significantly; in addition, the bid-ask spreads of the prices of such securities may be large, and a Fund may therefore incur significant costs and suffer losses when selling such investments. More generally, bonds traded in CIBM may be difficult or impossible to sell, which could further impact a Fund's ability to acquire or dispose of such securities at their expected prices. Bond Connect trades are settled in Renminbi ("RMB"), the Chinese currency, and investors must have timely access to a reliable supply of RMB in Hong Kong, which cannot be guaranteed. Moreover, securities purchased through Bond Connect generally may not be sold, purchased or otherwise transferred other than through Bond Connect in accordance with applicable rules. Finally, uncertainties in the Chinese tax rules governing taxation of income and gains from investments via Bond Connect could result in unexpected tax liabilities for a Fund. The withholding tax treatment of dividends and capital gains payable to overseas investors currently is unsettled.

Under the prevailing applicable Bond Connect regulations, a Fund participates in Bond Connect through an offshore custody agent, registration agent or other third parties (as the case may be), who would be responsible for making the relevant filings and account opening with the relevant authorities. A Fund is therefore subject to the risk of default or errors on the part of such agents.

Commercial Paper. Commercial paper refers to short-term fixed-income securities with maturities ranging from 1 to 397 days. They are primarily issued by corporations needing to finance large amounts of receivables, but may be issued by banks and other borrowers. Commercial paper is issued either directly or through broker-dealers, and may be discounted or interest bearing. Commercial paper is unsecured. Virtually all commercial paper is rated by Moody's, Fitch or S&P.

Commercial paper rated A-1 by S&P has the following characteristics: (1) liquidity ratios are adequate to meet cash requirements; (2) long-term senior debt is rated "A" or better; (3) the issuer has access to at least two additional channels of borrowing; (4) basic earnings and cash flow have an upward trend with allowance made for unusual circumstances; (5) typically, the issuer's industry is well established and the issuer has a strong position within the industry; and (6) the reliability and quality of management are unquestioned. Relative strength or weakness of the above factors determines whether the issuer's commercial paper is A-1, A-2 or A-3.

The rating Prime-1 is the highest commercial paper rating assigned by Moody's. Among the factors considered by Moody's in assigning ratings are the following: (1) evaluation of the management of the issuer; (2) economic evaluation of the issuer's industry or industries and the appraisal of speculative-type risks which may be inherent in certain areas; (3) evaluation of the issuer's products in relation to competition and customer acceptance; (4) liquidity; (5) amount and quality of long-term debt; (6) trend of earnings over a period of ten years; (7) financial strength of a parent company and the relationships that exist with the issuer; and (8) recognition by the management of obligations which may be present or may arise as a result of public interest questions and preparations to meet such obligations.

With respect to Fitch, a short-term issuer or obligation rating is based in all cases on the short-term vulnerability to default of the rated entity and relates to the capacity to meet financial obligations in accordance with the documentation governing the relevant obligation. Short-term deposit ratings may be adjusted for loss severity. Short-term ratings are assigned to obligations whose initial maturity is viewed as "short term" based on market convention. Typically, this means up to 13 months for corporate, sovereign, and structured obligations and up to 36 months for obligations in U.S. public finance markets. An F1 rating indicates the strongest intrinsic capacity for timely payment of financial commitments whereas an F2 rating indicates good intrinsic capacity for timely payment of financial commitments.

Corporates. Corporates are fixed-income securities issued by private businesses. Holders, as creditors, have a prior legal claim over holders of equity securities of the issuer as to both income and assets for the principal and interest due to the holder.

Floater. Floaters are fixed-income securities with a rate of interest that varies with changes in specified market rates or indices, such as the prime rate, or at specified intervals. Certain floating or variable rate obligations may carry a demand feature that permits the holder to tender them back to the issuer of the underlying instrument, or to a third party, at par value prior to maturity. When the demand feature of certain floating or variable rate obligations represents an obligation of a foreign entity, the demand feature will be subject to certain risks discussed under "Foreign Securities."

High Yield Securities. High yield securities are generally considered to include fixed-income securities rated below the four highest rating categories at the time of purchase (e.g., Ba through C by Moody's, or BB through D by S&P or Fitch or the equivalent by another nationally recognized NRSRO) and unrated fixed-income securities considered by the Adviser to be of equivalent quality. High yield securities are not considered investment grade and are commonly referred to as "junk bonds" or high yield, high risk

securities. Investment grade securities that a Fund holds may be downgraded to below investment grade by the rating agencies. If a Fund holds a security that is downgraded, the Fund may choose to retain the security.

While high yield securities offer higher yields, they also normally carry a high degree of credit risk and are considered speculative by the major credit rating agencies. High yield securities may be issued as a consequence of corporate restructuring or similar events. High yield securities are often issued by smaller, less creditworthy issuers, or by highly leveraged (indebted) issuers, that are generally less able than more established or less leveraged issuers to make scheduled payments of interest and principal. In comparison to investment grade securities, the price movement of these securities is influenced less by changes in interest rates and more by the financial and business position of the issuer. The values of high yield securities are more volatile and may react with greater sensitivity to market changes.

High yield securities are frequently ranked junior to claims by other creditors. If the issuer cannot meet its obligations, the senior obligations are generally paid off before the junior obligations, which will potentially limit a Fund's ability to fully recover principal or to receive interest payments when senior securities are in default. Thus, investors in high yield securities have a lower degree of protection with respect to principal and interest payments than do investors in higher rated securities. In addition, lower-rated securities frequently have call or redemption features that would permit an issuer to repurchase the security from a Fund. If a call were exercised by the issuer during a period of declining interest rates, a Fund likely would have to replace such called security with a lower yielding security, thus decreasing the net investment income to the Fund and any dividends to investors.

The secondary market for high yield securities is concentrated in relatively few market makers and is dominated by institutional investors, including mutual funds, insurance companies and other financial institutions. Accordingly, the secondary market for such securities is not as liquid as, and is more volatile than, the secondary market for higher-rated securities. Because high yield securities are less liquid, judgment may play a greater role in valuing certain of a Fund's securities than is the case with securities trading in a more liquid market. Also, future legislation may have a possible negative impact on the market for high yield, high risk securities.

The credit rating of a high yield security does not necessarily address its market value risk. Ratings and market value may change from time to time, positively or negatively, to reflect new developments regarding the issuer.

The high yield securities markets may react strongly to adverse news about an issuer or the economy, or to the perception or expectation of adverse news, whether or not it is based on fundamental analysis. Additionally, prices for high yield securities may be affected by legislative and regulatory developments. These developments could adversely affect a Fund's NAV and investment practices, the secondary market for high yield securities, the financial condition of issuers of these securities and the value and liquidity of outstanding high yield securities, especially in a thinly traded market.

Inverse Floaters. Inverse floating rate obligations are obligations which pay interest at rates that vary inversely with changes in market rates of interest. Because the interest rate paid to holders of such obligations is generally determined by subtracting a variable or floating rate from a predetermined amount, the interest rate paid to holders of such obligations will decrease as such variable or floating rate increases and increase as such variable or floating rate decreases.

Like most other fixed-income securities, the value of inverse floaters will decrease as interest rates increase. They are more volatile, however, than most other fixed-income securities because the coupon rate on an inverse floater typically changes at a multiple of the change in the relevant index rate. Thus, any rise in the index rate (as a consequence of an increase in interest rates) causes a correspondingly greater drop in the coupon rate of an inverse floater while a drop in the index rate causes a correspondingly greater increase in the coupon of an inverse floater. Some inverse floaters may also increase or decrease in value substantially because of changes in the rate of prepayments.

Inverse floating rate investments tend to underperform the market for fixed-rate bonds in a rising interest rate environment, but tend to outperform the market for fixed-rate bonds when interest rates decline or remain relatively stable. Inverse floating rate investments have varying degrees of liquidity.

Investment Grade Securities. Investment grade securities are fixed-income securities rated by one or more of the rating agencies in one of the four highest rating categories at the time of purchase (e.g., AAA, AA, A or BBB by S&P or Fitch or the equivalent by another nationally recognized NRSRO or Aaa, Aa, A or Baa by Moody's) or determined to be of equivalent quality by the Adviser. Securities rated BBB or Baa represent the lowest of four levels of investment grade securities and are regarded as borderline between sound obligations and those in which speculative elements predominate. A Fund is permitted to hold investment grade securities or "high grade" securities, and may hold unrated securities if the Adviser considers the risks involved in owning that security to be equivalent to the risks involved in holding an investment grade security. Ratings assigned to fixed-income securities represent only the opinion of the rating agency assigning the rating and are not dispositive of the credit risk associated with the purchase of a particular fixed-income security. Moreover, market risk also will affect the prices of even the highest rated fixed-income securities so that their prices may rise or fall even if the issuer's capacity to repay its obligations remains unchanged.

Lease Obligations. Included within the revenue bonds category in which a Fund may invest are participations in lease obligations or installment purchase contracts (hereinafter collectively called "lease obligations") of municipalities. State and local governments,

agencies or authorities issue lease obligations to acquire equipment and facilities. Lease obligations may have risks not normally associated with general obligation or other revenue bonds. Leases, and installment purchase or conditional sale contracts (which may provide for title to the leased asset to pass eventually to the issuer), have developed as a means for governmental issuers to acquire property and equipment without the necessity of complying with the constitutional and statutory requirements generally applicable for the issuance of debt. Certain lease obligations contain “non-appropriation” clauses that provide that the governmental issuer has no obligation to make future payments under the lease or contract unless money is appropriated for such purpose by the appropriate legislative body on an annual or other periodic basis. Consequently, continued lease payments on those lease obligations containing “non-appropriation” clauses are dependent on future legislative actions. If such legislative actions do not occur, the holders of the lease obligation may experience difficulty in exercising their rights, including disposition of the property.

In addition, lease obligations do not have the depth of marketability associated with more conventional municipal obligations, and, as a result, certain of such lease obligations may be considered illiquid securities. The Adviser, pursuant to procedures adopted by the Directors, will make a determination as to the liquidity of each lease obligation purchased by the Funds. If a lease obligation is determined to be “liquid,” the security will not be included within the category “illiquid securities.”

Loan-Related Investments. Loan-related investments may include, without limitation, bank loans, direct lending and loan participations and assignments. In addition to risks generally associated with debt investments, loan-related investments are subject to other risks. Loans in which a Fund may invest may not be rated by a rating agency, will not be registered with the SEC or any state securities commission and will not be listed on any national securities exchange. Investors in loans, such as a Fund, may not be entitled to rely on the anti-fraud protections of the federal securities laws, although they may be entitled to certain contractual remedies. The amount of public information available with respect to loans will generally be less extensive than that available for registered or exchange-listed securities. In evaluating the creditworthiness of borrowers, the Adviser will consider, and may rely in part on, analyses performed by others.

The market for loan obligations may be subject to irregular trading activity, wide bid/ask spreads and extended trade settlement periods. Because transactions in many loans are subject to extended trade settlement periods, a Fund may not receive the proceeds from the sale of a loan for a period after the sale. As a result, sale proceeds related to the sale of loans may not be available to make additional investments or to meet a Fund’s redemption obligations for a period after the sale of the loans, and, as a result, the Fund may have to hold additional cash or sell other investments or engage in borrowing transactions, such as borrowing from its credit facility, if necessary to raise cash to meet its obligations. In addition, a Fund may not be able to readily dispose of its loans at prices that approximate those at which the Fund could sell such loans if they were more widely-traded and, as a result of such illiquidity, a Fund may have to hold additional cash or sell other investments or engage in borrowing transactions, such as borrowing from its credit facility, if necessary to raise cash to meet its obligations, including redemption obligations. To the extent a readily available market ceases to exist for a particular investment, such investment would be treated as illiquid for purposes of a Fund’s limitations on illiquid investments.

Loans are subject to the risk of non-payment of scheduled interest or principal. Such non-payment would result in a reduction of income to a Fund, a reduction in the value of the investment and a potential decrease in the Fund’s NAV. There can be no assurance that the liquidation of any collateral securing a loan would satisfy a borrower’s obligation in the event of non-payment of scheduled interest or principal payments, or that such collateral could be readily liquidated. In the event of bankruptcy of a borrower, a Fund could experience delays or limitations with respect to its ability to realize the benefits of the collateral securing a loan. The collateral securing a loan may lose all or substantially all of its value in the event of the bankruptcy of a borrower. Some loans are subject to the risk that a court, pursuant to fraudulent conveyance or other similar laws, could subordinate such loans to presently existing or future indebtedness of the borrower or take other action detrimental to the holders of loans including, in certain circumstances, invalidating such loans or causing interest previously paid to be refunded to the borrower. If interest were required to be refunded, it could negatively affect a Fund’s performance.

Direct Lending. When a Fund acts as a direct lender, it may participate in structuring the loan. Under these circumstances, it will have a direct contractual relationship with the borrower, may enforce compliance by the borrower with the terms of the loan agreement and may have rights with respect to any funds acquired by other lenders through set-off. Lenders also have full voting and consent rights under the applicable loan agreement. Action subject to lender vote or consent generally requires the vote or consent of the holders of some specified percentage of the outstanding principal amount of the loan. Certain decisions, such as reducing the amount of interest on or principal of a loan, releasing collateral, changing the maturity of a loan or a change in control of the borrower, frequently require the unanimous vote or consent of all lenders affected.

Loan Participations and Assignments. Loan participations are interests in loans or other direct debt instruments relating to amounts owed by a corporate, governmental or other borrower to another party. These loans may represent amounts owed to lenders or lending syndicates, to suppliers of goods or services (trade claims or other receivables), or to other parties (“Lenders”) and may be fixed-rate or floating rate. These loans also may be arranged through private negotiations between an issuer of sovereign debt obligations and Lenders.

A Fund's investments in loans may be in the form of a participation in loans ("Participations") and assignments of all or a portion of loans ("Assignments") from third parties. In the case of a Participation, a Fund will have the right to receive payments of principal, interest and any fees to which it is entitled only from the Lender selling the Participation and only upon receipt by the Lender of the payments from the borrower. In the event of an insolvency of the Lender selling a Participation, a Fund may be treated as a general creditor of the Lender and may not benefit from any set-off between the Lender and the borrower. Certain Participations may be structured in a manner designed to avoid purchasers of Participations being subject to the credit risk of the Lender with respect to the Participation. Even under such a structure, in the event of a Lender's insolvency, the Lender's servicing of the Participation may be delayed and the assignability of the Participation may be impaired. A Fund will acquire Participations only if the Lender interpositioned between a Fund and the borrower is determined by the Adviser to be creditworthy.

When a Fund purchases Assignments from Lenders it will acquire direct rights against the borrower on the loan. However, because Assignments are arranged through private negotiations between potential assignees and potential assignors, the rights and obligations acquired by a Fund as the purchaser of an Assignment may differ from, and be more limited than, those held by the assigning Lender. Because there is no liquid market for Participations and Assignments, it is likely that such securities could be sold only to a limited number of institutional investors. The lack of a liquid secondary market may have an adverse impact on the value of such securities and a Fund's ability to dispose of particular Assignments or Participations when necessary to meet a Fund's liquidity needs or in response to a specific economic event, such as a deterioration in the creditworthiness of the borrower. The lack of a liquid secondary market for Participations and Assignments also may make it more difficult for a Fund to assign a value to these securities for purposes of valuing a Fund's securities and calculating its NAV.

Participations and Assignments involve a risk of loss in case of default or insolvency of the borrower. In addition, they may offer less legal protection to a Fund in the event of fraud or misrepresentation and may involve a risk of insolvency of the Lender. Certain Participations and Assignments may also include standby financing commitments that obligate the investing Fund to supply additional cash to the borrower on demand. Participations involving emerging market country issuers may relate to loans as to which there has been or currently exists an event of default or other failure to make payment when due, and may represent amounts owed to Lenders that are themselves subject to political and economic risks, including the risk of currency devaluation, expropriation, or failure. Such Participations and Assignments present additional risk of default or loss.

Bank loans generally are negotiated between a borrower and several financial institutional lenders represented by one or more lenders acting as agent of all the lenders. The agent is responsible for negotiating the loan agreement that establishes the terms and conditions of the loan and the rights of the borrower and the lenders, monitoring any collateral, and collecting principal and interest on the loan. By investing in a loan, a Fund becomes a member of a syndicate of lenders. Investments in bank loans entail those risks described above, such as liquidity risk and risk of default.

Some of the loans in which a Fund may invest or obtain exposure to may be "covenant lite" loans. Certain financial institutions may define "covenant lite" loans differently. Covenant lite loans or securities, which have varied terms and conditions, may contain fewer or no restrictive covenants compared to other loans that might enable an investor to proactively enforce financial covenants or prevent undesired actions by the borrower. As a result, a Fund may experience relatively greater difficulty or delays in enforcing its rights on its holdings of certain covenant lite loans and debt securities than its holdings of loans or securities with more traditional financial covenants, which may result in losses to the Fund.

Money Market Instruments. Money market instruments are high quality short-term fixed-income securities. Money market instruments may include obligations of governments, government agencies, banks, corporations and special purpose entities and repurchase agreements relating to these obligations. Certain money market instruments may be denominated in a foreign currency.

Mortgage-Related Securities. Mortgage-related securities are securities that, directly or indirectly, represent a participation in, or are secured by and payable from, mortgage loans on real property. Mortgage-related securities include collateralized mortgage obligations and MBS issued or guaranteed by agencies or instrumentalities of the U.S. Government or by private sector entities.

Mortgage-Backed Securities. With MBS, many mortgagees' obligations to make monthly payments to their lending institution are pooled together and the risk of the mortgagees' payment obligations is passed through to investors. The pools are assembled by various governmental, government-related and private organizations. A Fund may invest in securities issued or guaranteed by Ginnie Mae, Freddie Mac or Fannie Mae, private issuers and other government agencies. MBS issued by non-agency issuers, whether or not such securities are subject to guarantees, may entail greater risk, since private issuers may not be able to meet their obligations under the policies. If there is no guarantee provided by the issuer, a Fund will purchase only MBS that, at the time of purchase, are rated investment grade by one or more NRSROs or, if unrated, are deemed by the Adviser to be of comparable quality.

MBS are issued or guaranteed by private sector originators of or investors in mortgage loans and structured similarly to governmental pass-through securities. Because private pass-throughs typically lack a guarantee by an entity having the credit status of a governmental agency or instrumentality, however, they are generally structured with one or more of the types of credit enhancement described below. Fannie Mae and Freddie Mac obligations are not backed by the full faith and credit of the U.S. Government as Ginnie Mae certificates are. Freddie Mac securities are supported by Freddie Mac's right to borrow from the U.S. Treasury. Each of

Ginnie Mae, Fannie Mae and Freddie Mac guarantees timely distributions of interest to certificate holders. Each of Ginnie Mae and Fannie Mae also guarantees timely distributions of scheduled principal. Although Freddie Mac has in the past guaranteed only the ultimate collection of principal of the underlying mortgage loan, Freddie Mac now issues MBS (Freddie Mac Gold PCS) that also guarantee timely payment of monthly principal reductions. Resolution Funding Corporation obligations are backed, as to principal payments, by zero coupon U.S. Treasury bonds and, as to interest payments, ultimately by the U.S. Treasury.

There are two methods of trading MBS. A specified pool transaction is a trade in which the pool number of the security to be delivered on the settlement date is known at the time the trade is made. This is in contrast with the typical MBS transaction, called a to-be-announced (“TBA”) transaction, in which the type of MBS to be delivered is specified at the time of trade but the actual pool numbers of the securities that will be delivered are not known at the time of the trade. The pool numbers of the pools to be delivered at settlement are announced shortly before settlement takes place. The terms of the TBA trade may be made more specific if desired. Generally, agency pass-through MBS are traded on a TBA basis. Investments in TBAs may give rise to a form of leverage and may cause a Fund’s portfolio turnover rate to appear higher. Leverage may cause a Fund to be more volatile than if the Fund had not been leveraged.

Like fixed-income securities in general, MBS will generally decline in price when interest rates rise. Rising interest rates also tend to discourage refinancings of home mortgages, with the result that the average life of MBS held by a Fund may be lengthened. As average life extends, price volatility generally increases. This extension of average life causes the market price of the MBS to decrease further when interest rates rise than if their average lives were fixed. However, when interest rates fall, mortgages may not enjoy as large a gain in market value due to prepayment risk because additional mortgage prepayments must be reinvested at lower interest rates. Faster prepayment will shorten the average life and slower prepayments will lengthen it. However, it is possible to determine what the range of the average life movement could be and to calculate the effect that it will have on the price of the MBS. In selecting MBS, the Adviser looks for those that offer a higher yield to compensate for any variation in average maturity. If the underlying mortgage assets experience greater than anticipated prepayments of principal, a Fund may fail to fully recoup its initial investment in these securities, even if the security is in one of the highest rating categories. A Fund may invest, without limit, in MBS issued by private issuers when the Adviser deems that the quality of the investment, the quality of the issuer, and market conditions warrant such investments. A Fund will purchase securities issued by private issuers that are rated investment grade at the time of purchase by Moody’s, Fitch or S&P or are deemed by the Adviser to be of comparable investment quality.

Fannie Mae Certificates. Fannie Mae is a federally chartered and privately owned corporation organized and existing under the Federal National Mortgage Association Charter Act of 1938. Each Fannie Mae certificate represents a pro rata interest in one or more pools of mortgage loans insured by the Federal Housing Administration under the National Housing Act of 1934, as amended (the “Housing Act”), or Title V of the Housing Act of 1949 (“FHA Loans”), or guaranteed by the Department of Veteran Affairs under the Servicemen’s Readjustment Act of 1944, as amended (“VA Loans”), or conventional mortgage loans (i.e., mortgage loans that are not insured or guaranteed by any governmental agency) of the following types: (i) fixed rate level payment mortgage loans; (ii) fixed rate growing equity mortgage loans; (iii) fixed rate graduated payment mortgage loans; (iv) variable rate California mortgage loans; (v) other adjustable rate mortgage loans; and (vi) fixed rate and adjustable mortgage loans secured by multi-family projects.

Freddie Mac Certificates. Freddie Mac is a corporate instrumentality of the United States created pursuant to the Emergency Home Finance Act of 1970, as amended (the “FHLMC Act”). Freddie Mac certificates represent a pro rata interest in a group of mortgage loans (a “Freddie Mac Certificate group”) purchased by Freddie Mac. The mortgage loans underlying the Freddie Mac Certificates consist of fixed rate or adjustable rate mortgage loans with original terms to maturity of between ten and thirty years, substantially all of which are secured by first liens on one-to-four-family residential properties or multi-family projects. Each mortgage loan must meet the applicable standards set forth in the FHLMC Act. A Freddie Mac Certificate group may include whole loans, participation interests in whole loans and undivided interests in whole loans and participations comprising another Freddie Mac Certificate group.

Ginnie Mae Certificates. Ginnie Mae is a wholly-owned corporate instrumentality of the United States within the Department of Housing and Urban Development. The Housing Act authorizes Ginnie Mae to guarantee the timely payment of the principal and interest on certificates that are based on and backed by a pool of FHA Loans, VA Loans or by pools of other eligible mortgage loans. The Housing Act provides that the full faith and credit of the United States is pledged to the payment of all amounts that may be required to be paid under any guaranty. In order to meet its obligations under such guaranty, Ginnie Mae is authorized to borrow from the U.S. Treasury with no limitations as to amount.

Each Ginnie Mae certificate represents a pro rata interest in one or more of the following types of mortgage loans: (i) fixed rate level payment mortgage loans; (ii) fixed rate graduated payment mortgage loans; (iii) fixed rate growing equity mortgage loans; (iv) fixed rate mortgage loans secured by manufactured (mobile) homes; (v) mortgage loans on multi-family residential properties under construction; (vi) mortgage loans on completed multi-family projects; (vii) fixed rate mortgage loans as to which escrowed funds are used to reduce the borrower’s monthly payments during the early years of the mortgage loans (“buydown” mortgage loans); (viii) mortgage loans that provide for adjustments in payments based on periodic changes in interest rates or in other payment terms of the mortgage loans; and (ix) mortgage-backed serial notes. All of these mortgage loans will be FHA Loans or VA loans and, except as otherwise specified above, will be fully-amortizing loans secured by first liens on one-to-four-family housing units.

Collateralized Mortgage Obligations. Certain Funds may invest in collateralized mortgage obligations (“CMOs”), which are MBS that are collateralized by mortgage loans or mortgage pass-through securities, and multi-class pass-through securities, which are equity interests in a trust composed of mortgage loans or other MBS. Unless the context indicates otherwise, the discussion of CMOs below also applies to multi-class pass-through securities.

CMOs may be issued by governmental or government-related entities or by private entities, such as banks, savings and loan institutions, private mortgage insurance companies, mortgage bankers and other secondary market traders. CMOs are issued in multiple classes, often referred to as “tranches,” with each tranche having a specific fixed or floating coupon rate and stated maturity or final distribution date. Under the traditional CMO structure, the cash flows generated by the mortgages or mortgage pass-through securities in the collateral pool are used to first pay interest and then pay principal to the holders of the CMOs. Subject to the various provisions of individual CMO issues, the cash flow generated by the underlying collateral (to the extent it exceeds the amount required to pay the stated interest) is used to retire the bonds.

The principal and interest on the underlying collateral may be allocated among the several tranches of a CMO in innumerable ways, including “interest only” and “inverse interest only” tranches. In a common CMO structure, the tranches are retired sequentially in the order of their respective stated maturities or final distribution dates (as opposed to the pro-rata return of principal found in traditional pass-through obligations). The fastest-pay tranches would initially receive all principal payments. When those tranches are retired, the next tranches in the sequence receive all of the principal payments until they are retired. The sequential retirement of bond groups continues until the last tranche is retired. Accordingly, the CMO structure allows the issuer to use cash flows of long maturity, monthly-pay collateral to formulate securities with short, intermediate, and long final maturities and expected average lives and risk characteristics.

The primary risk of CMOs is the uncertainty of the timing of cash flows that results from the rate of prepayments on the underlying mortgages serving as collateral and from the structure of the particular CMO transaction (that is, the priority of the individual tranches). An increase or decrease in prepayment rates (resulting from a decrease or increase in mortgage interest rates) may cause the CMOs to be retired substantially earlier than their stated maturities or final distribution dates and will affect the yield and price of CMOs. In addition, if the collateral securing CMOs or any third-party guarantees are insufficient to make payments, a Fund could sustain a loss. The prices of certain CMOs, depending on their structure and the rate of prepayments, can be volatile. Some CMOs may also not be as liquid as other types of mortgage-backed securities. As a result, it may be difficult or impossible to sell the securities at an advantageous time or price.

Privately issued CMOs are arrangements in which the underlying mortgages are held by the issuer, which then issues debt collateralized by the underlying mortgage assets. Such securities may be backed by mortgage insurance, letters of credit, or other credit enhancing features. Although payment of the principal of, and interest on, the underlying collateral securing privately issued CMOs may be guaranteed by the U.S. Government or its agencies and instrumentalities, these CMOs represent obligations solely of the private issuer and are not insured or guaranteed by the U.S. Government, its agencies and instrumentalities or any other person or entity. Privately issued CMOs are subject to prepayment risk due to the possibility that prepayments on the underlying assets will alter the cash flow. Yields on privately issued CMOs have been historically higher than the yields on CMOs backed by mortgages guaranteed by U.S. government agencies and instrumentalities. The risk of loss due to default on privately issued CMOs, however, is historically higher since the U.S. Government has not guaranteed them.

New types of CMO tranches have evolved. These include floating rate CMOs, planned amortization classes, accrual bonds and CMO residuals. These newer structures affect the amount and timing of principal and interest received by each tranche from the underlying collateral. For example, an inverse interest-only class CMO entitles holders to receive no payments of principal and to receive interest at a rate that will vary inversely with a specified index or a multiple thereof. Under certain of these newer structures, given classes of CMOs have priority over others with respect to the receipt of prepayments on the mortgages. Therefore, depending on the type of CMOs in which a Fund invests, the investment may be subject to a greater or lesser risk of prepayment than other types of MBS.

CMOs may include real estate mortgage investment conduits (“REMICs”). REMICs, which were authorized under the Tax Reform Act of 1986, are private entities formed for the purpose of holding a fixed pool of mortgages secured by an interest in real property. A REMIC is a CMO that qualifies for special tax treatment under the Code, and invests in certain mortgages principally secured by interests in real property.

A Fund may invest in, among others, parallel pay CMOs and planned amortization class CMOs (“PAC Bonds”). Parallel pay CMOs are structured to provide payments of principal on each payment date to more than one tranche. These simultaneous payments are taken into account in calculating the stated maturity date or final distribution date of each tranche which, as with other CMO structures, must be retired by its stated maturity date or final distribution date but may be retired earlier. PAC Bonds are a form of parallel pay CMO, with the required principal payment on such securities having the highest priority after interest has been paid to all classes. PAC Bonds generally require payments of a specified amount of principal on each payment date.

Stripped Mortgage-Backed Securities. Certain Funds may invest in stripped mortgage-backed securities (“SMBS”). An SMBS is a derivative multi-class mortgage-backed security. SMBS usually are structured with two classes that receive different proportions of the interest and principal distribution on a pool of mortgage assets. In the most extreme case, one class will receive all of the interest (the interest-only or “IO” class), while the other class will receive all of the principal (the principal-only or “PO” class). The yield to maturity on an IO class is extremely sensitive to the rate of principal payments (including prepayments) on the related underlying mortgage assets, and a rapid rate of principal payments may have a material adverse effect on such security’s yield to maturity. If the underlying mortgage assets experience greater than anticipated prepayments of principal, a Fund may fail to fully recoup its initial investment in these securities. Conversely, if the underlying mortgage assets experience less than anticipated prepayments of principal, the yield of POs could be materially adversely affected. The market values of IOs and POs are subject to greater risk of fluctuation in response to changes in market rates of interest than many other types of mortgage-backed securities. To the extent a Fund invests in IOs and POs, it may increase the risk of fluctuations in the NAV of a Fund.

Commercial Mortgage-Backed Securities. Commercial mortgage-backed securities (“CMBS”) are generally multi-class or pass-through securities issued by special purpose entities that represent an undivided interest in a portfolio of mortgage loans backed by commercial properties, including, but not limited to, industrial and warehouse properties, office buildings, retail space and shopping malls, hotels, healthcare facilities, multifamily properties and cooperative apartments. Private lenders, such as banks or insurance companies, originate these loans and then sell the loans directly into a CMBS trust or other entity. The commercial mortgage loans that underlie CMBS are generally not amortizing or not fully amortizing. That is, at their maturity date, repayment of the remaining principal balance or “balloon” is due and is repaid through the attainment of an additional loan or sale of this property. An extension of the final payment on commercial mortgages will increase the average life of the CMBS, generally resulting in a lower yield for discount bonds and a higher yield for premium bonds.

CMBS are subject to credit risk and prepayment risk. Although prepayment risk is present, it is of a lesser degree in the CMBS than in the residential mortgage market; commercial real estate property loans often contain provisions which substantially reduce the likelihood that such securities will be prepaid (e.g., significant prepayment penalties on loans and, in some cases, prohibition on principal payments for several years following origination).

CMBS may be less liquid and exhibit greater price volatility than other types of mortgage- or asset-backed securities. CMBS issued by private issuers may offer higher yields than CMBS issued by government issuers, but also may be subject to greater volatility and credit or default risk than CMBS issued by government issuers. In addition, at times the commercial real estate market has experienced substantially lower valuations combined with higher interest rates, leading to difficulty in refinancing debt and, as a result, the CMBS market has experienced (and could in the future experience) greatly reduced liquidity and valuations. CMBS held by the Fund may be subordinated to one or more other classes of securities of the same series for purposes of, among other things, establishing payment priorities and offsetting losses and other shortfalls with respect to the related underlying mortgage loans. There can be no assurance that the subordination will be sufficient on any date to offset all losses or expenses incurred by the underlying trust.

The values of, and income generated by, CMBS may be adversely affected by changing interest rates and other developments impacting the commercial real estate market, such as population shifts and other demographic changes, increasing vacancies (potentially for extended periods) and reduced demand for commercial and office space as well as maintenance or tenant improvement costs and costs to convert properties for other uses. These developments could result from, among other things, changing tastes and preferences (such as remote work arrangements) as well as cultural, technological, global or local economic and market developments. In addition, changing interest rate environments and associated changes in lending standards and higher refinancing rates may adversely affect the commercial real estate and CMBS markets. The occurrence of any of the foregoing developments would likely increase default risk for the properties and loans underlying these investments as well as impact the value of, and income generated by, these investments. These developments could also result in reduced liquidity for CMBS.

Credit Enhancement. Mortgage-related securities are often backed by a pool of assets representing the obligations of a number of parties. To lessen the effect of failure by obligors on underlying assets to make payments, these securities may have various types of credit support. Credit support falls into two primary categories: (i) liquidity protection, and (ii) protection against losses resulting from ultimate default by an obligor on the underlying assets. Liquidity protection generally refers to the provision of advances, typically by the entity administering the pool of assets, to ensure that the pass-through of payments due on the underlying pool occurs in a timely fashion. Protection against losses resulting from ultimate default enhances the likelihood of ultimate payment of the obligations on at least a portion of the assets in the pool. Such protection may be provided through guarantees, insurance policies or letters of credit obtained by the issuer or sponsor from third-parties (referred to herein as “third-party credit support”), through various means of structuring the transaction or through a combination of such approaches.

The ratings of mortgage-related securities for which third-party credit enhancement provides liquidity protection or protection against losses from default are generally dependent upon the continued creditworthiness of the provider of the credit enhancement. The ratings of such securities could decline in the event of deterioration in the creditworthiness of the credit enhancement provider even in cases where the delinquency and loss experience on the underlying pool of assets is better than expected.

Examples of credit support arising out of the structure of the transaction include “senior-subordinated securities” (multiple class securities with one or more classes subordinate to other classes as to the payment of principal and interest thereon, with defaults on the underlying assets being borne first by the holders of the most subordinated class), creation of “reserve funds” (where cash or investments, sometimes funded from a portion of the payments on the underlying assets, are held in reserve against future losses) and “over-collateralization” (where the scheduled payments on, or the principal amount of, the underlying assets exceed those required to make payment of the securities and pay any servicing or other fees). The degree of credit support provided for each security is generally based on historical information with respect to the level of credit risk associated with the underlying assets. Delinquency or loss in excess of that which is anticipated could adversely affect the return on an investment in such a security.

Municipals. Municipal securities include debt obligations issued by or on behalf of states, territories or possessions of the United States and the District of Columbia and their political subdivisions, agencies and instrumentalities, the income on which is exempt from federal income tax at the time of issuance, in the opinion of bond counsel or other counsel to the issuers of such securities. Municipals include both municipal bonds (those securities with maturities of five years or more) and municipal notes (those with maturities of less than five years). Municipal bonds are issued for a wide variety of reasons: to construct public facilities, such as airports, highways, bridges, schools, hospitals, mass transportation, streets, water and sewer works; to obtain funds for operating expenses; to refund outstanding municipal obligations; and to loan funds to various public institutions and facilities. Certain industrial development bonds are also considered municipal bonds if their interest is exempt from federal income tax. Industrial development bonds are issued by, or on behalf of, public authorities to obtain funds for various privately-operated manufacturing facilities, housing, sports arenas, convention centers, airports, mass transportation systems and water, gas or sewage works. Industrial development bonds are ordinarily dependent on the credit quality of a private user, not the public issuer. Private activity bonds are another type of municipal security.

The two principal classifications of municipal bonds are “general obligation” and “revenue” or “special tax” bonds. General obligation bonds are secured by the issuer’s pledge of its full faith, credit and taxing power for the payment of principal and interest. Thus, these bonds may 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 may also be influenced by any unfunded pension liabilities or other post-employee benefit plan liabilities. These bonds may also depend on legislative appropriation and/or funding or other support from other governmental bodies in order to make payments. Revenue or special tax bonds are payable only from the revenues derived from a particular facility or class of facilities or, in some cases, from the proceeds of a special excise or other tax, but not from general tax revenues. 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.

Industrial revenue bonds in most cases are revenue bonds and generally do not have the pledge of the credit of the issuer. The payment of the principal and interest on such industrial revenue bonds is dependent solely on the ability of the user of the facilities financed by the bonds to meet its financial obligations and the pledge, if any, of real and personal property so financed as security for such payment. Short-term municipal obligations issued by states, cities, municipalities or municipal agencies, include tax anticipation notes, revenue anticipation notes, bond anticipation notes, construction loan notes and short-term discount notes.

Private activity bonds may be used by municipalities to finance the development of industrial facilities for use by private enterprise. Principal and interest payments are to be made by the private enterprise benefitting from the development, which means that the holder of the bond is exposed to the risk that the private issuer may default on the bond. The credit and quality of private activity bonds and industrial development bonds are usually related to the credit of the corporate user of the facilities. Payment of interest on and repayment of principal of such bonds is the responsibility of the corporate user (and/or any guarantor).

Municipal notes are issued to meet the short-term funding requirements of local, regional and state governments. Municipal notes include bond anticipation notes, revenue anticipation notes and tax and revenue anticipation notes. These are short-term debt obligations issued by state and local governments to aid cash flows while waiting for taxes or revenue to be collected, at which time the debt is retired. Other types of municipal notes in which a Fund may invest are construction loan notes, short-term discount notes, tax-exempt commercial paper, demand notes and similar instruments.

Municipal bonds generally include debt obligations issued by states and their political subdivisions, and duly constituted authorities and corporations, to obtain funds to construct, repair or improve various public facilities such as airports, bridges, highways, hospitals, housing, schools, streets and water and sewer works. Municipal bonds may also be issued to refinance outstanding obligations as well as to obtain funds for general operating expenses and for loans to other public institutions and facilities. In addition, municipal bonds may include obligations of municipal housing authorities and single-family mortgage revenue bonds. Weaknesses in federal housing subsidy programs and their administration may result in a decrease of subsidies available for payment of principal and interest on housing authority bonds. Economic developments, including fluctuations in interest rates and increasing construction and operating costs, may also adversely impact revenues of housing authorities. In the case of some housing authorities, inability to obtain additional financing could also reduce revenues available to pay existing obligations. Single-family mortgage revenue bonds are subject to extraordinary mandatory redemption at par in whole or in part from the proceeds derived from

prepayments of underlying mortgage loans and also from the unused proceeds of the issue within a stated period which may be within a year from the date of issue.

Note obligations with demand or put options may have a stated maturity in excess of one year, but permit any holder to demand payment of principal plus accrued interest upon a specified number of days' notice. Frequently, such obligations are secured by letters of credit or other credit support arrangements provided by banks. The issuer of such notes normally has a corresponding right, after a given period, to repay at its discretion the outstanding principal of the note plus accrued interest upon a specific number of days' notice to the bondholders. The interest rate on a demand note may be based upon a known lending rate, such as the prime lending rate, and be adjusted when such rate changes, or the interest rate on a demand note may be a market rate that is adjusted at specified intervals. Each note purchased by the Funds will meet the quality criteria set out in the Prospectus for the Funds.

The yields of municipal bonds depend on, among other things, general money market conditions, conditions in the municipal bond market, the size of a particular offering, the maturity of the obligation, and the rating of the issue. The ratings of Moody's Investors Service, Inc. ("Moody's") and S&P Global Ratings Group, a division of S&P Global, Inc. ("S&P") represent their opinions of the quality of the municipal bonds rated by them. It should be emphasized that such ratings are general and are not absolute standards of quality. Consequently, municipal bonds with the same maturity, coupon and rating may have different yields, while municipal bonds of the same maturity and coupon, but with different ratings, may have the same yield. It will be the responsibility of the Adviser to appraise independently the fundamental quality of the bonds held by the Funds.

Municipal bonds are sometimes purchased on a "when-issued" or "delayed-delivery" basis, which means the Fund has committed to purchase certain specified securities at an agreed-upon price when they are issued. The period between commitment date and issuance date can be a month or more. It is possible that the securities will never be issued and the commitment canceled.

From time to time proposals have been introduced before Congress to restrict or eliminate the federal income tax exemption for interest on municipal bonds. Similar proposals may be introduced in the future.

Similarly, from time to time proposals have been introduced before state and local legislatures to restrict or eliminate the state and local income tax exemption for interest on municipal bonds. Similar proposals may be introduced in the future.

The Funds may also purchase bonds the income on which is subject to the alternative minimum tax ("AMT bonds"). AMT bonds are tax-exempt private activity bonds issued after August 7, 1986, the proceeds of which are directed, at least in part, to private, for-profit organizations. While the income from AMT bonds is exempt from regular federal income tax, it is a tax preference item in the calculation of the alternative minimum tax. The alternative minimum tax is a special separate tax that applies to some taxpayers who have certain adjustments to income or tax preference items.

Municipal obligations of any type, such as general obligation and revenue or special tax bonds as well as other municipal obligations associated with specific projects, can be negatively affected by changing demographic trends, such as population shifts or changing tastes and values, or increasing vacancies or declining rents resulting from legal, cultural, technological, global or local economic developments, as well as reduced demand for properties, revenues or goods. As a result of various economic, market and other factors, there could be reduced tax or other revenue available to issuers of municipal obligations and, in turn, increased budgetary and financial pressure on municipalities and other issuers of municipal obligations, which could adversely impact the risks associated with municipal obligations of such issuer. As a result, the Fund's investments in municipal obligations may be subject to and heightened risks relating to the occurrence of such developments.

An issuer of municipal securities may file for bankruptcy or otherwise seek to reorganize its debts by extending debt maturities, reducing the amount of principal or interest, refinancing the debt or taking other measures, in each case which may significantly affect the rights of creditors and the value of the municipal securities and the value of a Fund's investments in such municipal securities. In addition, changes to bankruptcy laws may adversely impact a Fund's investments in municipal securities, including creditor rights, if the issuer seeks bankruptcy protection.

Build America Bonds are taxable municipal securities on which the issuer receives federal support of the interest paid. Assuming certain specified conditions are satisfied, issuers of Build America Bonds may either (i) receive reimbursement from the U.S. Treasury with respect to a portion of its interest payments on the bonds ("direct pay" Build America Bonds) or (ii) provide tax credits to investors in the bonds ("tax credit" Build America Bonds). Unlike most other municipal securities, interest received on Build America Bonds is subject to federal and state income tax. Issuance of Build America Bonds ceased on December 31, 2010. The number of Build America Bonds available in the market is limited, which may negatively affect the value of the Build America Bonds.

The Company may hold municipal private placements. These securities are sold through private negotiations, usually to institutions or mutual funds, and generally have resale restrictions. Their yields are usually higher than comparable public securities to compensate the investor for their limited marketability.

Repurchase Agreements. Repurchase agreements are transactions in which a Fund purchases a security or basket of securities and simultaneously commits to resell that security or basket to the seller (a bank, broker or dealer) at a mutually agreed-upon date and

price. The resale price reflects the purchase price plus an agreed-upon market rate of interest which is unrelated to the coupon rate or date of maturity of the purchased security. The term of these agreements usually ranges from overnight to one week, and never exceeds one year. Repurchase agreements with a term of over seven days are considered illiquid.

In these transactions, a Fund receives securities that have a market value at least equal to the purchase price (including accrued interest) of the repurchase agreement, and this value is maintained during the term of the agreement. These securities are held by the Custodian or an approved third-party for the benefit of the Fund until repurchased. Repurchase agreements permit a Fund to remain fully invested while retaining overnight flexibility to pursue investments of a longer-term nature. If the seller defaults and the value of the repurchased securities declines, a Fund might incur a loss. If bankruptcy proceedings are commenced with respect to the seller, a Fund's realization upon the collateral may be delayed.

While repurchase agreements involve certain risks not associated with direct investments in debt securities, each Fund follows procedures approved by the Directors that are designed to minimize such risks. These procedures include effecting repurchase transactions only with large, well-capitalized and well-established financial institutions whose financial condition will be continually monitored by the Adviser. In addition, as described above, the value of the collateral underlying the repurchase agreement will be at least equal to the repurchase price, including any accrued interest earned on the repurchase agreement. In the event of a default or bankruptcy by a selling financial institution, the Funds will seek to liquidate such collateral. However, the exercising of the Fund'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, the Fund could suffer a loss. Repurchase agreements involving obligations other than U.S. government securities may be subject to special risks. Repurchase agreements secured by obligations that are not eligible for direct investment under a Fund's investment objectives and restrictions may require the Fund to promptly dispose of such collateral if the seller or guarantor becomes insolvent.

A Fund may enter into repurchase agreements on a forward commitment basis. To the extent a Fund does so and the counterparty to the trade fails to effectuate the trade at the scheduled time, a Fund may be forced to deploy its capital in a repurchase agreement with a less favorable rate of return than it otherwise may have achieved or may be unable to enter into a repurchase agreement at all at the desired time.

Temporary Defensive Investments. When the Adviser believes that changes in market, economic, political or other conditions make it advisable, a Fund may invest up to 100% of its assets in cash, cash equivalents and other fixed-income securities for temporary defensive purposes that may be inconsistent with the Fund's investment strategies. These temporary investments may consist of obligations of the U.S. or foreign governments, their agencies and instrumentalities; money market instruments; and instruments issued by international development agencies.

U.S. Treasury Securities. The U.S. Treasury securities that certain Funds may purchase include U.S. Treasury bills, notes and bonds issued by the U.S. Treasury. These instruments are direct obligations of the U.S. Government and, as a result, are backed by the full faith and credit of the United States. They differ primarily in their interest rates, the lengths of their maturities and the dates of their issuances.

Eurodollar and Yankee Dollar Obligations. Certain Funds may invest in Eurodollar and Yankee dollar obligations. Eurodollar and Yankee dollar obligations are fixed-income securities that include time deposits, which are non-negotiable deposits maintained in a bank for a specified period of time at a stated interest rate. The Eurodollar obligations may include bonds issued and denominated in euros. Eurodollar obligations may be issued by government and corporate issuers in Europe. Yankee dollar obligations, which include time deposits and certificates of deposit, are U.S. dollar-denominated obligations issued in the U.S. capital markets by foreign banks. Eurodollar bank obligations, which include time deposits and certificates of deposit, are U.S. dollar-denominated obligations issued outside the U.S. capital markets by foreign branches of U.S. banks and by foreign banks. The Funds may consider Yankee dollar obligations to be domestic securities for purposes of their investment policies.

Eurodollar and Yankee dollar obligations are subject to the same risks as domestic issues, notably credit risk, market risk and liquidity risk. However, Eurodollar (and to a limited extent, Yankee dollar) obligations are also subject to certain sovereign risks. One such risk is the possibility that a sovereign country might prevent capital from flowing across its borders. Other risks include adverse political and economic developments; the extent and quality of government regulations of financial markets and institutions; the imposition of foreign withholding taxes; and the expropriation or nationalization of foreign issuers.

Zero Coupons. Zero coupons are fixed-income securities on which the holder does not receive periodic cash payments of interest or principal. Generally, these securities are subject to greater price volatility and lesser liquidity in the event of adverse market conditions than comparably rated securities paying cash interest at regular intervals. Although a Fund will not receive cash periodic coupon payments on these securities, the Fund may be deemed to have received interest income, or "phantom income" during the life of the obligation. A Fund may have to distribute such phantom income to avoid taxes at the Fund level, although it has not received any cash payment.

Zero coupons are sold at a discount from their face value. The difference between a zero coupon's issue or purchase price and its face value represents the imputed interest an investor will earn if the obligation is held until maturity. For tax purposes, a portion of this imputed interest is deemed as income received by zero coupon bondholders each year. Each Fund intends to pass along such interest as a component of the Fund's distributions of net investment income.

Zero coupons may offer investors the opportunity to earn a higher yield than that available on ordinary interest-paying obligations of similar credit quality and maturity. However, zero coupon prices may also exhibit greater price volatility than ordinary fixed-income securities because of the manner in which their principal and interest are returned to the investor.

Foreign Securities. Investing in foreign securities involves certain special considerations which are not typically associated with investments in the securities of U.S. issuers. Foreign issuers are not generally subject to uniform accounting, auditing and financial reporting standards and may have policies that are not comparable to those of domestic issuers. As a result, there may be less information available about foreign issuers than about domestic issuers. Securities of some foreign issuers may be less liquid and more volatile than securities of comparable domestic issuers. There is generally less stringent investor protections and disclosure standards, and less government supervision and regulation of stock exchanges, brokers and listed issuers than in the United States. In addition, with respect to certain foreign countries, there is a possibility of expropriation or confiscatory taxation, political and social instability, or diplomatic developments which could affect U.S. investments in those countries. The costs of investing in foreign countries frequently are higher than the costs of investing in the United States. Although the Adviser endeavors to achieve the most favorable execution costs in portfolio transactions, fixed commissions on many foreign stock exchanges are generally higher than negotiated commissions on U.S. exchanges. In addition, investments in certain foreign markets that have historically been considered stable may become more volatile and subject to increased risk due to ongoing developments and changing conditions in such markets. Moreover, the growing interconnectivity of global economies and financial markets has increased the probability that adverse developments and conditions in one country or region will affect the stability of economies and financial markets in other countries or regions. For instance, if one or more countries leave the European Union ("EU") or the EU dissolves, the world's securities markets likely will be significantly disrupted.

Investments in foreign markets may also be adversely affected by governmental actions such as the imposition of capital controls, nationalization of companies or industries, expropriation of assets or the imposition of punitive taxes. The governments of certain countries may prohibit or impose substantial restrictions on foreign investing in their capital markets or in certain sectors or industries. In addition, a foreign government may 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 may become less liquid in response to market developments or adverse investor perceptions, or become illiquid after purchase by a Fund, particularly during periods of market turmoil. When a Fund holds illiquid investments, its portfolio may be harder to value.

Investments in securities of foreign issuers may be denominated in foreign currencies. Accordingly, the value of a Fund's assets, as measured in U.S. dollars, may be affected favorably or unfavorably by changes in currency exchange rates and in exchange control regulations. A Fund may incur costs in connection with conversions between various currencies.

Certain foreign markets may rely heavily on particular industries or foreign capital and are more vulnerable to diplomatic developments, the imposition of economic sanctions against a particular country or countries, organizations, companies, entities and/or individuals, changes in international trading patterns, trade barriers, and other protectionist or retaliatory measures. International trade barriers or economic sanctions against foreign countries, organizations, companies, entities and/or individuals, may adversely affect a Fund's foreign holdings or exposures. Investments in foreign markets may also be adversely affected by governmental actions such as the imposition of capital controls, nationalization of companies or industries, expropriation of assets, or the imposition of punitive taxes. Governmental actions can have a significant effect on the economic conditions in foreign countries, which also may adversely affect the value and liquidity of a Fund's investments. For example, the governments of certain countries may prohibit or impose substantial restrictions on foreign investing in their capital markets or in certain sectors or industries. In addition, a foreign government may 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. Any of these actions could severely affect security prices, impair a Fund's ability to purchase or sell foreign securities or transfer a Fund's assets back into the U.S., or otherwise adversely affect a Fund's operations. Certain foreign investments may become less liquid in response to market developments or adverse investor perceptions, or become illiquid after purchase by a Fund, particularly during periods of market turmoil. Certain foreign investments may become illiquid when, for instance, there are few, if any, interested buyers and sellers or when dealers are unwilling to make a market for certain securities. When a Fund holds illiquid investments, its portfolio may be harder to value.

Certain foreign governments may levy withholding or other taxes on dividend and interest income. Although in some countries a portion of these taxes may be recoverable, the non-recovered portion of foreign withholding taxes will reduce the income received from investments in such countries. Certain Funds may be able to pass through to their shareholders a credit for U.S. tax purposes with respect to any such foreign taxes.

Unless otherwise noted in a Fund's Prospectus, the Adviser may consider an issuer to be from a particular country (including the United States) or geographic region if: (i) its principal securities trading market is in that country or geographic region; (ii) alone or on a consolidated basis it derives 50% or more of its annual revenue or profits from goods produced, sales made or services performed in that country or geographic region or has at least 50% of its assets, core business operations and/or employees in that country or geographic region; or (iii) it is organized under the laws of, or has a principal office in, that country or geographic region. By applying these tests, it is possible that a particular issuer could be deemed to be from more than one country or geographic region.

Foreign securities may include, without limitation, foreign equity securities, which are equity securities of a non-U.S. issuer, foreign government fixed-income securities, which are fixed-income securities issued by a government other than the U.S. Government or government-related issuer in a country other than the United States, and foreign corporate fixed-income securities, which are fixed-income securities issued by a private issuer in a country other than the United States.

Investments in foreign companies and countries are subject to economic sanction and trade laws in the United States and other jurisdictions. These laws and related governmental actions may, from time to time, prohibit a Fund from investing in certain countries and in certain companies. Investments in certain countries and companies may be, and have in the past been, restricted as a result of the imposition of economic sanctions. In addition, economic sanction laws in the United States and other jurisdictions may prohibit a Fund from transacting with a particular country or countries, organizations, companies, entities and/or individuals. These types of sanctions may significantly restrict or completely prohibit investment activities in certain jurisdictions.

Economic sanctions and other similar governmental actions could, among other things, effectively restrict or eliminate a Fund's ability to purchase or sell securities or groups of securities, and thus may make the Fund's investments in such securities less liquid or more difficult to value. In addition, as a result of economic sanctions, the Fund may be forced to sell or otherwise dispose of investments at inopportune times or prices, which could result in losses to the Fund and increased transaction costs. These conditions may be in place for a substantial period of time and enacted with limited advance notice to the Fund.

In addition, such economic sanctions or other government restrictions may negatively impact the value or liquidity of a Fund's investments, and could impair the Fund's ability to meet its investment objective or invest in accordance with its investment strategy because the Fund may, for example, be prohibited from investing in securities issued by companies subject to such restrictions and the Fund could be required to freeze or divest its existing investments that the Adviser would otherwise consider to be attractive.

The risks posed by economic sanctions against a particular foreign country, its nationals or industries or businesses within the country may be heightened to the extent a Fund invests significantly in the affected country or region or in issuers from the affected country that depend on global markets.

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 may 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.

The Funds may 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 the Funds conduct their business (including making investments) and any corresponding deterioration in global macro-economic conditions could have a material adverse effect on a Fund's investment returns. Potential consequences to which the Funds may 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 a Fund'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 or investment returns of a Fund and/or the Adviser 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 a Fund) 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 a Fund and the Adviser. These risks may affect a Fund, the Adviser and other service providers given economic, political and regulatory uncertainty created by Brexit.

Brady Bonds. Brady Bonds are fixed-income securities that are created through the exchange of existing commercial bank loans to foreign entities for new obligations in connection with debt restructuring under a plan introduced by Nicholas F. Brady when he was the U.S. Secretary of the Treasury. They may be collateralized or uncollateralized and issued in various currencies (although most are U.S. dollar-denominated) and they are actively traded in the over-the-counter (“OTC”) secondary market. A Fund will invest in Brady Bonds only if they are consistent with the Fund’s quality specifications. Dollar-denominated, collateralized Brady Bonds may be fixed-rate par bonds or floating rate discount bonds. Interest payments on Brady Bonds generally are collateralized by cash or securities in an amount that, in the case of fixed-rate bonds, is equal to at least one year of rolling interest payments or, in the case of floating rate bonds, initially is equal to at least one year’s rolling interest payments based on the applicable interest rate at that time and is adjusted at regular intervals thereafter. Certain Brady Bonds are entitled to “value recovery payments” in certain circumstances, which in effect constitute supplemental interest payments but generally are not collateralized.

Brady Bonds are often viewed as having three or four valuation components: (i) the collateralized repayment of principal at final maturity; (ii) the collateralized interest payments; (iii) the uncollateralized interest payments; and (iv) any uncollateralized repayment of principal at maturity (these uncollateralized amounts constitute the “residual risk”). In the event of a default with respect to collateralized Brady Bonds as a result of which the payment obligations of the issuer are accelerated, the U.S. Treasury zero coupon obligations held as collateral for the payment of principal will not be distributed to investors, nor will such obligations be sold and the proceeds distributed. The collateral will be held by the collateral agent to the scheduled maturity of the defaulted Brady Bonds, which will continue to be outstanding, at which time the face amount of the collateral will equal the principal payments due on the Brady Bonds in the normal course. However, Brady Bonds should be viewed as speculative in light of the history of defaults with respect to commercial bank loans by public and private entities of countries issuing Brady Bonds.

Emerging Market Securities. Certain Funds may invest in emerging market securities. An emerging market security is a security issued by an emerging market foreign government or private issuer. An emerging market foreign government or private issuer has one or more of the following characteristics: (i) its principal securities trading market is in an emerging market or developing country; (ii) alone or on a consolidated basis it derives 50% or more of its annual revenue or profits from goods produced, sales made or services performed in an emerging market or developing country or has at least 50% of its assets, core business operations and/or employees in an emerging market or developing country; or (iii) it is organized under the laws of, or has a principal office in, an emerging market or developing country. Based on these criteria it is possible for a security to be considered issued by an issuer in more than one country. Therefore, it is possible for the securities of any issuer that has one or more of these characteristics in connection with any emerging market or developing country to be considered an emerging market security when held in one Fund, but not considered an emerging market security when held in another Fund if it has one or more of these characteristics in connection with a developed country.

Emerging market describes any country that is generally considered to be an emerging or developing country by major organizations in the international financial community or by a Fund’s benchmark index.

The economies of individual emerging market or developing countries may differ favorably or unfavorably from the U.S. economy in such respects as growth of gross domestic product, rate of inflation or deflation, currency depreciation, capital reinvestment, resource self-sufficiency and balance of payments position. Further, the economies of developing countries generally are heavily dependent upon international trade and, accordingly, have been, and may continue to be, adversely affected by trade barriers, exchange controls, managed adjustments in relative currency values and other protectionist measures. These economies also have been, and may continue to be, adversely affected by economic conditions in the countries with which they trade.

Prior governmental approval for foreign investments may be required under certain circumstances in some emerging market or developing countries, and the extent of foreign investment in certain fixed-income securities and domestic companies may be subject to limitation in other emerging market or developing countries. Foreign ownership limitations also may be imposed by the charters of individual companies in emerging market or developing countries to prevent, among other concerns, violation of foreign investment limitations. Repatriation of investment income, capital and the proceeds of sales by foreign investors may require governmental registration and/or approval in some emerging countries. A Fund could be adversely affected by delays in, or a refusal to grant, any required governmental registration or approval for such repatriation. Any investment subject to such repatriation controls will be considered illiquid if it appears reasonably likely that this process will take more than seven days.

Certain emerging market countries may be subject to less stringent requirements regarding accounting, auditing, financial reporting and record keeping and therefore, material information related to an investment may not be available or reliable. In addition, a Fund 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.

Investment in emerging market or developing countries may entail purchasing securities issued by or on behalf of entities that are insolvent, bankrupt, in default or otherwise engaged in an attempt to reorganize or reschedule their obligations and in entities that have little or no proven credit rating or credit history. In any such case, the issuer’s poor or deteriorating financial condition may increase the likelihood that a Fund will experience losses or diminution in available gains due to bankruptcy, insolvency or fraud.

Emerging market or developing countries also pose the risk of nationalization, expropriation or confiscatory taxation, political changes, government regulation, social instability or diplomatic developments (including war) that could adversely affect the economies of such countries or the value of a Fund's investments in those countries. In addition, it may be difficult to obtain and enforce a judgment in a court outside the United States.

A Fund may also be exposed to an extra degree of custodial and/or market risk, especially where the securities purchased are not traded on an official exchange or where ownership records regarding the securities are maintained by an unregulated entity (or even the issuer itself).

Sukuk. The Fund may invest in Sukuk, which are foreign or emerging market securities based on Islamic principles. Sukuk are securities with cash flows similar to conventional bonds, issued by an issuer, which is usually a special purpose vehicle ("SPV") incorporated by the sovereign or corporate entity seeking financing, to obtain an upfront payment in exchange for an income stream and a future promise to return capital. Sukuk are designed to comply with Islamic religious law, commonly known as Sharia and, accordingly, do not pay interest. Instead, Sukuk securities represent a contractual obligation of the issuer or issuing vehicle to make periodic distributions (such as income or other periodic payments) to the investor on pre-defined distribution dates and to return capital on a specified date, and such contractual payment obligation is linked to the issuer or issuing vehicle and not from interest on the investor's money for Sukuk. Sukuk may be linked to income streams relating to tangible assets, but even in respect of such Sukuk, the Fund will not have a direct interest in, or recourse to, the underlying asset or pool of assets.

In the event of a default or the insolvency of the issuer, the resolution process can be expected to take longer than for conventional bonds. Sukuk remain relatively new instruments, and evolving interpretations of Islamic law by courts, regulators and prominent scholars may affect liquidity, prices, free transferability and the ability and willingness of issuers of Sukuk to make payments in ways that cannot now be foreseen. In addition, issuers have, in the past, challenged the Islamic compliance of certificates. If any such or analogous events should occur, the Fund may be required to hold its Sukuk for longer than intended, even if their value or other condition is deteriorating. In such circumstances, the Fund may not be able to achieve expected returns on its investment in Sukuk or any returns at all.

Issuers of Sukuk may include SPVs established by corporations and financial institutions, foreign governments and agencies of foreign governments. Underlying assets may include, without limitation, real estate (developed and undeveloped), lease contracts, forward-sale commodity contracts and machinery and equipment. Although the Sukuk market has grown significantly in recent years, there may be times when the market is illiquid and where it is difficult for the Fund to make an investment in or dispose of Sukuk at the desired time or price. Sukuk involve many of the same risks that conventional bonds incur, such as credit risk and interest rate risk, as well as the risks associated with foreign or emerging market securities. In addition to these risks, there are certain risks specific to Sukuk, such as those relating to their structures. Furthermore, the global Sukuk market is significantly smaller than conventional bond markets, which may impact liquidity and the ability for the Fund to sell Sukuk at a desired time or price.

The unique characteristics of Sukuk may lead to uncertainties regarding their tax treatment within the Fund. In light of tax requirements applicable to the Fund, it may be necessary or advisable for the Fund to sell one or more Sukuk (or another investment) sooner than otherwise anticipated. As a result, the Fund may incur taxable gains or investment losses, as well as costs associated with such transaction.

Foreign Fixed-Income Securities. Foreign fixed-income securities are fixed-income securities that may be denominated in foreign currency and traded primarily outside of the United States, which include: (1) obligations issued or guaranteed by foreign national governments, their agencies, instrumentalities, or political subdivisions ("sovereign debt"); (2) debt securities issued, guaranteed or sponsored by supranational organizations established or supported by several national governments, the European Community, the Asian Development Bank and others; (3) non-government foreign corporate debt securities; and (4) foreign mortgage securities and various other mortgages and asset-backed securities.

Certain emerging market or developing countries are among the largest debtors to commercial banks and foreign governments. The issuer or governmental authority that controls the repayment of sovereign debt may not be willing or able to repay the principal and/or pay interest when due in accordance with the terms of such obligations.

A governmental entity's willingness or ability to repay principal and pay interest due in a timely manner may be affected by, among other factors, its cash flow situation, the extent of its foreign reserves, the availability of sufficient foreign exchange on the date a payment is due, the relative size of the debt service burden to the economy as a whole, the government's dependence on expected disbursements from third-parties, the government's policy toward the International Monetary Fund and the political constraints to which a government may be subject. Governmental entities may also be dependent on expected disbursements from foreign governments, multilateral agencies and others abroad to reduce principal and interest arrearages on their debt. The commitment on the part of these governments, agencies and others to make such disbursements may be conditioned on a debtor's implementation of economic reforms or economic performance and the timely service of such debtor's obligations. Failure to implement such reforms, achieve such levels of economic performance or repay principal or interest when due may result in the cancellation of such third-parties' commitments to lend funds to the government debtor, which may further impair such debtor's ability or willingness to

timely service its debts. Holders of sovereign debt may be requested to participate in the rescheduling of such debt and to extend further loans to governmental entities. In addition, no assurance can be given that the holders of commercial bank debt will not contest payments to the holders of other foreign government debt obligations in the event of default under their commercial bank loan agreements. The issuers of the government debt securities in which a Fund may invest have in the past experienced substantial difficulties in servicing their external debt obligations, which led to defaults on certain obligations and the restructuring of certain indebtedness. Restructuring arrangements have included, among other things, reducing and rescheduling interest and principal payments by negotiating new or amended credit agreements or converting outstanding principal and unpaid interest to Brady Bonds, and obtaining new credit to finance interest payments. There can be no assurance that the Brady Bonds and other foreign government debt securities in which the Fund may invest will not be subject to similar restructuring arrangements or to requests for new credit, which may adversely affect the Fund's holdings. (See "Brady Bonds" above.) Furthermore, certain participants in the secondary market for such debt may be directly involved in negotiating the terms of these arrangements and may therefore have access to information not available to other market participants.

Foreign Currency Transactions. The U.S. dollar value of the assets of the Funds, to the extent they invest in securities denominated in foreign currencies, may be affected favorably or unfavorably by changes in foreign currency exchange rates and exchange control regulations, and the Funds may incur costs in connection with conversions between various currencies. Currency exchange rates may fluctuate significantly over short periods of time for a number of reasons, including changes in interest rates and the overall economic health of the issuer. Devaluation of a currency by a country's government or banking authority also will have a significant impact on the value of any investments denominated in that currency. The Funds may conduct their foreign currency exchange transactions on a spot (i.e., cash) basis at the then-prevailing spot rate in the foreign currency exchange market. The Funds also may manage their foreign currency transactions by entering into foreign currency forward exchange contracts to purchase or sell foreign currencies or by using other instruments and techniques described under "Derivatives."

Under normal circumstances, consideration of the prospect for changes in the values of currency will be incorporated into the long-term investment decisions made with regard to overall diversification strategies. However, the Adviser believes that it is important to have the flexibility to use such derivative products when it determines that it is in the best interests of a Fund. It may not be practicable to hedge foreign currency risk in all markets, particularly emerging markets.

Principal Exchange Rate Linked Securities. Principal exchange rate linked securities are debt obligations the principal of which is payable at maturity in an amount that may vary based on the exchange rate between the U.S. dollar and a particular foreign currency at or about that time. The return on "standard" principal exchange rate linked securities is enhanced if the foreign currency to which the security is linked appreciates against the U.S. dollar, and is adversely affected by increases in the foreign exchange value of the U.S. dollar; "reverse" principal exchange rate linked securities are like the "standard" securities, except that their return is enhanced by increases in the value of the U.S. dollar and adversely impacted by increases in the value of foreign currency. Interest payments on the securities are generally made in U.S. dollars at rates that reflect the degree of foreign currency risk assumed or given up by the purchaser of the notes (i.e., at relatively higher interest rates if the purchaser has assumed some foreign currency risk).

Investment Funds. Some emerging market countries have laws and regulations that currently preclude direct investment or make it undesirable to invest directly in the securities of their companies. However, indirect investment in the securities of companies listed and traded on the stock exchanges in these countries is permitted by certain emerging market countries through investment funds that have been specifically authorized. A Fund may invest in these investment funds subject to the provisions of the 1940 Act, as applicable, and other applicable laws. The Funds will invest in such investment funds only where appropriate given that the Fund's shareholders will bear indirectly the layer of expenses of the underlying investment funds in addition to their proportionate share of the expenses of the Fund.

Exchange-Listed Equities via Stock Connect Program. The Shanghai-Hong Kong Stock Connect program and the Shenzhen-Hong Kong Stock Connect programs ("Stock Connect") allow non-Chinese investors (such as a Fund) 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 may prevent a Fund 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 may restrict a Fund'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, 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 may fluctuate at times when a Fund is unable to add to or exit its position. Only certain China A-shares are eligible to be accessed through Stock Connect. Such securities may 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 (such as a Fund) by the Hong Kong Securities Clearing Company Limited (“HKSCC”) as nominee. 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 may 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, a Fund’s ability to enforce its ownership rights may be negatively impacted. A Fund may not be able to participate in corporate actions affecting Stock Connect securities due to time constraints or for other operational reasons. A Fund 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 a Fund does not utilize a special segregated account, the Fund 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 may, as a practical matter, limit the number of brokers that a Fund may use to execute trades. While a Fund may 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 may require aggregation of a Fund’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 may be imposed until regulatory filings are completed or complying with China’s short-term trading rules.

OTHER SECURITIES AND INVESTMENT STRATEGIES

Borrowing for Investment Purposes. Borrowing for investment purposes creates leverage which is a speculative characteristic. Funds authorized to borrow will do so only when the Adviser believes that borrowing will benefit the Fund after taking into account considerations such as the costs of borrowing and the likely investment returns on securities purchased with borrowed funds. Borrowing by a Fund will create the opportunity for increased net income but, at the same time, will involve special risk considerations. Leverage that results from borrowing will magnify declines as well as increases in a Fund’s NAV and net yield. Each Fund that engages in borrowing expects that all of its borrowing will be made on a secured basis. The Fund will either segregate the assets securing the borrowing for the benefit of the lenders or arrangements will be made with a suitable sub-custodian. If assets used to secure the borrowing decrease in value, a Fund may be required to pledge additional collateral to the lender in the form of cash or securities to avoid liquidation of those assets.

Loans of Portfolio Securities. Each Fund may lend its portfolio securities to brokers, dealers, banks and other institutional investors. By lending its portfolio securities, a Fund attempts to increase its net investment income through the receipt of interest on the cash collateral with respect to the loan or fees received from the borrower in connection with the loan. Any gain or loss in the market price of the securities loaned that might occur during the term of the loan would be for the account of the Fund. Each Fund employs an agent to implement the securities lending program and the agent receives a fee from the Funds for its services. A Fund will not lend more than 33⅓% of the value of its total assets.

Each Fund may lend its portfolio securities so long as the terms, structure and the aggregate amount of such loans are not inconsistent with the 1940 Act or the rules and regulations or interpretations of the SEC thereunder, which currently require that (i) the borrower pledge and maintain with the Fund collateral consisting of liquid, unencumbered assets having a value not less than 100% of the value of the securities loaned; (ii) the borrower adds to such collateral whenever the price of the securities loaned rises (i.e., the borrower “marks-to-market” on a daily basis); (iii) the loan be made subject to termination by the Fund at any time; and (iv) the Fund receives a reasonable return on the loan (which may include the Fund investing any cash collateral in interest bearing short-term investments), any distributions on the loaned securities and any increase in their market value. In addition, voting rights may pass with the loaned securities, but a Fund will retain the right to call any security in anticipation of a vote that the Adviser deems material to the security on loan.

Loans of securities involve a risk that the borrower may fail to return the securities or may fail to maintain the proper amount of collateral, which may result in a loss of money by a Fund. There may 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 by the Adviser to be creditworthy and when, in the

judgment of the Adviser, the income that can be earned from such securities loans justifies the attendant risk. All relevant facts and circumstances, including the creditworthiness of the broker, dealer, bank or institution, will be considered in making decisions with respect to the lending of securities, subject to review by the Company's Board of Directors. Each Fund 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.

Non-Publicly Traded Securities, Private Placements and Restricted Securities. The Funds may invest in securities that are neither listed on a stock exchange nor traded OTC, including privately placed and restricted securities. Such unlisted securities may involve a higher degree of business and financial risk that can result in substantial losses. As a result of the absence of a public trading market for these securities, they may be less liquid than publicly traded securities. Although these securities may be resold in privately negotiated transactions, the prices realized from these sales could be less than those originally paid by the Fund or less than what may be considered the fair value of such securities. Furthermore, companies whose securities are not publicly traded may not be subject to the disclosure and other investor protection requirements which might be applicable if their securities were publicly traded. The illiquidity of the market, as well as the lack of publicly available information regarding these securities, may also adversely affect the ability of the Funds to arrive at a fair value for certain securities at certain times and could make it difficult for the Funds to sell certain securities. If such securities are required to be registered under the securities laws of one or more jurisdictions before being sold, a Fund may be required to bear the expenses of registration.

The Funds may purchase equity securities, in a private placement, that are issued by issuers who have outstanding, publicly-traded equity securities of the same class ("private investments in public equity" or "PIPEs"). Shares in PIPEs generally are not registered with the SEC until after a certain time period from the date the private sale is completed. This restricted period can last many months. Until the public registration process is completed, PIPEs are restricted as to resale and the Funds cannot freely trade the securities. Generally, such restrictions cause the PIPEs to be illiquid during this time. PIPEs may contain provisions that the issuer will pay specified financial penalties to the holder if the issuer does not publicly register the restricted equity securities within a specified period of time, but there is no assurance that the restricted equity securities will be publicly registered, or that the registration will remain in effect.

Reverse Repurchase Agreements. Under a reverse repurchase agreement, a Fund sells a security and promises to repurchase that security at an agreed-upon future date and price. The price paid to repurchase the security reflects interest accrued during the term of the agreement. Reverse repurchase agreements may be entered into for, among other things, obtaining leverage, facilitating short-term liquidity or when the Adviser expects that the interest income to be earned from the investment of the transaction proceeds will be greater than the related interest expense. Please see "Derivatives Agreements -- Regulatory Matters." Reverse repurchase agreements may be viewed as a speculative form of borrowing called leveraging. 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 a Fund may decline below the price of the securities the Fund has sold but is obligated to repurchase, (iii) the market value of the securities sold will decline below the price at which the Fund is required to repurchase them and (iv) the securities will not be returned to the Fund.

In addition, the use of leverage may cause a Fund to liquidate portfolio positions when it may not be advantageous to do so to satisfy its obligations. Leverage, including borrowing, may cause a Fund to be more volatile than if the Fund had not been leveraged. This is because leverage tends to exaggerate the effect of any increase or decrease in the value of a Fund's portfolio securities. All forms of borrowing (including reverse repurchase agreements) are limited in the aggregate and may not exceed 33⅓% of the Fund's total assets, except as permitted by law or SEC requirements.

Short Sales. A short sale is a transaction in which a Fund sells securities 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 price of the securities. To deliver the securities to the buyer, a Fund arranges through a broker to borrow the securities and, in so doing, the Fund becomes obligated to replace the securities borrowed at their market price at the time of replacement. When selling short, a Fund intends to replace the securities at a lower price and therefore, profit from the difference between the cost to replace the securities and the proceeds received from the sale of the securities. When a Fund makes a short sale, the proceeds it receives from the sale will be held on behalf of a broker until the Fund replaces the borrowed securities. A Fund may have to pay a premium to borrow the securities and must pay any dividends or interest payable on the securities until they are replaced.

A Fund's obligation to replace the securities borrowed in connection with a short sale will be secured by collateral deposited with the broker that consists of cash or other liquid securities. Short sales by a Fund involve certain risks and special considerations. If the Adviser incorrectly predicts that the price of the borrowed security will decline, a Fund will have to replace the securities with securities with a greater value than the amount received from the sale. As a result, losses from short sales differ from losses that could be incurred from a purchase of a security, because losses from short sales may be unlimited, whereas losses from purchases can equal only the total amount invested. Please see "Derivatives Agreements -- Regulatory Matters".

Temporary Borrowing. Each Fund is permitted to borrow from banks for extraordinary or emergency purposes. For example, the Funds may borrow for temporary defensive purposes or to meet shareholder redemptions when the Adviser believes that it would not be in the best interests of a Fund to liquidate portfolio holdings. Except in the case of the Emerging Markets Debt Portfolio, the Fund will not purchase additional securities while temporary borrowings exceed 5% of its total assets.

The Board of Directors of the Company has approved procedures whereby the Funds together with other investment companies advised by the Adviser or its affiliates may enter into a joint line of credit arrangement with a bank. Each Fund would be liable only for its own temporary borrowings under the joint line of credit arrangements.

When, As and If Issued Securities. A Fund may purchase securities on a “when, as and if issued” basis, under which the issuance of the security depends upon the occurrence of a subsequent event, such as approval of a merger, corporate reorganization or debt restructuring. The commitment for the purchase of any such security will not be recognized in the portfolio of a Fund until the Adviser determines that issuance of the security is probable. At that time, a Fund will record the transaction and, in determining its NAV, will reflect the value of the security daily.

An increase in the percentage of a Fund’s assets committed to the purchase of securities on a “when, as and if issued” basis may increase the volatility of its NAV. A Fund may also sell securities on a “when, as and if issued” basis provided that the issuance of the security will result automatically from the exchange or conversion of a security owned by the Fund at the time of sale.

When-Issued and Delayed Delivery Securities, TBAs and Forward Commitments. A Fund may purchase or sell securities on a when-issued or delayed delivery basis or may purchase or sell securities on a forward commitment basis. When these transactions are negotiated, the price is fixed at the time of the commitment, but delivery and payment can take place a month or more after the date of commitment. The Funds may sell the securities before the settlement date if it is deemed advisable. The securities so purchased or sold are subject to market fluctuation and no interest or dividends accrue to the purchaser prior to the settlement date. In addition, a Fund may invest in to-be-announced pass-through mortgage securities, which settle on a delayed delivery basis (“TBAs”). In a TBA transaction, the buyer and seller agree upon general trade parameters such as agency, settlement date, par amount, and price at the time the contract is entered into but the MBS are delivered in the future, generally 30 days later. Accordingly, a Fund’s investments in TBAs are subject to risks such as failure of the counterparty to perform its obligation to deliver the security, the characteristics of a security delivered to a Fund may be less favorable than expected and the security a Fund buys will lose value prior to its delivery.

At the time a Fund makes the commitment to purchase or sell securities on a when-issued, delayed delivery or forward commitment basis, it will record the transaction and thereafter reflect the value, each day, of such security purchased, or if a sale, the proceeds to be received, in determining its NAV. At the time of delivery of the securities, their value may be more or less than the purchase or sale price. An increase in the percentage of a Fund’s assets committed to the purchase of securities on a when-issued, delayed delivery or forward commitment basis may increase the volatility of its NAV.

Derivatives. Certain Funds may, but are not required to, use various derivatives and other similar instruments as described below. Derivatives may be used for a variety of purposes including hedging, risk management, portfolio management or to earn income. Any or all of the investment techniques described herein may be used at any time and there is no particular strategy that dictates the use of one technique rather than another, as the use of any derivative by a Fund is a function of numerous variables, including market conditions. A Fund complies with applicable regulatory requirements when using derivatives. Although the Adviser seeks to use derivatives to further a Fund’s investment objective, no assurance can be given that the use of derivatives will achieve this result.

General Risks of Derivatives. Derivatives utilized by a Fund may involve the purchase and sale of derivative instruments. A derivative is a financial instrument the value of which depends upon (or derives from) the value of another asset, security, interest rate, index or financial instrument. Derivatives may relate to a wide variety of underlying instruments, including equity and debt securities, indices, interest rates, currencies and other assets. Certain derivative instruments that a Fund may use and the risks of those instruments are described in further detail below. A Fund may in the future also utilize derivatives techniques, instruments and strategies that may be newly developed or permitted as a result of regulatory changes, consistent with a Fund’s investment objective and policies. Such newly developed techniques, instruments and strategies may involve risks different than or in addition to those described herein. No assurance can be given that any derivatives strategy employed by a Fund will be successful.

The risks associated with the use of derivatives are different from, and possibly greater than, the risks associated with investing directly in the instruments underlying such derivatives. Derivatives are highly specialized instruments that require investment techniques and risk analyses different from other portfolio investments. The use of derivative instruments requires an understanding not only of the underlying instrument but also of the derivative itself. Certain risk factors generally applicable to derivative transactions are described below.

- Derivatives are subject to the risk that the market value of the derivative itself or the market value of underlying instruments will change in a way adverse to a Fund’s interests. A Fund bears the risk that the Adviser may incorrectly forecast future market trends and other financial or economic factors or the value of the underlying security, index, interest rate or currency when establishing a derivatives position for a Fund.
- Derivatives may be subject to pricing risk, which exists when a derivative becomes extraordinarily expensive (or inexpensive)

relative to historical prices or corresponding instruments. Under such market conditions, it may not be economically feasible to initiate a transaction or liquidate a position at an advantageous time or price.

- Many derivatives are complex and often valued subjectively. Improper valuations can result in increased payment requirements to counterparties or a loss of value to a Fund. Many derivatives may also involve operational and legal risks.
- Using derivatives as a hedge against a portfolio investment subjects a Fund to the risk that the derivative will have imperfect correlation with the portfolio investment, which could result in a Fund incurring substantial losses. This correlation risk may be greater in the case of derivatives based on an index or other basket of securities, as the portfolio securities being hedged may not duplicate the components of the underlying index or the basket may not be of exactly the same type of obligation as those underlying the derivative. The use of derivatives for “cross hedging” purposes (using a derivative based on one instrument as a hedge on a different instrument) may also involve greater correlation risks.
- While using derivatives for hedging purposes can reduce a Fund’s risk of loss, it may also limit a Fund’s opportunity for gains or result in losses by offsetting or limiting a Fund’s ability to participate in favorable price movements in portfolio investments.
- Derivatives transactions for non-hedging purposes involve greater risks and may result in losses which would not be offset by increases in the value of portfolio securities or declines in the cost of securities to be acquired. In the event that a Fund enters into a derivatives transaction as an alternative to purchasing or selling the underlying instrument or in order to obtain desired exposure to an index or market, a Fund will be exposed to the same risks as are incurred in purchasing or selling the underlying instruments directly as well as the additional risks associated with derivatives transactions.
- The use of certain derivatives transactions, including OTC derivatives, involves the risk of loss resulting from the insolvency or bankruptcy of the counterparty to the contract or the failure by the counterparty to make required payments or otherwise comply with the terms of the contract. In the event of default by a counterparty, a Fund may have contractual remedies pursuant to the agreements related to the transaction.
- Liquidity risk exists when a particular derivative is difficult to purchase or sell. If a derivative transaction is particularly large or if the relevant market is illiquid, a Fund may be unable to initiate a transaction or liquidate a position at an advantageous time or price.
- While some derivatives are cleared through a regulated, central clearinghouse, many derivatives transactions are not entered into or traded on exchanges or in markets regulated by the U.S. Commodity Futures Trading Commission (“CFTC”) or the SEC. Instead, in some cases, certain types of bilateral OTC derivatives are entered into directly by a Fund and a counterparty and may be traded only through financial institutions acting as market makers. OTC derivatives transactions can only be entered into with a willing counterparty that is approved by the Adviser in accordance with guidelines established by the Board. Where no such counterparty is available, a Fund will be unable to enter into a desired OTC transaction. There also may be greater risk that no liquid secondary market in the trading of OTC derivatives will exist, in which case a Fund may be required to hold such instruments until exercise, expiration or maturity. Many of the protections afforded to participants in the cleared derivatives markets are not available to participants in bilateral OTC derivatives transactions. Bilateral OTC derivatives transactions are not subject to the guarantee of a clearinghouse and, as a result, a Fund would bear greater risk of default by the counterparties to such transactions.
- A Fund may be required to make physical delivery of portfolio securities underlying a derivative in order to close out or to meet margin and payment requirements and a derivatives position or to sell portfolio securities at a time or price at which it may be disadvantageous to do so in order to obtain cash to close out or to maintain a derivatives position.
- As a result of the structure of certain derivatives, adverse changes in, among other things, interest rates, volatility or the value of the underlying instrument can result in losses substantially greater than the amount invested in the derivative itself. Certain derivatives have the potential for unlimited loss, regardless of the size of the initial investment.
- Certain derivatives may be classified as illiquid and therefore subject to a Fund’s limitation on investments in illiquid investments.
- Derivatives transactions conducted outside the United States may not be conducted in the same manner as those entered into on U.S. exchanges, and may be subject to different margin, exercise, settlement or expiration procedures. Brokerage commissions, clearing costs and other transaction costs may be higher on foreign exchanges. Many of the risks of OTC derivatives transactions are also applicable to derivatives transactions conducted outside the United States. Derivatives transactions conducted outside the United States are subject to the risk of governmental action affecting the trading in, or the prices of, foreign securities, currencies and other instruments. The value of such positions could be adversely affected by foreign political and economic factors; lesser availability of data on which to make trading decisions; delays on a Fund’s ability to act upon economic events occurring in foreign markets; and less liquidity than U.S. markets.
- Currency derivatives are subject to additional risks. Currency derivatives transactions may be negatively affected by government exchange controls, blockages and manipulation. Currency exchange rates may be influenced by factors extrinsic to a country’s economy. There is no systematic reporting of last sale information with respect to underlying foreign currencies. As a result, the available information on which trading in currency derivatives will be based may not be as complete as comparable data for other transactions. Events could occur in the foreign currency market which will not be reflected in currency derivatives until the following day, making it more difficult for a Fund to respond to such events in a timely manner.

Regulatory Matters. Regulatory developments affecting the exchange-traded and OTC derivatives markets may impair a Fund’s ability to manage or hedge its investment portfolio through the use of derivatives. In particular, in October 2020, the SEC adopted a final

rule related to the use of derivatives, short sales, reverse repurchase agreements and certain other transactions by registered investment companies that rescinded and withdrew the guidance of the SEC and its staff regarding asset segregation and cover transactions previously applicable to a Fund's derivatives and other transactions. These requirements may limit the ability of a Fund to use derivatives and reverse repurchase agreements and similar financing transactions as part of its investment strategies. The final rule requires Funds to trade derivatives and other transactions that create future payment or delivery obligations subject to a value-at-risk ("VaR") leverage limit, certain derivatives risk management program and reporting requirements. Generally, these requirements apply unless a Fund qualifies as a "limited derivatives user." Under the final rule, when a Fund trades reverse repurchase agreements or similar financing transactions, including certain tender option bonds, it needs to aggregate the amount of indebtedness associated with the reverse repurchase agreements or similar financing transactions with the aggregate amount of any other senior securities representing indebtedness when calculating the Fund's asset coverage ratio or treat all such transactions as derivatives transactions. Reverse repurchase agreements or similar financing transactions aggregated with other indebtedness do not need to be included in the calculation of whether a Fund is a limited derivatives user, but for funds subject to the VaR testing, reverse repurchase agreements and similar financing transactions must be included for purposes of such testing whether treated as derivatives transactions or not. The SEC also provided guidance in connection with the rule regarding use of securities lending collateral that may limit the Funds' securities lending activities. In addition, under the rule, the Fund is permitted to invest in a security on a when-issued or forward-settling basis, or with a non-standard settlement cycle, and the transaction will be deemed not to involve a senior security under the 1940 Act, provided that (i) the Fund intends to physically settle the transaction and (ii) the transaction will settle within 35 days of its trade date (the "Delayed-Settlement Securities Provision"). The Fund may otherwise engage in such transactions that do not meet the conditions of the Delayed-Settlement Securities Provision so long as the Fund treats any such transaction as a "derivatives transaction" for purposes of compliance with the rule. Furthermore, under the rule, the Fund will be permitted to enter into an unfunded commitment agreement, and such unfunded commitment agreement will not be subject to the asset coverage requirements under the 1940 Act, if the Fund reasonably believes, at the time it enters into such agreement, that it will have sufficient cash and cash equivalents to meet its obligations with respect to all such agreements as they come due. These requirements may increase the cost of a Fund's investments and cost of doing business, which could adversely affect investors.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") and the rules promulgated thereunder may limit the ability of a Fund to enter into one or more exchange-traded or OTC derivatives transactions.

The Adviser is subject to registration and regulation as a "commodity pool operator" ("CPO") under the Commodity Exchange Act, as amended ("CEA"), with respect to its service as investment adviser to the Global Strategist Portfolio. As a result, the Company, on behalf of the Global Strategist Portfolio, will be required to operate in compliance with applicable CFTC requirements, including registration, disclosure, reporting and other operational requirements under the CEA and related CFTC regulations. Compliance with these additional requirements may increase Company expenses. The Adviser and the Global Strategist Portfolio are exempt from certain CFTC recordkeeping, reporting and disclosure requirements under CFTC Rule 4.7 with respect to the Global Strategist Subsidiary (as defined below).

The Adviser, with respect to each Fund except for Global Strategist Portfolio, has filed a notice of eligibility with the National Futures Association ("NFA") claiming an exclusion from the definition of the term CPO pursuant to CFTC Regulation 4.5, as promulgated under the CEA, with respect to each Fund's operations. In addition, the Adviser will operate each Bitcoin Subsidiary (as defined below) in reliance on an exemption from registration as a CPO under CFTC Regulation 4.13(a)(3). Therefore, neither the Funds nor the Adviser (with respect to the Funds and each Bitcoin Subsidiary), except for Global Strategist Portfolio and Global Strategist Subsidiary, is subject to registration or regulation as a commodity pool or CPO under the CEA. If the Adviser or a Fund becomes subject to these requirements, as well as related NFA rules, the Fund may incur additional compliance and other expenses.

With respect to investments in swap transactions, commodity futures, commodity options or certain other commodity interests used for purposes other than bona fide hedging purposes, as such term is defined in CFTC regulations, an investment company must meet one of the following tests under the amended regulations in order for its investment adviser to claim an exemption from being considered a CPO. First, the aggregate initial margin and premiums required to establish an investment company's positions in such investments may not exceed five percent (5%) of the liquidation value of the investment company's portfolio (after accounting for unrealized profits and unrealized losses on any such investments). Alternatively, the aggregate net notional value of such instruments, determined at the time of the most recent position established, may not exceed one hundred percent (100%) of the liquidation value of the investment company's portfolio (after accounting for unrealized profits and unrealized losses on any such positions). In addition to meeting one of the foregoing trading limitations, the investment company may not market itself as a commodity pool or otherwise as a vehicle for trading in the commodity futures, commodity options or swaps and derivatives markets.

Regulations recently adopted by federal banking regulators under the Dodd-Frank Act require that certain qualified financial contracts ("QFCs") with counterparties that are part of U.S. or foreign global systemically important banking organizations be amended to include contractual restrictions on close-out and cross-default rights. QFCs include, but are not limited to, securities contracts, commodities contracts, forward contracts, repurchase agreements, securities lending agreements and swaps agreements, as well as related master agreements, security agreements, credit enhancements, and reimbursement obligations. If a covered

counterparty of a Fund or certain of the covered counterparty's affiliates were to become subject to certain insolvency proceedings, a Fund may be temporarily unable to exercise certain default rights, and the QFC may be transferred to another entity. These requirements may impact a Fund's credit and counterparty risks.

Contracts for Difference. Certain Funds may purchase contracts for difference ("CFDs"). A CFD is a privately negotiated contract between two parties, buyer and seller, stipulating that the seller will pay to or receive from the buyer the difference between the nominal value of the underlying instrument at the opening of the contract and that instrument's value at the end of the contract. The underlying instrument may be a single security, stock basket or index. A CFD can be set up to take either a short or long position on the underlying instrument. The buyer and seller are typically both required to post margin, which is adjusted daily. The buyer will also pay to the seller a financing rate on the notional amount of the capital employed by the seller less the margin deposit. A CFD is usually terminated at the buyer's initiative. The seller of the CFD will simply match the exposure of the underlying instrument in the open market and the parties will exchange whatever payment is due.

As is the case with owning any financial instrument, there is the risk of loss associated with buying a CFD. For example, if a Fund buys a long CFD and the underlying security is worth less at the end of the contract, the Fund would be required to make a payment to the seller and would suffer a loss. Also, there may be liquidity risk if the underlying instrument is illiquid because the liquidity of a CFD is based on the liquidity of the underlying instrument. A further risk is that adverse movements in the underlying security will require the buyer to post additional margin. CFDs also carry counterparty risk, i.e., the risk that the counterparty to the CFD transaction may be unable or unwilling to make payments or to otherwise honor its financial obligations under the terms of the contract. If the counterparty were to do so, the value of the contract, and of a Fund's shares, may be reduced. A Fund will not enter into a CFD transaction that is inconsistent with its investment objective, policies and strategies.

Options. An option is a contract that gives the holder of the option the right, but not the obligation, to buy from (in the case of a call option) or sell to (in the case of a put option) the buyer or seller, as applicable, of the option (the "option writer") the underlying instrument at a specified fixed price (the "exercise price") on or prior to a specified date for American options or only at expiration for European options (the "expiration date"). The buyer of the option pays to the option writer the option premium, which is the purchase price of the option.

Exchange-traded options are issued by a regulated intermediary such as the Options Clearing Corporation ("OCC"), which guarantees the performance of the obligations of the parties to such options. OTC options are purchased from or sold to counterparties through direct bilateral agreements between a Fund and its counterparties. Certain options, such as options on individual securities, are settled through physical delivery of the underlying security, whereas other options, such as index options, may be settled in cash in an amount based on the difference between the value of the underlying instrument and the strike price, which is then multiplied by a specified multiplier.

Writing Options. Certain Funds may write call and put options. As the writer of a call option, a Fund receives the premium from the purchaser of the option and has the obligation, upon exercise of the option, to deliver the underlying security upon payment of the exercise price. If the option expires without being exercised a Fund is not required to deliver the underlying security and retains the premium received.

Certain Funds may write call options that are "covered." A call option on a security is covered if (a) a Fund owns the security underlying the call or has an absolute and immediate right to acquire that security without additional cash consideration (or, if additional cash consideration is required, such amount is maintained by a Fund in earmarked or segregated cash or liquid assets) upon conversion or exchange of other securities held by a Fund; or (b) a Fund has purchased a call on the underlying security, the exercise price of which is (i) equal to or less than the exercise price of the call written, or (ii) greater than the exercise price of the call written, provided the difference is maintained by a Fund in earmarked or segregated cash or liquid assets.

Selling call options involves the risk that a Fund may be required to sell the underlying security at a disadvantageous price, below the market price of such security, at the time the option is exercised. As the writer of a covered call option, a Fund forgoes, during the option's life, the opportunity to profit from increases in the market value of the underlying security covering the option above the sum of the premium and the exercise price but retains the risk of loss should the price of the underlying security decline.

Certain Funds may write put options. As the writer of a put option, a Fund receives the premium from the purchaser of the option and has the obligation, upon exercise of the option, to pay the exercise price and receive delivery of the underlying security. If the option expires without being exercised, a Fund is not required to receive the underlying security in exchange for the exercise price and retains the option premium.

A Fund may write put options that are "covered." A put option on a security is covered if (a) a Fund earmarks or segregates cash or liquid assets equal to the exercise price; or (b) a Fund has purchased a put on the same security as the put written, the exercise price of which is (i) equal to or greater than the exercise price of the put written, or (ii) less than the exercise price of the put written, provided the difference is maintained by a Fund in earmarked or segregated cash or liquid assets.

Selling put options involves the risk that a Fund may be required to buy the underlying security at a disadvantageous price, above the market price of such security, at the time the option is exercised. While a Fund's potential gain in writing a covered put option is limited to the premium received plus the interest earned on the liquid assets covering the put option, a Fund's risk of loss is equal to the entire value of the underlying security, offset only by the amount of the premium received.

A Fund may close out an options position that it has written through a closing purchase transaction. A Fund could execute a closing purchase transaction with respect to a written call option by purchasing a call option on the same underlying security that has the same exercise price and expiration date as the call option written by a Fund. A Fund could execute a closing purchase transaction with respect to a put option written by purchasing a put option on the same underlying security and having the same exercise price and expiration date as the put option written by a Fund. A closing purchase transaction may or may not result in a profit to a Fund. A Fund can close out its position as an option writer only if a liquid market exists for options on the same underlying security that have the same exercise price and expiration date as the option written by a Fund. There is no assurance that such a market will exist with respect to any particular option.

The writer of an American option generally has no control over the time when the option is exercised and the option writer is required to deliver or acquire the underlying security. Once an option writer has received an exercise notice, it cannot effect a closing purchase transaction in order to terminate its obligation under the option. Thus, the use of options may require a Fund to buy or sell portfolio securities at inopportune times or for prices other than the current market values of such securities, which may limit the amount of appreciation a Fund can realize on an investment, or may cause a Fund to hold a security that it might otherwise sell.

Purchasing Options. Certain Funds may purchase call and put options. As the buyer of a call option, a Fund pays the premium to the option writer and has the right to purchase the underlying security from the option writer at the exercise price. If the market price of the underlying security rises above the exercise price, a Fund could exercise the option and acquire the underlying security at a below-market price, which could result in a gain to a Fund, minus the premium paid. As the buyer of a put option, a Fund pays the premium to the option writer and has the right to sell the underlying security to the option writer at the exercise price. If the market price of the underlying security declines below the exercise price, a Fund could exercise the option and sell the underlying security at an above-market price, which could result in a gain to a Fund, minus the premium paid. A Fund may buy call and put options whether or not it holds the underlying securities.

As a buyer of a call or put option, a Fund may sell put or call options that it has purchased at any time prior to such option's expiration date through a closing sale transaction. The principal factors affecting the market value of a put or a call option include supply and demand, interest rates, the current market price of the underlying security in relation to the exercise price of the option, the volatility of the underlying security, the underlying security's dividend policy, and the time remaining until the expiration date. A closing sale transaction may or may not result in a profit to a Fund. A Fund's ability to initiate a closing sale transaction is dependent upon the liquidity of the options market and there is no assurance that such a market will exist with respect to any particular option. If a Fund does not exercise or sell an option prior to its expiration date, the option expires and becomes worthless.

OTC Options. Unlike exchange-traded options, which are standardized with respect to the underlying instrument, expiration date, contract size and strike price, the terms of OTC options generally are established through negotiation between the parties to the options contract. This type of arrangement allows the purchaser and writer greater flexibility to tailor the option to their needs. OTC options are available for a greater variety of securities or baskets of securities, and in a wider range of expiration dates and exercise prices, than exchange-traded options. However, unlike exchange-traded options, which are issued and guaranteed by a regulated intermediary, such as the OCC, OTC options are entered into directly with the counterparty. Unless the counterparties provide for it, there is no central clearing or guaranty function for an OTC option. Therefore, OTC options are subject to the risk of default or non-performance by the counterparty. Accordingly, the Adviser must assess the creditworthiness of the counterparty to determine the likelihood that the terms of the option will be satisfied. There can be no assurance that a continuous liquid secondary market will exist for any particular OTC option at any specific time. As a result, a Fund may be unable to enter into closing sale transactions with respect to OTC options.

Index Options. Call and put options on indices operate similarly to options on securities. Rather than the right to buy or sell a single security at a specified price, options on an index give the holder the right to receive, upon exercise of the option, an amount of cash determined by reference to the difference between the value of the underlying index and the strike price. The underlying index may be a broad-based index or a narrower market index. Unlike many options on securities, all settlements are in cash. The settlement amount, which the writer of an index option must pay to the holder of the option upon exercise, is generally equal to the difference between the strike price of the option and the value of the underlying index, multiplied by a specified multiplier. The multiplier determines the size of the investment position the option represents. Gain or loss to a Fund on index options transactions will depend, in part, on price movements of the underlying index generally or in a particular segment of the index rather than price movements of individual components of the index. As with other options, a Fund may close out its position in index options through closing purchase transactions and closing sale transactions provided that a liquid secondary market exists for such options.

Index options written by a Fund may be covered in a manner similar to the covering of other types of options, by holding an offsetting financial position and/or earmarking or segregating cash or liquid assets. A Fund may cover call options written on an index by owning securities or other assets whose price changes, in the opinion of the Adviser, are expected to correlate to those of the underlying index.

Foreign Currency Options. Options on foreign currencies operate similarly to options on securities. Rather than the right to buy or sell a single security at a specified price, options on foreign currencies give the holder the right to buy or sell foreign currency for a fixed amount in U.S. dollars or other base currencies. Options on foreign currencies are traded primarily in the OTC market, but may also be traded on U.S. and foreign exchanges. 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 base currency. The price of the option may vary with changes, among other things, 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. As with other options, a Fund may close out its position in foreign currency options through closing purchase transactions and closing sale transactions provided that a liquid market exists for such options.

Foreign currency options written by a Fund may be covered in a manner similar to the covering of other types of options, by holding an offsetting financial position and/or earmarking or segregating cash or liquid assets.

Options on Futures Contracts. Options on futures contracts are similar to options on securities except that options on futures contracts give the purchasers the right, in return for the premium paid, to assume a position in a futures contract (a long position in the case of a call option and a short position in the case of a put option) at a specified exercise price at any time prior to the expiration of the option. Upon exercise of the option, the parties will be subject to all of the risks associated with futures transactions and subject to margin requirements. As the writer of options on futures contracts, a Fund would also be subject to initial and variation margin requirements on the option position.

Options on futures contracts written by a Fund may be covered in a manner similar to the covering of other types of options, by holding an offsetting financial position and/or earmarking or segregating cash or liquid assets. A Fund may cover an option on a futures contract by purchasing or selling the underlying futures contract. In such instances the exercise of the option will serve to close out a Fund's futures position.

Additional Risks of Options Transactions. The risks associated with options transactions are different from, and possibly greater than, the risks associated with investing directly in the underlying instruments. Options are highly specialized instruments that require investment techniques and risk analyses different from those associated with other portfolio investments. The use of options requires an understanding not only of the underlying instrument but also of the option itself. Options may be subject to the risk factors generally applicable to derivatives transactions described herein, and may also be subject to certain additional risk factors, including:

- The exercise of options written or purchased by a Fund could cause a Fund to sell portfolio securities, thus increasing a Fund's portfolio turnover.
- A Fund pays brokerage commissions each time it writes or purchases an option or buys or sells an underlying security in connection with the exercise of an option. Such brokerage commissions could be higher relative to the commissions for direct purchases or sales of the underlying securities.
- A Fund's options transactions may be subject to limitations on options positions established by the SEC, the CFTC or the exchanges on which such options are traded.
- The hours of trading for exchange-listed options may not coincide with the hours during which the underlying securities are traded. To the extent that the options markets close before the markets for the underlying securities, significant price and rate movements can take place in the underlying securities that cannot be reflected in the options markets.
- Index options based upon a narrow index of securities or other assets may present greater risks than options based on broad market indices, as narrower indices are more susceptible to rapid and extreme fluctuations as a result of changes in the values of a smaller number of securities or other assets.
- A Fund is subject to the risk of market movements between the time that an option is exercised and the time of performance thereunder, which could increase the extent of any losses suffered by a Fund in connection with options transactions.

Futures Contracts. A futures contract is a standardized 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 (the "settlement date"). Futures contracts may be based on, among other things, a specified equity security (securities futures), a specified debt security or reference rate (interest rate futures), the value of a specified securities index (index futures) or the value of a foreign currency (currency futures). While the value of a futures contract tends to increase and decrease in tandem with the value of the underlying instrument, differences between the futures market and the market for the underlying asset may result in an imperfect correlation. The buyer of a futures contract agrees to purchase the underlying instrument on the settlement date and is said to be "long" the contract. The seller of a futures contract agrees to sell the underlying instrument on the settlement date and is said to be "short" the contract. Futures contracts call for settlement only on the expiration date and cannot be "exercised" at any other time during their term.

Depending on the terms of the particular contract, futures contracts are settled through either physical delivery of the underlying instrument on the settlement date (such as in the case of futures based on a specified debt security) or by payment of a cash settlement amount on the settlement date (such as in the case of futures contracts relating to broad-based securities indices). In the case of cash-settled futures contracts, the settlement amount is equal to the difference between the reference instrument's price on the last trading day of the contract and the reference instrument's price at the time the contract was entered into. Most futures contracts, particularly futures contracts requiring physical delivery, are not held until the settlement date, but instead are offset before the settlement date through the establishment of an opposite and equal futures position (buying a contract that had been sold, or selling a contract that had been purchased). All futures transactions are effected through a clearinghouse associated with the exchange on which the futures are traded.

The buyer and seller of a futures contract are not required to deliver or pay for the underlying commodity unless the contract is held until the settlement date. However, both the buyer and seller are required to deposit "initial margin" with a futures commission merchant ("FCM") when the futures contract is entered into. Initial margin deposits are typically calculated as a percentage of the contract's market value. If the value of either party's position declines, the party will be required to make additional "variation margin" payments to settle the change in value on a daily basis. The process is known as "marking-to-market." Upon the closing of a futures position through the establishment of an offsetting position, a final determination of variation margin will be made and additional cash will be paid by or released to a Fund.

Additional Risks of Futures Transactions. The risks associated with futures contract transactions are different from, and possibly greater than, the risks associated with investing directly in the underlying instruments. Futures are highly specialized instruments that require investment techniques and risk analyses different from those associated with other portfolio investments. The use of futures requires an understanding not only of the underlying instrument but also of the futures contract itself. Futures may be subject to the risk factors generally applicable to derivatives transactions described herein, and may also be subject to certain additional risk factors, including:

- The risk of loss in buying and selling futures contracts can be substantial. Small price movements in the commodity, security, index, currency or instrument underlying a futures position may result in immediate and substantial loss (or gain) to a Fund.
- Buying and selling futures contracts may result in losses in excess of the amount invested in the position in the form of initial margin. In the event of adverse price movements in the underlying commodity, security, index, currency or instrument, a Fund would be required to make daily cash payments to maintain its required margin. A Fund may be required to sell portfolio securities, or make or take delivery of the underlying securities in order to meet daily margin requirements at a time when it may be disadvantageous to do so. A Fund could lose margin payments deposited with an FCM if the FCM breaches its agreement with a Fund, becomes insolvent or declares bankruptcy.
- Most exchanges limit the amount of fluctuation permitted in futures contract prices during any single trading day. Once the daily limit has been reached in a particular futures contract, no trades may be made on that day at prices beyond that limit. If futures contract prices were to move to the daily limit for several trading days with little or no trading, a Fund could be prevented from prompt liquidation of a futures position and subject to substantial losses. The daily limit governs only price movements during a single trading day and therefore does not limit a Fund's potential losses.
- Index futures based upon a narrower index of securities may present greater risks than futures based on broad market indices, as narrower indices are more susceptible to rapid and extreme fluctuations as a result of changes in value of a small number of securities.

Currency Forwards. A foreign currency forward exchange contract is a negotiated agreement between two parties to exchange specified amounts of two or more currencies at a specified future time at a specified rate. The rate specified by the foreign currency forward exchange contract can be higher or lower than the spot rate between the currencies that are the subject of the contract. A Fund may also invest in non-deliverable foreign currency forward exchange contracts ("NDFs"). NDFs are similar to other foreign currency forward exchange contracts, but do not require or permit physical delivery of currency upon settlement. Instead, settlement is made in cash based on the difference between the contracted exchange rate and the spot foreign exchange rate at settlement. Currency futures are similar to foreign currency forward exchange contracts, except that they are traded on an exchange and standardized as to contract size and delivery date. Most currency futures call for payment or delivery in U.S. dollars. Unanticipated changes in currency prices may result in losses to a Fund and poorer overall performance for a Fund than if it had not entered into foreign currency forward exchange contracts. The typical use of a foreign currency forward exchange contract is to "lock in" the price of a security in U.S. dollars or some other foreign currency, which a Fund is holding in its portfolio. By entering into a foreign currency forward exchange contract for the purchase or sale, for a fixed amount of dollars or other currency, of the amount of foreign currency involved in the underlying security transactions, a Fund may be able to protect itself against a possible loss resulting from an adverse change in the relationship between the U.S. dollar or other currency which is being used for the security purchase and the foreign currency in which the security is denominated during the period between the date on which the security is purchased or sold and the date on which payment is made or received. The Adviser also may from time to time utilize foreign currency forward exchange contracts for other purposes. For example, they may be used to hedge a foreign security held in the portfolio against a decline in value of the applicable foreign currency. They also may be used to lock in the current exchange rate of the currency in

which those securities anticipated to be purchased are denominated. At times, a Fund may enter into “cross-currency” hedging transactions involving currencies other than those in which securities are held or proposed to be purchased are denominated.

A Fund will not enter into foreign currency forward exchange contracts or maintain a net exposure to these contracts where the consummation of the contracts would obligate a Fund to deliver an amount of foreign currency in excess of the value of a Fund’s portfolio securities.

A Fund may be limited in its ability to enter into hedging transactions involving foreign currency forward exchange contracts by Code requirements relating to qualification as a RIC.

Foreign currency forward exchange contracts may limit gains on portfolio securities that could otherwise be realized had they not been utilized and could result in losses. The contracts also may increase a Fund’s volatility and may involve a significant amount of risk relative to the investment of cash.

Swaps. 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. Most 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 Fund’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 counterparty. Many 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 the risk of default or non-performance by the counterparty. Accordingly, the Adviser must assess the creditworthiness of the counterparty to determine the likelihood that the terms of the swap will be satisfied.

Swap agreements allow for a wide variety of transactions. For example, fixed-rate payments may be exchanged for floating rate payments, U.S. dollar-denominated payments may be exchanged for payments denominated in foreign currencies, and payments tied to the price of one security, index, reference rate, currency or other instrument may be exchanged for payments tied to the price of a different security, index, reference rate, currency or other instrument. Swap contracts are typically individually negotiated and structured to provide exposure to a variety of particular types of investments or market factors. Swap contracts can take many different forms and are known by a variety of names. To the extent consistent with a Fund’s investment objective and policies, a Fund is not limited to any particular form or variety of swap contract. A Fund may utilize swaps to increase or decrease its exposure to the underlying instrument, reference rate, foreign currency, market index or other asset. Certain Funds may also enter into related derivative instruments including caps, floors and collars.

The Dodd-Frank Act and related regulatory developments require the eventual clearing and exchange-trading of many standardized OTC derivative instruments that the CFTC and SEC defined as “swaps” and “security based swaps,” respectively. Mandatory exchange-trading and clearing is occurring on a phased-in basis based on the type of market participant and CFTC approval of contracts for central clearing and exchange-trading. In a cleared swap, a Fund’s ultimate counterparty is a central clearinghouse rather than a brokerage firm, bank or other financial institution. A Fund initially will enter into cleared swaps through an executing broker. Such transactions will then be submitted for clearing and, if cleared, will be held at regulated FCMs that are members of the clearinghouse that serves as the central counterparty. When a Fund enters into a cleared swap, it must deliver to the central counterparty (via an FCM) an amount referred to as “initial margin.” Initial margin requirements are determined by the central counterparty, but an FCM may require additional initial margin above the amount required by the central counterparty. During the term of the swap agreement, a “variation margin” amount may also be required to be paid by a Fund or may be received by a Fund in accordance with margin controls set for such accounts, depending upon changes in the price of the underlying reference asset subject to the swap agreement. At the conclusion of the term of the swap agreement, if a Fund has a loss equal to or greater than the margin amount, the margin amount is paid to the FCM along with any loss that is greater than such margin amount. If a Fund has a loss of less than the margin amount, the excess margin is returned to the Fund. If a Fund has a gain, the full margin amount and the amount of the gain is paid to the Fund.

Central clearing is designed to reduce counterparty credit risk compared to uncleared swaps because central clearing interposes the central clearinghouse as the counterparty to each participant’s swap, but it does not eliminate those risks completely. There is also a risk of loss by a Fund of the initial and variation margin deposits in the event of bankruptcy of the FCM with which the Fund has an open position in a swap contract. The assets of a Fund may not be fully protected in the event of the bankruptcy of the FCM or central counterparty because the Fund might be limited to recovering only a pro rata share of all available funds and margin segregated on behalf of an FCM’s or central counterparty’s customers or clearing members. If the FCM does not provide accurate reporting, a Fund is also subject to the risk that the FCM could use the Fund’s assets, which are held in an omnibus account with assets belonging to the FCM’s other customers, to satisfy its own financial obligations or the payment obligations of another customer to the central counterparty.

As a result of recent regulatory developments, certain standardized swaps are currently subject to mandatory central clearing and some of these cleared swaps must be traded on an exchange or swap execution facility (“SEF”). An SEF is an electronic trading platform in

which multiple market participants can execute swap transactions by accepting bids and offers made by multiple other participants on the platform. Transactions executed on an SEF may increase market transparency and liquidity but may cause a Fund to incur increased expenses to execute swaps. Central clearing should decrease counterparty risk and increase liquidity compared to bilateral swaps because central clearing interposes the central clearinghouse as the counterparty to each participant's swap. However, central clearing does not eliminate counterparty risk or liquidity risk entirely. In addition, depending on the size of a Fund and other factors, the margin required under the rules of a clearinghouse and by a clearing member may be in excess of the collateral required to be posted by a Fund to support its obligations under a similar bilateral swap. However, the CFTC and other applicable regulators have adopted rules imposing certain margin requirements, including minimums, on uncleared swaps which may result in a Fund and its counterparties posting higher margin amounts for uncleared swaps. Requiring margin on uncleared swaps may reduce, but not eliminate, counterparty credit risk.

In addition, with respect to cleared swaps, a Fund may not be able to obtain as favorable terms as it would be able to negotiate for an uncleared swap. In addition, an FCM may unilaterally impose position limits or additional margin requirements for certain types of swaps in which a Fund may invest. Central counterparties and FCMs generally can require termination of existing cleared swap transactions at any time, and can also require increases in margin above the margin that is required at the initiation of the swap agreement. Margin requirements for cleared swaps vary on a number of factors, and the margin required under the rules of the clearinghouse and FCM may be in excess of the collateral required to be posted by a Fund to support its obligations under a similar uncleared swap. However, as noted above, regulators have adopted rules imposing certain margin requirements, including minimums, on uncleared swaps, which may result in a Fund and its counterparties posting higher margin amounts for uncleared swaps. Requiring margin on uncleared swaps may reduce, but not eliminate, counterparty credit risk.

A Fund is also subject to the risk that, after entering into a cleared swap with an executing broker, no FCM or central counterparty is willing or able to clear the transaction. In such an event, the central counterparty would void the trade. Before a Fund can enter into a new trade, market conditions may become less favorable to the Fund.

The Adviser will continue to monitor developments regarding trading and execution of cleared swaps on exchanges, particularly to the extent regulatory changes affect a Fund's ability to enter into swap agreements and the costs and risks associated with such investments.

Interest Rate Swaps, Caps, Floors and Collars. Interest rate swaps consist of an agreement between two parties to exchange their respective commitments to pay or receive interest (e.g., an exchange of floating rate payments for fixed-rate payments). Interest rate swaps are generally entered into on a net basis. Interest rate swaps do not involve the delivery of securities, other underlying assets, or principal. Accordingly, the risk of market loss with respect to interest rate and total return swaps is typically limited to the net amount of interest payments that a Fund is contractually obligated to make.

Certain Funds may also buy or sell interest rate caps, floors and collars. The purchase of an interest rate cap entitles the purchaser, to the extent that a specified interest rate index exceeds a predetermined level, to receive payments of interest on a specified notional amount from the party selling the interest rate cap. The purchase of an interest rate floor entitles the purchaser, to the extent that a specified interest rate falls below a predetermined level, to receive payments of interest on a specified notional amount from the party selling the interest rate floor. A collar is a combination of a cap and a floor that preserves a certain return within a predetermined range of interest rates. Caps, floors and collars may be less liquid than other types of derivatives.

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 may include, but not be 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 may 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. Each Fund may incur a theoretically unlimited loss on short exposures. In comparison, the Fund may incur losses on long exposures, but such losses are limited by the fact that the underlying security's price cannot fall below zero. Total return swaps may effectively add leverage to a Fund's portfolio because, in addition to its total net assets, a Fund 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 Fund thereunder, and conversely, that a Fund will not be able to meet its obligation to the counterparty. Generally, a Fund will enter into total return swaps on a net basis (i.e., the two payment streams are netted against one another with a Fund receiving or paying, as the case may be, only the net amount of the two payments).

Index Swaps. An index swap consists of an agreement between two parties in which a party typically exchanges a cash flow based on a notional amount of a reference index for a cash flow based on a different index or on another specified instrument or reference rate. Index swaps are generally entered into on a net basis.

Inflation Swaps. Inflation swap agreements are contracts in which one party typically agrees to pay the cumulative percentage increase in a price index, such as the Consumer Price Index, over the term of the swap (with some lag on the referenced inflation index), and the other party pays a compounded fixed rate. Inflation swap agreements may be used to protect the NAV of a Fund against an unexpected change in the rate of inflation measured by an inflation index. The value of inflation swap agreements is expected to change in response to changes in real interest rates. Real interest rates are tied to the relationship between nominal interest rates and the rate of inflation.

Currency Swaps. A currency swap consists of an agreement between two parties to exchange cash flows on a notional amount of two or more currencies based on the relative value differential among them, such as exchanging a right to receive a payment in foreign currency for the right to receive U.S. dollars. Currency swap agreements may be entered into on a net basis or may involve the delivery of the entire principal value of one designated currency in exchange for the entire principal value of another designated currency. In such cases, the entire principal value of a currency swap is subject to the risk that the counterparty will default on its contractual delivery obligations.

Credit Default Swaps. A credit default swap consists of an agreement between two parties in which the “buyer” typically agrees to pay to the “seller” a periodic stream of payments over the term of the contract and the seller agrees to pay the buyer the par (or other agreed-upon) value of a referenced debt obligation upon the occurrence of a credit event with respect to the issuer of that referenced debt obligation. Generally, a credit event means bankruptcy, failure to pay, obligation acceleration or modified restructuring. A Fund may be either the buyer or seller in a credit default swap. Where a Fund 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 the issuer of the debt obligation. If no default occurs, a Fund would have paid to the counterparty a periodic stream of payments over the term of the contract and received no benefit from the contract. The use of credit default swaps could result in losses to a Fund if the Adviser fails to correctly evaluate the creditworthiness of the issuer of the referenced debt obligation.

Swaptions. An option on a swap agreement, also called a “swaption,” is an option that gives the buyer the right, but not the obligation, to enter into a swap on a future date in exchange for a premium. A receiver swaption gives the owner the right to receive the return of a specified asset, reference rate, or index. A payer swaption gives the owner the right to pay the return of a specified asset, reference rate, or index. Swaptions also include options that allow an existing swap to be terminated or extended by one of the counterparties.

General Risks of Swaps. The risks associated with swap transactions are different from, and possibly greater than, the risks associated with investing directly in the underlying instruments. Swaps are highly specialized instruments that require investment techniques and risk analyses different from those associated with other portfolio investments. The use of swaps requires an understanding not only of the underlying instrument but also of the swap contract itself. Swap transactions may be subject to the risk factors generally applicable to derivatives transactions described above, and may also be subject to certain additional risk factors, including:

- OTC swap agreements are not traded on exchanges and may be subject to liquidity risk, which exists when a particular swap is difficult to purchase or sell.
- In addition to the risk of default by the counterparty, if the creditworthiness of a counterparty to a swap agreement declines, the value of the swap agreement would be likely to decline, potentially resulting in losses.
- The swaps market is subject to extensive regulation under the Dodd-Frank Act and certain CFTC and SEC rules promulgated thereunder. It is possible that further developments in the swaps market, including new and additional governmental regulation, could result in higher Fund costs and expenses and could adversely affect a Fund’s ability to utilize swaps, terminate existing swap agreements or realize amounts to be received under such agreements.

Structured Investments. Certain Funds may invest in structured investments. A structured investment is a derivative security designed to offer a return linked to a particular underlying security, currency, commodity or market, for which the amount of principal repayment and/or interest payments is based on the change in value of such underlying security, currency, commodity or market, including, among others, currency exchange rates, interest rates, referenced bonds and stock indices or other financial references. Structured investments may come in various forms, including notes, warrants and options to purchase securities, and may be listed and traded on an exchange or otherwise traded in the OTC market.

The Funds will typically use structured investments to gain exposure to a permitted underlying security, currency, commodity or market when direct access to such security, currency, commodity or market is limited or inefficient from a tax, cost or regulatory standpoint. Investments in structured investments involve risks including issuer risk, counterparty risk and market risk. Holders of structured investments bear risks of the underlying investment and are subject to issuer or counterparty risk because the holders are relying on the creditworthiness of such issuer or counterparty and have no rights with respect to the underlying investment. Certain structured investments may be thinly traded or have a limited trading market and may have the effect of increasing a Fund’s illiquidity to the extent that the Fund, at a particular point in time, may be unable to find qualified buyers for these investments.

A structured investment may be linked either positively or negatively to an underlying security, currency, commodity, index or market and a change in interest rates, principal amount, volatility, currency values or other factors, depending on the structured investment's design, may result in a gain or loss that is a multiple of the movement of such interest rates, principal amount, volatility, currency values or other factors. Application of a multiplier is comparable to the use of financial leverage, a speculative technique. Leverage magnifies the potential for gain and the risk of loss. As a result, a relatively small decline in the value of the referenced factor could result in a relatively large loss in the value of a structured investment.

Other types of structured investments include interests in entities organized and operated for the purpose of restructuring the investment characteristics of underlying investment interests or securities. This type of securitization or restructuring usually involves the deposit or purchase of an underlying security by a U.S. or foreign entity, such as a corporation or trust of specified instruments, and the issuance by that entity of one or more classes of securities backed by, or representing an interest in, the underlying instruments. The cash flow or rate of return on the underlying investments may be apportioned among the newly issued securities to create different investment characteristics, such as varying maturities, credit quality, payment priorities and interest rate provisions. Structured investments that are subordinated, for example, in payment priority often offer higher returns, but may result in increased risks compared to other investments.

Combined Transactions. Combined transactions involve entering into multiple derivatives transactions (such as multiple options transactions, including purchasing and writing options in combination with each other; multiple futures transactions; and combinations of options, futures, forward and swap transactions) instead of a single derivatives transaction in order to customize the risk and return characteristics of the overall position. Combined transactions typically contain elements of risk that are present in each of the component transactions. A Fund may enter into a combined transaction instead of a single derivatives transaction when, in the opinion of the Adviser, it is in the best interest of the Fund to do so. Because combined transactions involve multiple transactions, they may result in higher transaction costs and may be more difficult to close out.

Commodity-Linked Investments. The Global Strategist Portfolio may seek to provide exposure to the investment returns of real assets that trade in the commodity markets through investments in commodity-linked derivative securities, such as structured notes, and other similar investments (including commodity exchange-traded funds ("ETFs")) which are designed to provide this exposure without direct investment in physical commodities or commodities futures contracts. The Global Strategist Portfolio may also seek to provide exposure to the investment returns of real assets that trade in the commodity markets through investments in the Fund's wholly-owned subsidiary (the "Global Strategist Subsidiary"). Real assets are assets such as oil, gas, industrial and precious metals, livestock, and agricultural or meat products, or certain other tangible items, as compared to stocks or bonds, which are intangible financial instruments. In choosing investments, the Adviser seeks to provide exposure to various commodities and commodity sectors. The value of commodity-linked derivative securities held by a Global Strategist Portfolio and/or the Global Strategist Subsidiary Fund may be affected by a variety of factors, including, but not limited to, overall market movements and other factors affecting the value of particular industries or commodities, such as weather, disease, embargoes, acts of war or terrorism, or political and regulatory developments.

The prices of commodity-linked derivative securities may move in different directions than investments in traditional equity and debt securities when the value of those traditional securities is declining due to adverse economic conditions. As an example, during periods of rising inflation, debt securities have historically tended to decline in value due to the general increase in prevailing interest rates. Conversely, during those same periods of rising inflation, the prices of certain commodities, such as oil and metals, have historically tended to increase. Of course, there cannot be any guarantee that these investments will perform in that manner in the future, and at certain times the price movements of commodity-linked instruments have been parallel to those of debt or equity securities. Commodities have historically tended to increase and decrease in value during different parts of the business cycle than financial assets. Nevertheless, at various times, commodities prices may move in tandem with the prices of financial assets and thus may not provide overall portfolio diversification benefits. Under favorable economic conditions, the Global Strategist Portfolio's investments may underperform an investment in traditional securities. Over the long term, the returns on the Global Strategist Portfolio's investments are expected to exhibit low or negative correlation with stocks and bonds.

Special Risks Related to Cyber Security. The Company and its service providers are susceptible to cyber security risks that include, among other things, theft, unauthorized monitoring, release, misuse, loss, destruction or corruption of confidential and highly restricted data; denial of service attacks; unauthorized access to relevant systems; compromises to networks or devices that the Company and its service providers use to service the Company's operations; or operational disruption or failures in the physical infrastructure or operating systems that support the Company and its service providers. Cyber attacks against or security breakdowns of the Company or its service providers may adversely impact the Company and its shareholders, potentially resulting in, among other things, financial losses; the inability of Fund shareholders to transact business and a Fund to process transactions; inability to calculate a Fund's NAV; violations of applicable privacy and other laws; regulatory fines, penalties, reputational damage, reimbursement or other compensation costs; and/or additional compliance costs. The Company may incur additional costs for cyber security risk management and remediation purposes. In addition, cyber security risks may also impact issuers of securities in which a

Fund invests, which may cause a Fund's investment in such issuers to lose value. There can be no assurance that the Company or its service providers will not suffer losses relating to cyber attacks or other information security breaches in the future.

ESG Investment Risk. To the extent that a Fund considers environmental, social and governance ("ESG") criteria and application of related analyses when selecting investments, the Fund's performance may be affected depending on whether such investments are in or out of favor and relative to similar funds that do not adhere to such criteria or apply such analyses. A company's ESG practices or the Adviser's assessment of such may change over time. Additionally, a Fund's adherence to its ESG criteria and application of related analyses in connection with identifying and selecting investments may require subjective analysis and may be difficult if data about a particular company is limited. The Fund's consideration of ESG criteria may result in the Fund buying certain securities or forgoing opportunities to buy certain securities. A Fund's investments in certain companies may be susceptible to various factors that may impact their businesses or operations, including the effects of general economic conditions throughout the world, increased competition from other providers of services, unfavorable tax laws or accounting policies and high leverage.

Regulatory and Legal Risk. 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 a Fund, the strategies used by a Fund or the level of regulation or taxation applying to the Fund (such as regulations related to investments in derivatives and other transactions). These regulations and laws impact the investment strategies, performance, costs and operations of the Fund or taxation of shareholders.

LIBOR Discontinuance or Unavailability Risk. A Fund's investments, payment obligations and financing terms may be based on floating rates, such as the London Interbank Offered Rates (collectively, "LIBOR"), Euro Interbank Offered Rate 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 may obtain short-term borrowings from each other within certain financial markets. On July 27, 2017, the Chief Executive of the UK Financial Conduct Authority ("FCA"), which regulates LIBOR, announced that the FCA will no longer persuade nor require banks to submit rates for the calculation of LIBOR and certain other Reference Rates after 2021. Such announcement indicates that the continuation of LIBOR and other Reference Rates on the current basis cannot and will not be guaranteed after the end of 2021. On March 5, 2021, the FCA announced that LIBOR will either cease to be provided by any administrator, or no longer be representative for many LIBOR settings after December 31, 2021, and for the most widely used tenors of U.S. dollar LIBOR after June 30, 2023. In addition, in connection with supervisory guidance from regulators, many regulated entities have ceased to enter into new LIBOR-based contracts after January 1, 2022. These announcements and developments and any additional regulatory or market changes may have an adverse impact on a Fund or its investments.

Regulators and market participants are currently engaged in identifying successor Reference Rates ("Alternative Reference Rates"). Additionally, it is expected that market participants will focus on the transition mechanisms by which the Reference Rates in existing contracts or instruments may be amended, whether through marketwide protocols, fallback contractual provisions, bespoke negotiations or amendments or otherwise, in connection with the federal Adjustable Interest Rate (LIBOR) Act. Nonetheless, the termination of certain Reference Rates presents risks to a Fund. At this time, it is not possible to completely identify or predict the effect of any such changes, any establishment of Alternative Reference Rates or any other reforms to Reference Rates that may be enacted in the UK or elsewhere. The elimination of a Reference Rate or any other changes or reforms to the determination or supervision of Reference Rates could have an adverse impact on the market for or value of any securities or payments linked to those Reference Rates and other financial obligations held by a Fund or on its overall financial condition or results of operations. To identify a successor rate for US dollar LIBOR, the Alternative Reference Rates Committee ("ARRC"), a U.S.-based group convened by the Federal Reserve Board and the Federal Reserve Bank of New York, was formed. The ARRC has identified Secured Overnight Financing Rate ("SOFR") as its preferred alternative rate for LIBOR. SOFR is a measure of the cost of borrowing cash overnight, collateralized by the U.S. Treasury securities, and is based on directly observable U.S. Treasury backed repurchase transactions. It is expected that a substantial portion of future floating rate investments will be linked to SOFR or benchmark rates derived from SOFR. At this time, it is not possible to predict the effect of the transition to these benchmark rates.

The transition process might lead to increased volatility and illiquidity in markets that currently rely on Reference Rates to determine interest rates. It could also lead to a reduction in the value of some Reference Rate-based investments held by a Fund and reduce the effectiveness of new hedges placed against existing Reference Rate-based instruments. While market participants are endeavoring to minimize the economic impact of the transition from Reference Rates to Alternative Reference Rates, the transition away from LIBOR and certain other Reference Rates could, among other negative consequences:

- 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 a Fund may invest;
- Require extensive negotiations of and/or amendments to agreements and other documentation governing Reference Rate-linked investments products;
- 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; or
- Cause a Fund to incur additional costs in relation to any of the above factors.

The risks associated with the above factors, including decreased liquidity, are heightened with respect to investments in Reference Rate-based products that do not include a fallback provision that addresses how interest rates will be determined if LIBOR and certain other Reference Rates stop being published. Even with some Reference Rate-based instruments that may contemplate a scenario where Reference Rates are no longer available by providing for an alternative rate-setting methodology and/or increased costs for certain Reference Rate-related instruments or financing transactions, there may be significant uncertainty regarding the effectiveness of any such alternative methodologies, resulting in prolonged adverse market conditions for a Fund. In many cases, in the event that an instrument falls back to an Alternative Reference Rate, the Alternative Reference Rate would not perform the same as the Reference Rate being replaced would have and may not include adjustments to such rates that are reflective of current economic circumstances or differences between such rate and LIBOR. Since the usefulness of LIBOR and certain other Reference Rates as benchmarks could deteriorate during the transition period, these effects could occur prior to June 2023 for those Reference Rates which are expected to be discontinued at that time. There also remains uncertainty and risk regarding the willingness and ability of issuers to include enhanced provisions in new and existing contracts or instruments. In addition, when a Reference Rate is discontinued, the Alternative Reference Rate may 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. Various pieces of legislation, including recent federal legislation and laws enacted by the states may affect the transition of LIBOR-based instruments as well by transitioning such tough legacy instruments to an Alternative Reference Rate provided for in such legislation. For example, the Adjustable Interest Rate (LIBOR) Act provides a statutory fallback mechanism on a nationwide basis to replace U.S. Dollar LIBOR with a benchmark rate that is selected by the Board of Governors of the Federal Reserve System based on SOFR for tough legacy contracts. On February 27, 2023, the final rule in connection with this law became effective, establishing benchmark replacements based on SOFR and Term SOFR (a forward-looking measurement of market expectations of SOFR implied from certain derivatives markets) for applicable tough legacy contracts governed by U.S. law. Such pieces of legislation also include safe harbors from liability, which may limit the recourse a Fund may have if the Alternative Reference Rate does not fully compensate the Fund for the transition of an instrument from LIBOR. It is uncertain what impact any such legislation may have. Moreover, the FCA has announced that it will require the publication of the one-month, three-month and six-month U.S. Dollar LIBOR settings on the basis of a changed methodology (known as “synthetic LIBOR”), after June 30, 2023 through at least September 30, 2024, addressing non-U.S. law governed U.S. Dollar LIBOR instruments, but this synthetic LIBOR will be designated by the FCA as unrepresentative of the underlying market that it seeks to measure and will be solely available for use in legacy transactions. The effect that synthetic LIBOR may have cannot be predicted at this time and affected tough legacy contracts which do not expire before the end date of synthetic LIBOR may still need to be transitioned to an Alternative Reference Rate and may not be affected by U.S. law only solutions such as statutory transition measures. In addition, any Alternative Reference Rate and any pricing adjustments imposed by a regulator or counterparties or otherwise may adversely affect a Fund’s performance or NAV.

Alteration of the terms of a debt instrument or a modification of the terms of other types of contracts to replace LIBOR or another interbank offered rate (“IBOR”) with a new reference rate could result in a taxable exchange and the realization of income and gain/loss for U.S. federal income tax purposes. The Internal Revenue Service (“IRS”) has issued final regulations regarding the tax consequences of the transition from IBOR to a new reference rate in debt instruments and non-debt contracts. Under the final regulations, alteration or modification of the terms of a debt instrument to replace an operative rate that uses a discontinued IBOR with a qualified rate (as defined in the final regulations) including true up payments equalizing the fair market value of contracts before and after such IBOR transition, to add a qualified rate as a fallback rate to a contract whose operative rate uses a discontinued IBOR or to replace a fallback rate that uses a discontinued IBOR with a qualified rate would not be taxable. These federal income tax consequences would apply only to shareholders of the Funds, but there would not be federal income tax consequences to the owners of the variable annuity contracts and the variable life insurance policies. The IRS may provide additional guidance, with potential retroactive effect.

Market and Geopolitical Risk. The value of your investment in a Fund is based on the values of a Fund’s investments. These values change daily due to economic and other events that affect markets generally, as well as those that affect particular regions, countries, industries, companies or governments. Price movements, sometimes called volatility, may be greater or less depending on the types of securities a Fund owns and the markets in which the securities trade. The increasing interconnectivity between global economies and markets increases the likelihood that events or conditions in one region, sector, industry, market or with respect to one company may adversely impact issuers in a different country, region, sector, industry, or market. For example, adverse developments in the banking or financial services sector could impact companies operating in various sectors or industries (and in turn adversely impact a Fund’s investments) and otherwise adversely affect a Fund and its operations. Securities in a Fund’s portfolio may underperform due to inflation (or expectations for inflation), interest rates, global demand for particular products or resources, natural disasters, pandemics, epidemics, terrorism, regulatory events and governmental or quasi-governmental actions. The occurrence of global events similar to those in recent years, such as terrorist attacks around the world, natural disasters, social and political discord or debt crises and downgrades, among others, may result in market volatility and may have long term effects on both the U.S. and global financial markets. The occurrence of such events may be sudden and unexpected, and it is difficult to predict when similar events affecting the U.S. or global financial markets may occur, the effects that such events may have and the duration of those effects. Any

such event(s) could have a significant adverse impact on the value, liquidity and risk profile of a Fund's portfolio, as well as its ability to sell securities to meet redemptions. There is a risk that you may lose money by investing in a Fund.

Social, political, economic and other conditions and events, such as war, natural disasters, health emergencies (e.g., epidemics and pandemics), terrorism, conflicts, social unrest, recessions, inflation, rapid interest rate changes and supply chain disruptions may occur and could significantly impact issuers, industries, governments and other systems, including the financial markets. As global systems, economies and financial markets are increasingly interconnected, events that once had only local impact are now more likely to have regional or even global effects. Events that occur in one country, region or financial market will, more frequently, adversely impact issuers in other countries, regions or markets. These impacts can be exacerbated by failures of governments and societies to adequately respond to an emerging event or threat. These types of events quickly and significantly impact markets in the U.S. and across the globe leading to extreme market volatility and disruption. The extent and nature of the impact on supply chains or economies and markets from these events is unknown, particularly if a health emergency or other similar event, such as the COVID-19 (the "Coronavirus") outbreak, persists for an extended period of time. Social, political, economic and other conditions and events, such as natural disasters, health emergencies (e.g., epidemics and pandemics), terrorism, conflicts and social unrest, could reduce consumer demand or economic output, result in market closures, travel restrictions or quarantines, and generally have a significant impact on the economies and financial markets and the Adviser's investment advisory activities and services of other service providers, which in turn could adversely affect a Fund's investments and other operations. The value of a Fund's investment may decrease as a result of such events, particularly if these events adversely impact the operations and effectiveness of the Adviser or key service providers or if these events disrupt systems and processes necessary or beneficial to the investment advisory or other activities on behalf a Fund.

Many countries have experienced outbreaks of infectious illnesses in recent decades, including swine flu, avian influenza, SARS and the Coronavirus, and may 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 a Fund invests and the value of a Fund's investments therein, the operations of the Adviser (including those relating to the Fund) could be impacted adversely, including through quarantine measures and travel restrictions imposed on the Adviser's 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 the Adviser's ability to source, manage and divest investments on behalf of a Fund and pursue a Fund'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 the Fund's investments may be impacted adversely.

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 Fund's susceptibility to interest rate risk (i.e., the risks associated with changes in interest rates) may be magnified, its yield and income may be diminished and its performance may be adversely affected (e.g., during periods of very low or negative interest rates, the Fund may be unable to maintain positive returns). These levels of interest rates (or negative interest rates) may magnify the risks associated with rising interest rates. Changing interest rates, including rates that fall below zero, may have unpredictable effects on markets, including market volatility and reduced liquidity, and may adversely affect a Fund'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 Fund'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 may create certain systemic risks if sound debt management practices are not implemented. A high debt level may increase market pressures to meet an issuer's funding needs, which may 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 may be unable or unwilling to repay the principal or interest on its debt, which may adversely impact instruments held by a Fund that rely on such payments. Governmental and quasi-governmental responses to certain economic or other conditions may 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 may adversely affect issuers, obligors, guarantors or instruments across a variety of asset classes.

Bitcoin Exposure. The Discovery Portfolio may have exposure to bitcoin indirectly through cash settled futures or indirectly through investments in Grayscale Bitcoin Trust (BTC) (“GBTC”), a privately offered investment vehicle that invests in bitcoin. In addition, the Global Strategist Portfolio may have exposure to bitcoin indirectly through cash settled futures. To the extent either Fund invests in bitcoin futures or the Discovery Portfolio invests in GBTC, it will do so through a wholly-owned subsidiary, which is organized as an exempted company under the laws of the Cayman Islands (the “Bitcoin Subsidiary” and together with either the Discovery Portfolio Subsidiary or Global Strategist Subsidiary, referred to as a “Subsidiary”). Each Fund may at times have no exposure to bitcoin. Although neither Fund directly invests in bitcoin, each Fund’s indirect investments in bitcoin are exposed to risks associated with the price of bitcoin, which is subject to numerous factors and risks.

Bitcoin is a digital asset whose ownership and behavior are determined by participants in an online, peer-to-peer network that connects computers that run publicly accessible, or “open source,” software that follows the rules and procedures governing the bitcoin network (commonly referred to as the bitcoin protocol). The value of bitcoin, like the value of other cryptocurrencies, is not backed by any government, corporation, or other identified body. The value of bitcoin is determined in part by the supply of (which is limited), and demand for, bitcoin in the markets for exchange that have been organized to facilitate the trading of bitcoin. The further development of the bitcoin network, which is part of a new and rapidly changing industry, is subject to a variety of factors that are difficult to evaluate.

Risks Related to Bitcoin. Cryptocurrencies (also referred to as “virtual currencies” and “digital currencies”) are digital assets designed to act as a medium of exchange. Although there are thousands of cryptocurrencies, the most well-known of which is bitcoin. Cryptocurrency is an emerging asset class with a limited history. Investments in or exposure to bitcoin are subject to substantial risks, including significant price volatility and fraud and manipulation, which are generally more pronounced in the crypto asset market. In addition, performance and value of indirect investments in bitcoin may differ significantly from the performance or value of bitcoin.

Cryptocurrency facilitates 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 (i.e., a currency that is backed by a central bank or a national, supra-national or quasi-national organization), cryptocurrencies are susceptible to theft, loss and destruction. For example, the bitcoin held by GBTC (and the Discovery Portfolio’s indirect exposure to such bitcoin) is also susceptible to these risks.

The value of a Fund’s indirect investments in bitcoin is subject to significant fluctuations in the value of the cryptocurrency, which have been and may in the future be highly volatile and subject to sharp declines. 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 bitcoin could drop precipitously (including to zero) for a variety of reasons, including, but not limited to, regulatory changes, a crisis of confidence, flaw or operational issue in the bitcoin network or a change in user preference to competing cryptocurrencies. A Fund’s exposure to bitcoin could result in substantial losses to the Fund.

Cryptocurrencies trade on exchanges, which are largely unregulated and, therefore, are more exposed to fraud, market manipulation and failure than established, regulated exchanges for securities and other traditional assets, derivatives and other currencies. Cryptocurrency exchanges have in the past, and may in the future, fail or otherwise cease operating temporarily or even permanently, resulting in the potential loss of users’ cryptocurrency or other market disruptions. 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, such as measures designed to prevent sudden drops in value of items traded on the exchange (i.e., “flash crashes”). As a result, the prices of cryptocurrencies on exchanges may 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 have been breached, resulting in the theft and/or loss of bitcoin and other cryptocurrencies. A cyber or other security breach or a business failure of a cryptocurrency exchange or custodian may affect the price of a particular cryptocurrency or cryptocurrencies generally. A risk also exists with respect to malicious actors or previously unknown vulnerabilities, which may adversely affect the value of bitcoin.

Disruptions at bitcoin exchanges and potential consequences of a bitcoin exchange’s failure could adversely affect a Fund’s indirect investments in bitcoin. In 2022 and early 2023, several large participants in the cryptocurrency industry, including exchanges, lenders and investment firms, declared bankruptcy, which has resulted in a loss of confidence in participants of the digital asset ecosystem and negative publicity surrounding digital assets more broadly. These events have also contributed to financial distress among crypto asset market participants and widespread disruption in those markets. The collateral impacts of these types of failures, or of fraud or other adverse developments in the crypto asset markets, is difficult to predict. Extreme volatility in the future, including further

declines in the trading prices of the bitcoin, could have a material adverse effect on the value of the Funds' indirect investments in bitcoin. Furthermore, negative perception and/or a lack of stability and standardized regulation in the digital asset economy may reduce confidence in the digital asset economy and may result in greater volatility in the prices of bitcoin and other digital assets, including a depreciation in value. Further, regulation of crypto asset markets is still developing and federal, state or foreign governmental authorities may restrict the development use or exchange of cryptocurrencies. In addition, events that impact one cryptocurrency may lead to a volatility or a decline in the value of another cryptocurrency, such as bitcoin.

The market for bitcoin (and bitcoin futures) depends on, among other things: the supply and demand for bitcoin (and bitcoin futures); the adoption of bitcoin for commercial uses; the anticipated increase of investments in bitcoin-related investment products by retail and institutional investors; speculative interest in bitcoin, bitcoin futures, and bitcoin-related investment products; regulatory or other restrictions on investors' ability to invest in bitcoin futures; and the potential ability to hedge against the price of bitcoin with bitcoin futures (and vice versa). At times, there has been, and may in the future be, significant disruption to the crypto asset market, which could adversely impact a Fund's indirect investments in bitcoin.

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. A breach or failure of one cryptocurrency may lead to a loss in confidence in, and thus decreased usage and/or value of, other cryptocurrencies.

Bitcoin mining operations consume significant amounts of electricity, which may have a negative environmental impact and give rise to public opinion against allowing, or government regulations restricting, the use of electricity for mining operations. Additionally, miners may be forced to cease operations during an electricity shortage or power outage. Given the energy-intensiveness and electricity costs of mining, miners are restricted in where they can locate mining operations. Any shortage of electricity supply or increase in related costs (or if miners otherwise cease expanding processing power) will negatively impact the viability and expected economic return from bitcoin mining, which will affect the availability of bitcoin in the marketplace. Today, many bitcoin mining operations rely on fossil fuels to power their operations. Public perception of the impact of bitcoin mining on climate change may reduce the demand for bitcoin and increase the likelihood of government regulation. Such events could have a negative impact on the price of bitcoin, bitcoin futures, and a Fund's performance. In addition, sales of newly mined bitcoin (and sales of bitcoin by large holders) may impact the price of bitcoin.

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, may result in increased volatility or a reduction in the value of cryptocurrencies, either of which could adversely impact a Fund's indirect investment in bitcoin. 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 U.S. or foreign government or regulatory actions or policies may limit, perhaps to a materially adverse extent, the value of a Fund's indirect investment in bitcoin and the ability to exchange a cryptocurrency or utilize it for payments.

Many significant aspects of the tax treatment of investments in cryptocurrency are uncertain, and a direct or indirect investment in cryptocurrency may produce income that if directly earned by a RIC, like each Fund, would be treated as non-qualifying income for purposes of the income test applicable to RICs. Accordingly, to the extent the Global Strategist Portfolio invests in bitcoin futures or the Discovery Portfolio or the Growth Portfolio invest in bitcoin futures or GBTC, it will do so through its Subsidiary.

In 2014, the Internal Revenue Service ("IRS") released a notice (the "Notice") discussing certain aspects of "convertible virtual currency" (that is, digital assets that have an equivalent value in fiat currency or that act as a substitute for fiat currency) for U.S. federal income tax purposes and, in particular, stating that such a digital asset (i) is "property," (ii) is not "currency" for purposes of the rules relating to foreign currency gain or loss and (iii) may be held as a capital asset. In 2019, the IRS released a revenue ruling and a set of "Frequently Asked Questions" (the "Ruling & FAQs") that provide some additional guidance. However, the Notice and the Ruling & FAQs do not address other significant aspects of the U.S. federal income tax treatment of digital assets. Moreover, although the Ruling & FAQs address the treatment of hard forks, there continues to be uncertainty with respect to the income and withholding taxation of incidental rights received through a fork in the blockchain, airdrops offered to bitcoin holders and other similar events, including situations where such rights are disclaimed, as is expected with respect to GBTC's intended treatment of such events.

The taxing authorities of certain states (i) have announced that they will follow the Notice with respect to the treatment of digital assets for state income tax purposes and/or (ii) have issued guidance exempting the purchase and/or sale of digital assets for fiat

currency from state sales tax. It is unclear what further guidance on the treatment of digital assets for state tax purposes may be issued in the future.

It is unclear what additional guidance on the treatment of digital assets for U.S. federal, state and local income tax purposes may be issued in the future. Because of the evolving nature of digital assets, it is not possible to predict potential future developments that may arise with respect to digital assets. Any future guidance on the treatment of digital assets for federal, state or local tax purposes could result in adverse tax consequences for investors in each Fund and could have an adverse effect on the value of bitcoin.

Bitcoin Cash Settled Futures. The Discovery Portfolio may engage in futures contracts based on bitcoin to obtain long exposure to bitcoin. The Global Strategist Portfolio may engage in futures contracts based on bitcoin to obtain long or short exposure to bitcoin. A long exposure reflects an investment contemplating an increase in the value of the underlying asset whereas a short exposure contemplates a decrease in value of the underlying asset.

The only bitcoin futures in which each Fund may invest are cash settled bitcoin futures traded on futures exchanges registered with the CFTC. The value of bitcoin futures is determined by reference to the CME CF Bitcoin Reference Rate, which provides an indication of the price of bitcoin across certain cash bitcoin exchanges.

Bitcoin futures expose a Fund to all of the risks related to bitcoin discussed above and also expose a Fund to risks related to futures, and specifically risks related to bitcoin futures. The price of bitcoin futures is based on a variety of factors. For example, regulatory changes or actions may alter the nature of an investment in bitcoin futures or restrict the use of bitcoin or the operations of the bitcoin network or exchanges on which bitcoin trades in a manner that adversely affects the price of bitcoin futures, which could adversely impact a Fund and necessitate the payment of large daily variation margin payments to settle a Fund's losses.

The market for bitcoin futures is still developing and a Fund's investment in bitcoin futures may involve illiquidity risk, as bitcoin futures are not as heavily traded as other futures given that the bitcoin futures market is relatively new, which means a Fund may be unable to purchase or sell a futures contract at a desired price or time. In addition, bitcoin futures markets may be more volatile than traditional futures markets and exchanges on which bitcoin futures are traded and their related clearinghouses and a Fund's FCMs generally require the Fund to maintain relatively high levels of initial margin at the clearinghouse and FCM in connection with bitcoin futures. Initial margin requirements will increase if a Fund's bitcoin futures investments increase in value. Bitcoin futures are subject to collateral requirements and daily limits that may limit the Fund's ability to achieve the desired exposure.

Exchanges on which bitcoin is traded (which are the source of the price(s) used to determine the cash settlement amount for a Fund's bitcoin futures) have experienced, and may in the future experience, technical and operational issues, making bitcoin prices unavailable at times. In addition, the cash market in bitcoin has been the target of fraud and manipulation, which could affect the pricing of bitcoin futures contracts.

The contractual obligations of a buyer or seller holding a futures contract to expiration may be satisfied by settling in cash as provided by the terms of such contract. However, neither Fund intends to hold bitcoin futures through expiration. Instead, each Fund intends to "roll" futures positions. "Rolling" refers to a process whereby futures contracts nearing expiration are closed out and replaced with new futures contracts with a later expiration date. Accordingly, the Fund is subject to risks related to rolling. In addition, the costs associated with rolling bitcoin futures typically are substantially higher than the costs associated with other futures contracts and may have a significant adverse impact on the performance of a Fund's investments in bitcoin futures.

When the market for certain futures contracts is such that the prices are higher in the more distant delivery months than in the nearer delivery months, the sale during the "rolling process" of the bitcoin futures with closer delivery dates would take place at a price that is lower than the price of the bitcoin futures with more distant delivery dates. This pattern of higher futures prices for longer expiration bitcoin futures is often referred to as "contango." Alternatively, when the market for certain bitcoin futures is such that the prices are higher in the nearer months than in the more distant months, the sale during the rolling process of the more nearby bitcoin futures would take place at a price that is higher than the price of the more distant bitcoin futures. This pattern of higher future prices for shorter expiration bitcoin futures is referred to as "backwardation." There have been extended periods in which contango or backwardation has existed in certain futures markets in general. Such periods could occur in the future for bitcoin futures and may cause significant and sustained losses. Additionally, because of the frequency with which a Fund may roll futures contracts, the impact of contango or backwardation on Fund performance may be greater than it would have been if the Fund rolled futures contracts less frequently.

In addition, bitcoin and bitcoin futures have generally exhibited significant price volatility relative to traditional asset classes. Bitcoin futures may also experience significant price volatility as a result of the market fraud and manipulation noted above.

Futures contracts providing short exposure to bitcoin are also subject to additional risks, including potentially unlimited losses. The Global Strategist Portfolio's short exposure would reflect the portfolio management team's view that the value of the underlying asset will decrease. If the Adviser fails to accurately predict the movement in the value of the underlying asset, the Global Strategist Portfolio may incur a theoretically unlimited loss on short exposures (whereas losses from long exposures can equal only the full value of the underlying asset).

Futures contracts based on bitcoin are also subject to the risks otherwise applicable to derivatives, in particular those described in “Futures Contracts.”

GBTC. The Discovery Portfolio may obtain investment exposure to bitcoin indirectly through investing in GBTC. The amount of the Discovery Portfolio’s investment in GBTC will be subject to certain limits at the time of investment. GBTC’s investment objective is for the shares of GBTC to reflect the value of bitcoin held by GBTC, less expenses and other liabilities, and the risks of investing in GBTC are similar to the risks of investing in cryptocurrencies generally. Investments in GBTC expose the Discovery Portfolio to all of the risks related to bitcoin discussed above and also expose the Discovery Portfolio to risks specific to GBTC.

Shares of GBTC have historically traded, and may continue to trade, at a significant discount or premium to NAV. To the extent GBTC trades at a discount to NAV, the value of the Discovery Portfolio’s investment in GBTC would typically decrease, even if the value of GBTC’s underlying holdings in bitcoin does not decrease. In addition, there is no guarantee that an active trading market for GBTC will exist at any time. The Discovery Portfolio’s investment in GBTC will be subject to the operating expenses associated with GBTC. If GBTC incurs expenses in U.S. dollars, GBTC would be required to sell bitcoins to pay these expenses. The sale of GBTC’s bitcoins to pay expenses in U.S. dollars at a time of low bitcoin prices could adversely affect the value of the Discovery Portfolio’s investment in GBTC. Over time, sales of bitcoin by GBTC to pay expenses will decrease the amount of bitcoin associated with each share of GBTC. In addition, GBTC is susceptible to theft of its bitcoin holdings, which would negatively affect an investment by the Discovery Portfolio in GBTC.

The Discovery Portfolio’s investments in GBTC are also subject to the risks associated with private funds generally, including liquidity risk. The securities of such private funds are generally not registered under the 1940 Act, the Securities Act of 1933, as amended, or any federal or state securities laws, and therefore the Discovery Portfolio’s investments in GBTC will not benefit from the protections and restrictions of such laws.

GBTC is expected to be treated as a grantor trust for U.S. federal income tax purposes, and therefore an investment by the Bitcoin Subsidiary in GBTC will generally be treated as a direct investment by the Bitcoin Subsidiary in bitcoin for such purposes and will be subject to the tax risks related to investment in bitcoin.

Special Risks Related to the Cayman Islands Subsidiary. Each of the Discovery Portfolio, Global Strategist Portfolio and Growth Portfolio may, consistent with its principal investment strategies, invest up to 25% of its total assets in a wholly-owned subsidiary of the Fund organized as a company under the laws of the Cayman Islands. Each Bitcoin Subsidiary may invest in GBTC, cash-settled bitcoin futures and other investments. Investments in each Bitcoin Subsidiary are expected to provide the Discovery Portfolio and Growth Portfolio with exposure to bitcoin within the limitations of Subchapter M of the Code and IRS revenue rulings, as discussed below under “Taxes.” The Global Strategist Subsidiary may invest, directly or indirectly through the use of derivatives, in securities, commodities, commodity-related instruments and other investments, primarily futures, swaps and notes. The Global Strategist Subsidiary may also invest in cash-settled bitcoin futures. Investments in the Global Strategist Subsidiary are expected to provide the Global Strategist Portfolio with exposure to bitcoin and the commodity markets within the limitations of Subchapter M of the Code and IRS revenue rulings, as discussed below under “Taxes.”

Each Subsidiary is a company organized under the laws of the Cayman Islands and is overseen by its own board of directors. Each Fund is the sole shareholder of its respective Subsidiary, and it is not currently expected that shares of any Subsidiary will be sold or offered to other investors. To the extent that a Fund invests in a Subsidiary, the Fund may be subject to the risks associated with such commodity-related instruments, bitcoin and other bitcoin related investments.

While each Subsidiary may be considered similar to investment companies, it is not registered under the 1940 Act and, unless otherwise noted in the Prospectus and this SAI, is not subject to all of the investor protections of the 1940 Act and other U.S. regulations. Changes in the laws of the United States and/or the Cayman Islands could result in the inability of a Fund and/or the Subsidiary to operate as described in the applicable Prospectus and this SAI and could eliminate or severely limit the Fund’s ability to invest in the Subsidiary which may adversely affect the Fund and its shareholders.

Special Purpose Acquisition Companies. A Fund may invest in stock, warrants, rights and other securities of special purpose acquisition companies (“SPAC”), 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”), or similar special purpose entities. 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 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 may increase the time horizon for an acquisition as well as other risks associated with these investments, including price volatility. Conversely, other SPACs may invest without such limitations, in which case the SPAC’s management may have limited experience or knowledge of the market sector, industry 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, may be classified as illiquid and/or be subject to restrictions on resale,

which restrictions may be imposed for at least a year or possibly a more extended time, and may 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, the SPAC may not perform similar to other equity securities and this may impact the Fund's ability to meet its investment objective. SPAC shareholders may not approve any proposed acquisition or merger, or an acquisition or merger, once effected, may 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 unless the shareholders approve alternative options. As a result, a Fund may 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 Fund may expire worthless or may be repurchased or retired by the SPAC at an unfavorable price.

In connection with a proposed acquisition, a SPAC may raise additional funds in order to fund the acquisition, post-acquisition working capital, redemptions or some combination of those purposes. This additional fundraising may 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 may also be investment grade debt or below investment grade debt.

A Fund may 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 Fund 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 may 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 may 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 the Fund 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 Fund may not be able to sell its interest in a SPAC or it may only sell its interest at a price below what the Fund believes is the SPAC interest's value. If not subject to a restriction on resale, a Fund may 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 Fund holds shares of publicly traded SPAC stock, this means that a Fund may not be able to redeem those shares prior to an acquisition and may have to hold those shares until after the completion of the acquisition. If a Fund purchases shares in a private placement, those shares will not be redeemable in connection with a transaction. In addition, a Fund may elect not to participate in a proposed SPAC transaction or may 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 may not obtain the requisite approval of SPAC shareholders, may require governmental or other approvals that it fails to obtain or that an acquisition or merger, once effected, may 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 may lead to conflicts as they evaluate, negotiate and recommend business combination transactions to shareholders. This risk may 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.

An investment in a SPAC is subject to the risks that any proposed acquisition or merger may not obtain the requisite approval of SPAC shareholders, may require governmental or other approvals that it fails to obtain or that an acquisition or merger, once effected, may 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 may 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 may directly or indirectly own interests in a SPAC, the sponsor, directors and officers may have a conflict of interest in determining whether a particular target business is an appropriate business with which to effectuate a business combination. SPAC sponsors generally purchase equity in the SPAC at more favorable terms than investors in the IPO or subsequent investors on the open market. As a result, although most of the SPAC's capital has been provided by IPO investors, the sponsors and potentially other initial investors will benefit more than investors from the SPAC's completion of an initial business combination and may have an incentive to complete a transaction on terms that may be less favorable to other

investors. This risk may 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 may give potential target businesses leverage over the SPAC in negotiating a business combination and may 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 may be expended during the search for a target acquisition or merger. The value of investments in SPACs may be highly volatile and may depreciate over time.

In addition, investments in SPACs may 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 may be volatile, and share prices of newly-public companies have fluctuated significantly over short periods of time. Although some IPOs may produce high returns, such returns are not typical and may not be sustainable. Certain investments in SPACs are privately placed securities and are also subject to the risks of such securities.

TAXES

The following is only a summary of certain additional federal income and excise tax considerations generally affecting the Funds and their shareholders that are not described in the Funds' prospectuses. No attempt is made to present a detailed explanation of the tax treatment of the Funds or their shareholders, and the discussion here and in the Funds' prospectuses is not intended as a substitute for careful tax planning. Shareholders are urged to consult their tax advisors with specific reference to their own tax situations, including their state and local tax liabilities.

The following general discussion of certain federal income and excise tax consequences is based on the Code, and the regulations issued thereunder as in effect on the date of this SAI. New legislation, as well as administrative changes or court decisions, may significantly change the conclusions expressed herein, and may have a retroactive effect with respect to the transactions contemplated herein.

Each Fund within the Company is generally treated as a separate corporation for federal income tax purposes, and thus the provisions of the Code generally will be applied to each Fund separately, rather than to the Company as a whole.

Federal Income Tax Treatment of Shareholders

Shares of the Funds will be purchased by life insurance companies for their separate accounts under variable annuity contracts and variable life insurance policies and by other entities under qualified pension and retirement plans. Under the provisions of the Code currently in effect, net income and net realized capital gains of Funds of the Company are not currently taxable when distributed to and left to accumulate within a variable annuity contract or variable life insurance policy or under a qualified pension or retirement plan.

Section 817(h) of the Code provides that the investments of a separate account underlying a variable insurance contract (or the investments of a mutual fund, the shares of which are owned by the variable separate account) must be "adequately diversified" in order for the contract to be treated as an annuity or as life insurance for federal income tax purposes. The Treasury Department has issued regulations explaining these diversification requirements. These regulations generally provide that, as of the end of each calendar quarter or within 30 days thereafter no more than 55% of the total assets of a Portfolio may be represented by any one investment, no more than 70% by any two investments, no more than 80% by any three investments and no more than 90% by any four investments. For this purpose, all securities of the same issuer are considered a single investment, and each U.S. government agency and instrumentality is considered a separate issuer. Section 817(h) of the Internal Revenue Code provides, as a safe harbor, that a separate account will be treated as being adequately diversified if the diversification requirements under Subchapter M of the Internal Revenue Code are satisfied and no more than 55% of the value of the account's total assets is attributable to cash and cash items (including receivables), U.S. government securities and securities of other regulated investment companies. Each Fund intends to continue to comply with such requirements. Failure by a Fund to satisfy these diversification requirements would generally cause the variable contracts to lose their favorable tax status and require a contract holder to include as ordinary income any income accrued under the contracts for the current and all prior taxable years.

For information on federal income taxation of a life insurance company with respect to its receipt of distributions from the Company and federal income taxation of owners of the company's variable annuity contracts or variable life insurance policies, refer to the life insurance company's variable annuity contract or variable life insurance policy prospectus.

Qualification as a Regulated Investment Company

The Company intends that each of its Funds elect and qualify to be treated for each taxable year as a RIC under Subchapter M of the Code. Qualification as a RIC requires, among other things, that (a) at least 90% of the Fund's gross income be derived from interest, dividends, payments with respect to securities loans, gains from the sale or other disposition of securities or options thereon or foreign

currencies, net income derived from an interest in a qualified publicly traded partnership, or other income derived with respect to its business of investing in such stock, securities, or currencies; and (b) the Fund diversify its holdings so that, at the end of each quarter of the taxable year, (i) at least 50% of the market value of the Fund's assets is represented by cash, U.S. government securities, securities of other RICs and other securities limited, in respect of any one issuer to an amount not greater than 5% of the Fund's total assets and not more than 10% of the outstanding voting securities of such issuer, and (ii) not more than 25% of the value of the Fund's total assets is invested in the securities of any one issuer (other than U.S. government securities or securities of other RICs) in two or more issuers that are controlled by the Fund and that are engaged in the same or similar trades or businesses or related trades or businesses. It is anticipated that any net gain realized from the closing out of futures contracts will be considered gain from the sale of securities and therefore be qualified income for purposes of the 90% gross income requirement described above. Net income derived from an interest in a "qualified publicly traded partnership," as defined in the Code, will be treated as qualified income for purposes of the 90% gross income requirement. For the purposes of the diversification requirements in clause (ii) above, the outstanding voting securities of any issuer includes the equity securities of a qualified publicly traded partnership. In addition, no more than 25% of the value of a RIC's total assets may be invested in the securities of one or more qualified traded partnerships.

For purposes of the 90% of gross income requirement described above, the Code expressly provides the U.S. Treasury with authority to issue regulations that would exclude foreign currency gains from qualifying income if such gains are not directly related to a Fund's business of investing in stock or securities. While to date the U.S. Treasury has not exercised this regulatory authority, there can be no assurance that it will not issue regulations in the future (possibly with retroactive application) that would treat some or all of a Fund's foreign currency gains as non-qualifying income. For purposes of the diversification requirement described above, a Fund will not be treated as in violation of such requirement as a result of a discrepancy between the value of its various investments and the diversification percentages described above, unless such discrepancy exists immediately following the acquisition of any security or other property and is wholly or partly the result of such acquisition. Moreover, even in the event of noncompliance with the diversification requirement as of the end of any given quarter, a Fund is permitted to cure the violation by eliminating the discrepancy causing such noncompliance within a period of 30 days from the close of the relevant quarter.

Each of the Discovery Portfolio and Growth Portfolio may seek to gain exposure to bitcoin through investments in a Bitcoin Subsidiary. The Global Strategist Portfolio may seek to gain exposure to bitcoin and the commodity markets through investments in the Global Strategist Subsidiary. Historically, the IRS has issued private letter rulings in which the IRS specifically concluded that income and gains from investments in a wholly-owned foreign subsidiary that invests in commodity-linked instruments are "qualifying income" for purposes of the 90% gross income test described above. The Funds have not received such a private letter ruling, and are not able to rely on private letter rulings issued to other taxpayers. The IRS issued final regulations that would generally treat a Fund's income inclusion with respect to a Subsidiary as qualifying income either if (i) there is a current distribution out of the earnings and profits of the Subsidiary that are attributable to such income inclusion or (ii) such inclusion is derived with respect to the Fund's business of investing in stock, securities or currencies. The tax treatment of a Fund's investments in a Subsidiary may be adversely affected by future legislation, court decisions, Treasury Regulations and/or guidance issued by the IRS that could affect whether income derived from such investments is "qualifying income" under Subchapter M of the Code, or otherwise affect the character, timing and/or amount of the Fund's taxable income or any gains and distributions made by the Fund. No assurances can be provided that the IRS would not be able to successfully assert that a Fund's income from such investments was not "qualifying income," in which case the Fund would fail to qualify as a RIC under Subchapter M of the Code if over 10% of its gross income was derived from these investments. If the Fund failed to qualify as a RIC, it would be subject to federal and state income tax on all of its taxable income at regular corporate tax rates with no deduction for any distributions paid to shareholders, which would significantly adversely affect the returns to, and could cause substantial losses for, Fund shareholders. Additionally, the failure of a Fund to qualify as a RIC could result in significant adverse tax consequences for the holders of the contracts and annuities which invest in the Fund through a separate account.

A foreign corporation, such as a Subsidiary, will generally not be subject to U.S. federal income taxation unless it is deemed to be engaged in a U.S. trade or business. The rules regarding whether the Subsidiary will be treated as engaged in a U.S. trade or business as a result of its bitcoin related investments are not certain. It is expected that each Subsidiary will conduct its activities in a manner so as to meet the requirements of a safe harbor under Section 864(b)(2) of the Code under which the Subsidiary may engage in trading in stocks or securities or certain commodities without being deemed to be engaged in a U.S. trade or business. However, if certain of a Subsidiary's activities were determined not to be of the type described in the safe harbor, then the activities of the Subsidiary may constitute a U.S. trade or business, or be taxed as such. In general, a foreign corporation, such as a Subsidiary, that does not conduct a U.S. trade or business is nonetheless subject to tax at a flat rate of 30 percent (or lower tax treaty rate), generally payable through withholding, on the gross amount of certain U.S.-source income that is not effectively connected with a U.S. trade or business. There is presently no tax treaty in force between the U.S. and the Cayman Islands that would reduce this rate of withholding tax. It is not expected that any Subsidiary will derive income subject to such withholding tax.

Each Subsidiary will be treated as a controlled foreign corporation and each Fund will be treated as a "U.S. shareholder" of the Subsidiary. As a result, each Fund will be required to include in gross income for U.S. federal income tax purposes all of a Subsidiary's "Subpart F income," whether or not such income is distributed by the Subsidiary. Each Fund's recognition of a

Subsidiary's "Subpart F income" will increase the Fund's tax basis in its respective Subsidiary. Distributions by a Subsidiary to a Fund will be tax-free, to the extent of their previously undistributed "Subpart F income," and will correspondingly reduce the Fund's tax basis in the Subsidiary. "Subpart F income" is generally treated as ordinary income, regardless of the character of a Subsidiary's underlying income. If a net loss is realized by a Subsidiary, such loss is not generally available to offset the income earned by a Fund, and such loss cannot be carried forward to offset taxable income of the Fund or the Subsidiary in future periods.

In addition to the requirements described above, in order to qualify as a RIC, each Fund must distribute an amount at least equal to the sum of 90% of the Fund's investment company taxable income (that generally includes dividends, taxable interest, currency gains, and the excess of net short-term capital gains over net long-term capital losses less operating expenses) and 90% of its net tax-exempt interest income, if any, to shareholders (the "Distribution Requirement"). If a Fund meets all of the RIC requirements, it will not be subject to federal income tax on any of its net investment income or net realized capital gains that it distributes to shareholders. Although each Fund intends to distribute all or substantially all of its net investment income and may distribute its net realized capital gains for any taxable year, a Fund will be subject to federal income taxation to the extent any such income or gains are not distributed.

A Fund is generally permitted to carry forward a net capital loss in any taxable year to offset its own capital gains, if any. These amounts are available to be carried forward to offset future capital gains to the extent permitted by the Code and applicable tax regulations. Any such loss carryforwards will retain their character as short-term or long-term.

Certain Funds may make certain investments indirectly through one or more entities treated as corporations for U.S. federal income tax purposes. Such entities will generally be required to pay U.S. corporate income tax, and possibly other taxes, on their earnings, which ultimately will reduce the Fund's return on income derived from such investments.

Some of the Funds may make investments that cause the Funds to recognize income or gain prior to receiving cash with respect to such investments. For example, in the event that the Funds invest in securities (such as STRIPS) that bear "original issue discount" or "acquisition discount" (collectively, "OID Securities") they will be deemed to have received interest income even though no cash payments have been received. Accordingly, such investments may not produce sufficient current cash receipts to match the amount of net investment income a Fund must distribute to satisfy the Distribution Requirement. In some cases, a Fund may have to borrow money or dispose of other investments in order to make sufficient cash distributions to satisfy the Distribution Requirement.

If a Fund fails to qualify for any taxable year as a RIC, all of its taxable income will be subject to tax at regular corporate income tax rates without any deduction for distributions to shareholders.

A Fund's transactions in derivatives (such as futures contracts and swaps) will be subject to special tax rules, the effect of which may be to accelerate income to the Fund, defer losses to the Fund, cause adjustments in the holding periods of the Fund's securities and convert short-term capital losses into long-term capital losses. These rules could therefore affect the amount, timing and character of distributions made by a Fund. A Fund's use of derivatives may result in the Fund realizing more short-term capital gains and ordinary income subject to tax at ordinary income tax rates than it would if it did not use derivatives.

Positions held by a Fund in certain regulated futures contracts and foreign currency contracts ("Section 1256 Contracts") will generally be marked-to-market (i.e., treated as though sold for fair market value) on the last business day of the Fund's taxable year and all gain or loss associated with such transactions (except certain currency gains covered by Section 988 of the Code) will generally be treated as 60% long-term capital gain or loss and 40% short-term capital gain or loss. The effect of the Section 1256 mark-to-market rules may be to accelerate income or to convert what otherwise would have been long-term capital gain into short-term capital gain or short-term capital losses into long-term capital losses within a Fund. The acceleration of income on Section 1256 Contracts may require a Fund to accrue taxable income without a corresponding receipt of cash. In order to generate enough cash to satisfy the Distribution Requirement, a Fund may be required to dispose of portfolio securities that it otherwise would have continued to hold or to use cash flows from other sources. Any or all of these rules may, therefore, affect the amount, character or timing of income earned and, in turn, affect the application of the Distribution Requirement to a particular Fund.

Short sales engaged in by a Fund may reduce the holding period of property held by a Fund which is substantially identical to the property sold short. This rule may have the effect of converting capital gains recognized by a Fund from long-term to short-term as well as converting capital losses recognized by a Fund from short-term to long-term.

Federal Excise Tax

No Fund will be subject to the 4% excise tax normally imposed on RICs that do not distribute substantially all of their income and gains each calendar year, because that tax does not apply to a RIC whose only shareholders are segregated asset accounts of life insurance companies held in connection with variable annuity accounts and/or variable life insurance policies and certain trusts under qualified pension and retirement plans.

Certain Tax Information Reporting Considerations

Because of the nature of the rules governing how REITs report their income and the timing of REITs issuing year-end tax information, to the extent a Fund invests in REITs, the Fund may need to estimate the character of distributions paid to its shareholders from REIT distributions. In addition, after the calendar year-end, REITs may recharacterize the nature of the distributions paid during that year, with the result that distributions previously identified as ordinary income are recharacterized as return of capital and/or capital gain. As a result, the composition of a Fund's distributions as reported initially may differ from the final composition determined after calendar year-end and reported to the Fund's shareholders on their year-end tax information statements.

Foreign Income Taxes

To the extent a Fund invests in foreign securities, the Fund may be subject to foreign withholding taxes with respect to its dividend and interest income from foreign countries, thus reducing the net amount available for distribution to the Fund's shareholders. The United States has entered into tax treaties with many foreign countries that may entitle the Fund to a reduced rate of, or exemption from, taxes on such income. It is impossible to determine the effective rate of foreign tax in advance because the amount of the Fund's assets to be invested within various countries is not known. A Fund incurring foreign taxes, if eligible, may elect to pass-through allowable foreign tax credits. The benefits, which may be potentially material, of this election will inure only to the insurance company that issued the variable contract and will not be shared with the contract holders.

State and Local Tax Considerations

Rules of U.S. state and local taxation of dividend and capital gains distributions from regulated investment companies often differ from the rules for U.S. federal income taxation described above. Shareholders are urged to consult their tax advisers as to the consequences of these and other U.S. state and local tax rules regarding an investment in the Fund.

PURCHASE OF SHARES

The purchase price of a share of each Fund of the Company is the NAV next determined after the order is received by the Company or its designee. NAV for Class I and Class II shares of a Fund will differ due to class specific expenses paid by each class, if any, and the 12b-1 fee charged to Class II shares. For each Fund of the Company, an order received prior to the close of the New York Stock Exchange (the "NYSE") (normally 4:00 p.m. Eastern time) will be executed at the price computed on the date of receipt; and an order received after the close of the NYSE will be executed at the price computed on the next day the NYSE is open as long as the Company's transfer agent receives payment by check or in Federal Funds. Shares of each Fund may be purchased on any day the NYSE is open except as noted below. If the NYSE is closed due to inclement weather, technology problems or any other reason on a day it would normally be open for business, or the NYSE has an unscheduled early closing on a day it has opened for business, a Fund reserves the right to treat such day as a business day and accept purchase and redemption orders until, and calculate its NAV as of, the normally scheduled close of regular trading on the NYSE for that day, so long as the Adviser believes there generally remains an adequate market to obtain reliable and accurate market quotations. A Fund may elect to remain open and price its shares on days when the NYSE is closed but the primary securities markets on which the Fund's securities trade remain open.

Shares may, in the Company's discretion, be purchased with investment securities (in lieu of or in conjunction with cash) acceptable to the Company. The securities would be acceptable by the Company at their market value in return for Fund Shares of equal value.

The Company may accept orders from participating insurance companies after the close of the NYSE. In these cases, all orders received by a participating insurance company on a business day are aggregated and the insurance company places a net purchase or redemption order for shares of one or more Funds later that day or the morning of the next business day. These orders are normally executed at the NAV that was computed at the close of the day on which the insurance company received the order.

Each Fund reserves the right in its sole discretion to suspend the offering of its shares and to reject purchase orders when in the judgment of management such rejection is in the best interest of the Fund.

REDEMPTION OF SHARES

The Company normally makes payment for all shares redeemed within one business day of receipt of the request, and in no event more than seven days after receipt of a redemption request in good order. The Company may suspend redemption privileges or postpone the date of payment (i) during any period that the NYSE is closed, or trading on the NYSE is restricted as determined by the SEC, (ii) during any period when an emergency exists as defined by the rules of the SEC as a result of which it is not reasonably practicable for a Fund to dispose of securities owned by it, or fairly to determine the value of its assets and (iii) for such other periods as the SEC may permit.

If the Adviser determines that it is in the best interest of the Company or a Fund not to pay redemption proceeds in cash, and subject to applicable agreements with life insurance companies and other qualified investors, the Company may distribute to you securities held by the Fund from which you are redeeming. If requested, the Fund will pay a portion of your redemption(s) in cash (during any

90 day period) up to the lesser of \$250,000 or 1% of the net assets of the Fund at the beginning of such period. Such in-kind securities may be illiquid and difficult or impossible for a shareholder to sell at a time and at a price that a shareholder would like. In addition, you may incur brokerage costs and a further gain or loss for income tax purposes when you ultimately sell the securities.

INVESTMENT LIMITATIONS

Fundamental Limitations

Each current Fund has adopted the following restrictions, which are fundamental policies and may not be changed without the approval of the lesser of: (1) at least 67% of the voting securities of the Fund present at a meeting if the holders of more than 50% of the outstanding voting securities of the Fund are present or represented by proxy, or (2) more than 50% of the outstanding voting securities of the Fund. Each Fund of the Company may not:

1. purchase or sell physical commodities unless acquired as a result of ownership of securities or other instruments; provided that this restriction shall not prohibit the Fund from purchasing or selling options, futures contracts and related options thereon, forward contracts, swaps, caps, floors, collars and any other financial instruments or from investing in securities or other instruments backed by physical commodities or as otherwise permitted by (i) the 1940 Act, (ii) the rules and regulations promulgated by the SEC under the 1940 Act, or (iii) an exemption or other relief applicable to the Fund from the provisions of the 1940 Act;
2. purchase or sell real estate, although it may purchase and sell securities of companies that deal in real estate and may purchase and sell securities that are secured by interests in real estate;
3. make loans of money or property to any person, except (a) to the extent that securities or interests in which the Fund may invest are considered to be loans, (b) through the loan of portfolio securities, (c) by engaging in repurchase agreements, or (d) as may otherwise be permitted by (i) the 1940 Act, (ii) the rules and regulations promulgated by the SEC under the 1940 Act, or (iii) an exemption or other relief applicable to the Company from the provision of the 1940 Act;
4. except with respect to the Emerging Markets Debt, Global Franchise, Global Infrastructure and U.S. Real Estate Portfolios, invest in a manner inconsistent with its classification as a “diversified company” as provided by (i) the 1940 Act, (ii) the rules and regulations promulgated by the SEC under the 1940 Act, or (iii) an exemption or other relief applicable to the Fund from the provisions of the 1940 Act;
5. borrow money, except the Fund may borrow money to the extent permitted by (i) the 1940 Act, (ii) the rules and regulations promulgated by the SEC under the 1940 Act, or (iii) an exemption or other relief applicable to the Company from the provisions of the 1940 Act;
6. issue senior securities, except the Fund may issue senior securities to the extent permitted by (i) the 1940 Act, (ii) the rules and regulations promulgated by the SEC under the 1940 Act, or (iii) an exemption or other relief applicable to the Fund from the provisions of the 1940 Act;
7. underwrite securities issued by others, except to the extent that the Fund may be considered an underwriter within the meaning of the 1933 Act in the disposition of restricted securities; and
8. except with respect to the Global Infrastructure Portfolio, acquire any securities of companies within one industry if, as a result of such acquisition, more than 25% of the value of the Fund’s total assets would be invested in securities of companies within such industry; provided, that (i) there shall be no limitation on the purchase of obligations issued or guaranteed by the U.S. Government, its agencies or instrumentalities or instruments issued by U.S. banks; (ii) utility companies will be divided according to their services, for example, gas, gas transmission, electric and telephone will each be considered a separate industry; (iii) financial service companies will be classified according to the end users of their services, for example, automobile finance, bank finance and diversified finance will each be considered a separate industry; and (iv) asset-backed securities will be classified according to the underlying assets securing such securities; and provided further that the Global Real Estate Portfolio may invest more than 25% of its total assets in the real estate industry; and the U.S. Real Estate Portfolio may invest more than 25% of its total assets in the U.S. real estate industry; and
9. with respect to the Global Infrastructure Portfolio only, acquire any securities of companies within one industry if, as a result of such acquisition, 25% or more of the value of the Fund’s total assets would be invested in securities of companies within such industry; provided, that there shall be no limitation on the purchase of obligations issued or guaranteed by the U.S. Government, its agencies and instrumentalities or instruments issued by U.S. banks; and provided further, that the Fund will invest 25% or more of its total assets in the infrastructure industry.

Non-Fundamental Limitations

In addition, each Fund of the Company has adopted the following non-fundamental investment limitations, which may be changed by the Board without shareholder approval. Each Fund of the Company will not:

1. invest its assets in securities of any investment company, except as permitted by the 1940 Act or the rules, regulations, interpretations or orders of the SEC and its staff thereunder;
2. make loans except (i) by purchasing bonds, debentures or similar obligations (including repurchase agreements, subject to the limitations as described in the prospectus) that are publicly distributed and (ii) by lending its portfolio securities to banks, brokers, dealers and other financial institutions, so long as such loans are not inconsistent with the 1940 Act or the Rules and Regulations or interpretations of the SEC thereunder;
3. purchase on margin except that (i) each Fund may make margin deposits in connection with short sales of securities, derivatives and other similar transactions; and (ii) each Fund may use short-term credit as may be necessary for the clearance of purchases and sales of securities; and
4. except in the case of the Emerging Markets Debt Portfolio, borrow money, other than temporarily or for extraordinary or emergency purposes or purchase additional securities when borrowings exceed 5% of total (gross) assets.

Whether diversified or non-diversified, each Fund will diversify its holdings so that, at the close of each quarter of its taxable year or within 30 days thereafter, (i) at least 50% of the market value of the Fund's total assets is represented by cash (including cash items and receivables), U.S. Government securities and other securities, with such other securities limited, in respect of any one issuer, for purposes of this calculation to an amount not greater than 5% of the value of the Fund's total assets and 10% of the outstanding voting securities of such issuer and (ii) not more than 25% of the value of its total assets is invested in the securities of any one issuer (other than U.S. Government securities).

The percentage limitations contained in these fundamental and non-fundamental limitations apply at the time of purchase of securities. A later change in percentage resulting from changes in a Fund's assets or in total or net assets of the Fund will not be considered a violation of the restriction and the sale of securities will not be required. The foregoing does not apply to borrowings. Future Funds of the Company may adopt different limitations.

The investments of life insurance company separate accounts made under variable annuity contracts and variable life insurance policies are subject to state insurance laws and regulations. The Company and its Funds will, when required, comply with investment restrictions imposed under such laws and regulations on life insurance company separate accounts investing in the Funds.

In addition, Section 817(h) of the Code requires that the assets of each Fund be adequately diversified so that insurance companies, and not variable contract owners, are considered the owners for federal income tax purposes of the assets held in the separate accounts. To meet the diversification requirements of regulations issued under Section 817(h), each Fund will meet the following test: no more than 55% of the assets will be invested in any one investment; no more than 70% of the assets will be invested in any two investments; no more than 80% of the assets will be invested in any three investments; and no more than 90% will be invested in any four investments. Each Fund must meet the above diversification requirements within 30 days of the end of each calendar quarter.

The investment policies, limitations or practices of the Funds may not apply during periods of unusual or adverse market, economic, political or other conditions. Such market, economic, political or other conditions may include periods of abnormal or heightened market volatility, strained credit and/or liquidity conditions or increased governmental intervention in the markets or industries. During such periods, a Fund may not invest according to its principal investment strategies or in the manner in which its name may suggest, and may be subject to different and/or heightened risks. It is possible that such unusual or adverse conditions may continue for extended periods of time. See "Investment Policies and Strategies — Fixed-Income Securities — Temporary Investments."

For purposes of policies adopted in accordance with Rule 35d-1 under the 1940 Act, the term "assets," as defined in Rule 35d-1 under the 1940 Act, means net assets plus the amount of any borrowings for investment purposes.

MANAGEMENT OF THE COMPANY

General. The Directors oversee the Company's affairs under the laws governing corporations in the State of Maryland. The Directors have approved contracts under which certain companies provide essential management, administrative and shareholder services to the Company.

Directors and Officers. The Board of the Company consists of 11 Directors. These same individuals also serve as directors or trustees for certain of the funds advised by the Adviser and Morgan Stanley AIP GP LP. None of the Directors have an affiliation or business connection with the Adviser or any of its affiliated persons or own any stock or other securities issued by the Adviser's parent company, Morgan Stanley. These are the "non-interested" or "Independent" Directors as defined under the 1940 Act.

Board Structure and Oversight Function. The Board's leadership structure features an Independent Director serving as Chairperson and the Board Committees described below. The Chairperson participates in the preparation of the agenda for meetings of the Board and the preparation of information to be presented to the Board with respect to matters to be acted upon by the Board.

The Chairperson also presides at all meetings of the Board and is involved in discussions regarding matters pertaining to the oversight of the management of the Company between meetings.

The Board of Directors operates using a system of committees to facilitate the timely and efficient consideration of all matters of importance to the Directors, the Company and Company shareholders, and to facilitate compliance with legal and regulatory requirements and oversight of the Company's activities and associated risks. The Board of Directors has established six standing committees: (1) Audit Committee, (2) Governance Committee, (3) Compliance and Insurance Committee, (4) Equity Investment Committee, (5) Fixed Income, Liquidity and Alternatives Investment Committee and (6) Risk Committee, which are each comprised exclusively of Independent Directors. Each committee charter governs the scope of the committee's responsibilities with respect to the oversight of the Company. The responsibilities of each committee, including their oversight responsibilities, are described further under the caption "Independent Directors and the Committees."

The Funds are subject to a number of risks, including investment, compliance, operational and valuation risk, among others. The Board of Directors oversees these risks as part of its broader oversight of the Company's affairs through various Board and committee activities. The Board has adopted, and periodically reviews, policies and procedures designed to address various risks to the Company. In addition, appropriate personnel, including but not limited to the Company's Chief Compliance Officer, members of the Company's administration and accounting teams, representatives from the Funds' independent registered public accounting firm, the Company's Treasurer, portfolio management personnel, risk management personnel and independent valuation and brokerage evaluation service provider, make regular reports regarding the Company's activities and related risks to the Board of Directors and the committees, as appropriate. These reports include, among others, quarterly performance reports, quarterly risk reports and discussions with members of the risk teams relating to each asset class. The Board's committee structure allows separate committees to focus on different aspects of risk and the potential impact of these risks on some or all of the funds in the complex and then report back to the full Board. In between regular meetings, Company officers also communicate with the Directors regarding material exceptions and items relevant to the Board's risk oversight function. The Board recognizes that it is not possible to identify all of the risks that may affect the Company, and that it is not possible to develop processes and controls to eliminate all of the risks that may affect the Company. Moreover, the Board recognizes that it may be necessary for the Funds to bear certain risks (such as investment risk) to achieve their respective investment objectives.

As needed between meetings of the Board, the Board or a specific committee receives and reviews reports relating to the Company and engages in discussions with appropriate parties relating to the Company's operations and related risks.

Directors. The Company seeks as Directors individuals of distinction and experience in business and finance, government service or academia. In determining that a particular Director was and continues to be qualified to serve as Director, the Board has considered a variety of criteria, none of which, in isolation, was controlling. Based on a review of the experience, qualifications, attributes or skills of each Director, including those enumerated in the table below, the Board has determined that each of the Directors is qualified to serve as a Director of the Company. In addition, the Board believes that, collectively, the Directors have balanced and diverse experience, qualifications, attributes and skills that allow the Board to operate effectively in governing the Company and protecting the interests of shareholders. Information about the Company's Governance Committee and Board of Directors nomination process is provided below under the caption "Independent Directors and the Committees."

The Directors of the Company, their birth years, addresses, positions held, length of time served, their principal business occupations during the past five years and other relevant professional experience, the number of portfolios in the Fund Complex (described herein) overseen by each Independent Director and other directorships, if any, held by the Directors, are shown below (as of January 1, 2023). The Fund Complex includes all open-end and closed-end funds (including all of their portfolios) advised by the Adviser and any registered funds that have an adviser that is an affiliate of the Adviser (including, but not limited to, Morgan Stanley AIP GP LP) (the "Morgan Stanley AIP Funds").

Name, Address and Birth Year of Independent Director	Position(s) Held with Registrant	Length of Time Served*	Principal Occupation(s) During Past 5 Years and Other Relevant Professional Experience	Number of Funds in Fund Complex Overseen by Independent Director	Other Directorships Held by Independent Director During Past 5 Years**
Frank L. Bowman c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1944	Director	Since August 2006	President, Strategic Decisions, LLC (consulting) (since February 2009); Director or Trustee of various Morgan Stanley Funds (since August 2006); Chairperson of the Compliance and Insurance Committee (since October 2015); formerly, Chairperson of the Insurance Sub-Committee of the Compliance and Insurance Committee (2007-2015); served as President and Chief Executive Officer of the Nuclear Energy Institute (policy organization) (February 2005-November 2008); retired as Admiral, U.S. Navy after serving over 38 years on active duty including 8 years as Director of the Naval Nuclear Propulsion Program in the Department of the Navy and the U.S. Department of Energy (1996-2004); served as Chief of Naval Personnel (July 1994-September 1996) and on the Joint Staff as Director of Political Military Affairs (June 1992-July 1994); knighted as Honorary Knight Commander of the Most Excellent Order of the British Empire; awarded the Officier de l'Orde National du Mérite by the French Government; elected to the National Academy of Engineering (2009).	83	Director of Naval and Nuclear Technologies LLP; Director Emeritus of the Armed Services YMCA; Member of the National Security Advisory Council of the Center for U.S. Global Engagement and a former member of the CNA Military Advisory Board; Chairman of the Board of Trustees of Fairhaven United Methodist Church; Member of the Board of Advisors of the Dolphin Scholarship Foundation; Director of other various nonprofit organizations; formerly, Director of BP, plc (November 2010-May 2019).
Frances L. Cashman c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1961	Director	Since February 2022	Chief Executive Officer, Asset Management Division, Delinian Ltd. (financial information) (May 2021-Present); Executive Vice President and various other roles, Legg Mason & Co. (asset management) (2010-2020); Managing Director, Stifel Nicolaus (2005-2010).	84	Trustee and Investment Committee Member, Georgia Tech Foundation (Since June 2019); Trustee and Chair of Marketing Committee, and Member of Investment Committee, Loyola Blakefield (Since September 2017); Trustee, MMI Gateway Foundation (since September 2017); Director and Investment Committee Member, Catholic Community Foundation Board (2012-2018); Director and Investment Committee Member, St. Ignatius Loyola Academy (2011-2017).
Kathleen A. Dennis c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1953	Director	Since August 2006	Chairperson of the Governance Committee (since January 2021), Chairperson of the Liquidity and Alternatives Sub-Committee of the Investment Committee (2006-2020) and Director or Trustee of various Morgan Stanley Funds (since August 2006); President, Cedarwood Associates (mutual fund and investment management consulting) (since July 2006); formerly, Senior Managing Director of Victory Capital Management (1993-2006).	83	Board Member, University of Albany Foundation (2012-present); Board Member, Mutual Funds Directors Forum (2014-present); Director of various non-profit organizations.

Name, Address and Birth Year of Independent Director	Position(s) Held with Registrant	Length of Time Served*	Principal Occupation(s) During Past 5 Years and Other Relevant Professional Experience	Number of Funds in Fund Complex Overseen by Independent Director	Other Directorships Held by Independent Director During Past 5 Years**
Nancy C. Everett c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1955	Director	Since January 2015	Chairperson of the Equity Investment Committee (since January 2021); Director or Trustee of various Morgan Stanley Funds (since January 2015); Chief Executive Officer, Virginia Commonwealth University Investment Company (since November 2015); Owner, OBIR, LLC (institutional investment management consulting) (since June 2014); formerly, Managing Director, BlackRock, Inc. (February 2011-December 2013) and Chief Executive Officer, General Motors Asset Management (a/k/a Promark Global Advisors, Inc.) (June 2005-May 2010).	84	Formerly, Member of Virginia Commonwealth University School of Business Foundation (2005-2016); Member of Virginia Commonwealth University Board of Visitors (2013-2015); Member of Committee on Directors for Emerging Markets Growth Fund, Inc. (2007-2010); Chairperson of Performance Equity Management, LLC (2006-2010); and Chairperson, GMAM Absolute Return Strategies Fund, LLC (2006-2010).
Eddie A. Grier c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1955	Director	Since February 2022	Dean, Santa Clara University Leavey School of Business (since July 2021); Dean, Virginia Commonwealth University School of Business (2010-2021); President and various other roles, Walt Disney Company (entertainment and media) (1981-2010).	84	Director, Witt/Kieffer, Inc. (executive search) (since 2016); Director, NuStar GP, LLC (energy) (since August 2021); Director, Sonida Senior Living, Inc. (residential community operator) (2016-2021); Director, NVR, Inc. (homebuilding) (2013-2020); Director, Middleburg Trust Company (wealth management) (2014-2019); Director, Colonial Williamsburg Company (2012-2021); Regent, University of Massachusetts Global (since 2021); Director and Chair, ChildFund International (2012-2021); Trustee, Brandman University (2010-2021); Director, Richmond Forum (2012-2019).
Jakki L. Haussler c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1957	Director	Since January 2015	Chairperson of the Audit Committee (since January 2023) and Director or Trustee of various Morgan Stanley Funds (since January 2015); Chairman, Opus Capital Group (since 1996); formerly, Chief Executive Officer, Opus Capital Group (1996-2019); Director, Capvest Venture Fund, LP (May 2000-December 2011); Partner, Adena Ventures, LP (July 1999-December 2010); Director, The Victory Funds (February 2005-July 2008).	84	Director, Vertiv Holdings Co. (VRT) (since August 2022); Director of Cincinnati Bell Inc. and Member, Audit Committee and Chairman, Governance and Nominating Committee (2008-2021); Director of Service Corporation International and Member, Audit Committee and Investment Committee; Director, Barnes Group Inc. (since July 2021); Director of Northern Kentucky University Foundation and Member, Investment Committee; Member of Chase College of Law Center for Law and Entrepreneurship Board of Advisors; Director of Best Transport (2005-2019); Director of Chase College of Law Board of Visitors; formerly, Member, University of Cincinnati Foundation Investment Committee.

Name, Address and Birth Year of Independent Director	Position(s) Held with Registrant	Length of Time Served*	Principal Occupation(s) During Past 5 Years and Other Relevant Professional Experience	Number of Funds in Fund Complex Overseen by Independent Director	Other Directorships Held by Independent Director During Past 5 Years**
Dr. Manuel H. Johnson c/o Johnson Smick International, Inc. 220 I Street, NE Suite 200 Washington, D.C. 20002 Birth Year: 1949	Director	Since July 1991	Senior Partner, Johnson Smick International, Inc. (consulting firm); Chairperson of the Fixed Income, Liquidity and Alternatives Investment Committee (since January 2021), Chairperson of the Investment Committee (2006-2020) and Director or Trustee of various Morgan Stanley Funds (since July 1991); Co-Chairman and a founder of the Group of Seven Council (G7C) (international economic commission); formerly, Chairperson of the Audit Committee (July 1991-September 2006); Vice Chairman of the Board of Governors of the Federal Reserve System and Assistant Secretary of the U.S. Treasury.	83	Director of NVR, Inc. (home construction).
Joseph J. Kearns c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1942	Director	Since August 1994	Senior Adviser, Kearns & Associates LLC (investment consulting); Chairperson of the Audit Committee (2006-2022) and Director or Trustee of various Morgan Stanley Funds (since August 1994); formerly, Deputy Chairperson of the Audit Committee (July 2003-September 2006) and Chairperson of the Audit Committee of various Morgan Stanley Funds (since August 1994); CFO of the J. Paul Getty Trust (1982-1999).	84	Director, Rubicon Investments (since February 2019); Prior to August 2016, Director of Electro Rent Corporation (equipment leasing). Prior to December 31, 2013, Director of The Ford Family Foundation.
Michael F. Klein c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1958	Director	Since August 2006	Chairperson of the Risk Committee (since January 2021); Managing Director, Aetos Alternatives Management, LP (since March 2000); Co-President, Aetos Alternatives Management, LP (since January 2004) and Co-Chief Executive Officer of Aetos Alternatives Management, LP (since August 2013); Chairperson of the Fixed Income Sub-Committee of the Investment Committee (2006-2020) and Director or Trustee of various Morgan Stanley Funds (since August 2006); formerly, Managing Director, Morgan Stanley & Co. Inc. and Morgan Stanley Dean Witter Investment Management and President, various Morgan Stanley Funds (June 1998-March 2000); Principal, Morgan Stanley & Co. Inc. and Morgan Stanley Dean Witter Investment Management (August 1997-December 1999).	83	Director of certain investment funds managed or sponsored by Aetos Alternatives Management, LP; Director of Sanitized AG and Sanitized Marketing AG (specialty chemicals).

Name, Address and Birth Year of Independent Director	Position(s) Held with Registrant	Length of Time Served*	Principal Occupation(s) During Past 5 Years and Other Relevant Professional Experience	Number of Funds in Fund Complex Overseen by Independent Director	Other Directorships Held by Independent Director During Past 5 Years**
Patricia A. Maleski c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1960	Director	Since January 2017	Director or Trustee of various Morgan Stanley Funds (since January 2017); Managing Director, JPMorgan Asset Management (2004-2016); Oversight and Control Head of Fiduciary and Conflicts of Interest Program (2015-2016); Chief Control Officer—Global Asset Management (2013-2015); President, JPMorgan Funds (2010-2013); Chief Administrative Officer (2004-2013); various other positions including Treasurer and Board Liaison (since 2001).	84	Trustee (since January 2022) and Treasurer (since January 2023), Nutley Family Service Bureau, Inc.
W. Allen Reed c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1947	Chair of the Board and Director	Chair of the Board since August 2020 and Director since August 2006	Chair of the Boards of various Morgan Stanley Funds (since August 2020); Director or Trustee of various Morgan Stanley Funds (since August 2006); formerly, Vice Chair of the Boards of various Morgan Stanley Funds (January 2020-August 2020); President and Chief Executive Officer of General Motors Asset Management; Chairman and Chief Executive Officer of the GM Trust Bank and Corporate Vice President of General Motors Corporation (August 1994-December 2005).	83	Formerly, Director of Legg Mason, Inc. (2006-2019); and Director of the Auburn University Foundation (2010-2015).

* This is the earliest date the Director began serving the Morgan Stanley Funds. Each Director serves an indefinite term, until his or her successor is elected.

** This includes any directorships at public companies and registered investment companies held by the Director at any time during the past five years.

The executive officers of the Company, their birth years, addresses, positions held, length of time served and their principal business occupations during the past five years are shown below (as of January 1, 2023).

Name, Address and Birth Year of Executive Officer	Position(s) Held with Registrant	Length of Time Served*	Principal Occupation(s) During Past 5 Years
John H. Gernon 522 Fifth Avenue New York, NY 10036 Birth Year: 1963	President and Principal Executive Officer	Since September 2013	President and Principal Executive Officer of the Equity and Fixed Income Funds and the Morgan Stanley AIP Funds (since September 2013) and the Liquidity Funds and various money market funds (since May 2014) in the Fund Complex; Managing Director of the Adviser.
Deidre A. Downes 1633 Broadway New York, NY 10019 Birth Year: 1977	Chief Compliance Officer	Since November 2021	Executive Director of the Adviser (since January 2021) and Chief Compliance officer of various Morgan Stanley Funds (since November 2021). Formerly, Vice President and Corporate Counsel at PGIM and Prudential Financial (October 2016 – December 2020).
Francis J. Smith 522 Fifth Avenue New York, NY 10036 Birth Year: 1965	Treasurer and Principal Financial Officer	Treasurer since July 2003 and Principal Financial Officer since September 2002	Managing Director of the Adviser and various entities affiliated with the Adviser; Treasurer (since July 2003) and Principal Financial Officer of various Morgan Stanley Funds (since September 2002).
Mary E. Mullin 1633 Broadway New York, NY 10019 Birth Year: 1967	Secretary	Since June 1999	Managing Director of the Adviser; Secretary of various Morgan Stanley Funds (since June 1999).
Michael J. Key 522 Fifth Avenue New York, NY 10036 Birth Year: 1979	Vice President	Since June 2017	Vice President of the Equity and Fixed Income Funds, Liquidity Funds, various money market funds and the Morgan Stanley AIP Funds in the Fund Complex (since June 2017); Managing Director of the Adviser; Head of Product Development for Equity and Fixed Income Funds (since August 2013).

* This is the earliest date the officer began serving the Morgan Stanley Funds. Each officer serves a one-year term, until his or her successor is elected and has qualified.

In addition, the following individuals who are officers of the Adviser or its affiliates serve as assistant secretaries of the Company: Nicholas Di Lorenzo, Princess Kludjeson, Francesca Mead, Sydney A. Walker and Jill R. Whitelaw.

It is a policy of the Company's Board that each Director shall invest in any combination of the Morgan Stanley Funds that the Director determines meets his or her own specific investment objectives, without requiring any specific investment in any particular Fund.

For each Director, the dollar range of equity securities beneficially owned by the Director in the Funds and in the Family of Investment Companies (Family of Investment Companies includes all of the registered investment companies advised by the Adviser and Morgan Stanley AIP GP LP) for the calendar year ended December 31, 2022 is set forth in the table below.

Name of Director	Dollar Range of Equity Securities in the Funds (as of December 31, 2022)	Aggregate Dollar Range of Equity Securities in All Registered Investment Companies Overseen by Director in Family of Investment Companies (as of December 31, 2022)
Independent:		
Frank L. Bowman	None	over \$100,000
Frances L. Cashman ¹	None	None
Kathleen A. Dennis	None	over \$100,000
Nancy C. Everett	None	over \$100,000
Eddie A. Grier ¹	None	None
Jakki L. Haussler	None	over \$100,000
Manuel H. Johnson	None	over \$100,000
Joseph J. Kearns ²	None	over \$100,000
Michael F. Klein ²	None	over \$100,000
Patricia Maleski	None	over \$100,000
W. Allen Reed ²	None	over \$100,000

¹ Ms. Cashman and Mr. Grier became members of the Advisory Board of the Board of Directors on January 1, 2022 and Directors on February 25, 2022.

² Includes the total amount of compensation deferred by the Director at his election pursuant to a deferred compensation plan. Such deferred compensation is placed in a deferral account and deemed to be invested in one or more of the Morgan Stanley Funds (or portfolio thereof) that are offered as investment options under the plan.

As to each Independent Director and his or her immediate family members, no person owned beneficially or of record securities of an investment adviser or principal underwriter of the Company, or a person (other than a registered investment company) directly or indirectly controlling, controlled by or under common control with an investment adviser or principal underwriter of the Company.

As of April 1, 2023, the Directors and officers of the Company, as a group, owned less than 1% of any class of the outstanding shares of beneficial interest of each Fund.

Independent Directors and the Committees

Law and regulation establish both general guidelines and specific duties for the Independent Directors. The Board has six committees: (1) Audit Committee, (2) Governance Committee, (3) Compliance and Insurance Committee, (4) Equity Investment Committee, (5) Fixed Income, Liquidity and Alternatives Investment Committee and (6) Risk Committee.

The Independent Directors are charged with recommending to the full Board approval of management, advisory and administration contracts, Rule 12b-1 plans and distribution and underwriting agreements; continually reviewing fund performance, checking on the pricing of portfolio securities, brokerage commissions, transfer agent costs and performance and trading among funds in the same complex; and approving fidelity bond and related insurance coverage and allocations, as well as other matters that arise from time to time. The Independent Directors are required to select and nominate individuals to fill any Independent Director vacancy on the board of any fund that has a Rule 12b-1 plan of distribution.

The Board of Directors has a separately-designated standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (the "1934 Act"). The Audit Committee is charged with recommending to the full Board the engagement or discharge of the Company's independent registered public accounting firm; directing investigations into matters within the scope of the independent registered public accounting firm's duties, including the power to retain outside specialists; reviewing with the independent registered public accounting firm the audit plan and results of the auditing engagement; approving professional services provided by the independent registered public accounting firm and other accounting firms prior to the performance of the services; reviewing the independence of the independent registered public accounting firm; considering the

range of audit and non-audit fees; reviewing the adequacy of the Company's system of internal controls and reviewing the valuation process. The Company has adopted a formal, written Audit Committee Charter.

The members of the Audit Committee of the Company are Nancy C. Everett, Eddie A. Grier, Jakki L. Haussler and Joseph J. Kearns. None of the members of the Company's Audit Committee is an "interested person," as defined under the 1940 Act, of the Company (with such disinterested Directors being "Independent Directors" or individually, an "Independent Director"). Each Independent Director is also "independent" from the Company under the listing standards of the NYSE. The Chairperson of the Audit Committee of the Company is Jakki L. Haussler.

The Board of Directors of the Company also has a Governance Committee. The Governance Committee identifies individuals qualified to serve as Independent Directors on the Company's Board and on committees of the Board and recommends such qualified individuals for nomination by the Company's Independent Directors as candidates for election as Independent Directors, advises the Company's Board with respect to Board composition, procedures and committees, develops and recommends to the Company's Board a set of corporate governance principles applicable to the Company, monitors and makes recommendations on corporate governance matters and policies and procedures of the Company's Board of Directors and any Board committees and oversees periodic evaluations of the Company's Board and its committees. The members of the Governance Committee of the Company are Kathleen A. Dennis, Manuel H. Johnson, Michael F. Klein, Patricia A. Maleski and W. Allen Reed, each of whom is an Independent Director. In addition, W. Allen Reed (as Chair of the Morgan Stanley Funds) periodically may attend other operating Committee meetings. The Chairperson of the Governance Committee is Kathleen A. Dennis.

The Company does not have a separate nominating committee. While the Company's Governance Committee recommends qualified candidates for nominations as Independent Directors, the Board of Directors of the Company believes that the task of nominating prospective Independent Directors is important enough to require the participation of all current Independent Directors, rather than a separate committee consisting of only certain Independent Directors. Accordingly, all the Independent Directors participate in the selection and nomination of candidates for election as Independent Directors for the Company. Persons recommended by the Company's Governance Committee as candidates for nomination as Independent Directors shall possess such experience, qualifications, attributes, skills and diversity so as to enhance the Board's ability to manage and direct the affairs and business of the Company, including, when applicable, to enhance the ability of committees of the Board to fulfill their duties and/or to satisfy any independence requirements imposed by law, regulation or any listing requirements of the NYSE. While the Independent Directors of the Company expect to be able to continue to identify from their own resources an ample number of qualified candidates for the Company's Board as they deem appropriate, they will consider nominations from shareholders to the Board. Nominations from shareholders should be in writing and sent to the Independent Directors as described below under the caption "Shareholder Communications."

The Board formed the Compliance and Insurance Committee to address insurance coverage and oversee the compliance function for the Company and the Board. The Compliance and Insurance Committee consists of Frank L. Bowman, Kathleen A. Dennis and Patricia A. Maleski, each of whom is an Independent Director. The Chairperson of the Compliance and Insurance Committee is Frank L. Bowman.

The Equity Investment Committee and the Fixed Income, Liquidity and Alternatives Investment Committees oversee the Company's portfolio investment process and review the performance of the Company's investments. The Equity Investment Committee and the Fixed Income, Liquidity and Alternatives Investment Committees also recommend to the Board to approve or renew the Company's Investment Advisory and Administration Agreements. Each Investment Committee focuses on the Company's primary areas of investment, namely equities, fixed income, liquidity and alternatives. Kathleen A. Dennis, Nancy C. Everett, Eddie A. Grier, Jakki L. Haussler and Michael F. Klein are members of the Equity Investment Committee. The Chairperson of the Equity Investment Committee is Nancy C. Everett. Frank L. Bowman, Frances L. Cashman, Manuel H. Johnson, Joseph J. Kearns and Patricia A. Maleski are members of the Fixed Income, Liquidity and Alternatives Investment Committee. The Chairperson of the Fixed Income, Liquidity and Alternatives Investment Committee is Manuel H. Johnson.

The Risk Committee assists the Board in connection with the oversight of the Company's risks, including investment risks, operational risks and risks posed by the Company's service providers as well as the effectiveness of the guidelines, policies and processes for monitoring and mitigating such risks. The members of the Risk Committee of the Company are Frances L. Cashman, Manuel H. Johnson, Michael F. Klein and W. Allen Reed, each of whom is an Independent Director. The Chairperson of the Risk Committee is Michael F. Klein.

During the Company's fiscal year ended December 31, 2022, the Board of Directors held the following meetings:

	Number of Meetings
Board of Directors/Committee	
Board of Directors	8
Audit Committee	4

	Number of Meetings
Board of Directors/Committee	
Governance Committee	4
Compliance and Insurance Committee	4
Equity Investment Committee	5
Fixed Income, Liquidity and Alternatives Investment Committee	5
Risk Committee	4

Experience, Qualifications and Attributes

The Board has concluded, based on each Director's experience, qualifications and attributes that each Board member should serve as a Director. Following is a brief summary of the information that led to and/or supports this conclusion.

Mr. Bowman has experience in a variety of business and financial matters through his prior service as a Director or Trustee for various funds in the Fund Complex, where he serves as Chairperson of the Compliance and Insurance Committee (and formerly served as Chairperson of the Insurance Sub-Committee of the Compliance and Insurance Committee). Mr. Bowman also serves as a Director of Naval and Nuclear Technologies LLP and Director Emeritus for the Armed Services YMCA, and formerly served as a Director of BP, plc. Mr. Bowman serves as a Chairman of the Board of Trustees of the Fairhaven United Methodist Church. Mr. Bowman is also a member of the National Security Advisory Council of the Center for U.S. Global Engagement, a former member of the CNA Military Advisory Board and a member of the Dolphin Scholarship Foundation Advisory Board. Mr. Bowman retired as an Admiral in the U.S. Navy after serving over 38 years on active duty including eight years as Director of the Naval Nuclear Propulsion Program in the Department of the Navy and the U.S. Department of Energy (1996-2004). Additionally, Mr. Bowman served as the U.S. Navy's Chief of Naval Personnel (1994-1996) where he was responsible for the planning and programming of all manpower, personnel, training and education resources for the U.S. Navy, and on the Joint Staff as Director of Political Military Affairs (1992-1994). In addition, Mr. Bowman served as President and Chief Executive Officer of the Nuclear Energy Institute. Mr. Bowman has received such distinctions as a knighthood as Honorary Knight Commander of the Most Excellent Order of the British Empire and the Officier de l'Orde National du Mérite from the French Government, and was elected to the National Academy of Engineering (2009). He is President of the consulting firm Strategic Decisions, LLC.

With more than 30 years of experience in the financial services industry, Ms. Cashman possesses valuable insights and expertise regarding governance, marketing, communications, and strategy. Ms. Cashman is Chief Executive Officer of the Asset Management Division of Delinian Ltd. Prior to that, Ms. Cashman spent over 20 years at Legg Mason & Co., ultimately serving as Executive Vice President and Global Head of Marketing and Communications. She has gained valuable experience as Director of two investment management entities and as a distribution leader reporting to boards of other mutual funds. In addition, Ms. Cashman also serves as Trustee for the Georgia Tech Foundation and the MMI Gateway Foundation.

Ms. Dennis has over 25 years of business experience in the financial services industry and related fields including serving as a Director or Trustee of various other funds in the Fund Complex, where she serves as Chairperson of the Governance Committee. Ms. Dennis possesses a strong understanding of the regulatory framework under which investment companies must operate based on her years of service to this Board and her position as Senior Managing Director of Victory Capital Management.

Ms. Everett has over 35 years of experience in the financial services industry, including roles with both registered investment companies and registered investment advisers. Ms. Everett serves as the Chairperson of the Equity Investment Committee. By serving on the boards of other registered funds, such as GMAM Absolute Return Strategies Fund, LLC and Emerging Markets Growth Fund, Inc., Ms. Everett has acquired significant experience with financial, accounting, investment and regulatory matters. Ms. Everett is also a Chartered Financial Analyst.

During the course of a career spanning more than 40 years in both academia and industry, Mr. Grier has gained substantial experience in management, operations, finance, marketing, and oversight. Mr. Grier is the Dean of Santa Clara University's Leavey School of Business. Prior to that, Mr. Grier was the Dean of the Virginia Commonwealth University School of Business. Before joining academia, Mr. Grier spent 29 years at the Walt Disney Company where he served in various leadership roles, including as President of the Disneyland Resort. Mr. Grier also gained substantial oversight experience serving on the boards of Sonia Senior Living, Inc. (formerly, Capital Senior Living Corporation), NVR, Inc., and Middleburg Trust Company. In addition, Mr. Grier currently serves as a Director of Witt/Kieffer, Inc., Director of NuStar GP, LLC, and Regent of University of Massachusetts Global. Mr. Grier is also a Certified Public Accountant.

With more than 30 years of experience in the financial services industry, including her years of entrepreneurial and managerial experience in the development and growth of Opus Capital Group, Ms. Haussler brings a valuable perspective to the Company's Board, where she serves as the Chairperson of the Audit Committee. Through her role at Opus Capital and her service as a director of several venture capital funds and other boards, Ms. Haussler has gained valuable experience dealing with accounting principles and

evaluating financial results of large corporations. She is a certified public accountant (inactive) and a licensed attorney in the State of Ohio (inactive). The Board has determined that Ms. Haussler is an “audit committee financial expert” as defined by the SEC.

In addition to his tenure as a Director or Trustee of various other funds in the Fund Complex, where he currently serves as the Chairperson of the Fixed Income, Liquidity and Alternatives Investment Committee and formerly served as Chairperson of the Audit Committee, Dr. Johnson has also served as an officer or a board member of numerous companies for over 20 years. These positions included Co-Chairman and a founder of the Group of Seven Council, Director of NVR, Inc., Director of Evergreen Energy and Director of Greenwich Capital Holdings. He also has served as Vice Chairman of the Board of Governors of the Federal Reserve System and Assistant Secretary of the U.S. Treasury. In addition, Dr. Johnson also served as Chairman of the Financial Accounting Foundation, which oversees the Financial Accounting Standards Board, for seven years.

Mr. Kearns gained extensive experience regarding accounting through his experience on the Audit Committees of the boards of other funds in the Fund Complex, including by previously serving as either Chairperson or Deputy Chairperson of the Audit Committee for nearly 20 years, and through his position as Chief Financial Officer of the J. Paul Getty Trust. He also has experience in financial, accounting, investment and regulatory matters through his position as President and founder of Kearns & Associates LLC, a financial consulting company. Mr. Kearns previously served as a Director of Electro Rent Corporation and previously served as Director of The Ford Family Foundation.

Through his prior positions as a Managing Director of Morgan Stanley & Co. Inc. and Morgan Stanley Dean Witter Investment Management and as President and a Trustee of the Morgan Stanley Institutional Funds, Mr. Klein has experience in the management and operation of registered investment companies, enabling him to provide management input and investment guidance to the Board. Mr. Klein is the Chairperson of the Risk Committee. Mr. Klein also has extensive experience in the investment management industry based on his current positions as Managing Director and Co-Chief Executive and Co-President of Aetos Alternatives Management, LP and as a Director of certain investment funds managed or sponsored by Aetos Alternatives Management, LP. In addition, he also has experience as a member of the board of other funds in the Fund Complex.

Ms. Maleski has over 30 years of experience in the financial services industry and extensive experience with registered investment companies. Ms. Maleski began her career as a certified public accountant at Price Waterhouse LLP (“PW”) and was a member of PW’s Investment Company Practice. After a brief stint at the Bank of New York, Ms. Maleski began her affiliation with the JPMorgan Funds, at the Pierpont Group, and then with J.P. Morgan Investment Management Inc. From 2001-2013, Ms. Maleski held roles with increasing responsibilities, from Vice President and Board Liaison, Treasurer and Principal Financial Officer, Chief Administrative Officer and finally President and Principal Executive Officer for the JPMorgan Fund complex. Between 2013 and 2016, Ms. Maleski served as Global Head of Oversight and Control of JPMorgan Asset Management and then as Head of JPMorgan Chase’s Fiduciary and Conflicts of Interest Program. Ms. Maleski has extensive experience in the management and operation of funds in addition to regulatory and accounting and valuation matters.

Mr. Reed has experience on investment company boards and is experienced with financial, accounting, investment and regulatory matters through his prior service as a Director of iShares Inc. and his service as Chair of the Board and as Trustee or Director of other funds in the Fund Complex. Mr. Reed also gained substantial experience in the financial services industry through his prior positions as a Director of Legg Mason, Inc. and as President and CEO of General Motors Asset Management.

The Directors’ principal occupations and other relevant professional experience during the past five years or more are shown in the above tables.

The Board has adopted a policy that Board members are expected to retire no later than the end of the year they reach the age of 78. The Governance Committee has discretion to grant waivers from this retirement policy under special circumstances, including for Board members to continue serving in Chair or Chair-related roles beyond the retirement age. Current Board members who reached the age of 75 as of January 1, 2021, are grandfathered as exceptions to the retirement policy and may continue to serve on the Board until the end of the year in which they turn 80 years of age.

Advantages of Having the Same Individuals as Independent Directors for the Morgan Stanley Funds

The Independent Directors and the Company’s management believe that having the same Independent Directors for each of the Morgan Stanley Funds avoids the duplication of effort that would arise from having different groups of individuals serving as Independent Directors for each of the funds or even of sub-groups of funds. They believe that having the same individuals serve as Independent Directors of all the Morgan Stanley Funds tends to increase their knowledge and expertise regarding matters which affect the Fund Complex generally and enhances their ability to negotiate on behalf of each fund with the fund’s service providers. This arrangement also precludes the possibility of separate groups of Independent Directors arriving at conflicting decisions regarding operations and management of the funds and avoids the cost and confusion that would likely ensue. Finally, having the same Independent Directors serve on all fund boards enhances the ability of each fund to obtain, at modest cost to each separate fund, the services of Independent Directors of the caliber, experience and business acumen of the individuals who serve as Independent Directors of the Morgan Stanley Funds.

Director and Officer Indemnification

The Company's Articles of Incorporation provides that no Director, officer, employee or agent of the Company is liable to the Company or to a shareholder, nor is any Director, officer, employee or agent liable to any third persons in connection with the affairs of the Company, except as such liability may arise from his/her or its own bad faith, willful malfeasance, gross negligence or reckless disregard of his/her or its duties. It also provides that all third persons shall look solely to Company property for satisfaction of claims arising in connection with the affairs of the Company. With the exceptions stated, the Articles of Incorporation provides that a Director, officer, employee or agent is entitled to be indemnified against all liability in connection with the affairs of the Company.

Shareholder Communications

Shareholders may send communications to the Company's Board of Directors. Shareholders should send communications intended for the Company's Board by addressing the communications directly to the Board (or individual Board members) and/or otherwise clearly indicating in the salutation that the communication is for the Board (or individual Board members) and by sending the communication to either the Company's office or directly to such Board member(s) at the address specified for each Director previously noted. Other shareholder communications received by the Company not directly addressed and sent to the Board will be reviewed and generally responded to by management, and will be forwarded to the Board only at management's discretion based on the matters contained therein.

COMPENSATION

Each Director (except for the Chair of the Boards) receives an annual retainer fee of \$335,000 (\$295,000 prior to January 1, 2023) for serving as a Director of the Morgan Stanley Funds.

The Audit Committee Chairperson receives an additional annual retainer fee of \$80,000, the Risk Committee Chairperson, the Equity Investment Committee Chairperson, Fixed Income, Liquidity and Alternatives Investment Committee Chairperson and Governance Committee Chairperson each receive an additional annual retainer fee of \$50,000 and the Compliance and Insurance Committee Chairperson receives an additional annual retainer fee of \$65,000. The aggregate compensation paid to each Director is paid by the Morgan Stanley Funds, and is allocated on a pro rata basis among each of the operational funds of the Morgan Stanley Funds based on the relative net assets of each of the funds. The Chair of the Boards receives a total annual retainer fee of \$630,000 (\$590,000 prior to January 1, 2023) for his services and for administrative services provided to each Board.

The Company also reimburses such Directors for travel and other out-of-pocket expenses incurred by them in connection with attending such meetings. Directors of the Company who are employed by the Adviser receive no compensation or expense reimbursement from the Company for their services as a Director.

Effective April 1, 2004, the Company began a Deferred Compensation Plan (the “DC Plan”), which allows each Director to defer payment of all, or a portion, of the fees he or she receives for serving on the Board of Directors throughout the year. Each eligible Director generally may elect to have the deferred amounts credited with a return equal to the total return on one or more of the Morgan Stanley Funds that are offered as investment options under the DC Plan. At the Director’s election, distributions are either in one lump sum payment, or in the form of equal annual installments over a period of five years. The rights of an eligible Director and the beneficiaries to the amounts held under the DC Plan are unsecured and such amounts are subject to the claims of the creditors of the Company.

Prior to April 1, 2004, the Company maintained a similar Deferred Compensation Plan (the “Prior DC Plan”), which also allowed each Independent Director to defer payment of all, or a portion, of the fees he or she received for serving on the Board of Directors throughout the year. Generally, the DC Plan amends and supersedes the Prior DC Plan and all amounts payable under the Prior DC Plan are now subject to the terms of the DC Plan (except for amounts paid during the calendar year 2004, which remain subject to the terms of the Prior DC Plan).

The following table shows aggregate compensation payable to each of the Company’s Directors from the Company for the fiscal year ended December 31, 2022 and the aggregate compensation payable to each of the Company’s Directors by the Fund Complex (which includes all of the Morgan Stanley Funds) for the calendar year ended December 31, 2022.

Compensation¹

Name of Independent Director:	Aggregate Compensation From the Funds ²	Total Compensation From Funds and Fund Complex Paid to Director ³
Frank L. Bowman	\$2,072	\$360,000
Frances L. Cashman	1,700	295,000
Kathleen A. Dennis	1,986	345,000
Nancy C. Everett	1,984	345,000
Eddie A. Grier	1,700	295,000
Jakki L. Haussler	1,697	295,000
Manuel H. Johnson	1,986	345,000
Joseph J. Kearns ^{2,3}	2,157	375,000
Michael F. Klein ^{2,3}	1,986	345,000
Patrica Maleski	1,697	295,000
W. Allen Reed ³	3,396	590,000

1 Includes all amounts paid for serving as director/trustee of the funds in the Fund Complex, as well as serving as Chair of the Boards or a Chairperson of a Committee.

2 The amounts shown in this column represent the aggregate compensation before deferral with respect to the Company’s fiscal year. The following Directors deferred compensation from the Company during the fiscal year ended December 31, 2022: Mr. Kearns, \$920 and Mr. Klein, \$1,986.

3 The amounts shown in this column represent the aggregate compensation paid by all of the funds in the Fund Complex as of December 31, 2022 before deferral by the Directors under the DC Plan. As of December 31, 2022, the value (including interest) of the deferral accounts across the Fund Complex for Messrs. Kearns, Klein and Reed pursuant to the deferred compensation plan was \$1,003,275, \$3,052,005 and \$3,795,878, respectively. Because the funds in the Fund Complex have different fiscal year ends, the amounts shown in this column are presented on a calendar year basis.

Prior to December 31, 2003, 49 of the Morgan Stanley Funds (the “Adopting Funds”), not including the Company, had adopted a retirement program under which an Independent Director who retired after serving for at least five years as an Independent Director of any such fund (an “Eligible Director”) would have been entitled to retirement payments, based on factors such as length of service, upon reaching the eligible retirement age. On December 31, 2003, the amount of accrued retirement benefits for each Eligible

Director was frozen, and will be payable, together with a return of 8% per annum, at or following each such Eligible Director's retirement as shown in the table below.

The following table illustrates the retirement benefits accrued to the Company's Independent Directors by the Adopting Funds for the calendar year ended December 31, 2022, and the estimated retirement benefits for the Independent Directors from the Adopting Funds for each calendar year following retirement. Only the Directors listed below participated in the retirement program.

Name of Independent Director:	Retirement Benefits Accrued as Company Expenses	Estimated Annual Benefits Upon Retirement ¹
	By all Adopting Funds	From all Adopting Funds
Manuel H. Johnson ²	\$(5,498)	\$55,816

1 Total compensation accrued under the retirement plan, together with a return of 8% per annum, will be paid annually commencing upon retirement and continuing for the remainder of the Director's life.

2 Mr. Johnson's retirement expenses are negative due to the fact that his retirement date has been extended and therefore his expenses have been over-accrued.

Code of Ethics

Pursuant to Rule 17j-1 under the 1940 Act, the Board of Directors has adopted a Code of Ethics for the Company and approved Codes of Ethics adopted by the Adviser, the Sub-Advisers and Morgan Stanley Distribution, Inc. (the "Distributor") (collectively the "Codes"). The Codes are intended to ensure that the interests of shareholders and other clients are placed ahead of any personal interest, that no undue personal benefit is obtained from the person's employment activities and that actual and potential conflicts of interest are avoided. The Codes are designed to detect and prevent improper personal trading.

The Codes permit personnel subject to the Codes to invest in securities, including securities that may be purchased, sold or held by the Company, subject to a number of restrictions and controls, including prohibitions against purchases of securities in an initial public offering and a pre-clearance requirement with respect to personal securities transactions.

INVESTMENT ADVISORY AND OTHER SERVICES

Adviser

The Adviser is a wholly owned subsidiary of Morgan Stanley (NYSE: "MS"), a preeminent global financial services firm engaged in securities trading and brokerage activities, as well as providing investment banking, research and analysis, financing and financial advisory services. The principal offices of Morgan Stanley are located at 1585 Broadway, New York, NY 10036 and the principal offices of the Adviser are located at 522 Fifth Avenue, New York, NY 10036. As of December 31, 2022, the Adviser, together with its affiliated asset management companies, had approximately \$1.3 trillion in assets under management or supervision.

Pursuant to the Investment Advisory Agreement, the Adviser is entitled to receive from each class of shares of each Fund an annual management fee, payable quarterly, equal to the percentage of average daily net assets set forth in the table below. In managing the Funds, the Adviser may use the services of associated investment personnel employed by its affiliated institutional asset management companies. The Adviser has agreed to a reduction in the fees payable to it and/or to reimburse the Funds, if necessary, if such fees would cause the total annual operating expenses of each Fund to exceed the percentage of average daily net assets set forth in the table below. In determining the actual amount of fee waivers and/or expense reimbursements for a Fund, if any, the Adviser excludes from total annual operating expenses, acquired fund fees and expenses (as applicable), certain investment related expenses, taxes, interest and other extraordinary expenses (including litigation) (but includes any 12b-1 fee paid to the Distributor, as applicable). The fee waivers and/or expense reimbursements for a Fund will continue for at least one year from the date of the applicable Prospectus or until such time as the Company's Board of Directors acts to discontinue all or a portion of such waivers and/or reimbursements when it deems such action is appropriate. The Adviser may make additional voluntary fee waivers and/or expense reimbursements. The Adviser may discontinue these voluntary fee waivers and/or expense reimbursements at any time in the future.

The Global Strategist Portfolio may gain exposure to bitcoin and the commodities markets by investing up to 25% of its total assets in a wholly-owned subsidiary of the Global Strategist Portfolio organized as a company under the laws of the Cayman Islands. Each of the Discovery Portfolio and Growth Portfolio may gain exposure to bitcoin and other assets by investing up to 25% of its total assets in a wholly-owned subsidiary of the Fund organized as a company under the laws of the Cayman Islands. Each Subsidiary has entered into a separate contract with the Adviser whereby the Adviser provides investment advisory and other services to that Subsidiary. In consideration of these services, each Subsidiary will pay to the Manager at the end of each of the Subsidiary's fiscal quarters, an advisory fee calculated by applying a quarterly rate, based on the annual percentage rate of 0.05%, to the average daily net assets of the Subsidiary for the quarter. The Adviser will waive or credit such amounts against the fees payable to the Adviser by the Funds.

The Discovery Portfolio and the Growth Portfolio and each Bitcoin Subsidiary have entered into contracts for the provision of custody and audit services with service providers. The Global Strategist Portfolio and the Global Strategist Subsidiary have also entered into contracts for the provision of custody and audit services with service providers.

Each Bitcoin Subsidiary is managed pursuant to compliance policies and procedures that are the same, in all material respects, as the policies and procedures adopted by the Discovery Portfolio and the Growth Portfolio. As a result, the Adviser, in managing a Bitcoin Subsidiary's portfolio, is subject to the same investment policies and restrictions that apply to the management of the Discovery Portfolio and the Growth Portfolio (as discussed above, the Bitcoin Subsidiary may invest in cash settled bitcoin futures or GBTC) and, in particular, to the requirements relating to portfolio leverage, liquidity, brokerage and the timing and method of valuation of the Bitcoin Subsidiary's portfolio investments and shares of the Bitcoin Subsidiary. Certain of these policies and restrictions are described in detail in this SAI. The Global Strategist Subsidiary is managed pursuant to compliance policies and procedures that are the same, in all material respects, as the policies and procedures adopted by the Global Strategist Portfolio. As a result, the Adviser, in managing the Global Strategist Subsidiary's portfolio, is subject to the same investment policies and restrictions that apply to the management of the Global Strategist Portfolio (as discussed above, the Global Strategist Subsidiary may invest in cash settled bitcoin futures or commodity-related instruments) and, in particular, to the requirements relating to portfolio leverage, liquidity, brokerage and the timing and method of valuation of the Global Strategist Subsidiary's portfolio investments and shares of the Global Strategist Subsidiary. Certain of these policies and restrictions are described in detail in this SAI.

The consolidated financial statements of each Bitcoin Subsidiary are included in the Annual Report and Semi-Annual Report of the Discovery Portfolio and the Growth Portfolio. The consolidated financial statements of the Global Strategist Subsidiary are included in the Annual Report and Semi-Annual Report of the Global Strategist Portfolio.

The following table reflects for each Fund (i) the advisory fee paid; and (ii) the advisory fee waived and/or affiliated rebates for each of the past three fiscal years ended December 31, 2020, 2021 and 2022.

Fund	Advisory Fees Paid (After Fee Waivers and/or								
	Affiliated Rebates)			Advisory Fees Waived			Affiliated Rebates		
	2020 (000)	2021 (000)	2022 (000)	2020 (000)	2021 (000)	2022 (000)	2020 (000)	2021 (000)	2022 (000)
Core Plus Fixed Income	\$561	\$328	\$25	\$86	\$190	\$297	\$31	\$10	\$10
Discovery	1,601	2,494	981	325	441	361	13	9	10
Emerging Markets Debt	1,238	1,095	702	0	72	161	6	1	5
Emerging Markets Equity	1,649	2,070	1,377	103	0	122	4	1	4
Global Franchise	66	73	39	197	214	206	1	@	1
Global Infrastructure	271	282	269	374	428	460	2	1	4
Global Real Estate	127	133	112	294	318	245	1	@	1
Global Strategist	36	131	0	671	668	659	18	5	16
Growth	2,697	3,686	1,575	1,432	1,917	1,143	45	15	17
U.S. Real Estate	1,809	2,074	1,694	586	607	638	12	2	7

@ Amount is less than \$500.

The following table reflects the contractual advisory fee and the maximum expense ratios for each Fund.

Fund	Contractual Rate of Advisory Fees	Expense Cap Class I	Expense Cap Class II
Core Plus Fixed Income	0.375% of the portion of the daily net assets not exceeding \$1 billion; and 0.30% of the portion of the daily net assets exceeding \$1 billion.	0.65%	0.90%
Discovery	0.75% of the portion of the daily net assets not exceeding \$500 million; 0.70% of the portion of the daily net assets exceeding \$500 million but not exceeding \$1 billion; and 0.65% of the portion of the daily net assets exceeding \$1 billion.	0.95%	1.05%
Emerging Markets Debt	0.75% of the portion of the daily net assets not exceeding \$500 million; 0.70% of the portion of the daily net assets exceeding \$500 million but not exceeding \$1 billion; and 0.65% of the portion of the daily net assets exceeding \$1 billion.	1.10%	1.15%
Emerging Markets Equity	0.75% of the portion of the daily net assets not exceeding \$1 billion; and 0.70% of the portion of the daily net assets exceeding \$1 billion but not exceeding \$2.5 billion; and 0.65% of the daily net assets exceeding \$2.5 billion.	1.25%	1.30%
Global Franchise	0.80% of the portion of the daily net assets not exceeding \$500 million; 0.75% of the portion of the daily net assets exceeding \$500 million but not exceeding \$1 billion; and 0.70% of the portion of the daily net assets exceeding \$1 billion.	N/A	1.20%
Global Infrastructure	0.85% of the daily net assets.	0.87%	1.12%
Global Real Estate	0.80% of the daily net assets.	N/A	1.25%

Fund	Contractual Rate of Advisory Fees	Expense Cap Class I	Expense Cap Class II
Global Strategist	0.75% of the portion of the daily net assets not exceeding \$500 million; 0.70% of the portion of the daily net assets exceeding \$500 million but not exceeding \$1 billion; and 0.65% of the portion of the daily net assets exceeding \$1 billion.	0.90%	1.00%
Growth	0.50% of the portion of the daily net assets not exceeding \$1 billion; 0.45% of the portion of the daily net assets exceeding \$1 billion but not exceeding \$2 billion; 0.40% of the portion of the daily net assets exceeding \$2 billion but not exceeding \$3 billion; and 0.35% of the daily net assets exceeding \$3 billion.	0.57%	0.82%
U.S. Real Estate	0.70% of the portion of the daily net assets not exceeding \$500 million; 0.65% of the portion of the daily net assets exceeding \$500 million but not exceeding \$1 billion; and 0.60% of the portion of the daily net assets exceeding \$1 billion.	0.82%	1.07%

Sub-Advisers

The Adviser has entered into Sub-Advisory Agreements with Morgan Stanley Investment Management Limited, located at 25 Cabot Square, Canary Wharf, London, E14 4QA, England, and Morgan Stanley Investment Management Company, located at 23 Church Street, 16-01 Capital Square, Singapore 049481. The Sub-Advisers are wholly owned subsidiaries of Morgan Stanley and provide the Funds listed below with investment advisory services subject to the overall supervision of the Adviser and the Company's officers and Directors. The Adviser pays the Sub-Advisers on a monthly basis a portion of the net advisory fees the Adviser receives from the relevant Funds. The chart below identifies the Fund(s) for which each Sub-Adviser provides investment advisory services.

Sub-Adviser	Fund(s)
MSIM Limited	Emerging Markets Debt, Global Franchise, Global Real Estate and Global Strategist
MSIM Company	Emerging Markets Equity and Global Real Estate

Participating Affiliate

In rendering investment advisory services to the Emerging Markets Equity Portfolio, the Adviser uses the portfolio management, research and other resources of Morgan Stanley Asia Limited ("MSAL"), a foreign (non-U.S.) affiliate of Morgan Stanley Investment Management ("MSIM") that is not registered under the Investment Advisers Act of 1940, as amended (the "Advisers Act"). One or more MSAL employees may provide services to the Fund through a "participating affiliate" arrangement, as that term is used in relief granted by the staff of the SEC allowing U.S. registered investment advisers to use portfolio management or research resources of advisory affiliates subject to the regulatory supervision of the registered investment adviser. Under the participating affiliate arrangement, MSAL is considered a Participating Affiliate of MSIM, and MSAL and its employees are considered "associated persons" of MSIM (as that term is defined in the Advisers Act) and investment professionals from MSAL may render portfolio management, research and other services to the Fund, subject to the supervision of MSIM.

In rendering investment advisory services to Global Strategist Portfolio, MSIM will use the portfolio management, research and other resources of Morgan Stanley Investment Management (Australia) Pty Limited ("MSIM Australia"). MSIM Australia is a foreign (non-U.S.) affiliate of MSIM that is not registered under the Advisers Act. One or more MSIM Australia employees may provide services to the Global Strategist Portfolio through a "participating affiliate" arrangement, as that term is used in relief granted by the staff of the SEC allowing U.S. registered investment advisers to use portfolio management or research resources of advisory affiliates subject to the regulatory supervision of the registered investment adviser. Under the participating affiliate arrangement, MSIM Australia is considered a Participating Affiliate of MSIM, and MSIM Australia and its employees are considered "associated persons" of MSIM (as that term is defined in the Advisers Act) and investment professionals from MSIM Australia may render portfolio management, research and other services to the Global Strategist Portfolio, subject to the supervision of MSIM.

Proxy Voting Policy and Proxy Voting Record

The Board of Directors believes that the voting of proxies on securities held by the Company is an important element of the overall investment process. As such, the Board has delegated the responsibility to vote such proxies to MSIM and its advisory affiliates.

A copy of MSIM's Proxy Voting Policy ("Proxy Policy") is attached hereto as Appendix A. In addition, a copy of the Proxy Policy, as well as the Company's most recent proxy voting record for the 12-month period ended June 30, as filed with the SEC, are available without charge on our web site at www.morganstanley.com/im. The Company's proxy voting record is also available without charge on the SEC's web site at www.sec.gov.

Fund Administration

The Adviser also provides administration services to the Company pursuant to an Amended and Restated Administration Agreement (the “Administration Agreement”). The services provided under the Administration Agreement are subject to the supervision of the officers and the Board of Directors of the Company and include day-today administration of matters related to the corporate existence of the Company, maintenance of records, preparation of reports, supervision of the Company’s arrangements with its custodian and assistance in the preparation of the Company’s registration statement under federal laws. Under the Administration Agreement, the Adviser receives an annual fee, accrued daily and payable monthly, of 0.08% of the Company’s average daily net assets, and is responsible for all fees payable under any sub-administration agreements.

For the fiscal years ended December 31, 2020, 2021 and 2022, the Company paid the following administrative fees (no administrative fees were waived):

Administrative Fees Paid			
Fund	2020 (000)	2021 (000)	2022 (000)
Core Plus Fixed Income	\$145	\$113	\$71
Discovery	207	314	144
Emerging Markets Debt	133	125	93
Emerging Markets Equity	165	195	141
Global Franchise	26	29	25
Global Infrastructure	61	67	69
Global Real Estate	42	45	36
Global Strategist	77	86	70
Growth	669	910	438
U.S. Real Estate	275	307	267

Sub-Administrator. Under an agreement between the Administrator and State Street Bank and Trust Company (“State Street”), State Street provides certain administrative services to the Company. For such services, the Administrator pays State Street a portion of the administrative fee the Administrator receives from the Company. The Administrator supervises and monitors the administrative and accounting services provided by State Street. Their services are also subject to the supervision of the officers and Board of Directors of the Company.

Custodian

State Street, located at One Lincoln Street, Boston, MA 02111-2101, acts as the Company’s custodian. State Street is not an affiliate of the Adviser or the Distributor. In maintaining custody of foreign assets held outside the United States, State Street has contracted with various banks and depositories in accordance with regulations of the SEC for the purpose of providing custodial services for such assets.

In the selection of foreign sub-custodians, the Directors or their delegates consider a number of factors, including, but not limited to, the reliability and financial stability of the institution, the ability of the institution to provide efficiently the custodial services required for the Funds, and the reputation of the institution in the particular country or region.

Principal Underwriter

Morgan Stanley Distribution, Inc., with principal offices at 522 Fifth Avenue, New York, NY 10036, is an indirect wholly owned subsidiary of Morgan Stanley and serves as principal underwriter to the Company. For information relating to the services provided by Morgan Stanley Distribution, Inc., see “Distribution of Shares (Applicable to Class II Shares Only).”

Dividend Disbursing and Transfer Agent

SS&C Global Investor and Distribution Solutions, Inc. (“SS&C GIDS”), P.O. Box 219804, Kansas City MO 64121-9804, provides dividend disbursing and transfer agency services for the Company.

Co-Transfer Agent

Eaton Vance Management is the co-transfer agent with respect to the Funds. Eaton Vance Management is a registered transfer agent and operates the Funds’ call center. In connection therewith, Eaton Vance Management performs certain transfer agency services related to processing and relaying purchase and redemption orders to SS&C GIDS, the Funds’ transfer agent. Eaton Vance Management does not receive any direct compensation from the Funds for providing the call center or the related transfer agency services.

Servicing Fee

The Company has agreed to pay a servicing fee of up to 0.17% of the total average daily NAV of shares of a Fund held in an insurance company's account to the extent an insurance company has entered into a servicing agreement with the Company to provide administrative and other contract-owner related services on behalf of such Fund.

Securities Lending

Pursuant to an agreement between the Company and State Street, the Funds may lend their securities through State Street as securities lending agent to certain qualified borrowers. As securities lending agent of the Company, State Street administers the Funds' securities lending program. These services include arranging the loans of securities with approved borrowers and their return to the Fund upon loan termination, negotiating the terms of such loans, selecting the securities to be loaned and monitoring dividend activity relating to loaned securities. State Street also marks-to-market daily the value of loaned securities and collateral and may require additional collateral as necessary from borrowers. State Street may also, in its capacity as securities lending agent, invest cash received as collateral in pre-approved investments in accordance with the Securities Lending Authorization Agreement. State Street maintains records of loans made and income derived therefrom and makes available such records that the Company deems necessary to monitor the securities lending program.

For the fiscal year ended December 31, 2022, the following Funds earned income and incurred the following costs and expenses as a result of their securities lending activities:

Fund	Gross Income ¹	Revenue Split ²	Cash Collateral Management Fees ³	Administrative Fees ⁴	Indemnification Fees ⁵	Rebates to Borrowers	Other Fees	Total Cost of the Securities Lending Activities	Net Income from the Securities Lending Activities
Core Plus Fixed Income	\$16,552	\$1,214	\$0	\$0	\$0	\$8,466	\$0	\$9,680	\$6,872
Discovery	247,901	37,026	0	0	0	1,057	0	38,083	209,818
Emerging Markets Debt	14,064	623	0	0	0	9,906	0	10,529	3,535
Emerging Markets Equity	11,118	1,642	0	0	0	174	0	1,816	9,302
Global Infrastructure	34,241	1,227	0	0	0	26,059	0	27,286	6,955
Global Real Estate	10,882	769	0	0	0	5,749	0	6,518	4,364
Growth	215,480	31,752	0	0	0	3,796	0	35,548	179,932
U.S. Real Estate	17,573	464	0	0	0	14,481	0	14,945	2,628

1 Gross income includes income from the reinvestment of cash collateral.

2 Revenue split represents the share of revenue generated by the securities lending program and paid to State Street.

3 Cash collateral management fees include fees deducted from a pooled cash collateral reinvestment vehicle that are not included in the revenue split.

4 These administrative fees are not included in the revenue split.

5 These indemnification fees are not included in the revenue split.

DISTRIBUTION OF SHARES (APPLICABLE TO CLASS II SHARES ONLY)

The Company has adopted a Distribution Plan (the "Plan") in accordance with the provisions of Rule 12b-1 under the 1940 Act, which regulates circumstances under which an investment company may directly or indirectly bear expenses relating to the distribution of its shares. Under the Plan, each Fund pays the Distributor a monthly 12b-1 fee at the annual rate of up to 0.25% of the average daily net assets of the Funds attributable to the Class II Shares. Such amount is paid to compensate the Distributor for remittance to insurance companies which offer the Company as an investment option. These payments are intended to compensate insurance companies for distribution and/or administrative related expenses incurred or paid in connection with the distribution of Class II shares of the Funds. Morgan Stanley Distribution may retain any portion of the fees it does not expend in meeting its obligations to the Company. The Distributor has agreed to waive the following amounts of the 0.25% 12b-1 fees that it is entitled to receive from the following Funds:

Class II Fund	Waiver
Discovery	0.15%
Emerging Markets Debt	0.20%

Class II Fund	Waiver
Emerging Markets Equity	0.20%
Global Strategist	0.15%

These waivers will continue for at least one year from the date of the applicable Prospectus or until such time as the Company's Board of Directors acts to discontinue all or a portion of such waivers when it deems such action is appropriate.

Since the 12b-1 fees associated with the Plan are paid out of the Company's assets on an on-going basis, over time these fees will increase the cost of your investment and may cost you more than paying other types of sales charges.

The following table describes the 12b-1 fees paid pursuant to the Plan (net of any waivers) by each active Class II Fund to various insurance companies for whose separate accounts the Funds are underlying investments for the fiscal year ended December 31, 2022.

Fund	Total Distribution (12b-1) Fees Paid by Fund (Net of Waivers)	Amount Waived
Core Plus Fixed Income	\$35,773	N/A
Discovery	147,972	\$221,958
Emerging Markets Debt	6,562	26,247
Emerging Markets Equity	26,611	106,440
Global Franchise	76,930	N/A
Global Infrastructure	133,364	N/A
Global Real Estate	111,786	N/A
Global Strategist	14,392	21,588
Growth	522,656	N/A
U.S. Real Estate	447,134	N/A

Continuance of the Plan must be approved annually by a majority of the Directors of the Company, including a majority of the Independent Directors. All material amendments of the Plan will require approval by a majority of the Directors of the Company, including a majority of the Independent Directors. The Plan was approved by the Company's Board of Directors, including the Independent Directors, none of whom has a direct or indirect financial interest in the operation of a Plan or in any agreements related thereto.

Revenue Sharing

The Adviser and/or the Distributor may pay compensation, out of their own funds and not as an additional charge to the Funds, to certain insurance companies or their affiliates in connection with Company-related administrative services that the insurance companies provide in connection with the issuance of their variable annuity contracts. Such payments are in addition to any distribution or shareholder servicing fees that may be payable by the Distributor. The additional payments may be based on various factors, including amount of assets invested through the insurance company's separate accounts, a Fund's advisory fees, some other agreed upon amount, or other measures as determined from time to time by the Adviser or Distributor. The amount of these payments may be different for different insurance companies.

The additional payments made to certain insurance companies, which are made in accordance with the applicable compensation structure for each intermediary, may include an ongoing annual fee in an amount up to 0.35% of the total average daily NAV of shares of the Funds held in such insurance companies' applicable accounts.

The prospect of receiving, or the receipt of, additional compensation, as described above, by insurance companies may provide insurance companies with an incentive to encourage variable annuity contract owners to favor one variable annuity contract investment option over other contract options with respect to which an intermediary does not receive additional compensation (or receives lower levels of additional compensation) or be a factor in an insurance company's decision to include the Fund as an underlying investment option in its variable insurance products. Investors may wish to take such payment arrangements into account when considering and evaluating any recommendations relating to Fund shares and should review carefully any disclosure provided by an insurance company as to its compensation.

Other Payments to Intermediaries

The Adviser and/or the Distributor may also make payments, out of their own assets and not as an expense to a Fund, to Intermediaries to offset certain nominal expenses of Intermediaries related to setup, connectivity or other technological maintenance of the Intermediary's investment platform and/or the provision of services with respect to a Fund or share class on an Intermediary's investment platform. Investors may wish to take such payment arrangements into account when considering an investment in Fund shares.

Portfolio Managers

Other Accounts Managed by the Portfolio Managers

Because the portfolio managers may manage assets for other investment companies, pooled investment vehicles, and/or other accounts (including institutional clients, pension plans and certain high net worth individuals), there may be an incentive to favor one client over another resulting in conflicts of interest. For instance, the Adviser and/or Sub-Advisers may receive fees from certain accounts that are higher than the fee it receives from the Company, or it may receive a performance-based fee on certain accounts. In those instances, the portfolio managers may have an incentive to favor the higher and/or performance-based fee accounts over the Company. In addition, a conflict of interest could exist to the extent the Adviser and/or Sub-Advisers have proprietary investments in certain accounts, where portfolio managers have personal investments in certain accounts or when certain accounts are investment options in the Adviser's and/or Sub-Advisers' employee benefits and/or deferred compensation plans. The portfolio manager may have an incentive to favor these accounts over others. If the Adviser and/or Sub-Advisers manage accounts that engage in short sales of securities of the type in which the Company invests, the Adviser and/or Sub-Advisers could be seen as harming the performance of the Company for the benefit of the accounts engaging in short sales if the short sales cause the market value of the securities to fall. The Adviser and/or Sub-Advisers have adopted trade allocation and other policies and procedures that it believes are reasonably designed to address these and other conflicts of interest.

Portfolio Manager Compensation Structure

Morgan Stanley's compensation structure is based on a total reward system of base salary and incentive compensation, which is paid either in the form of cash bonus, or for employees meeting the specified deferred compensation eligibility threshold, partially as a cash bonus and partially as mandatory deferred compensation. Deferred compensation granted to MSIM employees are generally granted as a mix of deferred cash awards under the Investment Management Alignment Plan ("IMAP") and equity-based awards in the form of stock units. The portion of incentive compensation granted in the form of a deferred compensation award and the terms of such awards are determined annually by the Compensation, Management Development and Succession Committee of the Morgan Stanley Board of Directors.

Base salary compensation. Generally, portfolio managers receive base salary compensation based on the level of their position with the Adviser.

Incentive compensation. In addition to base compensation, portfolio managers may receive discretionary year-end compensation.

Incentive compensation may include:

- Cash Bonus
- Deferred Compensation:
 - A mandatory program that defers a portion of incentive compensation into restricted stock units or other awards based on Morgan Stanley common stock or other plans that are subject to vesting and other conditions.
 - IMAP is a cash-based deferred compensation plan designed to increase the alignment of participants' interests with the interests of the Adviser's clients. For eligible employees, a portion of their deferred compensation is mandatorily deferred into IMAP on an annual basis. Awards granted under IMAP are notionally invested in referenced funds available pursuant to the plan, which are funds advised by MSIM. Portfolio managers are required to notionally invest a minimum of 40% of their account balance in the designated funds that they manage and are included in the IMAP notional investment fund menu.
 - Deferred compensation awards are typically subject to vesting over a multi-year period and are subject to cancellation through the payment date for competition, cause (i.e., any act or omission that constitutes a breach of obligation to MSIM, including failure to comply with internal compliance, ethics or risk management standards, and failure or refusal to perform duties satisfactorily, including supervisory and management duties), disclosure of proprietary information, and solicitation of employees or clients. Awards are also subject to clawback through the payment date if an employee's act or omission (including with respect to direct supervisory responsibilities) causes a restatement of the Firm's consolidated financial results, constitutes a violation of the Firm's global risk management principles, policies and standards, or causes a loss of revenue associated with a position on which the employee was paid and the employee operated outside of internal control policies.

MSIM compensates employees based on principles of pay-for-performance, market competitiveness and risk management. Eligibility for, and the amount of any, discretionary compensation is subject to a multi-dimensional process. Specifically, consideration is given to one or more of the following factors, which can vary by portfolio management team and circumstances:

- Revenue and profitability of the business and/or each fund/account managed by the portfolio manager
- Revenue and profitability of the Firm
- Return on equity and risk factors of both the business units and Morgan Stanley
- Assets managed by the portfolio manager

- External market conditions
- New business development and business sustainability
- Contribution to client objectives
- Team, product and/or MSIM performance
- The pre-tax investment performance of the funds/accounts managed by the portfolio manager (which may, in certain cases, be measured against the applicable benchmark(s) and/or peer group(s) over one-, three- and five-year periods)
- Individual contribution and performance

Further, the Firm's Global Incentive Compensation Discretion Policy requires compensation managers to consider only legitimate, business related factors when exercising discretion in determining variable incentive compensation, including adherence to Morgan Stanley's core values, conduct, disciplinary actions in the current performance year, risk management and risk outcomes.

Other Accounts Managed by Portfolio Managers at December 31, 2022 (unless otherwise indicated):

Fund and Portfolio Managers	Other Registered Investment Companies		Other Pooled Investment Vehicles		Other Accounts	
	Number of Accounts	Total Assets in the Accounts	Number of Accounts	Total Assets in the Accounts	Number of Accounts	Total Assets in the Accounts
Core Plus Fixed Income						
Matthew Dunning	3	\$1.2 billion	2	\$191.4 million	73 ¹	\$23.1 billion ¹
Joseph Mehlman	3	\$774.9 million	28	\$4.4 billion	40 ²	\$9.7 billion ²
Neil Stone	4	\$1.4 billion	15	\$3.1 billion	81 ³	\$24.5 billion ³
Gregory Finck	2	\$757.8 million	14	\$2.9 billion	30 ⁴	\$4.4 billion ⁴
Discovery						
Dennis P. Lynch	23	\$12.6 billion	34	\$9.9 billion	16 ⁵	\$3.9 billion ⁵
Sam G. Chainani	22	\$12.6 billion	31	\$9.9 billion	15 ⁵	\$3.9 billion ⁵
Jason C. Yeung	22	\$12.6 billion	31	\$9.9 billion	15 ⁵	\$3.9 billion ⁵
Armistead B. Nash	22	\$12.6 billion	31	\$9.9 billion	15 ⁵	\$3.9 billion ⁵
David S. Cohen	22	\$12.6 billion	31	\$9.9 billion	15 ⁵	\$3.9 billion ⁵
Alexander T. Norton	22	\$12.6 billion	31	\$9.9 billion	15 ⁵	\$3.9 billion ⁵
Emerging Markets Debt						
Sahil Tandon	2	\$493.1 million	6	\$410.7 million	4	\$204.6 million
Akbar Causer	3	\$1.3 billion	2	\$672.7 million	0	\$0
Kyle Lee	5	\$8.6 billion	1	\$91.9 million	0	\$0
Federico Sequeda	6	\$8.8 billion	1	\$91.9 million	0	\$0
Emerging Markets Equity						
Eric Carlson	3	\$711.8 million	5	\$1.8 billion	9 ⁶	\$3.0 billion ⁶
Amay Hattangadi	6	\$1.4 billion	8	\$1.8 billion	11 ⁷	\$5.4 billion ⁷
Paul C. Psaila	3	\$711.8 million	5	\$1.8 billion	5 ⁷	\$3.2 billion ⁷
Global Franchise						
William D. Lock	8	\$5.6 billion	39	\$37.0 billion	60 ⁸	\$27.7 billion ⁸
Bruno Paulson	8	\$5.6 billion	39	\$37.0 billion	60 ⁸	\$27.7 billion ⁸
Nic Sochovsky	8	\$5.6 billion	39	\$37.0 billion	60 ⁸	\$27.7 billion ⁸
Vladimir A. Demine	8	\$5.6 billion	39	\$37.0 billion	60 ⁸	\$27.7 billion ⁸
Nathan Wong	8	\$5.6 billion	39	\$37.0 billion	60 ⁸	\$27.7 billion ⁸
Marcus Watson	8	\$5.6 billion	39	\$37.0 billion	60 ⁸	\$27.7 billion ⁸
Alex Gabriele	8	\$5.6 billion	39	\$37.0 billion	60 ⁸	\$27.7 billion ⁸
Richard Perrott	8	\$5.6 billion	39	\$37.0 billion	60 ⁸	\$27.7 billion ⁸
Global Infrastructure						
Matthew King	1	\$260.4 million	6	\$2.0 billion	3 ⁹	\$521.4 million ⁹
Global Real Estate						
Laurel Durkay	5	\$368.7 million	11	\$1.4 billion	3	\$122.1 million
Desmond Foong	1	\$38.7 million	7	\$1.3 billion	0	\$0
Angeline Ho	1	\$38.7 million	7	\$1.3 billion	0	\$0
Simon Robson Brown	1	\$38.7 million	7	\$1.3 billion	0	\$0
Global Strategist						
Mark Bavoso	5	\$1.8 billion	7	\$992.2 million	8 ¹⁰	\$5.9 billion ¹⁰
Cyril Moullé-Berteaux	5	\$1.8 billion	8	\$998.3 million	9 ¹⁰	\$5.9 billion ¹⁰
Sergei Parmenov	5	\$1.8 billion	8	\$998.3 million	8 ¹⁰	\$5.9 billion ¹⁰
Growth						
Dennis P. Lynch	23	\$12.4 billion	34	\$9.9 billion	16 ⁵	\$3.9 billion ⁵
Sam G. Chainani	22	\$12.4 billion	31	\$9.9 billion	15 ⁵	\$3.9 billion ⁵
Jason C. Yeung	22	\$12.4 billion	31	\$9.9 billion	15 ⁵	\$3.9 billion ⁵
Armistead B. Nash	22	\$12.4 billion	31	\$9.9 billion	15 ⁵	\$3.9 billion ⁵
David S. Cohen	22	\$12.4 billion	31	\$9.9 billion	15 ⁵	\$3.9 billion ⁵

Fund and Portfolio Managers	Other Registered Investment Companies		Other Pooled Investment Vehicles		Other Accounts	
	Number of Accounts	Total Assets in the Accounts	Number of Accounts	Total Assets in the Accounts	Number of Accounts	Total Assets in the Accounts
Alexander T. Norton	22	\$12.4 billion	31	\$9.9 billion	15 ⁵	\$3.9 billion ⁵
U.S. Real Estate						
Laurel Durkay	5	\$115.4 million	11	\$1.4 billion	3	\$122.1 million

1 Of these other accounts, one account with a total of approximately \$318.5 million in assets had performance-based fees.

2 Of these other accounts, three accounts with a total of approximately \$1.5 billion in assets had performance-based fees.

3 Of these other accounts, two accounts with a total of approximately \$994.4 million in assets had performance-based fees.

4 Of these other accounts, one account with a total of approximately \$675.9 million in assets had performance-based fees.

5 Of these other accounts, two accounts with a total of approximately \$172.9 million in assets had performance-based fees.

6 Of these other accounts, two accounts with a total of approximately \$1.1 billion in assets had performance-based fees.

7 Of these other accounts, three accounts with a total of approximately \$1.1 billion in assets had performance-based fees.

8 Of these other accounts, five accounts with a total of approximately \$2.1 billion in assets had performance-based fees.

9 Of these other accounts, two accounts with a total of approximately \$237.7 billion in assets had performance-based fees.

10 Of these other accounts, two accounts with a total of approximately \$2.6 billion in assets had performance-based fees.

As of December 31, 2022 (unless otherwise noted), the dollar range of securities beneficially owned (or held notionally through IMAP) by each portfolio manager in the Fund he/she manages is shown below:

Fund and Portfolio Managers	Portfolio Holdings
Core Plus Fixed Income	
Matthew Dunning	None*
Joseph Mehlman	None*
Eric Baurmeister	None
Gregory Finck	None
Discovery	
Dennis P. Lynch	None*
Sam G. Chainani	None*
Jason C. Yeung	None*
Armistead B. Nash	None*
David S. Cohen	None*
Alexander T. Norton	None*
Emerging Markets Debt	
Sahil Tandon	None
Akbar Causer	None*
Kyle Lee	None*
Federico Sequeda	None*
Emerging Markets Equity	
Eric Carlson	None*
Amay Hattangadi	None
Paul C. Psaila	None*
Global Franchise	
William D. Lock	None*
Bruno Paulson	None*
Nic Sochovsky	None*
Vladimir A. Demine	None*
Nathan Wong	None*
Marcus Watson	None*
Alex Gabriele	None*
Richard Perrott	None*
Global Infrastructure	
Matthew King	None*

Fund and Portfolio Managers	Portfolio Holdings
Global Real Estate	
Laurel Durkay	None*
Desmond Foong	None*
Angeline Ho	None**
Simon Robson Brown	None*
Global Strategist	
Mark Bavoso	None*
Cyril Moullé-Berteaux	None*
Sergei Parmenov	None
Growth	
Dennis P. Lynch	None*
Sam G. Chainani	None*
Jason C. Yeung	None*
Armistead B. Nash	None*
David S. Cohen	None*
Alexander T. Norton	None*
U.S. Real Estate	
Laurel Durkay	None*

* Not included in the table above, the portfolio manager has made investments in one or more other mutual funds managed by the same portfolio management team pursuant to a similar strategy.

** Not included in the table above, the portfolio manager has made investments in one or more other pooled investment vehicles (i.e., funds not formed or registered in the United States) managed by the same portfolio management team pursuant to a similar strategy.

CONTROL PERSONS AND PRINCIPAL HOLDERS OF SECURITIES

Control Persons

As currently required under law, the insurance companies vote their shares of the Funds in accordance with instructions received from their variable annuity contract and variable life insurance policy owners. Morgan Stanley will vote the shares of each Fund that it owns in the same proportions as shares of the Fund are voted by the insurance companies. Accordingly, neither Morgan Stanley nor the insurance companies are deemed to control the Funds.

Principal Holders of Securities

As of April 1, 2023, the following persons were beneficial owners of 5% or more of the outstanding shares of the following Funds (Class I and Class II shares):

Fund	Name and Address	% of Class
Core Plus Fixed Income (Class I)	Talcott Resolution Life and Annuity Insurance Company* P.O. Box 5051 Hartford CT 06102-5051	25.52%
	Great-West Life & Annuity* FBO COLI VUL 7 8515 E Orchard RD 2T2 Greenwood Village CO 80111-5002	20.05%
	United of Omaha Life Insurance Co. ATTN Product ACCTG & Reporting 11 FL Mutual of Omaha Plaza Omaha, NE 68175-0001	9.84%
	Nationwide Life Insurance Company NWVA-9 C/O IPO Portfolio Accounting P.O. Box 182029 Columbus, OH 43218-2029	6.94%
	Nationwide Life Insurance Company NWPP C/O IPO Portfolio Accounting P.O. Box 182029 Columbus, OH 43218-2029	6.76%

Fund	Name and Address	% of Class
	Annuity Investors Life Insurance Co. ATTN Variable Annuity Dept P.O. Box 5420 Cincinnati, OH 45201-5420	6.28%
Discovery (Class I)	Prudential as Administrator for Allstate Life Insurance Co.* C/O Product Valuation One Security Benefit Pl. Topeka, KS 66636-1000	34.85%
	Nationwide Life Insurance Company NWPP C/O IPO Portfolio Accounting P.O. Box 182029 Columbus, OH 43218-2029	18.88%
	IDS Life Insurance Company 222 AMPF Financial Center Minneapolis MN 55474-0001	17.50%
	Annuity Investors Life Insurance Co. ATTN Variable Annuity Dept P.O. Box 5420 Cincinnati, OH 45201-5420	10.23%
	Delaware Life Insurance Company Variable Account H 1601 Trapelo Rd. STE 30 Waltham, MA 02451-7360	5.28%
	Nationwide Life Insurance Company NWVLI4 C/O IPO Portfolio Accounting P.O. Box 182029 Columbus, OH 43218-2029	5.06%
Emerging Markets Debt (Class I)	Fidelity Investments Life Insurance Company* ATTN Denis Vieira 100 Salem St. O2N Smithfield, RI 02917-1234	73.24%
	Empire Fidelity Investments Life Insurance Company ATTN Denis Vieira 100 Salem St. O2N Smithfield, RI 02917-1234	8.29%
Emerging Markets Equity (Class I)	Fidelity Investments Life Insurance Company* ATTN Denis Vieira 100 Salem St. O2N Smithfield, RI 02917-1234	34.78%
	Ameritas Life Insurance Corp.* Variable Separate Account VA2 ATTN Variable Processing 5900 O Street Lincoln, NE 68510-2234	16.19%
	Ameritas Life Insurance Corp. Separate Account LLVA ATTN Variable Trades 5900 O Street Lincoln, NE 68510-2234	8.35%
	Ameritas Life Insurance Corp. Variable Separate Account V ATTN Variable Processing 5900 O St. Lincoln, NE 68510-2234	7.70%
	Prudential as Administrator for Allstate Life Insurance Co. C/O Product Valuation One Security Benefit PL Topeka, KS 66636-1000	6.72%

Fund	Name and Address	% of Class
	Empire Fidelity Investments Life Insurance Company ATTN Denis Vieira 100 Salem ST O2N Smithfield RI 02917-1234	5.07%
Global Infrastructure (Class I)	Prudential as Administrator for Allstate Life Insurance Co.* C/O Product Valuation 1 SW Security Benefit PL Topeka, KS 66636-1000	61.85%
	Talcott Resolution Life and Annuity Insurance Company P.O. Box 5051 Hartford, CT 06102-5051	16.74%
	Members Horizon Variable Separate Account Members Life Insurance Company 2000 Heritage Way Waverly IA 50677-9208	6.95%
Global Strategist (Class I)	Prudential as Administrator for Allstate Life Insurance Co.* C/O Product Valuation One Security Benefit PL Topeka, KS 66636-1000	38.36%
	Fidelity Investments Life Insurance Company* ATTN Denis Vieira 100 Salem St. O2N Smithfield, RI 02917-1234	32.39%
	Prudential as Administrator for Allstate Life Insurance Co. C/O Product Valuation One Security Benefit Place Topeka, KS 66636-1000	9.25%
	Empire Fidelity Investments Life Insurance Company ATTN Denis Vieira 100 Salem St. O2N Smithfield, RI 02917-1234	5.38%
Growth (Class I)	Prudential as Administrator for Allstate Life Insurance Co.* C/O Product Valuation One Security Benefit PL Topeka, KS 66636-1000	62.63%
	Talcott Resolution Life and Annuity Insurance Company* P.O. Box 5051 Hartford, CT 06102-5051	16.73%
U.S. Real Estate (Class I)	Ameritas Life Insurance Corp.* Variable Separate Account VA2 ATTN Variable Processing 5900 O Street Lincoln, NE 68510-2234	35.19%
	NYLIAC ATTN Ashesh Upadhyay 30 Hudson St Jersey City, NJ 07302-4804	17.76%
	Ameritas Life Insurance Corp. Variable Separate Account V ATTN Variable Processing 5900 O Street Lincoln, NE 68510-2234	7.88%
	Nationwide Life Insurance Company NWPP C/O IPO Portfolio Accounting P.O. Box 182029 Columbus, OH 43218-2029	6.60%
	Prudential as Administrator for Allstate Life Insurance Co. C/O Product Valuation One Security Benefit PL Topeka, KS 66636-1000	5.72%

Fund	Name and Address	% of Class
	Annuity Investors Life Insurance Co. ATTN Variable Annuity Dept P.O. Box 5420 Cincinnati, OH 45201-5420	5.53%
Core Plus Fixed Income (Class II)	Nationwide Life Insurance Company* NWVA-II C/O IPO Portfolio Accounting P.O. Box 182029 Columbus, OH 43218-2029	53.64%
	Talcott Resolution Life and Annuity Insurance Company* P.O. Box 5051 Hartford, CT 06102-5051	30.51%
Discovery (Class II)	IDS Life Insurance Company* 222 AMPF Financial Center Minneapolis, MN 55474-0001	63.94%
	Talcott Resolution Life and Annuity Insurance Company* P.O. Box 5051 Hartford, CT 06102-5051	11.67%
	Talcott Resolution Life & Annuity Separate Account ATTN: UIT Operations P.O. Box 5051 Hartford, CT 06102-5051	5.59%
	Prudential as Administrator for Allstate Life Insurance Co. C/O Product Valuation One Security Benefit PL Topeka, KS 66636-1000	5.46%
Emerging Markets Debt (Class II)	Nationwide Life Insurance Company* NWVA4 C/O IPO Portfolio Accounting P.O. Box 182029 Columbus, OH 43218-2029	57.08%
	Prudential as Administrator for Allstate Life Insurance Co. C/O Product Valuation One Security Benefit PL Topeka, KS 66636-1000	22.90%
	Prudential as Administrator for Allstate Life Insurance Co. C/O Product Valuation One Security Benefit Place Topeka, KS 66636-1000	5.60%
Emerging Markets Equity (Class II)	Minnesota Life Insurance Company* ATTN A6-4105 400 Robert Street North Saint Paul, MN 55101-2099	56.26%
	Talcott Resolution Life and Annuity Insurance Company P.O. Box 5051 Hartford, CT 06102-5051	14.36%
	Security Benefit Life Ins Co. FBO Unbundled ATTN C/O Variable Annuity Dept One Security Benefit Place Topeka, KS 66636-1000	7.28%
	Talcott Resolution Life Insurance Company P.O. Box 5051 Hartford, CT 06102-5051	5.28%
Global Franchise (Class II)	Prudential as Administrator for Allstate Life Insurance Co.* C/O Product Valuation One Security Benefit Pl Topeka, KS 66636-1000	59.72%
	Talcott Resolution Life and Annuity Insurance Company* P.O. Box 5051 Hartford, CT 06102-5051	18.96%

Fund	Name and Address	% of Class
	Prudential as Administrator for Allstate Life Insurance Co. C/O Product Valuation One Security Benefit Place Topeka, KS 66636-1000	5.22%
Global Infrastructure (Class II)	Nationwide Life Insurance Company* NWVA-II C/O IPO Portfolio Accounting P.O. Box 182029 Columbus, OH 43218-2029	37.91%
	The Lincoln National Life Insurance Company* Separate Account N ATTN Cammie Kline 1300 South Clinton Street Fort Wayne, IN 46802-3506	22.76%
	Prudential as Administrator for Allstate Life Insurance Co. C/O Product Valuation 1 SW Security Benefit PL Topeka, KS 66636-1000	13.95%
	Nationwide Life Insurance Company NWVA4 C/O IPO Portfolio Accounting P.O. Box 182029 Columbus, OH 43218-2029	10.97%
Global Real Estate (Class II)	IDS Life Insurance Co.* 222 AMPF Financial Center Minneapolis, MN 55474-0001	49.30%
	Nationwide Life Insurance Company* NWVA4 C/O IPO Portfolio Accounting P.O. Box 182029 Columbus, OH 43218-2029	23.52%
	Protective Life Insurance Co.* Variable Annuity Separate Account ATTN Tom Barrett 2801 Highway 280 South Birmingham, AL 35223-2488	13.60%
	Nationwide Life Insurance Company NWVLI4 C/O IPO Portfolio Accounting P.O. Box 182029 Columbus, OH 43218-2029	5.40%
Global Strategist (Class II)	Prudential as Administrator for Allstate Life Insurance Co. C/O Product Valuation One Security Benefit Place Topeka, KS 66636-1000	75.80%
	Delaware Life Insurance Company 1601 Trapelo Rd. STE 30 Waltham, MA 02451-7360	11.63%
	Nationwide Life Insurance Company NWVA4 C/O IPO Portfolio Accounting P.O. Box 182029 Columbus, OH 43218-2029	7.59%
Growth (Class II)	OHIO National Life Ins Company* FBO ITS Separate Accounts 1 Financial Way Cincinnati, OH 45242-5800	30.01%
	Prudential As Administrator For Allstate Life Insurance Co.* C/O Product Valuation One Security Benefit Pl. Topeka Ks 66636-1000	19.84%

Fund	Name and Address	% of Class
	Nationwide Life Insurance Company* NWVA-II C/O IPO Portfolio Accounting P.O. Box 182029 Columbus, OH 43218-2029	15.81%
	Nationwide Life Insurance Company NWVA4 C/O IPO Portfolio Accounting P.O. Box 182029 Columbus, OH 43218-2029	9.15%
	Talcott Resolution Life and Annuity Insurance Company P.O. Box 5051 Hartford, CT 06102-5051	8.86%
U.S. Real Estate (Class II)	NYLIAC* ATTN Ashesh Upadhyay 30 Hudson St Jersey City, NJ 07302-4804	57.77%
	OHIO National Life Ins Company* FBO ITS Separate Accounts 1 Financial Way Cincinnati, OH 45242-5800	28.90%
	Prudential as Administrator for Allstate Life Insurance Co. C/O Product Valuation One Security Benefit PL Topeka, KS 66636-1000	6.21%

* The persons listed above as owning 25% or more of the outstanding shares of a Fund may be presumed to “control” (as that term is defined in the 1940 Act) such Fund. As a result, those persons would have the ability to vote a majority of the shares of the respective Fund on any matter requiring the approval of shareholders of the Fund.

NET ASSET VALUE

The NAV of each class is determined by dividing the total of the value of the Fund’s investments and other assets attributable to such class, less any liabilities attributable to such class, by the total number of outstanding shares of such class. NAV for Class I and Class II shares will differ due to class specific expenses paid by each class, if any, and the 12b-1 fee charged to Class II shares. The NAV of each Fund is determined as of the close of the NYSE (normally 4:00 p.m. Eastern time) on each day that the NYSE is open for business.

Price information on listed securities is taken from the exchange where the security is primarily traded. Fund securities generally are valued at their market value. In the calculation of a Fund’s NAV: (1) an equity portfolio security listed or traded on an exchange is valued at its latest reported sales price (or at the exchange official closing price if such exchange reports an official closing price), and if there were no sales on a given day and if there is no official exchange closing price for that day, the security is valued at the mean between the last reported bid and asked prices if such bid and asked prices are available on the relevant exchanges; and (2) all other equity portfolio securities for which OTC market quotations are readily available are valued at the latest reported sale price (or at the market official closing price if such market reports an official closing price), and if there was no trading in the security on a given day and if there is no official closing price from the relevant markets for that day, the security is valued at the mean between the last reported bid and asked prices if such bid and asked prices are available on the relevant markets. Listed equity securities not traded on the valuation date with no reported bid and asked prices available on the exchange are valued at the mean between the current bid and asked prices obtained from one or more reputable brokers or dealers. An unlisted equity security that does not trade on the valuation date and for which bid and asked prices from the relevant markets are unavailable is valued at the mean between the current bid and asked prices obtained from one or more reputable brokers or dealers.

In cases where a security is traded on more than one exchange, the security is valued on the exchange designated as the primary market. When no market quotations are readily available for a security or other asset, including circumstances under which the Adviser and/or Sub-Advisers determines that a market quotation is not accurate, fair value for the security or other asset will be determined in good faith using methods approved by the Fund’s Board of Directors. For valuation purposes, quotations of foreign portfolio securities, other assets and liabilities and forward contracts stated in foreign currency are translated into U.S. dollar equivalents at the prevailing market rates prior to the close of the NYSE.

Bonds and other fixed-income securities are valued according to the broadest and most representative market, which will ordinarily be the OTC market. NAV includes interest on fixed-income securities, which is accrued daily unless collection is in doubt. In addition, bonds and other fixed-income securities may be valued on the basis of prices provided by a pricing service when such prices

are believed to reflect the fair market value of such securities. The prices provided by a pricing service are determined without regard to bid or last sale prices, but take into account institutional-size trading in similar groups of securities and any developments related to the specific securities. Securities not priced in this manner are valued based on the mean of bid and ask prices (or a yield equivalent thereof), obtained from market makers or brokers or, when securities exchange valuations are used, at the latest quoted sale price on the day of valuation. If there is no such reported sale, the latest quoted bid price will be used. Short-term debt securities with remaining maturities of 60 days or less at the time of purchase may be valued at amortized cost, unless the Adviser determines such valuation does not reflect the securities' market value, in which case these securities will be valued at their fair market value as determined by the Adviser.

Certain of a Fund's securities may be valued using as an input evaluated prices provided by an approved outside pricing service. Prices obtained from these approved sources are monitored and reviewed by the Adviser's Valuation Committee and if not deemed to represent fair value, may be overridden and valued using procedures approved by the Board. The pricing service may utilize a matrix system or other model incorporating attributes such as security quality, maturity and coupon as the evaluation model parameters, and/or research evaluations by its staff, including review of broker-dealer market price quotations in determining what it believes is the fair valuation of the portfolio securities valued by such pricing service. Pricing services generally value securities assuming orderly transactions of an institutional round lot size, but a Fund may hold or transact in such securities in smaller, odd lot sizes. Odd lots often trade at lower prices than institutional round lots. In certain cases where a valuation is not available from any of the approved pricing services, then a quote from a broker or dealer may be used.

Listed options are valued at the last reported sales price on the exchange on which they are listed (or at the exchange official closing price if such exchange reports an official closing price). If an official closing price or last reported sale price is unavailable, the listed option should be fair valued at the mean between its latest bid and asked prices. If an exchange closing price or bid and asked prices are not available from the exchange, then the quotes from one or more brokers or dealers may be used. Unlisted options and swaps are valued by an approved outside pricing service or quotes from a broker or dealer. Unlisted options and swaps cleared on a clearinghouse or exchange may be valued using the closing price provided by the clearinghouse or exchange. Futures are valued at the settlement price on the exchange on which they trade or, if a settlement price is unavailable, then at the last sale price on the exchange.

If the Adviser or Sub-Advisers determine that the valuation received from the outside pricing service or broker or dealer is not reflective of the security's market value, such security is valued at its fair value as determined in good faith using methods approved by the Fund's Board of Directors.

Generally, trading in foreign securities, as well as corporate bonds, U.S. Government securities and money market instruments, is substantially completed each day at various times prior to the close of the NYSE. The values of such securities used in computing the NAV of the Fund's shares are determined as of such times. Foreign currency exchange rates are also generally determined prior to the close of the NYSE. Occasionally, events which may affect the values of such securities and such exchange rates may occur between the times at which they are determined and the close of the NYSE. If events that may affect the value of such securities occur during such period, then these securities may be valued at their fair value as determined in good faith using methods approved by the Fund's Board of Directors.

Certain Funds may invest up to 25% of its total assets in shares of a Bitcoin Subsidiary. The Bitcoin Subsidiary offers to redeem all or a portion of its shares at its current NAV every regular business day. The value of shares of the Bitcoin Subsidiary fluctuates with the value of the Subsidiary's portfolio investments. The Bitcoin Subsidiary prices its portfolio investments pursuant to the same pricing and valuation methodologies and procedures used by the Fund, which require, among other things, that each of the Bitcoin Subsidiary's portfolio investments be marked-to-market (that is, the value on the Bitcoin Subsidiary's books changes) each business day to reflect changes in the market value of each investment.

In general, fair value represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When there is no public market or possibly no market at all for an asset, fair value represents, in general, a good faith approximation of the current value of an asset. A security that is fair valued may be valued at a price higher or lower than actual market quotations or the value determined by other funds using their own fair valuation procedures or by other investors. The fair value of an asset may not be the price at which that asset is ultimately sold.

The proceeds received by each Fund from the issue or sale of its Shares, and all net investment income, realized and unrealized gain and proceeds thereof, subject only to the rights of creditors, will be specifically allocated to the Fund and constitute the underlying assets of each Fund. The underlying assets of a Fund will be segregated on the books of account, and will be charged with the liabilities in respect of a Fund and with a share of the general liabilities of the Trust. Expenses of the Trust with respect to the Fund and the other series of the Trust are generally allocated in proportion to the NAVs of the respective Fund except where allocations of expenses can otherwise be fairly made.

Each Fund relies on various sources to calculate its NAV. The ability of the Fund to calculate the NAV per share of the Fund is subject to operational risks associated with processing or human errors, systems or technology failures, cyber attacks and errors caused

by third party service providers, data sources, or trading counterparties. Such failures may result in delays in the calculation of the Fund's NAV and/or the inability to calculate NAV over extended time periods. The Fund may be unable to recover any losses associated with such failures. In addition, if the third-party service providers and/or data sources upon which the Fund directly or indirectly relies to calculate its NAV or price individual securities are unavailable or otherwise unable to calculate the NAV correctly, it may be necessary for alternative procedures to be utilized to price the securities at the time of determining the Fund's NAV.

BROKERAGE PRACTICES

Portfolio Transactions

The Adviser and/or Sub-Advisers are responsible for decisions to buy and sell securities for each Fund, for broker-dealer selection and for negotiation of commission rates. The Adviser and/or Sub-Advisers are prohibited from directing brokerage transactions on the basis of the referral of clients or the sale of shares of advised investment companies. Purchases and sales of securities on a stock exchange are effected through brokers who charge a commission for their services. In the OTC market, securities may be traded as agency transactions through broker-dealers or traded on a "net" basis with dealers acting as principal for their own accounts without a stated commission, although the price of the security usually includes profit to the dealer. In underwritten offerings, securities are purchased at a fixed price which includes an amount of compensation to the underwriter, generally referred to as the underwriter's concession or discount. When securities are purchased or sold directly from or to an issuer, no commissions or discounts are paid.

On occasion, a Fund may purchase certain money market instruments directly from an issuer without payment of a commission or concession. Money market instruments are generally traded on a "net" basis with dealers acting as principal for their own accounts without a stated commission, although the price of the security usually includes a profit to the dealer.

The Company anticipates that certain of its transactions involving foreign securities will be effected on foreign securities exchanges. There is also generally less government supervision and regulation of foreign securities exchanges and brokers than in the United States.

The Adviser and/or Sub-Advisers select broker-dealers for the execution of transactions for the Funds in accordance with their duty to seek "best execution" (i.e., the most favorable terms of execution). In seeking best execution, the Adviser and/or Sub-Advisers are not obligated to choose the broker-dealer offering the lowest available commission rate if, in the Adviser's and/or Sub-Advisers' reasonable judgment, (i) the total costs or proceeds from the transaction might be less favorable than may be obtained elsewhere; (ii) a higher commission is justified by the brokerage and research services provided by the broker-dealer that fall within the safe harbor of Section 28(e) of the 1934 Act or otherwise is permitted under applicable law; or (iii) other considerations, such as the order size, the time required for execution, the depth and breadth of the market for the security or minimum credit quality requirements to transact business with a particular broker-dealer. The research services received include services which aid the Adviser and/or Sub-Advisers in fulfilling their investment decision-making responsibilities, including (a) furnishing advice as to the value of securities, the advisability of investing in, purchasing or selling securities, and the availability of securities or purchasers or sellers of securities; and (b) furnishing analyses and reports concerning issuers, industries, securities, economic factors and trends, portfolio strategy, and the performance of accounts.

When effecting transactions on behalf of the Funds, the Adviser and/or Sub-Advisers may trade with any broker-dealer on their list of approved broker-dealers. Approved broker-dealers have met criteria as established by the Adviser's Trading and Research Governance team ("TRG"). TRG reviews and approves broker-dealers periodically to determine whether broker-dealers on the approved list continue to meet such criteria. The approval lists are reported quarterly to the Adviser's Counterparty Governance Committee. When selecting an approved broker-dealer (including an affiliate) to execute securities transactions, the following factors may be considered: (i) best available price; (ii) reliability, integrity and reputation in the industry (which may include a review of financial information and creditworthiness); (iii) execution capabilities, including block positioning, speed of execution and quality and responsiveness of its trading desk; (iv) knowledge of and access to the markets for the securities being traded; (v) potential ability to obtain price improvement; (vi) ability to maintain confidentiality; (vii) ability to handle non-traditional trades; (viii) commission and commission-equivalent rates; (ix) technology infrastructure; (x) clearance and settlement capabilities; (xi) the size of the trade relative to other trades in the same instrument; (xii) ability of a counterparty to commit its capital to a Fund's trade and its access to liquidity; (xiii) counterparty restrictions associated with a portfolio, including regulatory trading, documentation requirement or any specific clearing broker-dealer requirements; (xiv) client-directed execution; (xv) client-specific restrictions; and (xvi) such other factors as may be appropriate.

Subject to the duty to seek best execution, the Adviser uses a portion of the commissions generated when executing client transactions to acquire brokerage and research services that aid in fulfilling investment decision-making responsibilities in accordance with Section 28(e) and applicable law. Commissions paid to broker-dealers providing brokerage and research services may be higher than those charged by other broker-dealers. Subject to applicable law, the Adviser receives a benefit when using client commissions to obtain brokerage and research services because the Adviser does not have to produce or pay for the brokerage research services itself. Therefore, the Adviser has an incentive to select or recommend a broker-dealer based on its interest in receiving brokerage and research services, rather than solely on its clients' interest in obtaining the best price.

The Adviser has adopted policies and procedures designed to help track and evaluate the benefits received from brokerage and research services, as well as to track how much clients pay above the amount that broker-dealers from which the Adviser receives brokerage and research services may have charged solely for execution of such trades. The Adviser utilizes a voting system to assist in making a good faith determination of the value of brokerage and research services it receives in accordance with Section 28(e) and applicable law. In many cases, these involve subjective judgments or approximations. The Adviser has established a process for budgeting research costs and allocating such costs across client accounts.

The Adviser and certain other affiliated advisers have entered into commission sharing arrangements (“CSAs”) with executing brokers (“CSA Partners”) and a third-party vendor (“CSA Aggregator”). Pursuant to these arrangements, and under the Adviser’s supervision, the CSA Partners and CSA 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 may include executing brokerage firms or independent research providers (“Approved Research Providers”)) that provide brokerage and research services. The CSA Aggregator also reconciles research credits from trades with CSA Partners, and pays Approved Research Providers and provides other related administrative functions. In addition, a CSA Partner may provide the Adviser with proprietary research it has developed and, upon instruction, may retain research commission credits as compensation for the provision of such proprietary research services. The Adviser believes that these arrangements allow it to monitor the amount of trading costs that are attributable to execution services on the one hand and other brokerage and research services on the other.

Transactions that generate research credits include equity transactions executed on an agency basis or via a riskless principal transaction where the executing broker-dealer receives a commission. The Adviser does not use CSAs 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, the Adviser, subject to applicable law, may 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.

The Adviser may receive “mixed use” products and services from an Approved Research Provider, where a portion of the product or service assists in its investment decision-making process in accordance with Section 28(e) and a portion may be used for other purposes. Where a product or service has a mixed use, the Adviser 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 in its investment decision-making process. The Adviser may have an incentive to allocate the costs to uses that assist in its investment decision-making process because the Adviser may pay for such costs with client commissions rather than its own resources. To the extent the Adviser receives “mixed use” products and services, the Adviser will allocate the anticipated costs of a mixed use product or service in good faith and maintain records concerning allocations in order to mitigate such conflicts.

Client accounts that pay a greater amount of commissions relative to other accounts may bear a greater share of the cost of brokerage and research services than such other accounts. The Adviser may 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. The Adviser may also share brokerage and research services with its affiliated advisers, and the clients of its affiliated advisers may receive the benefits of such brokerage and research services. These arrangements remain subject to the Adviser’s overall obligation to seek best execution for client trading.

The EU’s Markets in Financial Instruments Directive II (“MiFID II”), which became effective January 3, 2018, requires investment advisers regulated under MiFID II to pay for research services separately from trade execution services, either through their own resources or a research payment account funded by a specific charge to a client. Although the Adviser is not directly subject to the provisions of MiFID II, certain of its affiliated advisers are, such as Morgan Stanley Investment Management Limited; accordingly, as applicable, the Adviser makes a reasonable valuation and allocation of the cost of research services as between MiFID II client accounts and other accounts that participate in CSAs and will pay for research services received with respect to MiFID II client accounts from its own resources. The Adviser and affiliated advisers subject to MiFID II may separately pay for fixed-income research from their own resources. Following its withdrawal from the EU on January 31, 2020, the United Kingdom has entered a transition period, during which EU law (including MiFID II) will continue to apply in the United Kingdom. Following the transition period, investment managers in the United Kingdom may still be required to comply with certain MiFID II equivalent requirements in accordance with the handbook of rules and guidance issued by the Financial Conduct Authority.

When permitted under applicable law, portfolio managers generally will aggregate orders of their clients 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. The Adviser and/or Sub-Advisers 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, the Adviser and/or Sub-Advisers may 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 or to avoid odd lots or small allocations, among other reasons. These allocations are made in the good faith judgment of the Adviser and/or the Sub-Advisers with a goal of seeking to ensure that fair and equitable allocation occurs over time. There may be times that the Adviser and/or Sub-Advisers are not able to aggregate orders because of applicable law or other considerations when doing so might otherwise be advantageous.

Affiliated Brokers

Subject to the overriding objective of obtaining the best execution of orders, a Company may use broker-dealer affiliates of the Adviser to effect Fund brokerage transactions, including transactions in futures contracts and options on futures contracts, under procedures adopted by the Company's Board of Directors. In order to use such affiliates, the commission rates and other remuneration paid to the affiliates must be fair and reasonable in comparison to those of other broker-dealers for comparable transactions involving similar securities being purchased or sold during a comparable time period. This standard would allow the affiliated broker or dealer to receive no more than the remuneration which would be expected to be received by an unaffiliated broker.

Pursuant to an order issued by the SEC, the Company is permitted to engage in principal transactions in money market instruments, subject to certain conditions, with Morgan Stanley & Co. LLC, a broker-dealer affiliated with the Company's Adviser.

During the fiscal years ended December 31, 2020, 2021 and 2022 the Company did not effect any principal transactions with Morgan Stanley & Co. LLC.

Brokerage Commissions Paid

During the fiscal years ended December 31, 2020, 2021 and 2022, the Company paid brokerage commissions of approximately \$901,831, \$1,006,489 and \$875,536 respectively. During the fiscal years ended December 31, 2020, 2021 and 2022, the Company paid in the aggregate \$0, \$378 and \$1,713 respectively, as brokerage commissions to Morgan Stanley & Co. LLC and/or its affiliated broker-dealers. During the fiscal year ended December 31, 2022, the brokerage commissions paid to Morgan Stanley & Co. LLC and/or its affiliated broker-dealers represented approximately 0.20% of the total brokerage commissions paid by the Company during the period and were paid on account of transactions having an aggregate dollar value equal to approximately 0.09% of the aggregate dollar value of all portfolio transactions of the Company during the period for which commissions were paid.

For the fiscal year ended December 31, 2022, each Fund paid brokerage commissions, including brokerage commissions paid to affiliated broker-dealers, as follows:

Brokerage Commissions Paid During Fiscal Year Ended December 31, 2022

Fund	Total Commissions Paid	Total Commissions	Commissions Paid to Morgan Stanley & Co. LLC and/or its affiliated broker-dealers	
			Percent of Total Commissions	Percent of Total Brokered Transactions
Core Plus Fixed Income	\$4,761	\$0	0.00%	0.00%
Discovery	97,136	0	0.00%	0.00%
Emerging Markets Debt	3,020	0	0.00%	0.00%
Emerging Markets Equity	143,921	0	0.00%	0.00%
Global Franchise	1,549	0	0.00%	0.00%
Global Infrastructure	51,752	0	0.00%	0.00%
Global Real Estate	46,868	0	0.00%	0.00%
Global Strategist	16,449	0	0.00%	0.00%
Growth	280,328	1,713	0.61%	0.27%
U.S. Real Estate	229,752	0	0.00%	0.00%

During the fiscal years ended December 31, 2020 and December 31, 2021, each Fund paid brokerage commissions, including brokerage commissions paid to affiliated broker-dealers, as follows:

**Brokerage Commissions Paid During Fiscal Years Ended
December 31, 2020 and 2021**

Fund	Fiscal Year Ended December 31, 2020		Fiscal Year Ended December 31, 2021	
	Total	Morgan Stanley & Co. LLC and/or its affiliated broker- dealers	Total	Morgan Stanley & Co. LLC and/or its affiliated broker- dealers
Core Plus Fixed Income	\$8,061	\$0	\$6,925	\$0
Discovery	106,377	0	132,744	0
Emerging Markets Debt	0	0	0	0
Emerging Markets Equity	195,964	0	171,197	0
Global Franchise	2,605	0	1,930	0
Global Infrastructure	56,498	0	34,971	0
Global Real Estate	47,190	0	70,509	0
Global Strategist	446	0	24,354	378
Growth	148,780	0	122,548	0
U.S. Real Estate	335,910	0	441,311	0

Regular Broker-Dealers

During the fiscal year ended December 31, 2022, the following Funds purchased securities issued by the following issuers, which issuers were among the ten brokers or ten dealers that executed transactions for or with the Company or the Fund in the largest dollar amounts during the period:

Fund	Issuer
Core Plus Fixed Income	Bank of America Corp. Citigroup Global Markets, Inc. Goldman Sachs & Co.
Discovery	None
Emerging Markets Debt	None
Emerging Markets Equity	None
Global Franchise	None
Global Infrastructure	None
Global Real Estate	None
Global Strategist	Bank Of America Corp. Barclays Bank Plc BNP Paribas S.A. Goldman Sachs & Co. JP Morgan Chase & Co. UBS AG Wells Fargo Bank
Growth	None
U.S. Real Estate	None

At December 31, 2022, the following Funds held securities issued by such brokers or dealers with the following market values:

Fund	Issuer	Approximate Market Value at 12/31/22
Core Plus Fixed Income	Bank of America Corp.	\$577,000
	Citigroup Global Markets, Inc.	522,000
	Goldman Sachs & Co.	420,000
Global Strategist	BNP Paribas S.A.	582,000
	JP Morgan Chase & Co.	385,000
	Bank Of America Corp.	251,000
	Goldman Sachs & Co.	156,000
	UBS AG	54,000
	Wells Fargo Bank	49,000
	Barclays Bank PLC	27,000

Portfolio Turnover

The Funds generally do not invest for short-term trading purposes; however, when circumstances warrant, each Fund may sell investment securities without regard to the length of time they have been held. Market conditions in a given year could result in a higher or lower portfolio turnover rate than expected and the Funds will not consider portfolio turnover rate a limiting factor in making investment decisions consistent with their investment objectives and policies. A high portfolio turnover rate (100% or more) increases a Fund's transaction costs (including brokerage commissions or dealer costs), which would adversely impact a Fund's performance. Higher portfolio turnover may result in the realization of more short-term capital gains than if a Fund had lower portfolio turnover.

PERFORMANCE INFORMATION

The average annual compounded rates of return for the Class I shares of the Funds for the 1-, 5- and 10-year periods ended December 31, 2022 and for the period from inception through December 31, 2022 are as follows:

Fund	Inception Date	One Year	Average Annual Five Years	Average Annual Ten Years	Average Annual Since Inception
Core Plus Fixed Income	01/02/97	-14.33%	0.28%	2.02%	4.07%
Discovery	10/18/99	-62.96%	5.20%	7.96%	6.26%
Emerging Markets Debt	06/16/97	-18.74%	-2.23%	0.06%	5.14%
Emerging Markets Equity	10/01/96	-25.08%	-2.71%	0.59%	4.62%
Global Infrastructure*	03/01/90	-8.02%	4.20%	6.52%	7.67%
Global Strategist	01/02/97	-16.94%	1.91%	4.10%	3.75%
Growth	01/02/97	-60.07%	4.25%	11.85%	8.50%
U.S. Real Estate	03/03/97	-27.05%	-1.43%	3.32%	7.49%

The average annual compounded rates of return for the Class II shares of the Funds for the 1- and 5- and 10-year periods ended December 31, 2022 and for the period from inception through December 31, 2022 are as follows:

Fund	Inception Date	One Year	Average Annual Five Years	Average Annual Ten Years	Average Annual Since Inception
Core Plus Fixed Income	05/01/03	-14.58%	0.03%	1.76%	2.82%
Discovery	05/05/03	-62.97%	5.10%	7.87%	9.40%
Emerging Markets Debt	12/19/02	-18.81%	-2.27%	0.02%	5.37%
Emerging Markets Equity	01/10/03	-25.13%	-2.77%	0.54%	7.41%
Global Franchise	04/30/03	-17.57%	7.64%	9.79%	10.40%
Global Infrastructure*	06/05/00	-8.32%	3.94%	6.24%	4.77%
Global Real Estate	04/28/06	-26.20%	-3.35%	0.95%	2.00%
Global Strategist	03/15/11	-17.07%	1.80%	3.97%	4.13%
Growth	05/05/03	-60.16%	3.99%	11.57%	9.73%
U.S. Real Estate	11/05/02	-27.22%	-1.68%	3.06%	7.56%

* Performance shown for the Global Infrastructure's Class I and Class II shares reflects the performance of the Class X and Class Y shares, respectively, of VIS Global Infrastructure for periods prior to April 28, 2014.

The respective current yields for certain of the Company's Class I Funds for the 30-day period ended December 31, 2022 were as follows:

Fund	30-Day Yield
Core Plus Fixed Income	6.15%
Emerging Markets Debt	8.68%
Global Strategist	2.16%

The respective current yields for certain of the Company's Class II Funds for the 30-day period ended December 31, 2022 were as follows:

Fund	30-Day Yield
Core Plus Fixed Income	5.90%
Emerging Markets Debt	8.62%
Global Strategist	2.06%

DISCLOSURE OF PORTFOLIO HOLDINGS

The Company's Board of Directors, the Adviser and the Sub-Advisers have adopted policies and procedures regarding disclosure of portfolio holdings (the "Policy"). Pursuant to the Policy, the Adviser and the Sub-Advisers may disclose information concerning Company portfolio holdings only if such disclosure is consistent with the antifraud provisions of the federal securities laws and the Company's, the Adviser's and the Sub-Advisers' fiduciary duties to Company shareholders. In no instance may the Adviser and the Sub-Advisers or the Company receive compensation or any other consideration in connection with the disclosure of information about the Fund securities of the Company. Consideration includes any agreement to maintain assets in the Company or in other investment companies or accounts managed by the Adviser, the Sub-Advisers or by any affiliated person of the Adviser or the Sub-Advisers. Non-public information concerning portfolio holdings may be divulged to third-parties only when the Company has a legitimate business purpose for doing so and the recipients of the information are subject to a duty of confidentiality. Under no

circumstances shall current or prospective Company shareholders receive non-public portfolio holdings information, except as described below.

The Company makes available on its public website the following portfolio holdings information:

- complete portfolio holdings information monthly, at least 15 calendar days after the end of each month (except with respect to the Discovery, Global Franchise and Growth Portfolios);
- complete portfolio holdings information quarterly, at least 45 calendar days after the end of each quarter (with respect to the Discovery and Growth Portfolios); and
- top 10 holdings monthly, at least 15 calendar days after the end of each month.

With respect to the Global Franchise Portfolio, complete holdings will be publicly available on a quarterly basis 15 calendar days after the quarter-end by calling 1-800-869-6397 or emailing client service at msimcs@morganstanley.com.

The Company provides a complete schedule of portfolio holdings for the second and fourth fiscal quarters in its Semi-Annual and Annual Reports, and for the first and third fiscal quarters in its filings with the SEC as an exhibit to Form N-PORT.

The Company may provide publicly, portfolio holdings information more frequently if it has a legitimate business purpose for doing so.

All other portfolio holdings information that has not been disseminated in a manner making it available generally as described above is non-public information for purposes of the Policy.

The Company may make selective disclosure of non-public portfolio holdings information pursuant to certain exemptions set forth in the Policy. Third-parties eligible for exemptions under the Policy and therefore eligible to receive such disclosures currently include clients/shareholders (such as redeeming shareholders in-kind), fund rating agencies, information exchange subscribers, proxy voting or advisory services, pricing services, consultants and analysts, portfolio analytics providers, transition managers and service providers, provided that the third-party expressly agrees to maintain the disclosed information in confidence and not to trade portfolio securities or related derivative securities based on the non-public information. Non-public portfolio holdings information may not be disclosed to a third-party pursuant to an exemption unless and until the third-party recipient has entered into a non-disclosure agreement with the Company and the arrangement has been reviewed and approved, as set forth in the Policy and discussed below. In addition, persons who owe a duty of trust or confidence to the Company or the Adviser may receive non-public portfolio holdings information without entering into a non-disclosure agreement. Currently, these persons include (i) the Funds' independent registered public accounting firm (as of the Company's fiscal year-end and on an as needed basis), (ii) counsel to the Company (on an as needed basis), (iii) counsel to the Independent Directors (on an as needed basis) and (iv) members of the Board of Directors (on an as needed basis). Subject to the terms and conditions of any agreement between the Adviser or the Company and the third-party recipient, if these conditions for disclosure are satisfied, there shall be no restriction on the frequency with which Company non-public portfolio holdings information is released, and no lag period shall apply (unless otherwise indicated below).

The Adviser and the Sub-Advisers may provide interest lists to broker-dealers who execute securities transactions for the Company without entering into a non-disclosure agreement with the broker-dealers, provided that the interest list satisfies all of the following criteria: (1) the interest list must contain only the CUSIP numbers and/or ticker symbols of securities held in all Morgan Stanley Funds on an aggregate, rather than a fund-by-fund basis; (2) the interest list will not disclose portfolio holdings on a fund-by-fund basis; (3) the interest list must not contain information about the number or value of shares owned by a specified Morgan Stanley Fund; (4) the interest list may identify the investment strategy, but not the particular Morgan Stanley Funds, to which the list relates; and (5) the interest list may not identify the portfolio manager or team members responsible for managing the Morgan Stanley Funds.

Company shareholders may elect in some circumstances to redeem their shares of the Company in exchange for their pro rata share of the securities held by the Company. Under such circumstances, Company shareholders may receive a complete listing of the holdings of the Company up to seven calendar days prior to making the redemption request provided that they represent in writing that they agree not to disclose or trade on the basis of the portfolio holdings information.

The Company may discuss or otherwise disclose performance attribution analyses (i.e., mention the effects of having a particular security in the portfolio(s)) where such discussion is not contemporaneously made public, provided that the particular holding has been disclosed publicly or the information that includes such holding(s) has been made available to shareholders requesting such information.

Additionally, any discussion of the analyses may not be more current than the date the holding was disclosed publicly or the information that includes such holding(s) has been made available to shareholders requesting such information.

The Company may disclose portfolio holdings to transition managers, provided that the Company has entered into a non-disclosure or confidentiality agreement with the party requesting that the information be provided to the transition manager and the party to the non-disclosure agreement has, in turn, entered into a non-disclosure or confidentiality agreement with the transition manager.

Portfolio holdings information may be provided to broker-dealers, prime brokers, futures commission merchants, or similar providers in connection with the Company's portfolio trading or operational processing activities; such entities generally need access to such information in the performance of their duties and responsibilities to fund service providers and are subject to a duty of confidentiality, including a duty not to trade on material nonpublic information, imposed by law or contract. Portfolio holdings information may also be provided to affiliates of MSIM pursuant to regulatory requirements for legitimate business purposes, which may include risk management, or may be reported by the Company's counterparties to certain global trade repositories pursuant to regulatory requirements.

The Adviser, the Sub-Advisers, the Company and/or certain Funds currently have entered into ongoing arrangements regarding the selective disclosure of complete portfolio holdings information with the following parties:

Name	Frequency ¹	Lag Time
Service Providers		
State Street Bank and Trust Company	Daily basis	Daily
BlackRock Financial Management Inc. ²	Daily basis	³
KellyCo Marketing	Monthly basis and Quarterly basis	Varying lag times after the date of the information
R.R. Donnelley & Sons Company	Monthly basis and Quarterly basis	Varying lag times after the date of the information
Toppan Merrill ⁴	Semi-Annual basis	Approximately 15 business days after month end
Commisce Software Limited ⁵	Monthly basis	Approximately three business days
Virtu Financial ⁵	Monthly basis	Approximately three business days
Fund Rating Agencies		
Refinitiv Lipper	Monthly basis	Approximately six business days after month end
Portfolio Analytics Providers		
Bloomberg Finance, L.P.	Daily basis	Daily
FactSet Research Systems, Inc.	Daily basis	Daily
BestX Ltd.	Daily basis	Daily
Abel Noser Solutions, LLC	Daily basis	Daily
MSCI Inc. ⁵	Daily basis	Daily

1 Dissemination of portfolio holdings information to entities listed above may occur less frequently than indicated (or not at all).

2 With respect to Core Plus Fixed Income Portfolio, Emerging Markets Debt Portfolio, Global Strategist Portfolio only.

3 Information will typically be provided on a real time basis or as soon thereafter as possible.

4 With respect to the Discovery and Growth Portfolios, only.

5 With respect to Discovery Portfolio, Emerging Markets Equity Portfolio, Global Franchise Portfolio, Global Infrastructure Portfolio, Global Real Estate Portfolio, Global Strategist Portfolio, Growth Portfolio, U.S. Real Estate Portfolio, only.

In addition, the following insurance companies, which are deemed service providers to the Fund, receive top ten portfolio holdings information, on a quarterly basis, approximately 15 days after quarter end: AG Life Insurance Company of Delaware (formerly AIG), Allstate Life Insurance Company, Allstate Life Insurance Company of New York, American General Life Insurance Company, Ameriprise Financial, Ameritas Life Insurance Corp, Ameritas Life Insurance Corp of New York, Annuity Investors Life Insurance Company, Columbus Life Insurance Company, Connecticut General Life Insurance Company (CIGNA), Continental Assurance Company, Continental Casualty Company, CUNA Mutual Insurance Society, Empire Fidelity Investments Life Insurance Company, Fidelity Insurance Life Insurance Company, Fidelity Investments Life Insurance Company, First MetLife Investors Insurance Company, First Security Benefit Life Insurance & Annuity Company of New York, General American Life Insurance Company, Great-West Life & Annuity Insurance Company, Hartford Life Insurance Company, Integrity Life Insurance Company, Kemper Investors Life Insurance Company, Lincoln Life & Annuity Company of New York, Metlife Insurance Company of Connecticut, MetLife Investors USA Insurance Company, Metropolitan Life Insurance Company, Midland National Life Insurance Company, Minnesota Life Insurance Company, MONY Life Insurance Company, National Integrity Life Insurance Company, National Life Insurance Company, National Security Life and Annuity Company, Nationwide Life Insurance Company, New York Life Insurance Company, Ohio National Life Assurance Corporation, Philadelphia Financial Life Assurance Company, Protective Life & Annuity Insurance Company, Protective Life Insurance Company, Security Benefit Life Insurance Company, Sun Life Assurance Company of Canada (U.S.), Sun Life Insurance and Annuity Company of New York, The Lincoln National Life Insurance Company, The Ohio National Life Insurance Company, The Prudential Insurance Company of America, Transamerica Financial Life, Transamerica Life Insurance Company, Transamerica Occidental Life, United Life Annuity and Insurance Company (ING), Valley Forge Life Insurance Company and Western Reserve Life Insurance Company of Ohio. The Fund does not currently have non-disclosure agreements in place with these entities and therefore, these entities can only receive publicly available information.

All disclosures of non-public portfolio holdings information made to third-parties pursuant to the exemptions set forth in the Policy must be reviewed and approved by the Adviser, which will also determine from time to time whether such third-parties should continue to receive portfolio holdings information.

The Adviser and the Sub-Advisers shall report quarterly to the Board of Directors (or a designated committee thereof) at the next regularly scheduled meeting (i) any material information concerning all parties receiving non-public portfolio holdings information pursuant to an exemption; and (ii) any new non-disclosure agreements entered into during the reporting period. Procedures to monitor the use of such non-public portfolio holdings information include requiring annual certifications that the recipients have utilized such information only pursuant to the terms of the agreement between the recipient and the Adviser and, for those recipients receiving information electronically, acceptance of the information will constitute reaffirmation that the third party expressly agrees to maintain the disclosed information in confidence and not to trade portfolio securities based on the nonpublic information.

GENERAL INFORMATION

Company History

The Company was incorporated pursuant to the laws of the State of Maryland on March 26, 1996 under the name Morgan Stanley Universal Funds, Inc. The Company filed a registration statement with the SEC registering itself as an open-end management investment company offering diversified and non-diversified series under the 1940 Act and its shares under the 1933 Act and commenced operations on September 16, 1996. On December 1, 1998, the Company changed its name to Morgan Stanley Dean Witter Universal Funds, Inc. Effective May 1, 2000, the Company changed its name to The Universal Institutional Funds, Inc. Effective May 1, 2017, the Company changed its name to Morgan Stanley Variable Insurance Fund, Inc.

Description of Shares and Voting Rights

The Company's Articles of Incorporation, as amended, permit the Directors to issue 9.5 billion shares of common stock, par value \$.001 per share, from an unlimited number of classes of shares. Currently the Company consists of shares of 10 Funds. Each Fund (with the exception of the Global Franchise and Global Real Estate Portfolios) offers Class I shares. In addition, all Funds offer Class II shares.

The shares of each Fund of the Company, upon issuance, are fully paid and nonassessable, and have no preference as to conversion, exchange, dividends, retirement or other features. The shares of each Fund of the Company have no pre-emptive rights. The shares of the Company have non-cumulative voting rights, which means that the holders of more than 50% of the shares voting for the election of Directors can elect 100% of the Directors if they choose to do so. A shareholder is entitled to one vote for each full share held (and a fractional vote for each fractional share held), then standing in his name on the books of the Company.

Shares of each Fund will be voted by the insurance company or qualified plans investing in such Fund based on instructions received from the contract holders having a voting interest in the underlying account. Shares for which timely instructions are not received generally will be voted by the insurance company or qualified plans in the same proportion as shares for which instructions have been timely received. Therefore, as a result of this proportional voting, the vote of a small number of contract holders could determine the outcome of a proposal subject to a shareholder vote.

Dividends and Capital Gains Distributions

The Company's policy is to distribute at least annually substantially all of each Fund's net investment income, if any. The Company may also distribute any net realized capital gains in the amount and at the times that are intended to eliminate income (including taxable gains) taxes imposed on the distributing Fund (see discussion under "Taxes" in this SAI). However, the Company may also choose to retain net realized capital gains and pay taxes on such gains. The amounts of any income dividends or capital gains distributions cannot be predicted. Any dividend or distribution paid shortly after the purchase of shares of a Fund by an investor may have the effect of reducing the per share NAV of that Fund by the per share amount of the dividend or distribution.

Independent Registered Public Accounting Firm

Ernst & Young LLP, located at 200 Clarendon Street, Boston, MA 02116-5021, serves as the Funds' independent registered public accounting firm and provides audit and audit-related services, tax-related services and assistance in connection with various SEC filings.

Legal Matters

Dechert LLP, located at 1095 Avenue of the Americas, New York, NY 10036-6797, acts as the Company's legal counsel.

POTENTIAL CONFLICTS OF INTEREST

As a diversified global financial services firm, Morgan Stanley, the parent company of the Adviser, engages in a broad spectrum of activities, including financial advisory services, investment management activities, lending, commercial banking, sponsoring and

managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication and other activities. In the ordinary course of its business, Morgan Stanley is a full-service investment banking and financial services firm and therefore engages in activities where Morgan Stanley's interests or the interests of its clients may conflict with the interests of a Fund. Morgan Stanley advises clients and sponsors, manages or advises other investment funds and investment programs, accounts and businesses (collectively, together with the Morgan Stanley Funds, any new or successor funds, programs, accounts or businesses (other than funds, programs, accounts or businesses sponsored, managed, or advised by former direct or indirect subsidiaries of Eaton Vance Corp. ("Eaton Vance Investment Accounts")), the "MS Investment Accounts", and, together with the Eaton Vance Investment Accounts, the "Affiliated Investment Accounts") with a wide variety of investment objectives that in some instances may overlap or conflict with a Fund's investment objectives and present conflicts of interest. In addition, Morgan Stanley or the Adviser may also from time to time create new or successor Affiliated Investment Accounts that may compete with a Fund and present similar conflicts of interest. The discussion below enumerates certain actual, apparent and potential conflicts of interest. There is no assurance that conflicts of interest will be resolved in favor of Fund shareholders and, in fact, they may not be. Conflicts of interest not described below may also exist.

The discussions below with respect to actual, apparent and potential conflicts of interest also may be applicable to or arise from the Eaton Vance Investment Accounts whether or not specifically identified.

Material Non-public and Other Information. It is expected that confidential or material non-public information regarding an investment or potential investment opportunity may become available to the Adviser. If such information becomes available, the Adviser may be precluded (including by applicable law or internal policies or procedures) from pursuing an investment or disposition opportunity with respect to such investment or investment opportunity. The Adviser may also from time to time be subject to contractual "stand-still" obligations and/or confidentiality obligations that may restrict its ability to trade in certain investments on a Fund's behalf. In addition, the Adviser may be precluded from disclosing such information to an investment team, even in circumstances in which the information would be beneficial if disclosed. Therefore, the investment team may not be provided access to material non-public information in the possession of Morgan Stanley that might be relevant to an investment decision to be made on behalf of a Fund, and the investment team may initiate a transaction or sell an investment that, if such information had been known to it, may not have been undertaken. In addition, certain members of the investment team may be recused from certain investment-related discussions so that such members do not receive information that would limit their ability to perform functions of their employment with the Adviser or its affiliates unrelated to that of a Fund. Furthermore, access to certain parts of Morgan Stanley may be subject to third party confidentiality obligations and to information barriers established by Morgan Stanley in order to manage potential conflicts of interest and regulatory restrictions, including without limitation joint transaction restrictions pursuant to the 1940 Act. Accordingly, the Adviser's ability to source investments from other business units within Morgan Stanley may be limited and there can be no assurance that the Adviser will be able to source any investments from any one or more parts of the Morgan Stanley network.

The Adviser may restrict its investment decisions and activities on behalf of the Funds in various circumstances, including because of applicable regulatory requirements or information held by the Adviser or Morgan Stanley. The Adviser might not engage in transactions or other activities for, or enforce certain rights in favor of, a Fund due to Morgan Stanley's activities outside the Funds. In instances where trading of an investment is restricted, the Adviser may not be able to purchase or sell such investment on behalf of a Fund, resulting in a Fund's inability to participate in certain desirable transactions. This inability to buy or sell an investment could have an adverse effect on a Fund's portfolio due to, among other things, changes in an investment's value during the period its trading is restricted. Also, in situations where the Adviser is required to aggregate its positions with those of other Morgan Stanley business units for position limit calculations, the Adviser may have to refrain from making investments due to the positions held by other Morgan Stanley business units or their clients. There may be other situations where the Adviser refrains from making an investment due to additional disclosure obligations, regulatory requirements, policies, and reputational risk, or the Adviser may limit purchases or sales of securities in respect of which Morgan Stanley is engaged in an underwriting or other distribution capacity.

Morgan Stanley has established certain information barriers and other policies to address the sharing of information between different businesses within Morgan Stanley. As a result of information barriers, the Adviser generally will not have access, or will have limited access, to certain information and personnel in other areas of Morgan Stanley and generally will not manage the Funds with the benefit of the information held by such other areas. Morgan Stanley, due to its access to and knowledge of funds, markets and securities based on its prime brokerage and other businesses, may make decisions based on information or take (or refrain from taking) actions with respect to interests in investments of the kind held (directly or indirectly) by the Funds in a manner that may be adverse to the Fund, and will not have any obligation or other duty to share information with the Adviser.

In limited circumstances, however, including for purposes of managing business and reputational risk, and subject to policies and procedures and any applicable regulations, Morgan Stanley personnel, including personnel of the Adviser, on one side of an information barrier may have access to information and personnel on the other side of the information barrier through "wall crossings." The Adviser faces conflicts of interest in determining whether to engage in such wall crossings. Information obtained in connection with such wall crossings may limit or restrict the ability of the Adviser to engage in or otherwise effect transactions on

behalf of the Funds (including purchasing or selling securities that the Adviser may otherwise have purchased or sold for a Fund in the absence of a wall crossing). In managing conflicts of interest that arise because of the foregoing, the Adviser generally will be subject to fiduciary requirements. The Adviser may also implement internal information barriers or ethical walls, and the conflicts described herein with respect to information barriers and otherwise with respect to Morgan Stanley and the Adviser will also apply internally within the Adviser. As a result, a Fund may not be permitted to transact in (e.g., dispose of a security in whole or in part) during periods when it otherwise would have been able to do so, which could adversely affect a Fund. Other investors in the security that are not subject to such restrictions may be able to transact in the security during such periods. There may also be circumstances in which, as a result of information held by certain portfolio management teams in the Adviser, the Adviser limits an activity or transaction for a Fund, including if a Fund is managed by a portfolio management team other than the team holding such information.

Investments by Morgan Stanley and its Affiliated Investment Accounts. In serving in multiple capacities to Affiliated Investment Accounts, Morgan Stanley, including the Adviser and its investment teams, may have obligations to other clients or investors in Affiliated Investment Accounts, the fulfillment of which may not be in the best interests of a Fund or its shareholders. A Fund's investment objectives may overlap with the investment objectives of certain Affiliated Investment Accounts. As a result, the members of an investment team may face conflicts in the allocation of investment opportunities among a Fund and other investment funds, programs, accounts and businesses advised by or affiliated with the Adviser. Certain Affiliated Investment Accounts may provide for higher management or incentive fees or greater expense reimbursements or overhead allocations, all of which may contribute to this conflict of interest and create an incentive for the Adviser to favor such other accounts.

Morgan Stanley currently invests and plans to continue to invest on its own behalf and on behalf of its Affiliated Investment Accounts in a wide variety of investment opportunities globally. Morgan Stanley and its Affiliated Investment Accounts, to the extent consistent with applicable law and policies and procedures, will be permitted to invest in investment opportunities without making such opportunities available to a Fund beforehand. Subject to the foregoing, Morgan Stanley may offer investments that fall into the investment objectives of an Affiliated Investment Account to such account or make such investment on its own behalf, even though such investment also falls within a Fund's investment objectives. A Fund may invest in opportunities that Morgan Stanley and/or one or more Affiliated Investment Accounts has declined, and vice versa. All of the foregoing may reduce the number of investment opportunities available to a Fund and may create conflicts of interest in allocating investment opportunities. Investors should note that the conflicts inherent in making such allocation decisions may not always be resolved to a Fund's advantage. There can be no assurance that a Fund will have an opportunity to participate in certain opportunities that fall within their investment objectives.

To seek to reduce potential conflicts of interest and to attempt to allocate such investment opportunities in a fair and equitable manner, the Adviser has implemented allocation policies and procedures. These policies and procedures are intended to give all clients of the Adviser, including the Fund, fair access to investment opportunities consistent with the requirements of organizational documents, investment strategies, applicable laws and regulations, and the fiduciary duties of the Adviser. Each client of the Adviser that is subject to the allocation policies and procedures, including each Fund, is assigned an investment team and portfolio manager(s) by the Adviser. The investment team and portfolio managers review investment opportunities and will decide with respect to the allocation of each opportunity considering various factors and in accordance with the allocation policies and procedures. The allocation policies and procedures are subject to change. Investors should note that the conflicts inherent in making such allocation decisions may not always be resolved to the advantage of a Fund.

It is possible that Morgan Stanley or an Affiliated Investment Account, including another Morgan Stanley Fund, will invest in or advise (in the case of Morgan Stanley) a company that is or becomes a competitor of a company of which a Fund holds an investment. Such investment could create a conflict between the Fund, on the one hand, and Morgan Stanley or the Affiliated Investment Account, on the other hand. In such a situation, Morgan Stanley may also have a conflict in the allocation of its own resources to the portfolio investment. Furthermore, certain Affiliated Investment Accounts will be focused primarily on investing in other funds which may have strategies that overlap and/or directly conflict and compete with a Fund.

In addition, certain investment professionals who are involved in a Fund's activities remain responsible for the investment activities of other Affiliated Investment Accounts managed by the Adviser and its affiliates, and they will devote time to the management of such investments and other newly created Affiliated Investment Accounts (whether in the form of funds, separate accounts or other vehicles), as well as their own investments. In addition, in connection with the management of investments for other Affiliated Investment Accounts, members of Morgan Stanley and its affiliates may serve on the boards of directors of or advise companies which may compete with a Fund's portfolio investments. Moreover, these Affiliated Investment Accounts managed by Morgan Stanley and its affiliates may pursue investment opportunities that may also be suitable for a Fund.

It should be noted that Morgan Stanley may, directly or indirectly, make large investments in certain of its Affiliated Investment Accounts, and accordingly Morgan Stanley's investment in a Fund may not be a determining factor in the outcome of any of the foregoing conflicts. Nothing herein restricts or in any way limits the activities of Morgan Stanley, including its ability to buy or sell interests in, or provide financing to, equity and/or debt instruments, funds or portfolio companies, for its own accounts or for the accounts of Affiliated Investment Accounts or other investment funds or clients in accordance with applicable law.

Different clients of the Adviser, including a Fund, may invest in different classes of securities of the same issuer, depending on the respective clients' investment objectives and policies. As a result, the Adviser and its affiliates, at times, will seek to satisfy 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 may 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, the Adviser and its affiliates may seek a liquidation of the issuer on behalf of the client that holds the debt securities, whereas the client holding the equity securities may benefit from a reorganization of the issuer. Thus, in such situations, the actions taken by the Adviser or its affiliates on behalf of one client can negatively impact securities held by another client. These conflicts also exist as between the Adviser's clients, including the Fund, and the Affiliated Investment Accounts managed by Eaton Vance.

The Adviser and its affiliates may give advice and recommend securities to other clients which may differ from advice given to, or securities recommended or bought for, a Fund even though such other clients' investment objectives may be similar to those of the Fund.

The Adviser and its 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 may be taken in client accounts, including 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 Adviser and its affiliates have adopted policies and procedures that are reasonably designed to mitigate these conflicts. In certain circumstances, the Adviser invests on behalf of itself in securities and other instruments that would be appropriate for, held by, or may fall within the investment guidelines of its clients, including a Fund. At times, the Adviser may give advice or take action for its own accounts that differs from, conflicts with, or is adverse to advice given or action taken for any client.

From time to time, conflicts also arise due to the fact that certain securities or instruments may be held in some client accounts, including a Fund, but not in others, or that client accounts may have different levels of holdings in certain securities or instruments. In addition, due to differences in the investment strategies or restrictions among client accounts, the Adviser may take action with respect to one account that differs from the action taken with respect to another account. In some cases, a client account may compensate the Adviser based on the performance of the securities held by that account. The existence of such a performance based fee may create additional conflicts of interest for the Adviser in the allocation of management time, resources and investment opportunities. The Adviser has adopted several policies and procedures designed to address these potential conflicts including a code of ethics and policies that govern the Adviser's trading practices, including, among other things, the aggregation and allocation of trades among clients, brokerage allocations, cross trades and best execution.

In addition, at times an investment team will give advice or take action with respect to the investments of one or more clients that is not given or taken with respect to other clients with similar investment programs, objectives, and strategies. Accordingly, clients with similar strategies will not always hold the same securities or instruments or achieve the same performance. The Adviser's investment teams also advise clients with conflicting programs, objectives or strategies. These conflicts also exist as between the Adviser's clients, including the Fund, and the Affiliated Investment Accounts managed by Eaton Vance.

Morgan Stanley and its affiliates maintain separate trading desks that operate independently of each other and do not share information with the Adviser. The Morgan Stanley and affiliate trading desks may compete against the Adviser trading desks when implementing buy and sell transactions, possibly causing certain Affiliated Investment Accounts to pay more or receive less for a security than other Affiliated Investment Accounts.

Investments by Separate Investment Departments. The entities and individuals that provide investment-related services for the Fund and certain other MS Investment Accounts (the "MS Investment Department") may be different from the entities and individuals that provide investment-related services to Eaton Vance Investment Accounts (the "Eaton Vance Investment Department" and, together with the MS Investment Department, the "Investment Departments"). Although Morgan Stanley has implemented information barriers between the Investment Departments in accordance with internal policies and procedures, each Investment Department may engage in discussions and share information and resources with the other Investment Department on certain 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. Because each Investment Department generally makes investment decisions and executes trades independently of the other, the quality and price of execution, and the performance of investments and accounts, can be expected to vary. In addition, each Investment Department may use different trading systems and technology and may employ differing investment and trading strategies. As a result, an Eaton Vance Investment Account could trade in advance of the Fund (and vice versa), might complete trades more quickly and efficiently than the Fund, and/or achieve different execution than the Fund on the same or similar investments made contemporaneously, even when the Investment Departments shared research and viewpoints that led to that investment decision. Any sharing of information or resources between the Investment Department servicing the Fund and the Eaton Vance Investment Department may result, from time to time, in the

Fund simultaneously or contemporaneously seeking to engage in the same or similar transactions as an account serviced by the other Investment Department and for which there are limited buyers or sellers on specific securities, which could result in less favorable execution for the Fund than such Affiliated Investment Account. The MS Investment Department will not knowingly or intentionally cause the Fund to engage in a cross trade with an account serviced by the Eaton Vance Investment Department, however, subject to applicable law and internal policies and procedures, the Fund may conduct cross trades with other accounts serviced by the MS Investment Department. Although the MS Investment Department may aggregate the Fund's trades with trades of other accounts serviced by the MS Investment Department, subject to applicable law and internal policies and procedures, there will be no aggregation or coordination of trades with accounts serviced by the Eaton Vance Investment Department, even when both Investment Departments are seeking to acquire or dispose of the same investments contemporaneously.

Payments to Broker-Dealers and Other Financial Intermediaries. The Adviser and/or the Distributor may pay compensation, out of their own funds and not as an expense of the Fund, to certain Financial Intermediaries (which may include affiliates of the Adviser and the Distributor), including recordkeepers and administrators of various deferred compensation plans, in connection with the sale, distribution, marketing and retention of shares of the Fund and/or shareholder servicing. For example, the Adviser or the Distributor may pay additional compensation to a Financial Intermediary for, among other things, promoting the sale and distribution of Fund shares, providing access to various programs, mutual fund platforms or preferred or recommended mutual fund lists that may be offered by a Financial Intermediary, granting the Distributor access to a Financial Intermediary's financial advisors and consultants, providing assistance in the ongoing education and training of a Financial Intermediary's financial personnel, furnishing marketing support, maintaining share balances and/or for sub-accounting, recordkeeping, administrative, shareholder or transaction processing services. Such payments are in addition to any distribution fees, shareholder servicing fees and/or transfer agency fees that may be payable by the Fund. The additional payments may be based on various factors, including level of sales (based on gross or net sales or some specified minimum sales or some other similar criteria related to sales of the Fund and/or some or all other Morgan Stanley Funds), amount of assets invested by the Financial Intermediary's customers (which could include current or aged assets of the Fund and/or some or all other Morgan Stanley Funds), a Fund's advisory fee, some other agreed upon amount or other measures as determined from time to time by the Adviser and/or the Distributor. The amount of these payments may be different for different Financial Intermediaries.

The prospect of receiving, or the receipt of, additional compensation, as described above, by Financial Intermediaries may provide such Financial Intermediaries and their financial advisors and other salespersons with an incentive to favor sales of shares of the Fund over other investment options with respect to which these Financial Intermediaries do not receive additional compensation (or receives lower levels of additional compensation). These payment arrangements, however, will not change the price that an investor pays for shares of the Fund or the amount that the Fund receives to invest on behalf of an investor. Investors may wish to take such payment arrangements into account when considering and evaluating any recommendations relating to Fund shares and should review carefully any disclosures provided by Financial Intermediaries as to their compensation.

In addition, in certain circumstances, the Adviser restricts, limits or reduces the amount of the Fund's investment, or restricts the type of governance or voting rights it acquires or exercises, where the Fund (potentially together with Morgan Stanley) exceeds a certain ownership interest, or possesses certain degrees of voting or control or has other interests.

Morgan Stanley Trading and Principal Investing Activities. Notwithstanding anything to the contrary herein, Morgan Stanley will generally conduct its sales and trading businesses, publish research and analysis, and render investment advice without regard for a Fund's holdings, although these activities could have an adverse impact on the value of one or more of the Fund's investments, or could cause Morgan Stanley to have an interest in one or more portfolio investments that is different from, and potentially adverse to that of a Fund. Furthermore, from time to time, the Adviser or its affiliates may invest "seed" capital in a Fund, typically to enable the Fund to commence investment operations and/or achieve sufficient scale. The Adviser and its affiliates may hedge such seed capital exposure by investing in derivatives or other instruments expected to produce offsetting exposure. Such hedging transactions, if any, would occur outside of a Fund.

Morgan Stanley's sales and trading, financing and principal investing businesses (whether or not specifically identified as such, and including Morgan Stanley's trading and principal investing businesses) will not be required to offer any investment opportunities to a Fund. These businesses may encompass, among other things, principal trading activities as well as principal investing.

Morgan Stanley's sales and trading, financing and principal investing businesses have acquired or invested in, and in the future may acquire or invest in, minority and/or majority control positions in equity or debt instruments of diverse public and/or private companies. Such activities may put Morgan Stanley in a position to exercise contractual, voting or creditor rights, or management or other control with respect to securities or loans of portfolio investments or other issuers, and in these instances Morgan Stanley may, in its discretion and subject to applicable law, act to protect its own interests or interests of clients, and not a Fund's interests.

Subject to the limitations of applicable law, a Fund may purchase from or sell assets to, or make investments in, companies in which Morgan Stanley has or may acquire an interest, including as an owner, creditor or counterparty.

Morgan Stanley's Investment Banking and Other Commercial Activities. Morgan Stanley advises clients on a variety of mergers, acquisitions, restructuring, bankruptcy and financing transactions. Morgan Stanley may act as an advisor to clients, including other investment funds that may compete with a Fund and with respect to investments that a Fund may hold. Morgan Stanley may give advice and take action with respect to any of its clients or proprietary accounts that may differ from the advice given, or may involve an action of a different timing or nature than the action taken, by a Fund. Morgan Stanley may give advice and provide recommendations to persons competing with a Fund and/or any of a Fund's investments that are contrary to the Fund'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 a Fund's ability to transact with respect to one or more existing or potential investments. Morgan Stanley may have relationships with third-party funds, companies or investors who may have invested in or may look to invest in portfolio companies, and there could be conflicts between a Fund's 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 U.S. Bankruptcy Code or similar laws in other jurisdictions, the Adviser's flexibility in making investments in such restructurings on a Fund's behalf may be limited.

Morgan Stanley could provide investment banking services to competitors of portfolio companies, as well as to private equity and/or private credit funds; such activities may present Morgan Stanley with a conflict of interest vis-a-vis a Fund's investment and may 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 may provide a broad range of financial services to companies in which a Fund 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 may 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 the Adviser) with a Fund, and any advisory fees payable will not be reduced thereby.

Morgan Stanley may be engaged to act as a financial advisor to a company in connection with the sale of such company, or subsidiaries or divisions thereof, may represent potential buyers of businesses through its mergers and acquisition activities and may 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. Under these circumstances, a Fund may be precluded from participating in a transaction with or relating to the company being sold or participating in any financing activity related to merger or acquisition.

The involvement or presence of Morgan Stanley in the investment banking and other commercial activities described above (or the financial markets more broadly) may restrict or otherwise limit investment opportunities that may otherwise be available to the Fund. For example, issuers may hire and compensate Morgan Stanley to provide underwriting, financial advisory, placement agency, brokerage services or other services and, because of limitations imposed by applicable law and regulation, a Fund may be prohibited from buying or selling securities issued by those issuers or participating in related transactions or otherwise limited in its ability to engage in such investments.

Morgan Stanley's Marketing Activities. Morgan Stanley is engaged in the business of underwriting, syndicating, brokering, administering, servicing, arranging and advising on the distribution of a wide variety of securities and other investments in which a Fund may invest. Subject to the restrictions of the 1940 Act, including Sections 10(f) and 17(e) thereof, a Fund may invest in transactions in which Morgan Stanley acts as underwriter, placement agent, syndicator, broker, administrative agent, servicer, advisor, arranger or structuring agent and receives fees or other compensation from the sponsors of such products or securities. Any fees earned by Morgan Stanley in such capacity will not be shared with the Adviser or the Fund. Certain conflicts of interest, in addition to the receipt of fees or other compensation, would be inherent in these transactions. Moreover, the interests of one of Morgan Stanley's clients with respect to an issuer of securities in which a Fund has an investment may be adverse to the Adviser's or a Fund's best interests. In conducting the foregoing activities, Morgan Stanley will be acting for its other clients and will have no obligation to act in the Adviser's or a Fund's best interests.

Client Relationships. Morgan Stanley has existing and potential relationships with a significant number of corporations, institutions and individuals. In providing services to its clients, Morgan Stanley may face conflicts of interest with respect to activities recommended to or performed for such clients, on the one hand, and a Fund, its shareholders or the entities in which the Fund invests, on the other hand. In addition, these client relationships may present conflicts of interest in determining whether to offer certain investment opportunities to a Fund.

In acting as principal or in providing advisory and other services to its other clients, Morgan Stanley may engage in or recommend activities with respect to a particular matter that conflict with or are different from activities engaged in or recommended by the Adviser on a Fund's behalf.

Principal Investments. To the extent permitted by applicable law, there may be situations in which a Fund's interests may conflict with the interests of one or more general accounts of Morgan Stanley and its affiliates or accounts managed by Morgan Stanley or its affiliates. This may occur because these accounts hold public and private debt and equity securities of many issuers which may be or become portfolio companies, or from whom portfolio companies may be acquired.

Transactions with Portfolio Companies of Affiliated Investment Accounts. The companies in which a Fund may invest may be counterparties to or participants in agreements, transactions or other arrangements with portfolio companies or other entities of portfolio investments of Affiliated Investment Accounts (for example, a company in which a Fund invests may retain a company in which an Affiliated Investment Account invests to provide services or may acquire an asset from such company or vice versa). Certain of these agreements, transactions and arrangements involve fees, servicing payments, rebates and/or other benefits to Morgan Stanley or its affiliates. For example, portfolio entities may, including at the encouragement of Morgan Stanley, enter into agreements regarding group procurement and/or vendor discounts. Morgan Stanley and its affiliates may also participate in these agreements and may realize better pricing or discounts as a result of the participation of portfolio entities. To the extent permitted by applicable law, certain of these agreements may provide for commissions or similar payments and/or discounts or rebates to be paid to a portfolio entity of an Affiliated Investment Account, and such payments or discounts or rebates may also be made directly to Morgan Stanley or its affiliates. Under these arrangements, a particular portfolio company or other entity may benefit to a greater degree than the other participants, and the Morgan Stanley Funds, investment vehicles and accounts (which may or may not include a Fund) that own an interest in such entity will receive a greater relative benefit from the arrangements than the Morgan Stanley Funds, investment vehicles or accounts that do not own an interest therein. Fees and compensation received by portfolio companies of Affiliated Investment Accounts in relation to the foregoing will not be shared with a Fund or offset advisory fees payable.

Investments in Portfolio Investments of Other Funds. To the extent permitted by applicable law, when a Fund invests in certain companies or other entities, other funds affiliated with the Adviser may have made or may be making an investment in such companies or other entities. Other funds that have been or may be managed by the Adviser may invest in the companies or other entities in which a Fund has made an investment. Under such circumstances, a Fund and such other funds may have conflicts of interest (e.g., over the terms, exit strategies and related matters, including the exercise of remedies of their respective investments). If the interests held by a Fund are different from (or take priority over) those held by such other funds, the Adviser may be required to make a selection at the time of conflicts between the interests held by such other funds and the interests held by a Fund.

Allocation of Expenses. Expenses may be incurred that are attributable to a Fund and one or more other Affiliated Investment Accounts (including in connection with issuers in which a Fund and such other Affiliated Investment Accounts have overlapping investments). The allocation of such expenses among such entities raises potential conflicts of interest. The Adviser and its affiliates intend to allocate such common expenses among a Fund and any such other Affiliated Investment Accounts on a pro rata basis or in such other manner as the Adviser deems to be fair and equitable or in such other manner as may be required by applicable law.

Temporary Investments. To more efficiently invest short-term cash balances held by a Fund, the Adviser may invest such balances on an overnight "sweep" basis in shares of one or more money market funds or other short-term vehicles. It is anticipated that the investment adviser to these money market funds or other short-term vehicles may be the Adviser (or an affiliate) to the extent permitted by applicable law, including Rule 12d1-1 under the 1940 Act. In such a case, the affiliated investment adviser may receive asset-based fees in respect of a Fund's investment (which will reduce the net return realized by a Fund).

Transactions with Affiliates. The Adviser and any investment sub-adviser might purchase securities from underwriters or placement agents in which a Morgan Stanley affiliate is a member of a syndicate or selling group, as a result of which an affiliate might benefit from the purchase through receipt of a fee or otherwise. Neither the Adviser nor any investment sub-adviser will purchase securities on behalf of a Fund from an affiliate that is acting as a manager of a syndicate or selling group. Purchases by the Adviser on behalf of a Fund from an affiliate acting as a placement agent must meet the requirements of applicable law. Furthermore, Morgan Stanley may face conflicts of interest when a Fund uses service providers affiliated with Morgan Stanley because Morgan Stanley receives greater overall fees when they are used.

General Process for Potential Conflicts. All of the transactions described above involve the potential for conflicts of interest between the Adviser, related persons of the Adviser and/or their 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 may be permitted subject to fulfillment of certain conditions. Certain other transactions may be prohibited. In addition, the Adviser has instituted policies and procedures designed to prevent conflicts of interest from arising and, when they do arise, to ensure that it effects transactions for clients in a manner that is consistent with its fiduciary duty to its clients and in accordance with applicable law. The Adviser seeks to ensure that potential or actual conflicts of interest are appropriately resolved taking into consideration the overriding best interests of the client.

FINANCIAL STATEMENTS

The Funds' audited financial statements for the fiscal year ended December 31, 2022, including notes thereto, and the reports of Ernst & Young LLP, an independent registered public accounting firm, are herein incorporated by reference to the Funds' Annual Reports to Shareholders. A copy of the Funds' Annual Reports to Shareholders must accompany the delivery of this SAI.

APPENDIX A — MORGAN STANLEY INVESTMENT MANAGEMENT EQUITY PROXY VOTING POLICY AND PROCEDURES

I. POLICY STATEMENT

Morgan Stanley Investment Management’s policy and procedures for voting proxies, the Equity Proxy Voting Policy and Procedures (the “Policy”), with respect to securities held in the accounts of clients applies to those Morgan Stanley Investment Management (“MSIM”) entities that provide discretionary investment management services and for which an MSIM entity has authority to vote proxies¹. For purposes of this Policy, clients shall include: Morgan Stanley U.S. registered investment companies, other Morgan Stanley pooled investment vehicles, and MSIM separately managed accounts (including accounts for Employee Retirement Income Security (“ERISA”) clients and ERISA-equivalent clients). This Policy is reviewed and updated as necessary to address new and evolving proxy voting issues and standards.

The MSIM entities covered by this Policy currently include the following: Morgan Stanley AIP GP LP, Morgan Stanley Investment Management Inc., Morgan Stanley Investment Management Limited, Morgan Stanley Investment Management Company, Morgan Stanley Saudi Arabia, MSIM Fund Management (Ireland) Limited, Morgan Stanley Asia Limited, Morgan Stanley Investment Management (Japan) Co. Limited, Morgan Stanley Investment Management Private Limited, Morgan Stanley Eaton Vance CLO Manager LLC, and, Morgan Stanley Eaton Vance CLO CM LLC (each an “MSIM Affiliate” and collectively referred to as the “MSIM Affiliates” or as “we” below).

Each MSIM Affiliate will use its best efforts to vote proxies as part of its authority to manage, acquire and dispose of account assets.

- With respect to the U.S. registered investment companies sponsored, managed or advised by any MSIM Affiliate (the “MS Funds”), each MSIM Affiliate will vote proxies under this Policy pursuant to authority granted under its applicable investment advisory agreement or, in the absence of such authority, as authorized by the Board of Directors/Trustees of the MS Funds.
- For other pooled investment vehicles (e.g., UCITS), each MSIM Affiliate will vote proxies under this Policy pursuant to authority granted under its applicable investment advisory agreement or, in the absence of such authority, as authorized by the relevant governing board.
- For separately managed accounts (including ERISA and ERISA-equivalent clients), each MSIM Affiliate will vote proxies under this Policy pursuant to authority granted under the applicable investment advisory agreement or investment management agreement. Where an MSIM Affiliate has the authority to vote proxies on behalf of ERISA and ERISA-equivalent clients, the MSIM Affiliate must do so in accordance with its fiduciary duties under ERISA (and the Internal Revenue Code).
- In certain situations, a client or its fiduciary may reserve the authority to vote proxies for itself or an outside party or may provide an MSIM Affiliate with a statement of proxy voting policy. The MSIM Affiliate will comply with the client’s policy.

An MSIM Affiliate will not vote proxies unless the investment management agreement, investment advisory agreement or other authority explicitly authorizes the MSIM Affiliate to vote proxies.

MSIM 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 the MSIM Affiliates manage assets, consistent with the objective of maximizing long-term investment returns (“Client Proxy Standard”) and this Policy. In addition to voting proxies of portfolio companies, MSIM routinely engages with, or, in some cases, may engage a third party to engage with, the management or board of companies in which we invest on a range of environmental, social and governance issues. Governance is a window into or proxy for management and board quality. MSIM 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. MSIM’s engagement process, through private communication with companies, allows us to understand the governance structures at investment companies and better inform our voting decisions.

¹ This Policy does not apply to MSIM’s authority to exercise certain decision-making rights associated with investments in loans and other fixed income instruments (collectively, for purposes hereof, “Fixed Income Instruments”).

Retention and Oversight of Outsourced Proxy Voting - Certain MSIM exchange-traded funds (“ETFs”) will follow Calvert Research and Management’s (“Calvert”) Proxy Voting Policies and Procedures and the Global Proxy Voting Guidelines set forth in Appendix A of the Calvert Proxy Voting Policies and Procedures. MSIM’s oversight of Calvert’s proxy voting engagement is ongoing pursuant to the 40 Act Fund Service Provider and Vendor Oversight Policy.

Retention and Oversight of Proxy Advisory Firms - Institutional Shareholder Services (“ISS”) and Glass Lewis (together with other proxy research providers as we may retain from time to time, the “Research Providers”) are independent advisers that specialize in providing a variety of fiduciary-level proxy-related services to institutional investment managers, plan sponsors, custodians, consultants, and other institutional investors. The services provided include in-depth research, global issuer analysis, record retention, ballot processing and voting recommendations.

To facilitate proxy voting, MSIM has retained Research Providers to provide company level reports that summarize key data elements contained within an issuer’s proxy statement. Although we are aware of the voting recommendations included in the Research Providers’ company level reports, these recommendations are not an input into our vote nor is any potential vote prepopulated based on a Research Provider’s research. MSIM votes all proxies based on its own proxy voting policies, consultation with the investment

teams, and in the best interests of each client. In addition to research, MSIM retains ISS to provide vote execution, reporting, and recordkeeping services.

As part of MSIM's ongoing oversight of the Research Providers, MSIM performs periodic due diligence on the Research Providers. Topics of the reviews include, but are not limited to, conflicts of interest, methodologies for developing their policies and vote recommendations, and resources.

Voting Proxies for Certain Non-U.S. Companies - Voting proxies of companies located in some jurisdictions may involve several problems that can restrict or prevent the ability to vote such proxies or entail significant costs. These problems include, but are not limited to: (i) proxy statements and ballots being written in a language other than English; (ii) untimely and/or inadequate notice of shareholder meetings; (iii) restrictions on the ability of holders outside the issuer's jurisdiction of organization to exercise votes; (iv) requirements to vote proxies in person; (v) the imposition of restrictions on the sale of the securities for a period of time in proximity to the shareholder meeting; and (vi) requirements to provide local agents with power of attorney to facilitate our voting instructions. As a result, we vote clients' non-U.S. proxies on a best efforts basis only, after weighing the costs and benefits of voting such proxies, consistent with the Client Proxy Standard. ISS has been retained to provide assistance in connection with voting non-U.S. proxies.

Securities Lending - MS Funds or any other investment vehicle sponsored, managed or advised by an MSIM affiliate may 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., an MS 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. In general, MSIM believes the revenue received from the lending program outweighs the ability to vote and we will not recall shares for the purpose of voting. However, in cases in which MSIM believes the right to vote outweighs the revenue received, we reserve the right to recall the shares on loan on a best efforts basis.

II. GENERAL PROXY VOTING GUIDELINES

To promote consistency in voting proxies on behalf of our clients, we follow this Policy (subject to any exception set forth herein). As noted above, certain ETFs will follow Calvert's Global Proxy Voting Guidelines set forth in Appendix A of Calvert's Proxy Voting Policies and Procedures and the proxy voting guidelines discussed in this section do not apply to such ETFs. See Appendix A of Calvert's Proxy Voting Policies and Procedures for a general discussion of the proxy voting guidelines to which these ETFs will be subject.

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. Pursuant to the procedures set forth herein, we may vote in a manner that is not in accordance with the following general guidelines, provided the vote is approved by the Proxy Review Committee (see Section 3) and is consistent with the Client Proxy Standard. Morgan Stanley AIP GP LP ("Morgan Stanley AIP") will follow the procedures as described in Appendix A.

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.

We seek to follow the Client Proxy Standard for each client. At times, this may result in split votes, for example when different clients have varying economic interests and / or priorities reflected in their mandates with respect to 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 may split votes at times based on differing views of portfolio managers.

We may abstain from or vote against matters for which disclosure is inadequate.

A. Routine Matters.

We generally support routine management proposals. The following are examples of routine management proposals:

- Approval of financial statements and auditor reports if delivered with an unqualified auditor's opinion.
- General updating/corrective amendments to the charter, articles of association or bylaws, unless we believe that such amendments would diminish shareholder rights.
- Most proposals related to the conduct of the annual meeting, with the following exceptions. We generally oppose proposals that relate to "the transaction of such other business which may come before the meeting," and open-ended requests for adjournment. However, where management specifically states the reason for requesting an adjournment and the requested adjournment would facilitate passage of a proposal that would otherwise be supported under this Policy (i.e., an uncontested corporate transaction), the adjournment request will be supported. We do not support proposals that allow companies to call a special meeting with a short (generally two weeks or less) time frame for review.

We generally support shareholder proposals advocating confidential voting procedures and independent tabulation of voting results.

B. Board of Directors.

- 1 Election of Directors: Votes on board nominees can involve balancing a variety of considerations. In vote decisions, we may take into consideration whether the company has a majority voting policy in place that we believe makes the director vote more meaningful. In the absence of a proxy contest, we generally support the board's nominees for director except as follows:
 - a) We consider withholding support from or voting against a nominee if we believe 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 may 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.
 - b) We consider withholding support from or voting against interested directors if the company's board does not meet market standards for director independence, or if otherwise we believe board independence is insufficient. We refer to prevalent market standards as promulgated by a stock exchange or other authority within a given market (e.g., New York Stock Exchange or Nasdaq rules for most U.S. companies, and The Combined Code on Corporate Governance in the United Kingdom). Thus, for an NYSE company with no controlling shareholder, we would expect that at a minimum a majority of directors should be independent as defined by NYSE. Where we view market standards as inadequate, we may withhold votes based on stronger independence standards. Market standards notwithstanding, we generally do not view long board tenure alone as a basis to classify a director as non-independent.
 - i) At a company with a shareholder or group that controls the company by virtue of a majority economic interest in the company, we have a reduced expectation for board independence, although we believe the presence of independent directors can be helpful, particularly in staffing the audit committee, and at times we may withhold support from or vote against a nominee on the view the board or its committees are not sufficiently independent. In markets where board independence is not the norm (e.g. Japan), however, we consider factors including whether a board of a controlled company includes independent members who can be expected to look out for interests of minority holders.
 - ii) We consider withholding support from or voting against a nominee if he or she is affiliated with a major shareholder that has representation on a board disproportionate to its economic interest.
 - c) Depending on market standards, we consider withholding support from or voting against a nominee who is interested and who is standing for election as a member of the company's compensation/remuneration, nominating/governance or audit committee.
 - d) We consider withholding support from or voting against nominees if the term for which they are nominated is excessive. We consider this issue on a market-specific basis.
 - e) We consider withholding support from or voting against nominees if in our view there has been insufficient board renewal (turnover), particularly in the context of extended poor company performance. Also, if the board has failed to consider diversity, including but not limited to, gender and ethnicity, in its board composition.
 - f) We consider withholding support from or voting against a nominee standing for election if the board has not taken action to implement generally accepted governance practices for which there is a "bright line" test. For example, in the context of the U.S. market, failure to eliminate a dead hand or slow hand poison pill would be seen as a basis for opposing one or more incumbent nominees.
 - g) In markets that encourage designated audit committee financial experts, we consider voting against members of an audit committee if no members are designated as such. We also consider voting against the audit committee members if the company has faced financial reporting issues and/or does not put the auditor up for ratification by shareholders.
 - h) We believe investors should have the ability to vote on individual nominees, and may abstain or vote against a slate of nominees where we are not given the opportunity to vote on individual nominees.
 - i) We consider withholding support from or voting against a nominee who has failed to attend at least 75% of the nominee's board and board committee meetings within a given year without a reasonable excuse. We also consider opposing nominees if the company does not meet market standards for disclosure on attendance.
 - j) We consider withholding support from or voting against a nominee who appears overcommitted, particularly through service on an excessive number of boards. Market expectations are incorporated into this analysis; for U.S. boards, we generally oppose election of a nominee who serves on more than five public company boards (excluding investment companies), or public company CEOs that serve on more than two outside boards given the level of time commitment required in their primary job.
 - k) We consider withholding support from or voting against a nominee where we believe executive remuneration practices are poor, particularly if the company does not offer shareholders a separate "say-on-pay" advisory vote on pay.

- 2 Discharge of Directors' Duties: In markets where an annual discharge of directors' responsibility is a routine agenda item, we generally support such discharge. However, we may vote against discharge or abstain from voting where there are serious findings of fraud or other unethical behavior for which the individual bears responsibility. The annual discharge of responsibility represents shareholder approval of disclosed actions taken by the board during the year and may make future shareholder action against the board difficult to pursue.
- 3 Board Independence: We generally support U.S. shareholder proposals requiring that a certain percentage (up to 66⅔%) of the company's board members be independent directors, and promoting all-independent audit, compensation and nominating/governance committees.
- 4 Board Diversity: We generally support shareholder proposals urging diversity of board membership with respect to gender, race or other factors where we believe the board has failed to take these factors into account. We will also consider not supporting the re-election of the nomination committee and/or chair (or other resolutions when the nomination chair is not up for re-election) where we perceive limited progress in gender diversity, with the expectation where feasible and with consideration of any idiosyncrasies of individual markets, that female directors represent not less than a third of the board, unless there is evidence that the company has made significant progress in this area. In markets where information on director ethnicity is available, and it is legal to obtain it, and where it is relevant, we will generally also consider not supporting the re-election of the nomination committee chair (or other resolutions when the nomination chair is not up for re-election) if the board lacks ethnic diversity and has not outlined a credible diversity strategy.
- 5 Majority Voting: We generally support proposals requesting or requiring majority voting policies in election of directors, so long as there is a carve-out for plurality voting in the case of contested elections.
- 6 Proxy Access: We consider proposals on procedures for inclusion of shareholder nominees and to have those nominees included in the company's proxy statement and on the company's proxy ballot on a case-by-case basis. Considerations include ownership thresholds, holding periods, the number of directors that shareholders may nominate and any restrictions on forming a group
- 7 Reimbursement for Dissident Nominees: We generally support well-crafted U.S. shareholder proposals that would provide for reimbursement of dissident nominees elected to a board, as the cost to shareholders in electing such nominees can be factored into the voting decision on those nominees.
- 8 Proposals to Elect Directors More Frequently: In the U.S. public company context, we usually support shareholder and management proposals to elect all directors annually (to "declassify" the board), although we make an exception to this policy where we believe that long-term shareholder value may be harmed by this change given particular circumstances at the company at the time of the vote on such proposal. As indicated above, outside the United States, we generally support greater accountability to shareholders that comes through more frequent director elections, but recognize that many markets embrace longer term lengths, sometimes for valid reasons given other aspects of the legal context in electing boards.
- 9 Cumulative Voting: We generally support proposals to eliminate cumulative voting in the U.S. market context. (Cumulative voting provides that shareholders may concentrate their votes for one or a handful of candidates, a system that can enable a minority bloc to place representation on a board.) U.S. proposals to establish cumulative voting in the election of directors generally will not be supported.
- 10 Separation of Chairman and CEO Positions: We vote on shareholder proposals to separate the Chairman and CEO positions and/or to appoint an independent Chairman based in part on prevailing practice in particular markets, since the context for such a practice varies. In many non-U.S. markets, we view separation of the roles as a market standard practice, and support division of the roles in that context. In the United States, we consider such proposals on a case-by-case basis, considering, among other things, the existing board leadership structure, company performance, and any evidence of entrenchment or perceived risk that power is overly concentrated in a single individual.
- 11 Director Retirement Age and Term Limits: Proposals setting or recommending director retirement ages or director term limits are voted on a case-by-case basis that includes consideration of company performance, the rate of board renewal, evidence of effective individual director evaluation processes, and any indications of entrenchment.
- 12 Proposals to Limit Directors' Liability and/or Broaden Indemnification of Officers and Directors: Generally, we will support such proposals provided that an individual is eligible only if he or she has not acted in bad faith, with gross negligence or with reckless disregard of their duties.

C. Statutory Auditor Boards.

The statutory auditor board, which is separate from the main board of directors, plays a role in corporate governance in several markets. These boards are elected by shareholders to provide assurance on compliance with legal and accounting standards and the company's articles of association. We generally vote for statutory auditor nominees if they meet independence standards. In markets that require disclosure on attendance by internal statutory auditors, however, we consider voting against nominees for these positions who failed to attend at least 75% of meetings in the previous year. We also consider opposing nominees if the company does not meet market standards for disclosure on attendance.

D. Corporate Transactions and Proxy Fights.

We examine proposals relating to mergers, acquisitions and other special corporate transactions (i.e., takeovers, spin-offs, sales of assets, reorganizations, restructurings and recapitalizations) on a case-by-case basis in the interests of each fund or other account. Proposals for mergers or other significant transactions that are friendly and approved by the Research Providers usually are supported if there is no portfolio manager objection. We also analyze proxy contests on a case-by-case basis.

E. Changes in Capital Structure.

1 We generally support the following:

- Management and shareholder proposals aimed at eliminating unequal voting rights, assuming fair economic treatment of classes of shares we hold.
- U.S. management proposals to increase the authorization of existing classes of common stock (or securities convertible into common stock) if: (i) a clear business purpose is stated that we can support and the number of shares requested is reasonable in relation to the purpose for which authorization is requested; and/or (ii) the authorization does not exceed 100% of shares currently authorized and at least 30% of the total new authorization will be outstanding. (We consider proposals that do not meet these criteria on a case-by-case basis.)
- U.S. management proposals to create a new class of preferred stock or for issuances of preferred stock up to 50% of issued capital, unless we have concerns about use of the authority for anti-takeover purposes.
- Proposals in non-U.S. markets that in our view appropriately limit potential dilution of existing shareholders. A major consideration is whether existing shareholders would have preemptive rights for any issuance under a proposal for standing share issuance authority. We generally consider market-specific guidance in making these decisions; for example, in the U.K. market we usually follow Association of British Insurers' ("ABI") guidance, although company-specific factors may be considered and for example, may sometimes lead us to voting against share authorization proposals even if they meet ABI guidance.
- Management proposals to authorize share repurchase plans, except in some cases in which we believe there are insufficient protections against use of an authorization for anti-takeover purposes.
- Management proposals to reduce the number of authorized shares of common or preferred stock, or to eliminate classes of preferred stock.
- Management proposals to effect stock splits.
- Management proposals to effect reverse stock splits if management proportionately reduces the authorized share amount set forth in the corporate charter. Reverse stock splits that do not adjust proportionately to the authorized share amount generally will be approved if the resulting increase in authorized shares coincides with the proxy guidelines set forth above for common stock increases.
- Management dividend payout proposals, except where we perceive company payouts to shareholders as inadequate.

2 We generally oppose the following (notwithstanding management support):

- Proposals to add classes of stock that would substantially dilute the voting interests of existing shareholders.
- Proposals to increase the authorized or issued number of shares of existing classes of stock that are unreasonably dilutive, particularly if there are no preemptive rights for existing shareholders. However, depending on market practices, we consider voting for proposals giving general authorization for issuance of shares not subject to preemptive rights if the authority is limited.
- Proposals that authorize share issuance at a discount to market rates, except where authority for such issuance is de minimis, or if there is a special situation that we believe justifies such authorization (as may be the case, for example, at a company under severe stress and risk of bankruptcy).
- Proposals relating to changes in capitalization by 100% or more.

We consider on a case-by-case basis shareholder proposals to increase dividend payout ratios, in light of market practice and perceived market weaknesses, as well as individual company payout history and current circumstances. For example, currently we perceive low payouts to shareholders as a concern at some Japanese companies, but may deem a low payout ratio as appropriate for a growth company making good use of its cash, notwithstanding the broader market concern.

F. Takeover Defenses and Shareholder Rights.

1 Shareholder Rights Plans: We generally support proposals to require shareholder approval or ratification of shareholder rights plans (poison pills). In voting on rights plans or similar takeover defenses, we consider on a case-by-case basis whether the company has demonstrated a need for the defense in the context of promoting long-term share value; whether provisions of the defense are in line with generally accepted governance principles in the market (and specifically the presence of an adequate

qualified offer provision that would exempt offers meeting certain conditions from the pill); and the specific context if the proposal is made in the midst of a takeover bid or contest for control.

- 2 Supermajority Voting Requirements: We generally oppose requirements for supermajority votes to amend the charter or bylaws, unless the provisions protect minority shareholders where there is a large shareholder. In line with this view, in the absence of a large shareholder we support reasonable shareholder proposals to limit such supermajority voting requirements. Also, we oppose provisions that do not allow shareholders any right to amend the charter or bylaws.
- 3 Shareholders Right to Call a Special Meeting: We consider proposals to enhance a shareholder's rights to call meetings on a case-by-case basis. At large-cap U.S. companies, we generally support efforts to establish the right of holders of 10% or more of shares to call special meetings, unless the board or state law has set a policy or law establishing such rights at a threshold that we believe to be acceptable.
- 4 Written Consent Rights: In the U.S. context, we examine proposals for shareholder written consent rights on a case-by-case basis.
- 5 Reincorporation: We consider management and shareholder proposals to reincorporate to a different jurisdiction on a case-by-case basis. We oppose such proposals if we believe the main purpose is to take advantage of laws or judicial precedents that reduce shareholder rights.
- 6 Anti-greenmail Provisions: Proposals relating to the adoption of anti-greenmail provisions will be supported, provided that the proposal: (i) defines greenmail; (ii) prohibits buyback offers to large block holders (holders of at least 1% of the outstanding shares and in certain cases, a greater amount) not made to all shareholders or not approved by disinterested shareholders; and (iii) contains no anti-takeover measures or other provisions restricting the rights of shareholders.
- 7 Bundled Proposals: We may consider opposing or abstaining on proposals if disparate issues are "bundled" and presented for a single vote.

G. Auditors.

We generally support management proposals for selection or ratification of independent auditors. However, we may consider opposing such proposals with reference to incumbent audit firms if the company has suffered from serious accounting irregularities and we believe rotation of the audit firm is appropriate, or if fees paid to the auditor for non-audit-related services are excessive. Generally, to determine if non-audit fees are excessive, a 50% test will be applied (i.e., non-audit-related fees should be less than 50% of the total fees paid to the auditor). We generally vote against proposals to indemnify auditors.

H. Executive and Director Remuneration.

- 1 We generally support the following:
 - Proposals for employee equity compensation plans and other employee ownership plans, provided that our research does not indicate that approval of the plan would be against shareholder interest. Such approval may be against shareholder interest if it authorizes excessive dilution and shareholder cost, particularly in the context of high usage ("run rate") of equity compensation in the recent past; or if there are objectionable plan design and provisions.
 - Proposals relating to fees to outside directors, provided the amounts are not excessive relative to other companies in the country or industry, and provided that the structure is appropriate within the market context. While stock-based compensation to outside directors is positive if moderate and appropriately structured, we are wary of significant stock option awards or other performance-based awards for outside directors, as well as provisions that could result in significant forfeiture of value on a director's decision to resign from a board (such forfeiture can undercut director independence).
 - Proposals for employee stock purchase plans that permit discounts, but only for grants that are part of a broad-based employee plan, including all non-executive employees, and only if the discounts are limited to a reasonable market standard or less.
 - Proposals for the establishment of employee retirement and severance plans, provided that our research does not indicate that approval of the plan would be against shareholder interest.
- 2 We generally oppose retirement plans and bonuses for non-executive directors and independent statutory auditors.
- 3 In the U.S. context, we generally vote against shareholder proposals requiring shareholder approval of all severance agreements, but we generally support proposals that require shareholder approval for agreements in excess of three times the annual compensation (salary and bonus) or proposals that require companies to adopt a provision requiring an executive to receive accelerated vesting of equity awards if there is a change of control and the executive is terminated. We generally oppose shareholder proposals that would establish arbitrary caps on pay. We consider on a case-by-case basis shareholder proposals that seek to limit Supplemental Executive Retirement Plans (SERPs), but support such shareholder proposals where we consider SERPs excessive.
- 4 Shareholder proposals advocating stronger and/or particular pay-for-performance models will be evaluated on a case-by-case basis, with consideration of the merits of the individual proposal within the context of the particular company and its labor

markets, and the company's current and past practices. While we generally support emphasis on long-term components of senior executive pay and strong linkage of pay to performance, we consider factors including whether a proposal may be overly prescriptive, and the impact of the proposal, if implemented as written, on recruitment and retention.

- 5 We generally support proposals advocating reasonable senior executive and director stock ownership guidelines and holding requirements for shares gained in executive equity compensation programs.
- 6 We generally support shareholder proposals for reasonable "claw-back" provisions that provide for company recovery of senior executive bonuses to the extent they were based on achieving financial benchmarks that were not actually met in light of subsequent restatements.
- 7 Management proposals effectively to re-price stock options are considered on a case-by-case basis. Considerations include the company's reasons and justifications for a re-pricing, the company's competitive position, whether senior executives and outside directors are excluded, potential cost to shareholders, whether the re-pricing or share exchange is on a value-for-value basis, and whether vesting requirements are extended.
- 8 Say-on-Pay: We consider proposals relating to an advisory vote on remuneration on a case-by-case basis. Considerations include a review of the relationship between executive remuneration and performance based on operating trends and total shareholder return over multiple performance periods. In addition, we review remuneration structures and potential poor pay practices, including relative magnitude of pay, discretionary bonus awards, tax gross ups, change-in-control features, internal pay equity and peer group construction. As long-term investors, we support remuneration policies that align with long-term shareholder returns.

I. Social and Environmental Issues. Shareholders in the United States and certain other markets submit proposals encouraging changes in company disclosure and practices related to particular social and environmental matters. MSIM believes that relevant social and environmental issues, including principal adverse sustainability impacts, can influence risk and return. Consequently, we consider how to vote on proposals related to social and environmental issues on a case-by-case basis by determining the relevance of social and environmental issues identified in the proposal and their likely impacts on shareholder value. In reviewing proposals on social and environmental issues, we consider a company's current disclosures and our understanding of the company's management of material social and environmental issues in comparison to peers. We seek to balance concerns on reputational and other risks that lie behind a proposal against costs of implementation, while considering appropriate shareholder and management prerogatives. We may abstain from voting on proposals that do not have a readily determinable financial impact on shareholder value and we may oppose proposals that intrude excessively on management prerogatives and/or board discretion. We generally vote against proposals requesting reports or actions that we believe are duplicative, related to matters not material to the business, or that would impose unnecessary or excessive costs. We consider proposals on these sustainability risks, opportunities and impacts on a case-by-case basis but generally support proposals that seek to enhance useful disclosure. We focus on understanding the company's business and commercial context and recognise that there is no one size fits all that can apply to all companies. In assessing and prioritising proposals, we carefully reflect on the materiality of the issues as well as the sector and geography in which the company operates. We also consider the explanation companies provide where they may depart from best practice to assess the adequacy and appropriateness of measures that are in place.

Environmental Issues

We generally support proposals that, if implemented, would enhance useful disclosure on climate, biodiversity, and other environmental risks such as disclosures aligned with SASB (Sustainability Accounting Standards Board) and the TCFD (Task Force on Climate-related Financial Disclosures). We also generally support proposals that aim to meaningfully reduce or mitigate a company's impact on the global climate. We generally will support reasonable proposals to reduce negative environmental impacts and ameliorate a company's overall environmental footprint, including any threats to biodiversity in ecologically sensitive areas. We generally will also support proposals asking companies to report on their environmental practices, policies and impacts, including environmental damage and health risks resulting from operations, and the impact of environmental liabilities on shareholder value.

Social Issues

We generally support proposals that, if implemented, would enhance useful disclosure on employee and board diversity, including gender, race, and other factors. We consider proposals on other social issues on a case-by-case basis but generally support proposals that:

- Seek to enhance useful disclosure or improvements on material issues such as human rights risks, supply chain management, workplace safety, human capital management and pay equity.
- Encourage policies to eliminate gender-based violence and other forms of harassment from the workplace.

We may consider withholding support where we have material concerns in relation to a company's involvement/remediation of a breach of global conventions such as UN Global Compact Principles on Human Rights, Labour Standards, Environment and Business Malpractice

J. Funds of Funds. Certain MS Funds advised by an MSIM Affiliate invest only in other MS Funds. If an underlying fund has a shareholder meeting, in order to avoid any potential conflict of interest, such proposals will be voted in the same proportion as the votes of the other shareholders of the underlying fund, unless otherwise determined by the Proxy Review Committee. In markets where proportional voting is not available we will not vote at the meeting, unless otherwise determined by the Proxy Review Committee. Other MS Funds invest in unaffiliated funds. If an unaffiliated underlying fund has a shareholder meeting and the MS Fund owns more than 25% of the voting shares of the underlying fund, the MS Fund will vote its shares in the unaffiliated underlying fund in the same proportion as the votes of the other shareholders of the underlying fund to the extent possible.

Voting Conditions Triggered Under Rule 12d1-4

Rule 12d1-4 sets forth the conditions under which a registered fund (“acquiring fund”) may invest in excess of the statutory limits of Section 12(d)(1) of the 1940 Act (for example by owning more than 3% of the total outstanding voting stock) in another registered fund (“acquired fund”). In the event that a Morgan Stanley “acquiring fund” invests in an “acquired fund” in reliance on Rule 12d1-4 under the 1940 Act, and the MS Fund and its “advisory group” (as defined in Rule 12d1-4) hold more than (i) 25% of the total outstanding voting stock of a particular open-end fund (including ETFs) or (ii) 10% of the total outstanding voting stock of a particular closed-end fund, the Morgan Stanley “acquiring fund” and its “advisory group” will be required to vote all shares of the open- or closed-end fund held by the fund and its “advisory group” in the same proportion as the votes of the other shareholders of the open- or closed-end fund.

Because MSIM and Eaton Vance are generally considered part of the same “advisory group,” an Eaton Vance “acquiring fund” that is required to comply with the voting conditions set forth in Rule 12d1-4 could potentially implicate voting conditions for a MS Fund invested in the same open- or closed-end fund as the Eaton Vance “acquiring fund.” The Committee will be notified by Compliance if the conditions are triggered for a particular open- or closed-end fund holding in an MS Fund. In the event that the voting conditions in Rule 12d1-4 are triggered, please refer to the Morgan Stanley Funds Fund of Funds Investment Policy for specific information on Rule 12d1-4 voting requirements and exceptions.

III. ADMINISTRATION OF THE POLICY

The MSIM Proxy Review Committee (the “Committee”) has overall responsibility for the Policy. The Committee consists of investment professionals who represent the different investment disciplines and geographic locations of MSIM, and is chaired by the director of the Global Stewardship Team (“GST”). Because proxy voting is an investment responsibility and may affect shareholder value, and because of their knowledge of companies and markets as well as their understanding of their clients’ objectives, portfolio managers and other members of investment staff play a key role in proxy voting, and the GST will consult with investment teams ahead of decisions on proxy votes. Consequently, there may be instances where we may split votes at times based on differing views of portfolio managers and / or different client objectives. The GST administers and implements the Policy, as well as monitoring services provided by the proxy advisory firms, third-party proxy engagements and other research providers used in the proxy voting process. As noted above, certain ETFs will follow Calvert’s Proxy Voting Policy and Procedures, which is administered by Calvert’s Proxy Voting and Engagement Department and overseen by Calvert’s Proxy Voting and Engagement Committee. The GST periodically monitors Calvert’s proxy voting with respect to securities held by the ETFs.

The GST Director is responsible for identifying issues that require Committee deliberation or ratification. The GST, working with advice of investment teams and the Committee, is responsible for voting on routine items and on matters that can be addressed in line with these Policy guidelines. The GST has responsibility for voting case-by-case where guidelines and precedent provide adequate guidance.

The Committee may periodically review and has the authority to amend, as necessary, the Policy and establish and direct voting positions consistent with the Client Proxy Standard.

GST and members of the Committee may take into account Research Providers’ recommendations and research as well as any other relevant information they may request or receive, including portfolio manager and/or analyst comments and research, as applicable. Generally, proxies related to securities held in client accounts that are managed pursuant to quantitative, index or index-like strategies (“Index Strategies”) will be voted in the same manner as those held in actively managed accounts, unless economic interests or investment guidelines of the accounts differ. Because accounts managed using Index Strategies are passively managed accounts, research from portfolio managers and/or analysts related to securities held in these accounts may not be available. If the affected securities are held only in accounts that are managed pursuant to Index Strategies, and the proxy relates to a matter that is not described in this Policy, the GST will consider all available information from the Research Providers, and to the extent that the holdings are significant, from the portfolio managers and/or analysts.

A. Committee Procedures

The Committee meets at least quarterly, and reviews and considers changes to the Policy at least annually. Through meetings and/or written communications, the Committee is responsible for monitoring and ratifying material “split votes” (i.e., allowing certain shares of the same issuer that are the subject of the same proxy solicitation and held by one or more MSIM portfolios to be voted

differently than other shares) and/or “override voting” (i.e., voting all MSIM portfolio shares in a manner contrary to the Policy). The Committee will review developing issues and approve upcoming votes, as appropriate, for matters as requested by GST.

The Committee reserves the right to review voting decisions at any time and to make voting decisions as necessary to ensure the independence and integrity of the votes.

B. Material Conflicts of Interest

In addition to the procedures discussed above, if the GST Director determines that an issue raises a material conflict of interest, the GST Director may request a special committee (“Special Committee”) to review, and recommend a course of action with respect to, the conflict(s) in question.

A potential material conflict of interest could exist in the following situations, among others:

- 1 The issuer soliciting the vote is a client of MSIM or an affiliate of MSIM and the vote is on a matter that materially affects the issuer.
- 2 The proxy relates to Morgan Stanley common stock or any other security issued by Morgan Stanley or its affiliates except if echo voting is used, as with MS Funds, as described herein.
- 3 Morgan Stanley has a material pecuniary interest in the matter submitted for a vote (e.g., acting as a financial advisor to a party to a merger or acquisition for which Morgan Stanley will be paid a success fee if completed).
- 4 One of Morgan Stanley’s independent directors or one of MS Funds’ directors also serves on the board of directors or is a nominee for election to the board of directors of a company held by an MS Fund or affiliate.

If the GST Director determines that an issue raises a potential material conflict of interest, depending on the facts and circumstances, the issue will be addressed as follows:

- 1 If the matter relates to a topic that is discussed in this Policy, the proposal will be voted as per the Policy.
- 2 If the matter is not discussed in this Policy or the Policy indicates that the issue is to be decided case-by-case, the proposal will be voted in a manner consistent with the Research Providers, provided that all the Research Providers consulted have the same recommendation, no portfolio manager objects to that vote, and the vote is consistent with MSIM’s Client Proxy Standard.
- 3 If the Research Providers’ recommendations differ, the GST Director will refer the matter to a Special Committee to vote on the proposal, as appropriate.

Any Special Committee shall be comprised of the GST Director, and at least two portfolio managers (preferably members of the Committee), as approved by the Committee. The GST Director may request non-voting participation by MSIM’s General Counsel or his/her designee and the Chief Compliance Officer or his/her designee. In addition to the research provided by Research Providers, the Special Committee may request analysis from MSIM Affiliate investment professionals and outside sources to the extent it deems appropriate.

C. Proxy Voting Reporting

The CGT will document in writing all Committee and Special Committee decisions and actions, which documentation will be maintained by the GST for a period of at least six years. To the extent these decisions relate to a security held by an MS Fund, the GST will report the decisions to each applicable Board of Trustees/Directors of those MS Funds (the “Board”) at each Board’s next regularly scheduled Board meeting. The report will contain information concerning decisions made during the most recently ended calendar quarter immediately preceding the Board meeting.

In addition, to the extent that Committee and Special Committee decisions and actions relate to a security held by other pooled investment vehicles, the GST will report the decisions to the relevant governing board of the pooled investment vehicle.

MSIM will promptly provide a copy of this Policy to any client requesting it. MSIM will also, upon client request, promptly provide a report indicating how each proxy was voted with respect to securities held in that client’s account.

MSIM’s Legal Department, in conjunction with GST and GST IT for MS Fund reporting and with the AIP investment team for AIP Closed-End 40 Act Fund reporting, is responsible for filing an annual Form N-PX on behalf of each MS Fund and AIP Closed-End 40 Act Fund for which such filing is required, indicating how all proxies were voted with respect to each such fund’s holdings.

Also, MSIM maintains voting records of individual agenda items a company meetings in a searchable database on its website on a rolling 12-month basis.

In addition, ISS provides vote execution, reporting and recordkeeping services to MSIM.

IV. RECORDKEEPING

Records are retained in accordance with Morgan Stanley’s Global Information Management Policy, which establishes general Firm-wide standards and procedures regarding the retention, handling, and destruction of official books and records and other information

of legal or operational significance. The Global Information Management Policy incorporates Morgan Stanley's Master Retention Schedule, which lists various record classes and associated retention periods on a global basis.

Approved by the Board September 2015, September 27-28, 2016, September 27-28, 2017, October 3-4, 2018, September 24-25, 2019, September 30-October 1, 2020, March 1-2, 2022; December 7-8, 2022.

APPENDIX A

Appendix A applies to the following accounts managed by Morgan Stanley AIP GP LP (i) closed-end funds registered under the Investment Company Act of 1940, as amended; (ii) discretionary separate accounts; (iii) unregistered funds; and (iv) non-discretionary accounts offered in connection with AIP's Custom Advisory Portfolio Solutions service.

Generally, AIP will follow the guidelines set forth in Section II of MSIM's Proxy Voting Policy and Procedures. To the extent that such guidelines do not provide specific direction, or AIP determines that consistent with the Client Proxy Standard, the guidelines should not be followed, the Proxy Review Committee has delegated the voting authority to vote securities held by accounts managed by AIP to the Fund of Hedge Funds investment team, the Private Markets investment team or the Portfolio Solutions team of AIP. A summary of decisions made by the applicable investment teams will be made available to the Proxy Review Committee for its information at the next scheduled meeting of the Proxy Review Committee.

In certain cases, AIP may determine to abstain from determining (or recommending) how a proxy should be voted (and therefore abstain from voting such proxy or recommending how such proxy should be voted), such as where the expected cost of giving due consideration to the proxy does not justify the potential benefits to the affected account(s) that might result from adopting or rejecting (as the case may be) the measure in question.

Waiver of Voting Rights

For regulatory reasons, AIP may either 1) invest in a class of securities of an underlying fund (the "Fund") that does not provide for voting rights; or 2) waive 100% of its voting rights with respect to the following:

- 1 Any rights with respect to the removal or replacement of a director, general partner, managing member or other person acting in a similar capacity for or on behalf of the Fund (each individually a "Designated Person," and collectively, the "Designated Persons"), which may include, but are not limited to, voting on the election or removal of a Designated Person in the event of such Designated Person's death, disability, insolvency, bankruptcy, incapacity, or other event requiring a vote of interest holders of the Fund to remove or replace a Designated Person; and
- 2 Any rights in connection with a determination to renew, dissolve, liquidate, or otherwise terminate or continue the Fund, which may include, but are not limited to, voting on the renewal, dissolution, liquidation, termination or continuance of the Fund upon the occurrence of an event described in the Fund's organizational documents; provided, however, that, if the Fund's organizational documents require the consent of the Fund's general partner or manager, as the case may be, for any such termination or continuation of the Fund to be effective, then AIP may exercise its voting rights with respect to such matter.

APPENDIX B — DESCRIPTION OF RATINGS

Standard & Poor's Ratings Services

An S&P Global Ratings issue credit rating is a forward-looking opinion about the creditworthiness of an obligor with respect to a specific financial obligation, a specific class of financial obligations, or a specific financial program (including ratings on medium-term note programs and commercial paper programs). It takes into consideration the creditworthiness of guarantors, insurers, or other forms of credit enhancement on the obligation and takes into account the currency in which the obligation is denominated. The opinion reflects S&P Global Ratings' view of the obligor's capacity and willingness to meet its financial commitments as they come due, and this opinion may assess terms, such as collateral security and subordination, which could affect ultimate payment in the event of default.

Issue credit ratings can be either long-term or short-term. Short-term ratings are generally assigned to those obligations considered short-term in the relevant market. Short-term ratings are also used to indicate the creditworthiness of an obligor with respect to put features on long-term obligations. Medium-term notes are assigned long-term ratings.

I. S&P's Long-Term Issue Credit Ratings

AAA: An obligation rated 'AAA' has the highest rating assigned by S&P Global Ratings. The obligor's capacity to meet its financial commitments on the obligation is extremely strong.

AA: An obligation rated 'AA' differs from the highest-rated obligations only to a small degree. The obligor's capacity to meet its financial commitments on the obligation is very strong.

A: An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitments on the obligation is still strong.

BBB: An obligation rated 'BBB' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to weaken the obligor's capacity to meet its financial commitments on the obligation.

BB; B; CCC; CC; and C: Obligations rated 'BB', 'B', 'CCC', 'CC', and 'C' are regarded as having significant speculative characteristics. 'BB' indicates the least degree of speculation and 'C' the highest. While such obligations will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposure to adverse conditions.

BB: An obligation rated 'BB' is less vulnerable to nonpayment than other speculative issues. However, it faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions that could lead to the obligor's inadequate capacity to meet its financial commitments on the obligation.

B: An obligation rated 'B' is more vulnerable to nonpayment than obligations rated 'BB', but the obligor currently has the capacity to meet its financial commitments on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitments on the obligation.

CCC: An obligation rated 'CCC' is currently vulnerable to nonpayment and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitments on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitments on the obligation.

CC: An obligation rated 'CC' is currently highly vulnerable to nonpayment. The 'CC' rating is used when a default has not yet occurred but S&P Global Ratings expects default to be a virtual certainty, regardless of the anticipated time to default.

C: An obligation rated 'C' is currently highly vulnerable to nonpayment, and the obligation is expected to have lower relative seniority or lower ultimate recovery compared with obligations that are rated higher.

D: An obligation rated 'D' is in default or in breach of an imputed promise. For non-hybrid capital instruments, the 'D' rating category is used when payments on an obligation are not made on the date due, unless S&P Global Ratings believes that such payments will be made within five business days in the absence of a stated grace period or within the earlier of the stated grace period or 30 calendar days. The 'D' rating also will be used upon the filing of a bankruptcy petition or the taking of similar action and where default on an obligation is a virtual certainty, for example due to automatic stay provisions. A rating on an obligation is lowered to 'D' if it is subject to a distressed exchange offer.

NR: Indicates that a rating has not been assigned or is no longer assigned.

Note: Ratings from 'AA' to 'CCC' may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the rating categories.

II. S&P's Short-Term Issue Credit Ratings

A-1: A short-term obligation rated 'A-1' is rated in the highest category by S&P Global Ratings. The obligor's capacity to meet its financial commitments on the obligation is strong. Within this category, certain obligations are designated with a plus sign (+). This indicates that the obligor's capacity to meet its financial commitments on these obligations is extremely strong.

A-2: A short-term obligation rated 'A-2' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rating categories. However, the obligor's capacity to meet its financial commitments on the obligation is satisfactory.

A-3: A short-term obligation rated 'A-3' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to weaken an obligor's capacity to meet its financial commitments on the obligation.

B: A short-term obligation rated 'B' is regarded as vulnerable and has significant speculative characteristics. The obligor currently has the capacity to meet its financial commitments; however, it faces major ongoing uncertainties that could lead to the obligor's inadequate capacity to meet its financial commitments.

C: A short-term obligation rated 'C' is currently vulnerable to nonpayment and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitments on the obligation.

D: A short-term obligation rated 'D' is in default or in breach of an imputed promise. For non-hybrid capital instruments, the 'D' rating category is used when payments on an obligation are not made on the date due, unless S&P Global Ratings believes that such payments will be made within any stated grace period. However, any stated grace period longer than five business days will be treated as five business days. The 'D' rating also will be used upon the filing of a bankruptcy petition or the taking of a similar action and where default on an obligation is a virtual certainty, for example due to automatic stay provisions. A rating on an obligation is lowered to 'D' if it is subject to a distressed exchange offer.

NR: Indicates that a rating has not been assigned or is no longer assigned.

III. Municipal Short-Term Note Ratings

SP-1: Strong capacity to pay principal and interest. An issue determined to possess a very strong capacity to pay debt service is given a plus (+) designation.

SP-2: Satisfactory capacity to pay principal and interest, with some vulnerability to adverse financial and economic changes over the term of the notes.

SP-3: Speculative capacity to pay principal and interest.

D: 'D' is assigned upon failure to pay the note when due, completion of a distressed exchange offer, or the filing of a bankruptcy petition or the taking of similar action anywhere default on an obligation is a virtual certainty, for example, due to automatic stay provisions.

Moody's Investors, Inc.

Ratings assigned on Moody's global long-term and short-term rating scales are forward-looking opinions of the relative credit risks of financial obligations issued by non-financial corporates, financial institutions, structured finance vehicles, project finance vehicles, and public sector entities. Long-term ratings are assigned to issuers or obligations with an original maturity of one year or more and reflect both on the likelihood of a default on contractually promised payments and the expected financial loss suffered in the event of default. Short-term ratings are assigned to obligations with an original maturity of thirteen months or less and reflect both on the likelihood of a default on contractually promised payments and the expected financial loss suffered in the event of default.

I. Moody's Global Long-Term Rating Scale

Aaa: Obligations rated Aaa are judged to be of the highest quality, subject to the lowest level of credit risk.

Aa: Obligations rated Aa are judged to be of high quality and are subject to very low credit risk.

A: Obligations rated A are judged to be upper-medium grade and are subject to low credit risk.

Baa: Obligations rated Baa are judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics.

Ba: Obligations rated Ba are judged to be speculative and are subject to substantial credit risk.

B: Obligations rated B are considered speculative and are subject to high credit risk.

Caa: Obligations rated Caa are judged to be speculative of poor standing and are subject to very high credit risk.

Ca: Obligations rated Ca are highly speculative and are likely in, or very near, default, with some prospect of recovery of principal and interest.

C: Obligations rated C are the lowest rated and are typically in default, with little prospect for recovery of principal or interest.

Note: Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category. Additionally, a "(hyb)" indicator is appended to all ratings of hybrid securities issued by banks, insurers, finance companies, and securities firms.

II. Moody's Global Short-Term Rating Scale

P-1: Issuers (or supporting institutions) rated Prime-1 have a superior ability to repay short-term debt obligations.

P-2: Issuers (or supporting institutions) rated Prime-2 have a strong ability to repay short-term debt obligations.

P-3: Issuers (or supporting institutions) rated Prime-3 have an acceptable ability to repay short-term obligations.

NP: Issuers (or supporting institutions) rated Not Prime do not fall within any of the Prime rating categories.

Fitch Ratings Inc.

Fitch Ratings' credit ratings relating to issuers are an opinion on the relative ability of an entity to meet financial commitments, such as interest, preferred dividends, repayment of principal, insurance claims or counterparty obligations. Credit ratings relating to securities and obligations of an issuer can include a recovery expectation. Credit ratings are used by investors as indications of the likelihood of receiving the money owed to them in accordance with the terms on which they invested. The agency's credit ratings cover the global spectrum of corporate, sovereign financial, bank, insurance, and public finance entities (including supranational and sub-national entities) and the securities or other obligations they issue, as well as structured finance securities backed by receivables or other financial assets.

I. Fitch's Long-Term Issuer Credit Rating Scale

AAA: Highest credit quality. 'AAA' ratings denote the lowest expectation of default risk. They are assigned only in cases of exceptionally strong capacity for payment of financial commitments. This capacity is highly unlikely to be adversely affected by foreseeable events.

AA: Very high credit quality. 'AA' ratings denote expectations of very low default risk. They indicate very strong capacity for payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.

A: High credit quality. 'A' ratings denote expectations of low default risk. The capacity for payment of financial commitments is considered strong. This capacity may, nevertheless, be more vulnerable to adverse business or economic conditions than is the case for higher ratings.

BBB: Good credit quality. 'BBB' ratings indicate that expectations of default risk are currently low. The capacity for payment of financial commitments is considered adequate, but adverse business or economic conditions are more likely to impair this capacity.

BB: Speculative. 'BB' ratings indicate an elevated vulnerability to default risk, particularly in the event of adverse changes in business or economic conditions over time; however, business or financial flexibility exists that supports the servicing of financial commitments.

B: Highly speculative. 'B' ratings indicate that material default risk is present, but a limited margin of safety remains. Financial commitments are currently being met; however, capacity for continued payment is vulnerable to deterioration in the business and economic environment.

CCC: Substantial credit risk. Default is a real possibility.

CC: Very high levels of credit risk. Default of some kind appears probable.

C: Near default. A default or default-like process has begun, or the issuer is in standstill, or for a closed funding vehicle, payment capacity is irrevocably impaired. Conditions that are indicative of a 'C' category rating for an issuer include: a. the issuer has entered into a grace or cure period following non-payment of a material financial obligation; b. the issuer has entered into a temporary negotiated waiver or standstill agreement following a payment default on a material financial obligation; c. the formal announcement by the issuer or their agent of a distressed debt exchange; d. a closed financing vehicle where payment capacity is irrevocably impaired such that it is not expected to pay interest and/or principal in full during the life of the transaction, but where no payment default is imminent.

RD: Restricted default. 'RD' ratings indicate an issuer that in Fitch's opinion has experienced: a. an uncured payment default or distressed debt exchange on a bond, loan or other material financial obligation, but b. has not entered into bankruptcy filings, administration, receivership, liquidation, or other formal winding-up procedure, and c. has not otherwise ceased operating. This would include: i. the selective payment default on a specific class or currency of debt; ii. the uncured expiry of any applicable grace period, cure period or default forbearance period following a payment default on a bank loan, capital markets security or other

material financial obligation; iii. the extension of multiple waivers or forbearance periods upon a payment default on one or more material financial obligations, either in series or in parallel; ordinary execution of a distressed debt exchange on one or more material financial obligations.

D: Default. 'D' ratings indicate an issuer that in Fitch's opinion has entered into bankruptcy filings, administration, receivership, liquidation or other formal winding-up procedure or that has otherwise ceased business.

Default ratings are not assigned prospectively to entities or their obligations; within this context, non-payment on an instrument that contains a deferral feature or grace period will generally not be considered a default until after the expiration of the deferral or grace period, unless a default is otherwise driven by bankruptcy or other similar circumstance, or by a distressed debt exchange.

Imminent default, categorized under 'C', typically refers to the occasion where a payment default has been intimated by the issuer and is all but inevitable. This may, for example, be where an issuer has missed a scheduled payment but (as is typical) has a grace period during which it may cure the payment default. Another alternative would be where an issuer has formally announced a distressed debt exchange, but the date of the exchange still lies several days or weeks in the immediate future.

In all cases, the assignment of a default rating reflects the agency's opinion as to the most appropriate rating category consistent with the rest of its universe of ratings and may differ from the definition of default under the terms of an issuer's financial obligations or local commercial practice.

Note: The modifiers "+" or "-" may be appended to a rating to denote relative status within major rating categories. Such suffixes are not added to 'AAA' ratings and ratings below the 'CCC' category.

II. Fitch's Short-Term Ratings Assigned to Issuers or Obligations in Corporate, Public and Structure Finance

F1: Highest Short-Term Credit Quality. Indicates the strongest intrinsic capacity for timely payment of financial commitments; may have an added "+" to denote any exceptionally strong credit feature.

F2: Good Short-Term Credit Quality. Good intrinsic capacity for timely payment of financial commitments.

F3: Fair Short-Term Credit Quality. The intrinsic capacity for timely payment of financial commitments is adequate.

B: Speculative Short-Term Credit Quality. Minimal capacity for timely payment of financial commitments, plus heightened vulnerability to near term adverse changes in financial and economic conditions.

C: High Short-Term Default Risk. Default is a real possibility.

RD: Restricted Default. Indicates an entity that has defaulted on one or more of its financial commitments, although it continues to meet other financial obligations. Typically applicable to entity ratings only.

D: Default. Indicates a broad-based default event for an entity, or the default of a short-term obligation.

Note: The modifiers "+" or "-" may be appended to a rating to denote relative status within major rating categories. For the short-term rating category of 'F1', a '+' may be appended.

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