

## **Statement of Additional Information**

# John Hancock Exchange-Traded Fund Trust

August 1, 2025

	Principal U.S. Listing Exchange	Ticker
John Hancock Disciplined Value Select ETF	NYSE Arca, Inc.	JDVL

This Statement of Additional Information ("SAI") provides information about the fund listed above (the "fund"). The fund is a series of the Trust indicated above. The information in this SAI is in addition to the information that is contained in the fund's prospectus dated August 1, 2025, as amended and supplemented from time to time (the "Prospectus").

This SAI is not a prospectus. It should be read in conjunction with the Prospectus. Copies of the Prospectus, Form N-CSR, other information such as fund financial statements that the fund files on Form N-CSR, or the annual report to shareholders (the "Annual Report") (including financial statements) (when they become available) can be obtained free of charge by contacting:

John Hancock Investment Management 200 Berkeley Street Boston, MA 02116 800-225-6020 jhinvestments.com/etf

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# **GLOSSARY**

Term	Definition
"1933 Act"	the Securities Act of 1933, as amended
"1940 Act"	the Investment Company Act of 1940, as amended
"Advisers Act"	the Investment Advisers Act of 1940, as amended
"Advisor"	John Hancock Investment Management LLC, 200 Berkeley Street, Boston, Massachusetts 02116
"Advisory Agreement"	an investment advisory agreement or investment management contract between the Trust and the Advisor
"Affiliated Subadvisors"	Manulife Investment Management (US) LLC and CQS (US), LLC, as applicable
"affiliated underlying funds"	underlying funds that are advised by John Hancock's investment advisor or its affiliates
"BDCs"	business development companies
"Board"	Board of Trustees of the Trust
"Brown Brothers Harriman"	Brown Brothers Harriman & Co.
"CATS"	Certificates of Accrual on Treasury Securities
"CBOs"	Collateralized Bond Obligations
"CCO"	Chief Compliance Officer
"CDSC"	Contingent Deferred Sales Charge
"CEA"	the Commodity Exchange Act, as amended
"CIBM"	China interbank bond market
"CLOs"	Collateralized Loan Obligations
"CMOs"	Collateralized Mortgage Obligations
"Code"	the Internal Revenue Code of 1986, as amended
"COFI floaters"	Cost of Funds Index
"CPI"	Consumer Price Index
"CPI-U"	Consumer Price Index for Urban Consumers
"CPO"	Commodity Pool Operator
"CFTC"	Commodity Futures Trading Commission
"Citibank"	Citibank, N.A., 388 Greenwich Street, New York, NY 10013
"Distributor"	Foreside Fund Services, LLC, a wholly owned subsidiary of Foreside Financial Group, LLC (dba ACA Group), Three Canal Plaza, Suite 100, Portland, Maine 04101
"EMU"	Economic and Monetary Union
"ETFs"	Exchange-Traded Funds
"ETNs"	Exchange-Traded Notes
"EU"	European Union
"Fannie Mae"	Federal National Mortgage Association
"FATCA"	Foreign Account Tax Compliance Act
"Fed"	U.S. Federal Reserve
"FHFA"	Federal Housing Finance Agency
"FHLBs"	Federal Home Loan Banks
"FICBs"	Federal Intermediate Credit Banks
"Fitch"	Fitch Ratings
"Freddie Mac"	Federal Home Loan Mortgage Corporation
"funds" or "series"	The John Hancock funds within this SAI as noted on the front cover and as the context may require
"funds of funds"	funds that seek to achieve their investment objectives by investing in underlying funds, as permitted by Section 12(d) of the 1940 Act and the rules thereunder
"GNMA"	Government National Mortgage Association
"HKSCC"	Hong Kong Securities Clearing Company
"lOs"	Interest-Only
"IRA"	Individual Retirement Account
"IRS"	Internal Revenue Service
"JHCT"	John Hancock Collateral Trust

Term	Definition
"JH Distributors"	John Hancock Distributors, LLC
"JHLICO New York"	John Hancock Life Insurance Company of New York
"JHLICO U.S.A."	John Hancock Life Insurance Company (U.S.A.)
"LOI"	Letter of Intention
"LIBOR"	London Interbank Offered Rate
"MAAP"	Monthly Automatic Accumulation Program
"Manulife Financial" or "MFC"	Manulife Financial, a publicly traded company based in Toronto, Canada
"Manulife IM (US)"	Manulife Investment Management (US) LLC
"MiFID II"	Markets in Financial Instruments Directive
"Moody's"	Moody's Investors Service, Inc
"NAV"	Net Asset Value
"NRSRO"	Nationally Recognized Statistical Rating Organization
"NYSE"	New York Stock Exchange
"OID"	Original Issue Discount
"OTC"	Over-The-Counter
"PAC"	Planned Amortization Class
"PFS"	Personal Financial Services
"POs"	Principal-Only
"PRC"	People's Republic of China
"REITs"	Real Estate Investment Trusts
"RIC"	Regulated Investment Company
"RPS"	John Hancock Retirement Plan Services
"SARSEP"	Salary Reduction Simplified Employee Pension Plan
"SEC"	Securities and Exchange Commission
"SEP"	Simplified Employee Pension
"SIMPLE"	Savings Incentive Match Plan for Employees
"S&P"	S&P Global Ratings
"SLMA"	Student Loan Marketing Association
"SOFR"	Secured Overnight Financing Rate
"SPACs"	Special Purpose Acquisition Companies
"State Street"	State Street Bank and Trust Company
"subadvisor"	Any subadvisors employed by John Hancock within this SAI as noted in Appendix B and as the context may
Subdavisor	require
"TAC"	Target Amortization Class
"TIGRs"	Treasury Receipts, Treasury Investors Growth Receipts
"Trust"	John Hancock Bond Trust
	John Hancock California Tax-Free Income Fund
	John Hancock Capital Series
	John Hancock Current Interest
	John Hancock Exchange-Traded Fund Trust
	John Hancock Funds II John Hancock Funds III
	John Hancock Investment Trust
	John Hancock Investment Trust II
	John Hancock Municipal Securities Trust
	John Hancock Sovereign Bond Fund
	John Hancock Strategic Series
<b></b>	John Hancock Variable Insurance Trust
"TSA"	Tax-Sheltered Annuity
"unaffiliated underlying funds"	underlying funds that are advised by an entity other than John Hancock's investment advisor or its affiliates

Term	Definition
"underlying funds"	funds in which the funds of funds invest
"UK"	United Kingdom

#### ORGANIZATION OF THE TRUST

The Trust is organized as a Massachusetts business trust under the laws of The Commonwealth of Massachusetts and is an open-end management investment company registered under the 1940 Act. The fund is a non-diversified series of the Trust, as that term is used in the 1940 Act, and as interpreted or modified by regulatory authority having jurisdiction, from time to time. The following table sets forth the date the Trust was organized:

Trust	Date of Organization
John Hancock Exchange-Traded Fund Trust	November 24, 2009

The Advisor is a Delaware limited liability company whose principal offices are located at 200 Berkeley Street, Boston, Massachusetts 02116. The Advisor is registered as an investment advisor under the Advisors Act. The Advisor is an indirect principally owned subsidiary of JHLICO U.S.A. JHLICO U.S.A. and its subsidiaries today offer a broad range of financial products, including life insurance, annuities, 401(k) plans, long-term care insurance, college savings, and other forms of business insurance. Additional information about John Hancock may be found on the Internet at johnhancock.com. The ultimate controlling parent of the Advisor is MFC, a publicly traded company based in Toronto, Canada. MFC is the holding company of The Manufacturers Life Insurance Company and its subsidiaries, collectively known as Manulife Financial.

The Advisor has retained for the fund a subadvisor that is responsible for providing investment advice to the fund subject to the review of the Board and the overall supervision of the Advisor.

Manulife Financial is a leading international financial services group with principal operations in Asia, Canada, and the United States. Operating primarily as John Hancock in the United States and Manulife elsewhere, it provides financial protection products and advice, insurance, as well as wealth and asset management services through its extensive network of solutions for individuals, groups, and institutions. Its global headquarters are in Toronto, Canada, and it trades as 'MFC' on the Toronto Stock Exchange, NYSE, and the Philippine Stock Exchange, and under '945' in Hong Kong. Manulife Financial can be found on the Internet at manulife.com.

The following table sets forth the fund's inception date:

Fund	Commencement of Operations
John Hancock Disciplined Value Select ETF	On or about August 5, 2025

#### **EXCHANGE LISTING AND TRADING**

A discussion of exchange listing and trading matters associated with an investment in the fund is contained in the "Shareholder information" section of the Prospectus. The discussion below supplements, and should be read in conjunction with, such sections of the Prospectus.

The shares of the fund ("Shares") are listed and traded on the NYSE Arca, Inc. (the "Exchange"). The Shares trade on the Exchange at prices that may differ to some degree from their NAV. There can be no assurance that the requirements of the Exchange necessary to maintain the listing of Shares of the fund will continue to be met.

The Exchange may, but is not required to, remove the Shares of the fund from listing if: (1) the Exchange becomes aware that the fund is no longer eligible to operate in reliance on Rule 6c-11 under the 1940 Act; (2) the fund no longer complies with the requirements set forth in Exchange Rule 5.2-E(j)(8); (3) following the initial twelve-month period beginning upon the commencement of trading of the fund, there are fewer than 50 beneficial holders of the Shares; or (4) such other event shall occur or condition exists that, in the opinion of the Exchange, makes further dealings on the Exchange inadvisable. In addition, the Exchange will remove the Shares of the fund from listing and trading upon termination of the Trust or the fund.

As in the case of other publicly-traded securities, when you buy or sell shares through a broker, you will incur a brokerage commission determined by that broker.

In order to provide additional information regarding the indicative value of Shares of the fund, the Exchange or a market data vendor disseminates every 15 seconds through the facilities of the Consolidated Tape Association, or through other widely disseminated means, an updated Indicative Optimized Portfolio Value ("IOPV") for the fund as calculated by an information provider or market data vendor. The Trust is not involved in or responsible for any aspect of the calculation or dissemination of the IOPVs and makes no representation or warranty as to the accuracy of the IOPVs.

The fund's IOPV is based on a securities component and a cash component which comprises that day's Fund Deposit (as defined below). The IOPV does not necessarily reflect the precise composition of the current portfolio of securities held by the fund at a particular point in time or the best possible valuation of the current portfolio. Therefore, the IOPV should not be viewed as a "real-time" update of the fund's NAV, which is computed only once a day. The IOPV is generally determined by using both current market quotations and/or price quotations obtained from broker dealers that may trade in the portfolio securities held by the fund. The quotations of certain fund holdings may not be updated during U.S. trading hours if such holdings do not trade in the United States.

The cash component included in an IOPV could consist of estimated accrued interest, dividends and other income, less expenses. If applicable, each IOPV also reflects changes in currency exchange rates between the U.S. dollar and the applicable currency.

The Trust reserves the right to adjust the Share prices of the fund in the future to maintain convenient trading ranges for investors. Any adjustments would be accomplished through stock splits or reverse stock splits, which would have no effect on the net assets of the fund or an investor's equity interest in the fund.

The base and trading currencies of the fund are the U.S. dollar. The base currency is the currency in which the fund's NAV per Share is calculated and the trading currency is the currency in which Shares of the fund are listed and traded on the Exchange.

The fund offers and issues Shares at its NAV per Share only in aggregations of a specified number of shares ("Creation Units"), generally in exchange for a basket of securities and/or instruments (the "Deposit Securities") together with a deposit of a specified cash payment (the "Cash Component") or, alternatively, a specified all cash payment ("Cash Deposit"). Shares are redeemable by the applicable fund only in Creation Units and, generally, in exchange for securities and instruments. Shares trade in the secondary market and elsewhere at market prices that may be at, above or below NAV. Creation Units typically are a specified number of Shares.

To the extent a fund effects redemptions in cash rather than in-kind, the fund may incur certain costs, including brokerage costs and/or taxable gains or losses, that the fund may not have incurred if it had effected redemptions entirely in-kind. These costs may decrease the fund's NAV to the extent they are not offset by a transaction fee payable by an Authorized Participant (defined below). The fund may charge creation/redemption transaction fees for each creation and redemption. In all cases, transaction fees will be limited in accordance with the requirements of the SEC applicable to management investment companies offering redeemable securities. See the "Creations and redemptions" section below.

## ADDITIONAL INVESTMENT POLICIES AND OTHER INSTRUMENTS

The principal strategies and risks of investing in the fund are described in the applicable Prospectus. Unless otherwise stated in the applicable Prospectus or this SAI, the investment objective and policies of the fund may be changed without shareholder approval. The fund may invest in the instruments below, and such instruments and investment policies apply to the fund, but only if and to the extent that such policies are consistent with and permitted by the fund's investment objective and policies. The fund may also have indirect exposure to the instruments described below through derivative contracts, if applicable. By owning shares of the underlying funds, each fund of funds indirectly invests in the securities and instruments held by the underlying funds and bears the same risks of such underlying funds.

#### **Asset-Backed Securities**

The securitization techniques used to develop mortgage securities also are being applied to a broad range of other assets. Through the use of trusts and special purpose corporations, automobile and credit card receivables are being securitized in pass-through structures similar to mortgage pass-through structures or in a pay-through structure similar to the CMO structure.

Generally, the issuers of asset-backed bonds, notes or pass-through certificates are special purpose entities and do not have any significant assets other than the receivables securing such obligations. In general, the collateral supporting asset-backed securities is of a shorter maturity than that of mortgage loans. As a result, investment in these securities should be subject to less volatility than mortgage securities. Instruments backed by pools of receivables are similar to mortgage-backed securities in that they are subject to unscheduled prepayments of principal prior to maturity. When the obligations are prepaid, a fund must reinvest the prepaid amounts in securities with the prevailing interest rates at the time. Therefore, a fund's ability to maintain an investment including high-yielding asset-backed securities will be affected adversely to the extent that prepayments of principal must be reinvested in securities that have lower yields than the prepaid obligations. Moreover, prepayments of securities purchased at a premium could result in a realized loss. Unless otherwise stated in its Prospectus, a fund will only invest in asset-backed securities rated, at the time of purchase, "AA" or better by S&P or Fitch or "Aa" or better by Moody's.

As with mortgage securities, asset-backed securities are often backed by a pool of assets representing the obligation of a number of different parties and use similar credit enhancement techniques. For a description of the types of credit enhancement that may accompany asset-backed securities, see "Types of Credit Support" below. When a fund invests in asset-backed securities, it will not limit its investments in asset-backed securities to those with credit enhancements. Although asset-backed securities are not generally traded on a national securities exchange, such securities are widely traded by brokers and dealers, and will not be considered illiquid securities for the purposes of the investment restriction on illiquid securities under the sub-section "Illiquid Securities" in this section below.

**Types of Credit Support.** To lessen the impact of an obligor's failure to make payments on underlying assets, mortgage securities and asset-backed securities may contain elements of credit support. Such credit support falls into two categories:

- liquidity protection; and
- default protection.

Liquidity protection refers to the provision of advances, generally by the entity administering the pool of assets, to ensure that the pass-through of payments due on the underlying pool of assets occurs in a timely fashion. Default protection provides protection against losses resulting from ultimate default and enhances the likelihood of ultimate payment of the obligations on at least a portion of the assets in the pool. This protection may be provided through guarantees, insurance policies or letters of credit obtained by the issuer or sponsor from third parties, through various means of structuring the transaction or through a combination of such approaches. A fund will not pay any additional fees for such credit support, although the existence of credit support may increase the price of a security.

Some examples of credit support include:

- "senior-subordinated securities" (multiple class securities with one or more classes subordinate to other classes as to the payment of principal thereof and interest thereon, with the result that defaults on the underlying assets are borne first by the holders of the 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 on the securities and pay any servicing or other fees).

The ratings of mortgage-backed securities and asset-backed securities for which third-party credit enhancement provides liquidity protection or default protection are generally dependent upon the continued creditworthiness of the provider of the credit enhancement. The ratings of these securities could be reduced in the event of deterioration in the creditworthiness of the credit enhancement provider even in cases where the delinquency and loss experienced on the underlying pool of assets is better than expected.

The degree of credit support provided for each issue is generally based on historical information concerning the level of credit risk associated with the underlying assets. Delinquency or loss greater than anticipated could adversely affect the return on an investment in mortgage securities or asset-backed securities.

**Collateralized Debt Obligations.** CBOs, CLOs, other collateralized debt obligations, and other similarly structured securities (collectively, "CDOs") are types of asset-backed securities. A CBO is a trust that is often backed by a diversified pool of high risk, below investment grade fixed-income securities. The collateral can be from many different types of fixed-income securities such as high yield debt, residential privately issued mortgage-related securities, commercial privately issued mortgage-related securities and emerging market debt. A CLO is a trust typically collateralized by a pool of loans, which may include, among others, domestic and foreign senior secured loans, senior unsecured loans, and subordinate corporate loans, including loans that may be rated below investment grade or equivalent unrated loans. Other CDOs are trusts backed by other types of assets representing obligations of various parties. CDOs may charge management fees and administrative expenses.

In a CDO structure, the cash flows from the trust are split into two or more portions, called tranches, varying in risk and yield. The riskiest portion is the "equity" tranche which bears the bulk of defaults from the bonds or loans in the trust and serves to protect the other, more senior tranches from default in all but the most severe circumstances. Since it is partially protected from defaults, a senior tranche from a CDO trust typically has a higher rating and lower yield than its underlying securities, and can be rated investment grade. Despite the protection from the equity tranche, CDO tranches can experience substantial losses due to actual defaults, increased sensitivity to defaults due to collateral default and disappearance of protecting tranches, market anticipation of defaults, as well as aversion to CDO securities as a class. In the case of all CDO tranches, the market prices of and yields on tranches with longer terms to maturity tend to be more volatile than those of tranches with shorter terms to maturity due to the greater volatility and uncertainty of cash flows.

#### Borrowing

Unless otherwise prohibited, the fund may borrow money in an amount that does not exceed 33% of its total assets. Borrowing by the fund involves leverage, which may exaggerate any increase or decrease in the fund's investment performance and in that respect may be considered a speculative practice. The interest that the fund must pay on any borrowed money, additional fees to maintain a line of credit or any minimum average balances required to be maintained are additional costs that will reduce or eliminate any potential investment income and may offset any capital gains. Unless the appreciation and income, if any, on the asset acquired with borrowed funds exceed the cost of borrowing, the use of leverage will diminish the investment performance of the fund.

## **Certificates of Deposit, Time Deposits, and Bankers' Acceptances**

**Certificates of Deposit.** Certificates of deposit are certificates issued against funds deposited in a bank or a savings and loan. They are issued for a definite period of time and earn a specified rate of return.

**Time Deposits.** Time deposits are non-negotiable deposits maintained in banking institutions for specified periods of time at stated interest rates.

**Bankers' Acceptances.** Bankers' acceptances are short-term credit instruments evidencing the obligation of a bank to pay a draft which has been drawn on it by a customer. These instruments reflect the obligations both of the bank and of the drawer to pay the face amount of the instrument upon maturity. They are primarily used to finance the import, export, transfer or storage of goods. They are "accepted" when a bank guarantees their payment at maturity.

These obligations are not insured by the Federal Deposit Insurance Corporation.

#### **Commercial Paper and Short-Term Notes**

Commercial paper consists of unsecured promissory notes issued by corporations. Issues of commercial paper and short-term notes will normally have maturities of less than nine months and fixed rates of return, although such instruments may have maturities of up to one year.

**Variable Amount Master Demand Notes.** Commercial paper obligations may include variable amount master demand notes. Variable amount master demand notes are obligations that permit the investment of fluctuating amounts at varying rates of interest pursuant to direct arrangements between a fund, as lender, and the borrower. These notes permit daily changes in the amounts borrowed. The investing (i.e., "lending") fund has the right

to increase the amount under the note at any time up to the full amount provided by the note agreement, or to decrease the amount, and the borrower may prepay up to the full amount of the note without penalty. Because variable amount master demand notes are direct lending arrangements between the lender and borrower, it is not generally contemplated that such instruments will be traded. There is no secondary market for these notes, although they are redeemable (and thus immediately repayable by the borrower) at face value, plus accrued interest, at any time.

A subadvisor will only invest in variable amount master demand notes issued by companies that, at the date of investment, have an outstanding debt issue rated "Aaa" or "Aa" by Moody's or "AAA" or "AA" by S&P or Fitch, and that the subadvisor has determined present minimal risk of loss. A subadvisor will look generally at the financial strength of the issuing company as "backing" for the note and not to any security interest or supplemental source, such as a bank letter of credit. A variable amount master demand note will be valued on each day a NAV is determined. The NAV generally will be equal to the face value of the note plus accrued interest unless the financial position of the issuer is such that its ability to repay the note when due is in question.

#### **Convertible Securities**

Convertible securities may include corporate notes or preferred securities. Investments in convertible securities are not subject to the rating criteria with respect to non-convertible debt obligations. As with all debt securities, the market value of convertible securities tends to decline as interest rates increase and, conversely, to increase as interest rates decline. The market value of convertible securities can also be heavily dependent upon the changing value of the equity securities into which such securities are convertible, depending on whether the market price of the underlying security exceeds the conversion price. Convertible securities generally rank senior to common stocks in an issuer's capital structure and consequently entail less risk than the issuer's common stock. However, the extent to which such risk is reduced depends upon the degree to which the convertible security sells above its value as a fixed-income security.

## **Depositary Receipts**

Securities of foreign issuers may include American Depositary Receipts, European Depositary Receipts, Global Depositary Receipts, International Depositary Receipts, and Non-Voting Depositary Receipts ("ADRs," "EDRs," "IDRs," and "NVDRs," respectively, and collectively, "Depositary Receipts"). Depositary Receipts are certificates typically issued by a bank or trust company that give their holders the right to receive securities issued by a foreign or domestic corporation.

ADRs are U.S. dollar-denominated securities backed by foreign securities deposited in a U.S. securities depository. ADRs are created for trading in the U.S. markets. The value of an ADR will fluctuate with the value of the underlying security and will reflect any changes in exchange rates. An investment in ADRs involves risks associated with investing in foreign securities. Issuers of unsponsored ADRs are not contractually obligated to disclose material information in the United States, and, therefore, there may not be a correlation between that information and the market value of an unsponsored ADR.

EDRs, GDRs, IDRs, and NVDRs are receipts evidencing an arrangement with a foreign bank or exchange affiliate similar to that for ADRs and are designed for use in foreign securities markets. EDRs, GDRs, IDRs, and NVDRs are not necessarily quoted in the same currency as the underlying security. NVDRs do not have voting rights.

#### **Fixed-Income Securities**

Investment grade bonds are rated at the time of purchase in the four highest rating categories by a NRSRO, such as those rated "Aaa," "A" and "Baa" by Moody's, or "AAA," "A" and "BBB" by S&P or Fitch. Obligations rated in the lowest of the top four rating categories (such as "Baa" by Moody's or "BBB" by S&P or Fitch) may have speculative characteristics and changes in economic conditions or other circumstances are more likely to lead to a weakened capacity to make principal and interest payments, including a greater possibility of default or bankruptcy of the issuer, than is the case with higher grade bonds. Subsequent to its purchase by a fund, an issue of securities may cease to be rated or its rating may be reduced below the minimum required for purchase by a fund. In addition, it is possible that Moody's, S&P, Fitch and other NRSROs might not timely change their ratings of a particular issue to reflect subsequent events. None of these events will require the sale of the securities by a fund, although a subadvisor will consider these events in determining whether it should continue to hold the securities.

In general, the ratings of Moody's, S&P, and Fitch represent the opinions of these agencies as to the quality of the securities that they rate. It should be emphasized however, that ratings are relative and subjective and are not absolute standards of quality. These ratings will be used by a fund as initial criteria for the selection of portfolio securities. Among the factors that will be considered are the long-term ability of the issuer to pay principal and interest and general economic trends. Appendix A contains further information concerning the ratings of Moody's, S&P, and Fitch and their significance.

## **Foreign Government Securities**

Foreign government securities include securities issued or guaranteed by foreign governments (including political subdivisions) or their authorities, agencies, or instrumentalities or by supra-national agencies. Different kinds of foreign government securities have different kinds of government support. For example, some foreign government securities are supported by the full faith and credit of a foreign national government or political subdivision and some are not. Foreign government securities of some countries may involve varying degrees of credit risk as a result of financial or political instability in those countries and the possible inability of a fund to enforce its rights against the foreign government issuer. As with other fixed income securities, sovereign issuers may be unable or unwilling to make timely principal or interest payments. Supra-national agencies are agencies whose member nations make capital contributions to support the agencies' activities.

#### High Yield (High Risk) Domestic Corporate Debt Securities

High yield corporate debt securities (also known as "junk bonds") include bonds, debentures, notes, bank loans, credit-linked notes and commercial paper. Most of these debt securities will bear interest at fixed rates, except bank loans, which usually have floating rates. Bonds also may have variable rates of interest, and debt securities may involve equity features, such as equity warrants or convertible outright and participation features (i.e., interest or other payments, often in addition to a fixed rate of return, that are based on the borrower's attainment of specified levels of revenues, sales or profits and thus enable the holder of the security to share in the potential success of the venture). Today, much high yield debt is used for general corporate purposes, such as financing capital needs or consolidating and paying down bank lines of credit.

The secondary market for high yield U.S. corporate debt securities is concentrated in relatively few market makers and is dominated by institutional investors, including 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. In addition, market trading volume for high yield U.S. corporate debt securities is generally lower and the secondary market for such securities could shrink or disappear suddenly and without warning as a result of adverse market or economic conditions, independent of any specific adverse changes in the condition of a particular issuer. The lack of sufficient market liquidity may cause a fund to incur losses because it will be required to effect sales at a disadvantageous time and then only at a substantial drop in price. These factors may have an adverse effect on the market price and a fund's ability to dispose of particular portfolio investments. A less liquid secondary market also may make it more difficult for a fund to obtain precise valuations of the high yield securities in its portfolio.

The fund is not obligated to dispose of securities whose issuers subsequently are in default or that are downgraded below the rating requirements that the fund imposes at the time of purchase.

## **Hybrid Instruments**

Hybrid instruments (a type of potentially high-risk derivative) combine the elements of futures contracts or options with those of debt, preferred equity or a depository instrument.

**Characteristics of Hybrid Instruments.** Generally, a hybrid instrument is a debt security, preferred stock, depository share, trust certificate, certificate of deposit or other evidence of indebtedness on which a portion of or all interest payments, and/or the principal or stated amount payable at maturity, redemption or retirement, is determined by reference to the following:

- prices, changes in prices, or differences between prices of securities, currencies, intangibles, goods, articles or commodities (collectively, "underlying assets"); or
- an objective index, economic factor or other measure, such as interest rates, currency exchange rates, commodity indices, and securities indices (collectively, "benchmarks").

Hybrid instruments may take a variety of forms, including, but not limited to:

- debt instruments with interest or principal payments or redemption terms determined by reference to the value of a currency or commodity or securities index at a future point in time;
- preferred stock with dividend rates determined by reference to the value of a currency; or
- convertible securities with the conversion terms related to a particular commodity.

**Uses of Hybrid Instruments.** Hybrid instruments provide an efficient means of creating exposure to a particular market, or segment of a market, with the objective of enhancing total return. For example, a fund may wish to take advantage of expected declines in interest rates in several European countries, but avoid the transaction costs associated with buying and currency-hedging the foreign bond positions.

One approach is to purchase a U.S. dollar-denominated hybrid instrument whose redemption price is linked to the average three-year interest rate in a designated group of countries. The redemption price formula would provide for payoffs of greater than par if the average interest rate was lower than a specified level, and payoffs of less than par if rates were above the specified level. Furthermore, the investing fund could limit the downside risk of the security by establishing a minimum redemption price so that the principal paid at maturity could not be below a predetermined minimum level if interest rates were to rise significantly.

The purpose of this type of arrangement, known as a structured security with an embedded put option, is to give the fund the desired European bond exposure while avoiding currency risk, limiting downside market risk, and lowering transactions costs. Of course, there is no guarantee that such a strategy will be successful and the value of the fund may decline if, for example, interest rates do not move as anticipated or credit problems develop with the issuer of the hybrid instrument.

**Structured Notes.** Structured notes include investments in an entity, such as a trust, organized and operated solely for the purpose of restructuring the investment characteristics of various securities. This type of restructuring involves the deposit or purchase of specified instruments and the issuance of one or more classes of securities backed by, or representing interests, in the underlying instruments. The cash flow on the underlying instruments may be apportioned among the newly issued structured notes to create securities with different investment characteristics, such as varying maturities, payment priorities or interest rate provisions. The extent of the income paid by the structured notes is dependent on the cash flow of the underlying instruments.

#### **Illiquid Securities**

The fund may not invest more than 15% of its net assets in securities that cannot be sold or disposed of in seven calendar days or less without the sale or disposition significantly changing the market value of the investment ("illiquid securities"). Investment in illiquid securities involves the risk that, because of the lack of consistent market demand for such securities, a fund may be forced to sell them at a discount from the last offer price. To the extent that an investment is deemed to be an illiquid investment or a less liquid investment, the fund can expect to be exposed to greater liquidity risk.

Illiquid securities may include, but are not limited to: (a) securities (except for Section 4(a)(2) Commercial Paper, discussed below) that are not eligible for resale pursuant to Rule 144A under the 1933 Act; (b) repurchase agreements maturing in more than seven days (except for those that can be terminated after a notice period of seven days or less); (c) IOs and POs of non-governmental issuers; (d) time deposits maturing in more than seven days; (e) federal fund loans maturing in more than seven days; (f) bank loan participation interests; (g) foreign government loan participations; (h) municipal leases and participations therein; and (i) any other securities or other investments for which a liquid secondary market does not exist.

The Trust has implemented a written liquidity risk management program (the "LRM Program") and related procedures to manage the liquidity risk of the fund in accordance with Rule 22e-4 under the 1940 Act ("Rule 22e-4"). Rule 22e-4 defines "liquidity risk" as the risk that a fund could not meet requests to redeem shares issued by the fund without significant dilution of the remaining investors' interests in the fund. The Board has designated the Advisor to serve as the administrator of the LRM Program and the related procedures. As a part of the LRM Program, the Advisor is responsible to identify illiquid investments and categorize the relative liquidity of the fund's investments in accordance with Rule 22e-4. Under the LRM Program, the Advisor assesses, manages, and periodically reviews the fund's liquidity risk, and is responsible to make periodic reports to the Board and the SEC regarding the liquidity of the fund's investments, and to notify the Board and the SEC of certain liquidity events specified in Rule 22e-4. The liquidity of the fund's portfolio investments is determined based on relevant market, trading and investment-specific considerations under the LRM Program.

Commercial paper issued in reliance on Section 4(a)(2) of the 1933 Act ("Section 4(a)(2) Commercial Paper") is restricted as to its disposition under federal securities law, and generally is sold to institutional investors, such as the fund, who agree that they are purchasing the paper for investment purposes and not with a view to public distribution. Any resale by the purchaser must be made in an exempt transaction. Section 4(a)(2) Commercial Paper normally is resold to other institutional investors, like the fund, through or with the assistance of the issuer or investment dealers who make a market in Section 4(a)(2) Commercial Paper, thus providing liquidity.

If the Advisor determines, pursuant to the LRM Program and related procedures, that specific Section 4(a)(2) Commercial Paper or securities that are restricted as to resale but for which a ready market is available pursuant to an exemption provided by Rule 144A under the 1933 Act or other exemptions from the registration requirements of the 1933 Act are liquid, they will not be subject to the fund's limitation on investments in illiquid securities. Investing in Section 4(a)(2) Commercial Paper could have the effect of increasing the level of illiquidity in the fund if qualified institutional buyers become for a time uninterested in purchasing these restricted securities.

#### **Indexed Securities**

Indexed securities are instruments whose prices are indexed to the prices of other securities, securities indices, currencies, or other financial indicators. Indexed securities typically, but not always, are debt securities or deposits whose value at maturity or coupon rate is determined by reference to a specific instrument or statistic.

Currency-indexed securities typically are short-term to intermediate-term debt securities whose maturity values or interest rates are determined by reference to the values of one or more specified foreign currencies, and may offer higher yields than U.S. dollar-denominated securities. Currency-indexed securities may be positively or negatively indexed; that is, their maturity value may increase when the specified currency value increases, resulting in a security that performs similarly to a foreign denominated instrument, or their maturity value may decline when foreign currencies increase, resulting in a security whose price characteristics are similar to a put on the underlying currency. Currency-indexed securities also may have prices that depend on the values of a number of different foreign currencies relative to each other.

The performance of indexed securities depends to a great extent on the performance of the security, currency, or other instrument to which they are indexed, and also may be influenced by interest rate changes in the United States and abroad. Indexed securities may be more volatile than the underlying instruments. Indexed securities also are subject to the credit risks associated with the issuer of the security, and their values may decline substantially if the issuer's creditworthiness deteriorates. Issuers of indexed securities have included banks, corporations, and certain U.S. government agencies. An indexed security may be leveraged to the extent that the magnitude of any change in the interest rate or principal payable on an indexed security is a multiple of the change in the reference price.

#### Index-Related Securities ("Equity Equivalents")

The fund may invest in certain types of securities that enable investors to purchase or sell shares in a basket of securities that seeks to track the performance of an underlying index or a portion of an index. Such Equity Equivalents include, among others DIAMONDS (interests in a basket of securities that seeks to track the performance of the Dow Jones Industrial Average), SPDRs or S&P Depositary Receipts (an ETF that tracks the S&P 500 Index). Such securities are similar to index mutual funds, but they are traded on various stock exchanges or secondary markets. The value of these securities is dependent upon the performance of the underlying index on which they are based. Thus, these securities are subject to the same risks as their underlying indices as well as the securities that make up those indices. For example, if the securities comprising an index that an index-related security seeks to track perform poorly, the index-related security will lose value.

Equity Equivalents may be used for several purposes, including to simulate full investment in the underlying index while retaining a cash balance for portfolio management purposes, to facilitate trading, to reduce transaction costs or to seek higher investment returns where an Equity Equivalent is priced more attractively than securities in the underlying index. Because the expense associated with an investment in Equity Equivalents may be substantially lower than the expense of small investments directly in the securities comprising the indices they seek to track, investments in Equity Equivalents may provide a cost-effective means of diversifying a fund's assets across a broad range of securities.

To the extent a fund invests in securities of other investment companies, including Equity Equivalents, fund shareholders would indirectly pay a portion of the operating costs of such companies in addition to the expenses of its own operations. These costs include management, brokerage, shareholder servicing and other operational expenses. Indirectly, if a fund invests in Equity Equivalents, shareholders may pay higher operational costs than if they owned the underlying investment companies directly. Additionally, a fund's investments in such investment companies are subject to limitations under the 1940 Act and market availability.

The prices of Equity Equivalents are derived and based upon the securities held by the particular investment company. Accordingly, the level of risk involved in the purchase or sale of an Equity Equivalent is similar to the risk involved in the purchase or sale of traditional common stock, with the exception that the pricing mechanism for such instruments is based on a basket of stocks. The market prices of Equity Equivalents are expected to fluctuate in accordance with both changes in the NAVs of their underlying indices and the supply and demand for the instruments on the exchanges on which they are traded. Substantial market or other disruptions affecting Equity Equivalents could adversely affect the liquidity and value of the shares of a fund.

#### **Inflation-Indexed Bonds**

Inflation-indexed bonds are debt instruments whose principal and/or interest value are adjusted periodically according to a rate of inflation (usually a CPI). Two structures are most common. The U.S. Treasury and some other issuers use a structure that accrues inflation into the principal value of the bond. Most other issuers pay out the inflation accruals as part of a semiannual coupon.

U.S. Treasury Inflation Protected Securities ("TIPS") currently are issued with maturities of five, ten, or thirty years, although it is possible that securities with other maturities will be issued in the future. The principal amount of TIPS adjusts for inflation, although the inflation-adjusted principal is not paid until maturity. Semiannual coupon payments are determined as a fixed percentage of the inflation-adjusted principal at the time the payment is made.

If the rate measuring inflation falls, the principal value of inflation-indexed bonds will be adjusted downward, and consequently the interest payable on these securities (calculated with respect to a smaller principal amount) will be reduced. At maturity, TIPS are redeemed at the greater of their inflation-adjusted principal or at the par amount at original issue. If an inflation-indexed bond does not provide a guarantee of principal at maturity, the adjusted principal value of the bond repaid at maturity may be less than the original principal.

The value of inflation-indexed bonds is expected to change in response to changes in real interest rates. Real interest rates in turn are tied to the relationship between nominal interest rates and the rate of inflation. For example, if inflation were to rise at a faster rate than nominal interest rates, real interest rates would likely decline, leading to an increase in value of inflation-indexed bonds. In contrast, if nominal interest rates increase at a faster rate than inflation, real interest rates would likely rise, leading to a decrease in value of inflation-indexed bonds.

While these securities, if held to maturity, are expected to be protected from long-term inflationary trends, short-term increases in inflation may lead to a decline in value. If nominal interest rates rise due to reasons other than inflation (for example, due to an expansion of non-inflationary economic activity), investors in these securities may not be protected to the extent that the increase in rates is not reflected in the bond's inflation measure.

The inflation adjustment of TIPS is tied to the CPI-U, which is calculated monthly by the U.S. Bureau of Labor Statistics. The CPI-U is a measurement of price changes in the cost of living, made up of components such as housing, food, transportation, and energy. There can be no assurance that the CPI-U will accurately measure the real rate of inflation in the prices of goods and services.

## **Interfund Lending**

Pursuant to an exemptive order issued by the SEC, a fund may lend money to, and borrow money from, other funds advised by the Advisor or any other investment advisor under common control with the Advisor, subject to the fundamental restrictions on borrowing and lending applicable to the fund.

The fund will borrow through the program only when the costs are equal to or lower than the cost of bank loans, and a fund will lend through the program only when the returns are higher than those available from an investment in overnight repurchase agreements. Interfund loans and borrowings normally extend overnight, but can have a maximum duration of seven days. Loans may be called on one day's notice. A fund may have to borrow from a bank at a higher interest rate if an interfund loan is called or not renewed. Any delay in repayment to a lending fund or from a borrowing fund could result in a lost investment opportunity or additional borrowing costs.

#### **Investment in Other Investment Companies**

A fund may invest in other investment companies (including closed-end investment companies, unit investment trusts, open-end investment companies, investment companies exempted from registration under the 1940 Act pursuant to the rules thereunder and other pooled vehicles) to the extent permitted by federal securities laws, including Section 12 of the 1940 Act, and the rules, regulations and interpretations thereunder. The fund may invest in other investment companies beyond the statutory limits set forth in Section 12 of the 1940 Act ("statutory limits") to the extent permitted by an exemptive rule adopted by the SEC or pursuant to an exemptive order obtained from the SEC.

Investing in other investment companies involves substantially the same risks as investing directly in the underlying instruments, but the total return on such investments at the investment company-level may be reduced by the operating expenses and fees of such other investment companies, including advisory fees. Certain types of investment companies, such as closed-end investment companies, issue a fixed number of shares that trade on a stock exchange or may involve the payment of substantial premiums above the value of such investment companies' portfolio securities when traded OTC or at discounts to their NAVs. Others are continuously offered at NAV, but also may be traded in the secondary market.

#### **Lending of Securities**

A fund may lend its securities so long as such loans do not represent more than 331/3% of its total assets. As collateral for the loaned securities, the borrower gives the lending portfolio collateral equal to at least 100% of the value of the loaned securities. The collateral will consist of cash (including U.S. dollars and foreign currency), cash equivalents or securities issued or guaranteed by the U.S. government or its agencies or instrumentalities. The borrower must also agree to increase the collateral if the value of the loaned securities increases. If the market value of the loaned securities declines, the borrower may request that some collateral be returned.

During the existence of the loan, a fund will receive from the borrower amounts equivalent to any dividends, interest or other distributions on the loaned securities, as well as interest on such amounts. If the fund receives a payment in lieu of dividends (a "substitute payment") with respect to securities on loan pursuant to a securities lending transaction, such income will not be eligible for the dividends-received deduction (the "DRD") for corporate shareholders or for treatment as qualified dividend income for individual shareholders. The DRD and qualified dividend income are discussed more fully in this SAI under "Additional Information Concerning Taxes."

As with other extensions of credit, there are risks that collateral could be inadequate in the event of the borrower failing financially, which could result in actual financial loss, and risks that recovery of loaned securities could be delayed, which could result in interference with portfolio management decisions or exercise of ownership rights. The collateral is managed by an affiliate of the Advisor, which may incentivize the Advisor to lend fund securities to benefit this affiliate. The Advisor maintains robust oversight of securities lending activity and seeks to ensure that all lending activity undertaken by a fund is in the fund's best interests. The fund will be responsible for the risks associated with the investment of cash collateral, including the risk that the fund may lose money on the investment or may fail to earn sufficient income to meet its obligations to the borrower. In addition, the fund may lose its right to vote its shares of the loaned securities at a shareholder meeting if the subadvisor does not recall or does not timely recall the loaned securities, or if the borrower fails to return the recalled securities in advance of the record date for the meeting.

The Trust, on behalf of its funds, may enter into an agency agreement for securities lending transactions ("Securities Lending Agreement") with State Street (the "Securities Lending Agent"). Pursuant to the Securities Lending Agreement, the Securities Lending Agent acts as securities lending agent for a fund and administers the fund's securities lending program. During the fiscal year, the Securities Lending Agent performed various services for the applicable funds, including the following: (i) lending portfolio securities, previously identified by the fund as available for loan, and held by State Street in its capacity as the fund's custodian ("Custodian") on behalf of the fund, to borrowers identified by the fund in the Securities Lending Agreement; (ii) instructing the Custodian to receive and deliver securities, as applicable, to effect such loans; (iii) locating borrowers; (iv) monitoring daily the market value of loaned securities; (v) ensuring daily movement of collateral associated with loan transactions; (vi) marking to market loaned securities and non-cash collateral; (vii) monitoring dividend activity with respect to loaned securities; (viii) negotiating loan terms with the borrowers; (ix) recordkeeping and account servicing related to securities lending activities; and (x) arranging for the return of loaned securities at the termination of the loan. Under the Securities Lending Agreement, the Securities Lending Agent generally will bear the risk that a borrower may default on its obligation to return loaned securities.

Securities lending involves counterparty risk, including the risk that the loaned securities may not be returned or returned in a timely manner and/or a loss of rights in the collateral if the borrower or the lending agent defaults or fails financially. This risk is increased when the fund's loans are concentrated with a single or limited number of borrowers. There are no limits on the number of borrowers to which the fund may lend securities and the fund may lend securities to only one or a small group of borrowers. In addition, under the Securities Lending Agreement, loans may be made to affiliates of the Securities Lending Agent as identified in the Securities Lending Agreement.

Cash collateral may be invested by the fund in JHCT, a privately offered 1940 Act registered government money market fund. Investment of cash collateral offers the opportunity for the fund to profit from income earned by this collateral pool, but also the risk of loss, should the value of the fund's shares in the collateral pool decrease below the NAV at which such shares were purchased.

#### **Loans and Other Direct Debt Instruments**

Direct debt instruments are interests in amounts owed by a corporate, governmental, or other borrower to lenders or lending syndicates (loans and loan participations), to suppliers of goods or services (trade claims or other receivables), or to other parties. Direct debt instruments involve a risk of loss in case of default or insolvency of the borrower and may offer less legal protection to the purchaser in the event of fraud or misrepresentation, or there may be a requirement that a fund supply additional cash to a borrower on demand. U.S. federal securities laws afford certain protections against fraud and misrepresentation in connection with the offering or sale of a security, as well as against manipulation of trading markets for securities. It is unclear whether these protections are available to investments in loans and other forms of direct indebtedness under certain circumstances, in which case such risks may be increased.

A fund may be in possession of material non-public information about a borrower as a result of owning a floating rate instrument issued by such borrower. Because of prohibitions on trading in securities of issuers while in possession of such information, a fund might be unable to enter into a transaction in a publicly traded security issued by that borrower when it would otherwise be advantageous to do so.

#### **Market Capitalization Weighted Approach**

A fund's structure may involve market capitalization weighting in determining individual security weights and, where applicable, country or region weights. Market capitalization weighting means each security is generally purchased based on the issuer's relative market capitalization. Market capitalization weighting may be adjusted by a subadvisor, for a variety of reasons. A fund may deviate from market capitalization weighting to limit or fix the exposure to a particular country or issuer to a maximum portion of the assets of the fund. Additionally, a subadvisor may consider such factors as free float, price momentum, short-run reversals, trading strategies, size, relative price, liquidity, profitability, investment characteristics and other factors determined to be appropriate by a subadvisor given market conditions. In assessing relative price, a subadvisor may consider additional factors such as price to cash flow or price to earnings ratios. In assessing profitability, a subadvisor may consider different ratios, such as that of earnings or profits from operations relative to book value or assets. The criteria a subadvisor uses for assessing relative price and profitability are subject to change from time to time. A subadvisor may exclude the eligible security of a company that meets applicable market capitalization criterion if it determines, in its judgment, that the purchase of such security is inappropriate in light of other conditions. These adjustments will result in a deviation from traditional market capitalization weighting. A further deviation may occur due to holdings in securities received in connection with corporate actions. A subadvisor may consider a small capitalization company's investment characteristics as compared to other eligible companies when making investment decisions and may exclude a small capitalization company with high asset growth. In assessing a company's investment characteristics, a subadvisor may consider ratios such as recent changes in assets divided by total assets. A fund will generally not exclude more than 5% of the eligible small capitalization company universe within each eligible country based on such investment characteristics. The criteria a subadvisor uses for assessing a company's investment characteristics is subject to change from time to time.

Adjustment for free float modifies market capitalization weighting to exclude the share capital of a company that is not freely available for trading in the public equity markets. For example, the following types of shares may be excluded: (i) those held by strategic investors (such as governments, controlling shareholders and management); (ii) treasury shares; or (iii) shares subject to foreign ownership restrictions.

Furthermore, a subadvisor may reduce the relative amount of any security held in order to retain sufficient portfolio liquidity. A portion, but generally not in excess of 20% of a fund's assets, may be invested in interest-bearing obligations, such as money market instruments, thereby causing further deviation from market capitalization weighting. A further deviation may occur due to holdings in securities received in connection with corporate actions.

Block purchases of eligible securities may be made at opportune prices, even though such purchases exceed the number of shares that, at the time of purchase, would be purchased under a market capitalization weighted approach. Generally, changes in the composition and relative ranking (in terms of market capitalization) of the stocks that are eligible for purchase take place with every trade when the securities markets are open for trading due, primarily, to price changes of such securities. On at least a semiannual basis, a subadvisor will identify companies whose stock is eligible for investment by the fund. Additional investments generally will not be made in securities that have changed in value sufficiently to be excluded from a subadvisor's then-current market capitalization requirement for eligible portfolio securities. This may result in further deviation from market capitalization weighting. Such deviation could be substantial if a significant amount of holdings of a fund change in value sufficiently to be excluded from the requirement for eligible securities but not by a sufficient amount to warrant their sale.

Country weights may be based on the total market capitalization of companies within each country. The country weights may take into consideration the free float of companies within a country or whether these companies are eligible to be purchased for the particular strategy. In addition, to maintain a satisfactory level of diversification, a subadvisor may limit or fix the exposure to a particular country or region to a maximum proportion of the assets of that vehicle. Country weights may also vary due to general day-to-day trading patterns and price movements. The weighting of countries may vary from their weighting in published international indices.

## **Money Market Instruments**

Money market instruments (and other securities as noted under the fund description) may be purchased for temporary defensive purposes or for short-term investment purposes. General overnight cash held in a fund's portfolio may also be invested in JHCT, a privately offered 1940 Act registered government money market fund subadvised by Manulife IM (US), an affiliate of the Advisor, that is part of the same group of investment companies as the fund and that is offered exclusively to funds in the same group of investment companies.

#### **Mortgage Dollar Rolls**

Under a mortgage dollar roll, a fund sells mortgage-backed securities for delivery in the future (generally within 30 days) and simultaneously contracts to repurchase substantially similar securities (of the same type, coupon and maturity) on a specified future date. During the roll period, a fund forgoes principal and interest paid on the mortgage-backed securities. A fund is compensated by the difference between the current sale price and the lower forward price for the future purchase (often referred to as the "drop"), as well as by the interest earned on the cash proceeds of the initial sale. A fund also may be compensated by receipt of a commitment fee. Dollar roll transactions involve the risk that the market value of the securities sold by a fund may decline below the repurchase price of those securities. A mortgage dollar roll may be considered a form of leveraging, and may, therefore, increase

fluctuations in a fund's NAV per share. Please see "Government Regulation of Derivatives" section for additional information. For financial reporting and tax purposes, the funds treat mortgage dollar rolls as two separate transactions; one involving the purchase of a security and a separate transaction involving a sale.

#### **Mortgage Securities**

**Prepayment of Mortgages.** Mortgage securities differ from conventional bonds in that principal is paid over the life of the securities rather than at maturity. As a result, when a fund invests in mortgage securities, it receives monthly scheduled payments of principal and interest, and may receive unscheduled principal payments representing prepayments on the underlying mortgages. When a fund reinvests the payments and any unscheduled prepayments of principal it receives, it may receive a rate of interest that is higher or lower than the rate on the existing mortgage securities. For this reason, mortgage securities may be less effective than other types of debt securities as a means of locking in long term interest rates.

In addition, because the underlying mortgage loans and assets may be prepaid at any time, if a fund purchases mortgage securities at a premium, a prepayment rate that is faster than expected will reduce yield to maturity, while a prepayment rate that is slower than expected will increase yield to maturity. Conversely, if a fund purchases these securities at a discount, faster than expected prepayments will increase yield to maturity, while slower than expected payments will reduce yield to maturity.

Adjustable Rate Mortgage Securities. Adjustable rate mortgage securities are similar to the fixed rate mortgage securities discussed above, except that, unlike fixed rate mortgage securities, adjustable rate mortgage securities are collateralized by or represent interests in mortgage loans with variable rates of interest. These variable rates of interest reset periodically to align themselves with market rates. Most adjustable rate mortgage securities provide for an initial mortgage rate that is in effect for a fixed period, typically ranging from three to twelve months. Thereafter, the mortgage interest rate will reset periodically in accordance with movements in a specified published interest rate index. The amount of interest due to an adjustable rate mortgage holder is determined in accordance with movements in a specified published interest rate index by adding a pre-determined increment or "margin" to the specified interest rate index. Many adjustable rate mortgage securities reset their interest rates based on changes in:

- one-year, three-year and five-year constant maturity Treasury Bill rates;
- three-month or six-month Treasury Bill rates;
- 11th District Federal Home Loan Bank Cost of Funds;
- National Median Cost of Funds; or
- one-month, three-month, six-month or one-year SOFR and other market rates.

During periods of increasing rates, a fund will not benefit from such increase to the extent that interest rates rise to the point where they cause the current coupon of adjustable rate mortgages held as investments to exceed any maximum allowable annual or lifetime reset limits or "cap rates" for a particular mortgage. In this event, the value of the mortgage securities held by a fund would likely decrease. During periods of declining interest rates, income to a fund derived from adjustable rate mortgages that remain in a mortgage pool may decrease in contrast to the income on fixed rate mortgages, which will remain constant. Adjustable rate mortgages also have less potential for appreciation in value as interest rates decline than do fixed rate investments. Also, a fund's NAV could vary to the extent that current yields on adjustable rate mortgage securities held as investments are different than market yields during interim periods between coupon reset dates.

**Privately Issued Mortgage Securities.** Privately issued mortgage securities provide for the monthly principal and interest payments made by individual borrowers to pass through to investors on a corporate basis, and in privately issued CMOs, as further described below. Privately issued mortgage securities are issued by private originators of, or investors in, mortgage loans, including:

- mortgage bankers;
- commercial banks;
- investment banks;
- · savings and loan associations; and
- special purpose subsidiaries of the foregoing.

Since privately issued mortgage certificates are not guaranteed by an entity having the credit status of GNMA or Freddie Mac, such securities generally are structured with one or more types of credit enhancement. For a description of the types of credit enhancements that may accompany privately issued mortgage securities, see "Types of Credit Support" below. To the extent that a fund invests in mortgage securities, it will not limit its investments in mortgage securities to those with credit enhancements.

**Collateralized Mortgage Obligations.** CMOs generally are bonds or certificates issued in multiple classes that are collateralized by or represent an interest in mortgages. CMOs may be issued by single-purpose, stand-alone finance subsidiaries or trusts of financial institutions, government agencies, investment banks or other similar institutions. Each class of CMOs, often referred to as a "tranche," may be issued with a specific fixed coupon rate (which may be zero) or a floating coupon rate. Each class of CMOs also has a stated maturity or final distribution date. Principal prepayments on the underlying mortgages may cause the CMOs to be retired substantially earlier than their stated maturities or final distribution dates. Interest is paid or accrued on CMOs on a monthly, quarterly or semiannual basis.

The principal of and interest on the underlying mortgages may be allocated among the several classes of a series of a CMO in many ways. The general goal sought to be achieved in allocating cash flows on the underlying mortgages to the various classes of a series of CMOs is to create tranches on which the expected cash flows have a higher degree of predictability than the underlying mortgages. In creating such tranches, other tranches may be subordinated to the interests of these tranches and receive payments only after the obligations of the more senior tranches have been satisfied. As a general matter, the more predictable the cash flow is on a CMO tranche, the lower the anticipated yield will be on that tranche at the time of issuance. As part of the process of creating more predictable cash flows on most of the tranches in a series of CMOs, one or more tranches generally must be created that absorb most of the volatility in the cash flows on the underlying mortgages. The yields on these tranches are relatively higher than on tranches with more predictable cash flows. Because of the uncertainty of the cash flows on these tranches, and the sensitivity of these transactions to changes in prepayment rates on the underlying mortgages, the market prices of and yields on these tranches tend to be highly volatile. The market prices of and yields on tranches with longer terms to maturity also tend to be more volatile than tranches with shorter terms to maturity due to these same factors. To the extent the mortgages underlying a series of a CMO are so-called "subprime mortgages" (mortgages granted to borrowers whose credit history is not sufficient to obtain a conventional mortgage), the risk of default is higher, which increases the risk that one or more tranches of a CMO will not receive its predicted cash flows.

CMOs purchased by a fund may be:

- 1 collateralized by pools of mortgages in which each mortgage is guaranteed as to payment of principal and interest by an agency or instrumentality of the U.S. government;
- 2 collateralized by pools of mortgages in which payment of principal and interest is guaranteed by the issuer and the guarantee is collateralized by U.S. government securities; or
- 3 securities for which the proceeds of the issuance are invested in mortgage securities and payment of the principal and interest is supported by the credit of an agency or instrumentality of the U.S. government.

**Separate Trading of Registered Interest and Principal of Securities.** Separately traded interest components of securities may be issued or guaranteed by the U.S. Treasury. The interest components of selected securities are traded independently under the Separate Trading of Registered Interest and Principal of Securities program. Under the Separate Trading of Registered Interest and Principal of Securities program, the interest components are individually numbered and separately issued by the U.S. Treasury at the request of depository financial institutions, which then trade the component parts independently.

**Stripped Mortgage Securities.** Stripped mortgage securities are derivative multi-class mortgage securities. Stripped mortgage securities may be issued by agencies or instrumentalities of the U.S. government, or by private issuers, including savings and loan associations, mortgage banks, commercial banks, investment banks and special purpose subsidiaries of the foregoing. Stripped mortgage securities have greater volatility than other types of mortgage securities in which a fund invests. Although stripped mortgage securities are purchased and sold by institutional investors through several investment banking firms acting as brokers or dealers, the market for such securities has not yet been fully developed. Accordingly, stripped mortgage securities may be illiquid and, together with any other illiquid investments, will not exceed a fund's limitation on investments in illiquid securities.

Stripped mortgage securities are usually structured with two classes that receive different proportions of the interest and principal distributions on a pool of mortgage assets. A common type of stripped mortgage security will have one class receiving some of the interest and most of the principal from the mortgage assets, while the other class will receive most of the interest and the remainder of the principal. 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 changes in prevailing interest rates and the rate of principal payments (including prepayments) on the related underlying mortgage assets. A rapid rate of principal payments may have a material adverse effect on an investing fund's yield to maturity. If the underlying mortgage assets experience greater than anticipated prepayments of principal, the fund may fail to fully recoup its initial investment in these securities even if the securities are rated highly.

As interest rates rise and fall, the value of IOs tends to move in the same direction as interest rates. The value of the other mortgage securities described in the Prospectus and this SAI, like other debt instruments, will tend to move in the opposite direction to interest rates. Accordingly, investing in IOs, in conjunction with the other mortgage securities described in the Prospectus and this SAI, is expected to contribute to the relative stability of a fund's NAV

Similar securities such as Super Principal Only ("SPO") and Levered Interest Only ("LIO") are more volatile than POs and IOs. Risks associated with instruments such as SPOs are similar in nature to those risks related to investments in POs. Risks associated with LIOs and IOettes (a.k.a. "high coupon bonds") are similar in nature to those associated with IOs. Other similar instruments may develop in the future.

Under the Code, POs may generate taxable income from the current accrual of OID, without a corresponding distribution of cash to a fund.

**Inverse Floaters.** Inverse floaters may be issued by agencies or instrumentalities of the U.S. government, or by private issuers, including savings and loan associations, mortgage banks, commercial banks, investment banks and special purpose subsidiaries of the foregoing. Inverse floaters have greater volatility than other types of mortgage securities in which a fund invests (with the exception of stripped mortgage securities and there is a risk that the market value will vary from the amortized cost). Although inverse floaters are purchased and sold by institutional investors through several

investment banking firms acting as brokers or dealers, the market for such securities has not yet been fully developed. Accordingly, inverse floaters may be illiquid. Any illiquid inverse floaters, together with any other illiquid investments, will not exceed a fund's limitation on investments in illiquid securities.

Inverse floaters are derivative mortgage securities that are structured as a class of security that receives distributions on a pool of mortgage assets. Yields on inverse floaters move in the opposite direction of short-term interest rates and at an accelerated rate.

**Types of Credit Support.** Mortgage securities are often backed by a pool of assets representing the obligations of a number of different parties. To lessen the impact of an obligor's failure to make payments on underlying assets, mortgage securities may contain elements of credit support. A discussion of credit support is included in "Asset-Backed Securities."

#### **Municipal Obligations**

The two principal classifications of municipal obligations are general obligations and revenue obligations. General obligations are secured by the issuer's pledge of its full faith, credit and taxing power for the payment of principal and interest. Revenue obligations 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. For example, industrial development and pollution control bonds are in most cases revenue obligations since payment of principal and interest is dependent solely on the ability of the user of the facilities financed or the guarantor to meet its financial obligations, and in certain cases, the pledge of real and personal property as security for payment.

Issuers of municipal obligations are subject to the provisions of bankruptcy, insolvency and other laws affecting the rights and remedies of creditors, such as the Federal Bankruptcy Act, and laws, if any, that may be enacted by Congress or state legislatures extending the time for payment of principal or interest or both, or imposing other constraints upon enforcement of such obligations. There also is the possibility that as a result of litigation or other conditions, the power or ability of any one or more issuers to pay when due the principal of and interest on their municipal obligations may be affected.

Municipal Bonds. Municipal bonds are issued to obtain funding for various public purposes, including the construction of a wide range of public facilities such as airports, highways, bridges, schools, hospitals, housing, mass transportation, streets and water and sewer works. Other public purposes for which municipal bonds may be issued include refunding outstanding obligations, obtaining funds for general operating expenses and obtaining funds to lend to other public institutions and facilities. In addition, certain types of industrial development bonds are issued by or on behalf of public authorities to obtain funds for many types of local, privately operated facilities. Such debt instruments are considered municipal obligations if the interest paid on them is exempt from federal income tax. The payment of principal and interest by issuers of certain obligations purchased may be guaranteed by a letter of credit, note repurchase agreement, insurance or other credit facility agreement offered by a bank or other financial institution. Such guarantees and the creditworthiness of guarantors will be considered by a subadvisor in determining whether a municipal obligation meets investment quality requirements. No assurance can be given that a municipality or guarantor will be able to satisfy the payment of principal or interest on a municipal obligation.

The yields or returns of municipal bonds depend on a variety of factors, including general market conditions, effective marginal tax rates, the financial condition of the issuer, general conditions of the municipal bond market, the size of a particular offering, the maturity of the obligation, and the rating (if any) of the issue. The ratings of S&P, Moody's and Fitch represent their opinions as to the quality of various municipal bonds that they undertake to rate. It should be emphasized, however, that ratings are not absolute standards of quality. For example, depending on market conditions, municipal bonds with the same maturity and stated interest rate, but with different ratings, may nevertheless have the same yield. See Appendix A for a description of ratings. Many issuers of securities choose not to have their obligations rated. Although unrated securities eligible for purchase must be determined to be comparable in quality to securities having certain specified ratings, the market for unrated securities may not be as broad as for rated securities since many investors rely on rating organizations for credit appraisal. Yield disparities may occur for reasons not directly related to the investment quality of particular issues or the general movement of interest rates, due to such factors as changes in the overall demand or supply of various types of municipal bonds.

The effects of a widespread health crisis such as a global pandemic could affect the ability of states and their political subdivisions to make payments on debt obligations when due and could adversely impact the value of their bonds, which could negatively impact the performance of the fund.

*Municipal Bonds Issued by the Commonwealth of Puerto Rico.* Municipal obligations issued by the Commonwealth of Puerto Rico and its agencies, or other U.S. territories, generally are tax-exempt.

Adverse economic, market, political, or other conditions within Puerto Rico may negatively affect the value of a fund's holdings in municipal obligations issued by the Commonwealth of Puerto Rico and its agencies.

Puerto Rico has faced and continues to face significant fiscal challenges, including persistent government budget deficits, underfunded public pension benefit obligations, underfunded government retirement systems, sizable debt service obligations and a high unemployment rate. In recent years, several rating organizations have downgraded a number of securities issued in Puerto Rico to below investment-grade or placed them on "negative watch." Puerto Rico has previously missed payments on its general obligation debt. As a result of Puerto Rico's fiscal challenges, it entered into a process analogous to a bankruptcy proceeding in U.S. courts. Recently, Puerto Rico received court approval to be released from bankruptcy through a large restructuring of its U.S. municipal debt. The restructuring was recommended by an oversight board, an unelected body that shares power with elected officials, that is federally mandated to oversee Puerto Rico's finances. Pursuant to federal law, the oversight board will remain intact and can

only disband after Puerto Rico experiences four consecutive years of balanced budgets. Any future defaults, or actions by the oversight board, among other factors, could have a negative impact on the marketability, liquidity, or value of certain investments held by a fund and could reduce a fund's performance.

**Municipal Notes.** Municipal notes are short-term obligations of municipalities, generally with a maturity ranging from six months to three years. The principal types of such notes include tax, bond and revenue anticipation notes, project notes and construction loan notes.

*Tax-Anticipation Notes.* Tax anticipation notes are issued to finance working capital needs of municipalities. Generally, they are issued in anticipation of various tax revenues, such as income, sales, use and business taxes, and are specifically payable from these particular future tax revenues.

Bond Anticipation Notes. Bond anticipation notes are issued to provide interim financing until long-term bond financing can be arranged. In most cases, the long-term bonds then provide the funds for the repayment of the notes.

*Revenue Anticipation Notes*. Revenue anticipation notes are issued in expectation of receipt of specific types of revenue, other than taxes, such as federal revenues available under Federal Revenue Sharing Programs.

Project Notes. Project notes are backed by an agreement between a local issuing agency and the Federal Department of Housing and Urban Development ("HUD") and carry a U.S. government guarantee. These notes provide financing for a wide range of financial assistance programs for housing, redevelopment and related needs (such as low-income housing programs and urban renewal programs). Although they are the primary obligations of the local public housing agencies or local urban renewal agencies, the HUD agreement provides for the additional security of the full faith and credit of the U.S. government. Payment by the United States pursuant to its full faith and credit obligation does not impair the tax-exempt character of the income from project notes.

Construction Loan Notes. Construction loan notes are sold to provide construction financing. Permanent financing, the proceeds of which are applied to the payment of construction loan notes, is sometimes provided by a commitment by GNMA to purchase the loan, accompanied by a commitment by the Federal Housing Administration to insure mortgage advances thereunder. In other instances, permanent financing is provided by the commitments of banks to purchase the loan.

**Municipal Commercial Paper.** Municipal commercial paper is a short-term obligation of a municipality, generally issued at a discount with a maturity of less than one year. Such paper is likely to be issued to meet seasonal working capital needs of a municipality or interim construction financing. Municipal commercial paper is backed in many cases by letters of credit, lending agreements, note repurchase agreements or other credit facility agreements offered by banks and other institutions.

**High Yield (High Risk) Municipal Debt Obligations.** Municipal bonds rated "BBB" or "BB" by S&P or Fitch, or "Baa" or "Ba" by Moody's, or lower (and their unrated equivalents) are considered to have some speculative characteristics and, to varying degrees, can pose special risks generally involving the ability of the issuer to make payment of principal and interest to a greater extent than higher rated securities.

A subadvisor may be authorized to purchase lower-rated municipal bonds when, based upon price, yield and its assessment of quality, investment in these bonds is determined to be consistent with a fund's investment objectives. The subadvisor will evaluate and monitor the quality of all investments, including lower-rated bonds, and will dispose of these bonds as determined to be necessary to assure that the fund's portfolio is constituted in a manner consistent with these objectives. To the extent that a fund's investments in lower-rated municipal bonds emphasize obligations believed to be consistent with the goal of preserving capital, these obligations may not provide yields as high as those of other obligations having these ratings, and the differential in yields between these bonds and obligations with higher quality ratings may not be as significant as might otherwise be generally available. The Prospectus for certain funds includes additional information regarding a fund's ability to invest in lower-rated debt obligations under "Principal investment strategies."

## **Preferred Stocks**

Preferred stock generally has a preference to dividends and, upon liquidation, over an issuer's common stock but ranks junior to debt securities in an issuer's capital structure. Preferred stock generally pays dividends in cash (or additional shares of preferred stock) at a defined rate but, unlike interest payments on debt securities, preferred stock dividends are payable only if declared by the issuer's board of directors. Dividends on preferred stock may be cumulative, meaning that, in the event the issuer fails to make one or more dividend payments on the preferred stock, no dividends may be paid on the issuer's common stock until all unpaid preferred stock dividends have been paid. Preferred stock also may be subject to optional or mandatory redemption provisions.

#### Repurchase Agreements, Reverse Repurchase Agreements, and Sale-Buybacks

Repurchase agreements are arrangements involving the purchase of an obligation and the simultaneous agreement to resell the same obligation on demand or at a specified future date and at an agreed-upon price. A repurchase agreement can be viewed as a loan made by the fund to the seller of the obligation with such obligation serving as collateral for the seller's agreement to repay the amount borrowed with interest. Repurchase agreements provide the opportunity to earn a return on cash that is only temporarily available. Repurchase agreements may be entered with banks, brokers, or dealers. However, a repurchase agreement will only be entered with a broker or dealer if the broker or dealer agrees to deposit additional collateral should the value of the obligation purchased decrease below the resale price.

Generally, repurchase agreements are of a short duration, often less than one week but on occasion for longer periods. Securities subject to repurchase agreements will be valued every business day and additional collateral will be requested if necessary so that the value of the collateral is at least equal to the value of the repurchase obligation, including the interest accrued thereon.

A subadvisor shall engage in a repurchase agreement transaction only with those banks or broker dealers who meet the subadvisor's quantitative and qualitative criteria regarding creditworthiness, asset size and collateralization requirements. The Advisor also may engage in repurchase agreement transactions on behalf of the fund. The counterparties to a repurchase agreement transaction are limited to a:

- Federal Reserve System member bank;
- primary government securities dealer reporting to the Federal Reserve Bank of New York's Market Reports Division; or
- broker dealer that reports U.S. government securities positions to the Federal Reserve Board.

A fund also may participate in repurchase agreement transactions utilizing the settlement services of clearing firms that meet the subadvisor's creditworthiness requirements.

The Advisor and the subadvisor will continuously monitor repurchase agreement transactions to ensure that the collateral held with respect to a repurchase agreement equals or exceeds the amount of the obligation.

The risk of a repurchase agreement transaction is limited to the ability of the seller to pay the agreed-upon sum on the delivery date. In the event of bankruptcy or other default by the seller, the instrument purchased may decline in value, interest payable on the instrument may be lost and there may be possible difficulties and delays in obtaining collateral and delays and expense in liquidating the instrument. If an issuer of a repurchase agreement fails to repurchase the underlying obligation, the loss, if any, would be the difference between the repurchase price and the underlying obligation's market value. A fund also might incur certain costs in liquidating the underlying obligation. Moreover, if bankruptcy or other insolvency proceedings are commenced with respect to the seller, realization upon the underlying obligation might be delayed or limited.

Under a reverse repurchase agreement, a fund sells a debt security and agrees to repurchase it at an agreed-upon time and at an agreed-upon price. The fund retains record ownership of the security and the right to receive interest and principal payments thereon. At an agreed-upon future date, the fund repurchases the security by remitting the proceeds previously received, plus interest. The difference between the amount the fund receives for the security and the amount it pays on repurchase is payment of interest. In certain types of agreements, there is no agreed-upon repurchase date and interest payments are calculated daily, often based on the prevailing overnight repurchase rate. A reverse repurchase agreement may be considered a form of leveraging and may, therefore, increase fluctuations in a fund's NAV per share.

The fund may effect simultaneous purchase and sale transactions that are known as "sale-buybacks." A sale-buyback is similar to a reverse repurchase agreement, except that in a sale-buyback, the counterparty that purchases the security is entitled to receive any principal or interest payments made on the underlying security pending settlement of the fund's repurchase of the underlying security.

Subject to the requirements noted under "Government Regulation of Derivatives", a fund will either treat reverse repurchase agreements and similar financings, including sale-buybacks, as derivatives subject to the Derivatives Rule limitations or not as derivatives and treat reverse repurchase agreements and similar financings transactions as senior securities equivalent to bank borrowings subject to asset coverage requirements of Section 18 of the 1940 Act. A fund will ensure that its repurchase agreement transactions are "fully collateralized" by maintaining in a custodial account cash, Treasury bills, other U.S. government securities, or certain other liquid assets having an aggregate value at least equal to the amount of such commitment to repurchase including accrued interest, until payment is made.

**Foreign Repurchase Agreements.** Foreign repurchase agreements involve an agreement to purchase a foreign security and to sell that security back to the original seller at an agreed-upon price in either U.S. dollars or foreign currency. Unlike typical U.S. repurchase agreements, foreign repurchase agreements may not be fully collateralized at all times. The value of a security purchased may be more or less than the price at which the counterparty has agreed to repurchase the security. In the event of default by the counterparty, the fund may suffer a loss if the value of the security purchased is less than the agreed-upon repurchase price, or if it is unable to successfully assert a claim to the collateral under foreign laws. As a result, foreign repurchase agreements may involve higher credit risks than repurchase agreements in U.S. markets, as well as risks associated with currency fluctuations. In addition, as with other emerging market investments, repurchase agreements with counterparties located in emerging markets, or relating to emerging markets, may involve issuers or counterparties with lower credit ratings than typical U.S. repurchase agreements.

#### **Short Sales**

The fund may engage in short sales and short sales "against the box." In a short sale against the box, a fund borrows securities from a broker-dealer and sells the borrowed securities, and at all times during the transaction, a fund either owns or has the right to acquire the same securities at no extra cost. If the price of the security has declined at the time a fund is required to deliver the security, a fund will benefit from the difference in the price of a security has increased, the fund will be required to pay the difference.

In addition, a fund may sell a security it does not own in anticipation of a decline in the market value of that security (a "short sale"). To complete such a transaction, a fund must borrow the security to make delivery to the buyer. The fund is then obligated to replace the security borrowed by purchasing it at market price at the time of replacement. The price at such time may be more or less than the price at which the security was sold by the fund. Until the security is replaced, the fund is required to pay the lender any dividends or interest which accrues during the period of the loan. To borrow the security,

the fund also may be required to pay a premium, which would increase the cost of the security sold. The proceeds of the short sale are typically retained by the broker to meet margin requirements until the short position is closed out. Please see "Government Regulation of Derivatives" section for additional information.

The fund will incur a loss as a result of the short sale if the price of the security increases between the date of the short sale and the date on which the fund replaced the borrowed security and theoretically the fund's loss could be unlimited. The fund will generally realize a gain if the security declines in price between those dates. This result is the opposite of what one would expect from a cash purchase of a long position in a security. The amount of any gain will be decreased, and the amount of any loss increased, by the amount of any premium, dividends or interest the fund may be required to pay in connection with a short sale. Short selling may amplify changes in a fund's NAV. Short selling also may produce higher than normal portfolio turnover, which may result in increased transaction costs to a fund.

#### **Short-Term Trading**

Short-term trading means the purchase and subsequent sale of a security after it has been held for a relatively brief period of time. If and to the extent consistent with and permitted by its investment objective and policies, the fund may engage in short-term trading in response to stock market conditions, changes in interest rates or other economic trends and developments, or to take advantage of yield disparities between various fixed-income securities in order to realize capital gains or improve income. Short-term trading may have the effect of increasing portfolio turnover rate. A high rate of portfolio turnover (100% or greater) involves correspondingly greater brokerage transaction expenses and may make it more difficult for the fund to qualify as a RIC for federal income tax purposes (for additional information about qualification as a RIC under the Code, see "Additional Information Concerning Taxes" in this SAI). See specific fund details in the "Portfolio Turnover" section of this SAI.

## **Sovereign Debt Obligations**

Sovereign debt obligations are issued or guaranteed by foreign governments or their agencies. Sovereign debt may be in the form of conventional securities or other types of debt instruments such as loan or loan participations. Typically, sovereign debt of developing countries may involve a high degree of risk and may be in default or present the risk of default, however, sovereign debt of developed countries also may involve a high degree of risk and may be in default or present the risk of default. Governments rely on taxes and other revenue sources to pay interest and principal on their debt obligations, and governmental entities responsible for repayment of the debt may be unable or unwilling to repay principal and pay interest when due and may require renegotiation or rescheduling of debt payments. The payment of principal and interest on these obligations may be adversely affected by a variety of factors, including economic results, changes in interest and exchange rates, changes in debt ratings, a limited tax base or limited revenue sources, natural disasters, or other economic or credit problems. In addition, prospects for repayment and payment of interest may depend on political as well as economic factors. Defaults in sovereign debt obligations, or the perceived risk of default, also may impair the market for other securities and debt instruments, including securities issued by banks and other entities holding such sovereign debt, and negatively impact the funds.

## **Structured or Hybrid Notes**

The distinguishing feature of a "structured" or "hybrid note" is that the amount of interest and/or principal payable on the note is based on the performance of a benchmark asset or market other than fixed income securities or interest rates. Examples of these benchmarks include stock prices, currency exchange rates and physical commodity prices. Investing in a structured note allows a fund to gain exposure to the benchmark market while fixing the maximum loss that the fund may experience in the event that the market does not perform as expected. Depending on the terms of the note, a fund may forgo all or part of the interest and principal that would be payable on a comparable conventional note; the fund's loss cannot exceed this forgone interest and/or principal. An investment in structured or hybrid notes involves risks similar to those associated with a direct investment in the benchmark asset.

## **U.S. Government and Government Agency Obligations**

**U.S. Government Obligations.** U.S. government obligations are debt securities issued or guaranteed as to principal or interest by the U.S. Treasury. These securities include treasury bills, notes and bonds.

**GNMA Obligations.** GNMA obligations are mortgage-backed securities guaranteed by the GNMA, which guarantee is supported by the full faith and credit of the U.S. government.

**U.S. Agency Obligations.** U.S. government agency obligations are debt securities issued or guaranteed as to principal or interest by an agency or instrumentality of the U.S. government pursuant to authority granted by Congress. U.S. government agency obligations include, but are not limited to:

- SLMA;
- FHLBs;
- FICBs; and
- Fannie Mae.

**U.S. Instrumentality Obligations.** U.S. instrumentality obligations include, but are not limited to, those issued by the Export-Import Bank and Farmers Home Administration.

Some obligations issued or guaranteed by U.S. government agencies or instrumentalities are supported by the right of the issuer to borrow from the U.S. Treasury or the Federal Reserve Banks, such as those issued by FICBs. Others, such as those issued by Fannie Mae, FHLBs and Freddie Mac, are

supported by discretionary authority of the U.S. government to purchase certain obligations of the agency or instrumentality. In addition, other obligations, such as those issued by the SLMA, are supported only by the credit of the agency or instrumentality. There also are separately traded interest components of securities issued or guaranteed by the U.S. Treasury.

No assurance can be given that the U.S. government will provide financial support for the obligations of such U.S. government-sponsored agencies or instrumentalities in the future, since it is not obligated to do so by law. In this SAI, "U.S. government securities" refers not only to securities issued or guaranteed as to principal or interest by the U.S. Treasury but also to securities that are backed only by their own credit and not the full faith and credit of the U.S. government.

It is possible that the availability and the marketability (liquidity) of the securities discussed in this section could be adversely affected by actions of the U.S. government to tighten the availability of its credit. In 2008, FHFA, an agency of the U.S. government, placed Fannie Mae and Freddie Mac into conservatorship, a statutory process with the objective of returning the entities to normal business operations. The FHFA will act as the conservator to operate Fannie Mae and Freddie Mac until they are stabilized. It is unclear what effect this conservatorship will have on the securities issued or guaranteed by Fannie Mae or Freddie Mac.

## **Variable and Floating Rate Obligations**

Investments in floating or variable rate securities normally will involve industrial development or revenue bonds, which provide that the rate of interest is set as a specific percentage of a designated base rate, such as rates of Treasury Bonds or Bills or the prime rate at a major commercial bank. In addition, a bondholder can demand payment of the obligations on behalf of the investing fund on short notice at par plus accrued interest, which amount may be more or less than the amount the bondholder paid for them. The maturity of floating or variable rate obligations (including participation interests therein) is deemed to be the longer of: (i) the notice period required before a fund is entitled to receive payment of the obligation upon demand; or (ii) the period remaining until the obligation's next interest rate adjustment. If not redeemed by the investor through the demand feature, the obligations mature on a specified date, which may range up to thirty years from the date of issuance.

#### Warrants

Warrants may trade independently of the underlying securities. Warrants are rights to purchase securities at specific prices and are valid for a specific period of time. Warrant prices do not necessarily move parallel to the prices of the underlying securities, and warrant holders receive no dividends and have no voting rights or rights with respect to the assets of an issuer. The price of a warrant may be more volatile than the price of its underlying security, and a warrant may offer greater potential for capital appreciation as well as capital loss. Warrants cease to have value if not exercised prior to the expiration date. These factors can make warrants more speculative than other types of investments.

#### When-Issued/Delayed Delivery/Forward Commitment Securities

A fund may purchase or sell securities on a "when-issued," "delayed-delivery" or "forward commitment" basis. When-issued, delayed-delivery or forward-commitment transactions involve a commitment to purchase or sell securities at a predetermined price or yield in which payment and delivery take place after the customary settlement for such securities (which is typically one month or more after trade date). When purchasing securities in one of these types of transactions, payment for the securities is not required until the delivery date, however, the purchaser assumes the rights and risks of ownership, including the risks of price and yield fluctuations and the risk that the security will not be delivered. When a fund has sold securities pursuant to one of these transactions, it will not participate in further gains or losses with respect to that security. At the time of delivery, the value of when-issued, delayed-delivery or forward commitment securities may be more or less than the transaction price, and the yields then available in the market may be higher or lower than those obtained in the transaction.

Under normal circumstances, when a fund purchases securities on a when-issued or forward commitment basis, it will take delivery of the securities, but a fund may, if deemed advisable, sell the securities before the settlement date. Forward contracts may settle in cash between the counterparty and the fund or by physical settlement of the underlying securities, and a fund may renegotiate or roll over a forward commitment transaction. In general, a fund does not pay for the securities, or start earning interest on them, or deliver or take possession of securities until the obligations are scheduled to be settled. In such transactions, no cash changes hands on the trade date, however, if the transaction is collateralized, the exchange of margin may take place between the fund and the counterparty according to an agreed-upon schedule. A fund does, however, record the transaction and reflect the value each day of the securities in determining its NAV.

When-issued or forward settling securities transactions physically settling within 35-days are deemed not to involve a senior security. When-issued or forward settling securities transactions that do not physically settle within 35-days are required to be treated as derivatives transactions in compliance with the Derivatives Rule as outlined in the "Government Regulation of Derivatives" section.

#### **Yield Curve Notes**

Inverse floating rate securities include, but are not limited to, an inverse floating rate class of a government agency-issued yield curve note. A yield curve note is a fixed-income security that bears interest at a floating rate that is reset periodically based on an interest rate benchmark. The interest rate resets on a yield curve note in the opposite direction from the interest rate benchmark.

## Zero Coupon Securities, Deferred Interest Bonds and Pay-In-Kind Bonds

Zero coupon securities, deferred interest bonds and pay-in-kind bonds involve special risk considerations. Zero coupon securities and deferred interest bonds are debt securities that pay no cash income but are sold at substantial discounts from their value at maturity. While zero coupon bonds do not

require the periodic payment of interest, deferred interest bonds provide for a period of delay before the regular payment of interest begins. When a zero coupon security or a deferred interest bond is held to maturity, its entire return, which consists of the amortization of discount, comes from the difference between its purchase price and its maturity value. This difference is known at the time of purchase, so that investors holding these securities until maturity know at the time of their investment what the return on their investment will be. Pay-in-kind bonds are bonds that pay all or a portion of their interest in the form of debt or equity securities.

Zero coupon securities, deferred interest bonds and pay-in-kind bonds are subject to greater price fluctuations in response to changes in interest rates than ordinary interest-paying debt securities with similar maturities. The value of zero coupon securities and deferred interest bonds usually appreciates during periods of declining interest rates and usually depreciates during periods of rising interest rates.

**Issuers of Zero Coupon Securities and Pay-In-Kind Bonds.** Zero coupon securities and pay-in-kind bonds may be issued by a wide variety of corporate and governmental issuers. Although zero coupon securities and pay-in-kind bonds are generally not traded on a national securities exchange, these securities are widely traded by brokers and dealers and, to the extent they are widely traded, will not be considered illiquid for the purposes of the investment restriction under "Illiquid Securities."

**Tax Considerations.** Current federal income tax law requires the holder of a zero coupon security or certain pay-in-kind bonds to accrue income with respect to these securities prior to the receipt of cash payments. To maintain its qualification as a RIC under the Code and avoid liability for federal income and excise taxes, a fund may be required to distribute income accrued with respect to these securities and may have to dispose of portfolio securities under disadvantageous circumstances in order to generate cash to satisfy these distribution requirements.

#### **RISK FACTORS**

The risks of investing in certain types of securities are described below. Risks are only applicable to the fund if and to the extent that corresponding investments, or indirect exposures to such investments through derivative contracts, are consistent with and permitted by the fund's investment objectives and policies. The value of an individual security or a particular type of security can be more volatile than the market as a whole and can perform differently than the value of the market as a whole. By owning shares of the underlying funds, each fund of funds indirectly invests in the securities and instruments held by the underlying funds and bears the same risks of such underlying funds.

#### Asia Risk (including Australia and New Zealand)

The developed Asian economies are heavily dependent on international trade and can be adversely affected by trade barriers, exchange controls, and other measures imposed or negotiated by the countries with which they trade, principally, the United States, Japan, China, and the EU. The countries in this region are also heavily dependent on exports and are thus particularly vulnerable to any weakening in global demand for these products. The Australian and New Zealand economies are dependent on the economies of Asian countries and on the price and demand for agricultural products and natural resources. Additionally, Australia and New Zealand are located in a region that has historically been prone to natural disasters. Any natural disaster in the region could negatively impact the economies of Australia and New Zealand and affect the value of securities held by the fund.

## **Cash Holdings Risk**

A fund may be subject to delays in making investments when significant purchases or redemptions of fund shares cause the fund to have an unusually large cash position. When the fund has a higher than normal cash position, it may incur "cash drag," which is the opportunity cost of holding a significant cash position. This significant cash position might cause the fund to miss investment opportunities it otherwise would have benefited from if fully invested, or might cause the fund to pay more for investments in a rising market, potentially reducing fund performance.

#### **Collateralized Debt Obligations**

The risks of an investment in a CDO depend largely on the quality of the collateral securities and the class of the instrument in which a fund invests. Normally, CDOs are privately offered and sold, and thus, are not registered under the securities laws. As a result, investments in CDOs may be characterized by a fund as illiquid, however an active dealer market may exist for CDOs allowing them to qualify for treatment as liquid under Rule 144A transactions. In addition to the normal risks associated with fixed-income securities discussed elsewhere in this SAI and the Prospectus (e.g., interest rate risk and default risk), CDOs carry risks including, but are not limited to the possibility that: (i) distributions from collateral securities will not be adequate to make interest or other payments; (ii) the quality of the collateral may decline in value or default; (iii) a fund may invest in CDO classes that are subordinate to other classes of the CDO; and (iv) the complex structure of the CDO may not be fully understood at the time of investment and may produce disputes with the issuer or unexpected investment results.

#### **Equity Securities**

Equity securities include common, preferred and convertible preferred stocks and securities the values of which are tied to the price of stocks, such as rights, warrants and convertible debt securities. Common and preferred stocks represent equity ownership in a company. Stock markets are volatile. The price of equity securities will fluctuate and can decline and reduce the value of a fund's investment in equities. The price of equity securities fluctuates based on changes in a company's financial condition and overall market and economic conditions. The value of equity securities purchased by a fund could decline if the financial condition of the issuers of these securities declines or if overall market and economic conditions deteriorate. Even funds that invest in high quality or "blue chip" equity securities or securities of established companies with large market capitalizations (which generally have strong financial characteristics) can be negatively impacted by poor overall market and economic conditions. Companies with large market capitalizations also may have less growth potential than smaller companies and may be able to react less quickly to change in the marketplace.

#### **ESG Integration Risk**

Certain subadvisors may integrate research on environmental, social and governance ("ESG") factors into a fund's investment process. Such subadvisors may consider ESG factors that it deems relevant or additive, along with other material factors and analysis, when managing a fund. ESG factors may include, but are not limited to, matters regarding board diversity, climate change policies, and supply chain and human rights policies. Incorporating ESG criteria and making investment decisions based on certain ESG characteristics, as determined by a subadvisor, carries the risk that a fund may perform differently, including underperforming, funds that do not utilize ESG criteria, or funds that utilize different ESG criteria. Integration of ESG factors into a fund's investment process may result in a subadvisor making different investment decisions for a fund than for a fund with a similar investment universe and/or investment style that does not incorporate such considerations in its investment strategy or processes, and a fund's investment performance may be affected. Integration of ESG factors into a fund's investment process does not preclude a fund from including companies with low ESG characteristics or excluding companies with high ESG characteristics in the fund's investments.

The ESG characteristics utilized in a fund's investment process may change over time, and different ESG characteristics may be relevant to different investments. Successful integration of ESG factors will depend on a subadvisor's skill in researching, identifying, and applying these factors, as well as on the availability of relevant data. The method of evaluating ESG factors and subsequent impact on portfolio composition, performance, proxy voting decisions and other factors, is subject to the interpretation of a subadvisor in accordance with the fund's investment objective and strategies. ESG factors may be evaluated differently by different subadvisors, and may not carry the same meaning to all investors and subadvisors. The regulatory landscape with respect to ESG investing in the United States is evolving and any future rules or regulations may require a fund to change its investment process with respect to ESG integration.

## **European Risk**

Countries in Europe may be significantly affected by fiscal and monetary controls implemented by the EU and EMU, which require member countries to comply with restrictions on inflation rates, deficits, interest rates, debt levels and fiscal and monetary controls. Decreasing imports or exports, changes in governmental or other regulations on trade, changes in the exchange rate or dissolution of the Euro, the default or threat of default by one or more EU member countries on its sovereign debt, and/or an economic recession in one or more EU member countries may have a significant adverse effect on other European economies and major trading partners outside Europe.

In recent years, the European financial markets have experienced volatility and adverse trends due to concerns about economic downturns, rising government debt levels and the possible default of government debt in several European countries. The European Central Bank and IMF have previously bailed-out several European countries. There is no guarantee that these institutions will continue to provide financial support, and markets may react adversely to any reduction in financial support. A default or debt restructuring by any European country can adversely impact holders of that country's debt and sellers of credit default swaps linked to that country's creditworthiness, which may be located in countries other than those listed above, and can affect exposures to other EU countries and their financial companies as well.

Uncertainties surrounding the sovereign debt of a number of EU countries and the viability of the EU have disrupted and may in the future disrupt markets in the United States and around the world. If one or more countries leave the EU, as the UK did in January of 2020 (commonly referred to as "Brexit"), or the EU dissolves, the global securities markets likely will be significantly disrupted. It is also possible that various countries within the UK, such as Scotland or Northern Ireland, could seek to separate and remain a part of the EU. Other secessionist movements including countries seeking to abandon the Euro or withdraw from the EU may cause volatility and uncertainty in the EU.

The UK has one of the largest economies in Europe and is a major trading partner with the EU countries and the United States. The UK's economy, which is heavily dominated by financial services, may be impacted by a slowdown in the financial services sector.

Investing in the securities of Eastern European issuers is highly speculative and involves risks not usually associated with investing in the more developed markets of Western Europea. Securities markets of Eastern European countries typically are less efficient and have lower trading volume, lower liquidity, and higher volatility than more developed markets. Eastern European economies also may be particularly susceptible to disruption in the international credit market due to their reliance on bank related inflows of capital.

To the extent that a fund invests in European securities, it may be exposed to these risks through its direct investments in such securities, including sovereign debt, or indirectly through investments in money market funds and financial institutions with significant investments in such securities. In addition, Russia's increasing international assertiveness could negatively impact EU and Eastern European economic activity. Please see "Market Events" for additional information regarding risks related to sanctions imposed on Russia.

#### **Fixed-Income Securities**

Fixed-income securities are generally subject to two principal types of risk: (1) interest-rate risk; and (2) credit quality risk. Fixed-income securities are also subject to liquidity risk.

**Interest Rate Risk.** Fixed-income securities are affected by changes in interest rates. When interest rates decline, the market value of the fixed-income securities generally can be expected to rise. Conversely, when interest rates rise, the market value of fixed-income securities generally can be expected to decline.

The longer a fixed-income security's duration, the more sensitive it will be to changes in interest rates. Similarly, a fund with a longer average portfolio duration will be more sensitive to changes in interest rates than a fund with a shorter average portfolio duration. Duration is a measure used to

determine the sensitivity of a security's price to changes in interest rates that incorporates a security's yield, coupon, final maturity, and call features, among other characteristics. All other things remaining equal, for each one percentage point increase in interest rates, the value of a portfolio of fixed-income investments would generally be expected to decline by one percent for every year of the portfolio's average duration above zero. For example, the price of a bond fund with an average duration of eight years would be expected to fall approximately 8% if interest rates rose by one percentage point. The maturity of a security, another commonly used measure of price sensitivity, measures only the time until final payment is due, whereas duration takes into account the pattern of all payments of interest and principal on a security over time, including how these payments are affected by prepayments and by changes in interest rates, as well as the time until an interest rate is reset (in the case of variable-rate securities).

In response to certain economic conditions, including periods of high inflation, governmental authorities and regulators may respond with significant fiscal and monetary policy changes such as raising interest rates. The fund may be subject to heightened interest rate risk when the Federal Reserve Board (Fed) raises interest rates. Recent and potential future changes in government monetary policy may affect interest rates. It is difficult to accurately predict the timing, frequency or magnitude of potential interest rate increases or decreases by the Fed and the evaluation of macro-economic and other conditions that could cause a change in approach in the future. If the Fed and other central banks increase the federal funds rate and equivalent rates, such increases generally will cause market interest rates to rise, and could cause the value of a fund's investments, and the fund's NAV, to decline, potentially suddenly and significantly. As a result, the fund may experience high redemptions and, as a result, increased portfolio turnover, which could increase the costs that the fund incurs and may negatively impact the fund's performance.

In certain market conditions, governmental authorities and regulators may considerably lower interest rates, which, in some cases could result in negative interest rates. These actions, including their reversal or potential ineffectiveness, could further increase volatility in securities and other financial markets and reduce market liquidity. To the extent the fund has a bank deposit or holds a debt instrument with a negative interest rate to maturity, the fund would generate a negative return on that investment. Similarly, negative rates on investments by money market funds and similar cash management products could lead to losses on investments, including on investments of the fund's uninvested cash.

**Credit Quality Risk.** Fixed-income securities are subject to the risk that the issuer of the security will not repay all or a portion of the principal borrowed and will not make all interest payments. If the credit quality of a fixed-income security deteriorates after a fund has purchased the security, the market value of the security may decrease and lead to a decrease in the value of the fund's investments. Funds that may invest in lower rated fixed-income securities are riskier than funds that may invest in higher rated fixed-income securities.

Liquidity Risk. Liquidity risk may result from the lack of an active market, the reduced number of traditional market participants, or the reduced capacity of traditional market participants to make a market in fixed-income securities. The capacity of traditional dealers to engage in fixed-income trading has not kept pace with the bond market's growth. As a result, dealer inventories of corporate bonds, which indicate the ability to "make markets," i.e., buy or sell a security at the quoted bid and ask price, respectively, are at or near historic lows relative to market size. Because market makers provide stability to fixed-income markets, the significant reduction in dealer inventories could lead to decreased liquidity and increased volatility, which may become exacerbated during periods of economic or political stress. In addition, liquidity risk may be magnified in a rising interest rate environment in which investor redemptions from fixed-income funds may be higher than normal; the selling of fixed-income securities to satisfy shareholder redemptions may result in an increased supply of such securities during periods of reduced investor demand due to a lack of buyers, thereby impairing the fund's ability to sell such securities. The secondary market for certain tax-exempt securities tends to be less well-developed or liquid than many other securities markets, which may adversely affect a fund's ability to sell such securities at attractive prices.

## **Floating Rate Loans Risk**

Floating rate loans are generally rated below investment-grade, or if unrated, determined by the manager to be of comparable quality. They are generally considered speculative because they present a greater risk of loss, including default, than higher quality debt instruments. Such investments may, under certain circumstances, be particularly susceptible to liquidity and valuation risks. Although certain floating rate loans are collateralized, there is no guarantee that the value of the collateral will be sufficient or available to satisfy the borrower's obligation. In times of unusual or adverse market, economic or political conditions, floating rate loans may experience higher than normal default rates. In the event of a serious credit event the value of the fund's investments in floating rate loans are more likely to decline. The secondary market for floating rate loans is limited and, therefore, the fund's ability to sell or realize the full value of its investment in these loans to reinvest sale proceeds or to meet redemption obligations may be impaired. In addition, floating rate loans generally are subject to extended settlement periods that may be longer than seven days. As a result, the fund may be adversely affected by selling other investments at an unfavorable time and/or under unfavorable conditions to meet redemption requests or pursue other investment opportunities. In addition, certain floating rate loans may be "covenant-lite" loans that may contain fewer or less restrictive covenants on the borrower or may contain other borrower-friendly characteristics. The 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 the usual covenants.

In certain circumstances, floating rate loans may not be deemed to be securities. As a result, the fund may not have the protection of the anti-fraud provisions of the federal securities laws. In such cases, the fund generally must rely on the contractual provisions in the loan agreement and common-law fraud protections under applicable state law.

#### **Foreign Securities**

**Currency Fluctuations.** Investments in foreign securities may cause a fund to lose money when converting investments from foreign currencies into U.S. dollars. A fund may attempt to lock in an exchange rate by purchasing a foreign currency exchange contract prior to the settlement of an investment in a foreign security. However, the fund may not always be successful in doing so, and it could still lose money.

**Political and Economic Conditions.** Investments in foreign securities subject a fund to the political or economic conditions of the foreign country. These conditions could cause a fund's investments to lose value if these conditions deteriorate for any reason. This risk increases in the case of emerging market countries which are more likely to be politically unstable. Political instability could cause the value of any investment in the securities of an issuer based in a foreign country to decrease or could prevent or delay a fund from selling its investment and taking the money out of the country.

**Removal of Proceeds of Investments from a Foreign Country.** Foreign countries, especially emerging market countries, often have currency controls or restrictions that may prevent or delay a fund from taking money out of the country or may impose additional taxes on money removed from the country. Therefore, a fund could lose money if it is not permitted to remove capital from the country or if there is a delay in taking the assets out of the country, since the value of the assets could decline during this period, or the exchange rate to convert the assets into U.S. dollars could worsen.

**Nationalization of Assets.** Investments in foreign securities subject a fund to the risk that the company issuing the security may be nationalized. If the company is nationalized, the value of the company's securities could decrease in value or even become worthless.

**Settlement of Sales.** Foreign countries, especially emerging market countries, also may have problems associated with settlement of sales. Such problems could cause a fund to suffer a loss if a security to be sold declines in value while settlement of the sale is delayed.

**Investor Protection Standards.** Foreign countries, especially emerging market countries, may have less stringent investor protection and disclosure standards than the U.S. Therefore, when making a decision to purchase a security for a fund, a subadvisor may not be aware of problems associated with the company issuing the security and may not enjoy the same legal rights as those provided in the U.S.

Securities of Emerging Market Issuers or Countries. The risks described above apply to an even greater extent to investments in emerging markets. The securities markets of emerging countries are generally smaller, less developed, less liquid, and more volatile than the securities markets of the United States and developed foreign countries. In addition, the securities markets of emerging countries may be subject to a lower level of monitoring and regulation. Government enforcement of existing securities regulations also has been extremely limited, and any such enforcement may be arbitrary and the results difficult to predict with any degree of certainty. Many emerging countries have experienced substantial, and in some periods extremely high, rates of inflation for many years. Inflation and rapid fluctuations in inflation rates have had and may continue to have very negative effects on the economies and securities markets of some emerging countries. Economies in emerging markets generally are heavily dependent upon international trade and, accordingly, have been and may continue to be affected adversely by trade barriers, exchange controls, managed adjustments in relative currency values, and other protectionist measures imposed or negotiated by the countries with which they trade. Economies in emerging markets also have been and may continue to be adversely affected by economic conditions in the countries with which they trade. The economies of countries with emerging markets also may be predominantly based on only a few industries or dependent on revenues from particular commodities. In many cases, governments of emerging market countries continue to exercise significant control over their economies, and government actions relative to the economy, as well as economic developments generally, may affect the capacity of issuers of debt instruments to make payments on their debt obligations, regardless of their financial condition.

Restrictions on Investments. There may be unexpected restrictions on investments in companies located in certain foreign countries. For example, on November 12, 2020, the President of the United States signed an Executive Order prohibiting U.S. persons from purchasing or investing in publicly-traded securities of companies identified by the U.S. government as "Communist Chinese military companies," or in instruments that are derivative of, or are designed to provide investment exposure to, such securities. In addition, to the extent that a fund holds such a security, one or more fund intermediaries may decline to process customer orders with respect to such fund unless and until certain representations are made by the fund or the prohibited holdings are divested. As a result of forced sales of a security, or inability to participate in an investment the manager otherwise believes is attractive, a fund may incur losses.

#### **Gaming-Tribal Authority Investments**

The value of the fund's investments in securities issued by gaming companies, including gaming facilities operated by Indian (Native American) tribal authorities, is subject to legislative or regulatory changes, adverse market conditions, and/or increased competition affecting the gaming sector. Securities of gaming companies may be considered speculative, and generally exhibit greater volatility than the overall market. The market value of gaming company securities may fluctuate widely due to unpredictable earnings, due in part to changing consumer tastes and intense competition, strong reaction to technological developments, and the threat of increased government regulation.

Securities issued by Indian tribal authorities are subject to particular risks. Indian tribes enjoy sovereign immunity, which is the legal privilege by which the United States federal, state, and tribal governments cannot be sued without their consent. In order to sue an Indian tribe (or an agency or instrumentality thereof), the tribe must have effectively waived its sovereign immunity with respect to the matter in dispute. Certain Indian tribal authorities have agreed to waive their sovereign immunity in connection with their outstanding debt obligations. Generally, waivers of sovereign immunity have been held to be enforceable against Indian tribes. Nevertheless, if a waiver of sovereign immunity is held to be ineffective, claimants, including investors in Indian tribal authority securities (such as the fund), could be precluded from judicially enforcing their rights and remedies.

Further, in most commercial disputes with Indian tribes, it may be difficult or impossible to obtain federal court jurisdiction. A commercial dispute may not present a federal question, and an Indian tribe may not be considered a citizen of any state for purposes of establishing diversity jurisdiction. The U.S. Supreme Court has held that jurisdiction in a tribal court must be exhausted before any dispute can be heard in an appropriate federal court. In cases where the jurisdiction of the tribal forum is disputed, the tribal court first must rule as to the limits of its own jurisdiction. Such jurisdictional issues, as well as the general view that Indian tribes are not considered to be subject to ordinary bankruptcy proceedings, may be disadvantageous to holders of obligations issued by Indian tribal authorities, including the fund.

#### **Greater China Region Risk**

Investments in the Greater China region are subject to special risks, such as less developed or less efficient trading markets, restrictions on monetary repatriation and possible seizure, nationalization or expropriation of assets. Taiwan's history of political contention with China has resulted in ongoing tensions between the two countries and, at times, threats of military conflict. Investments in Taiwan could be adversely affected by its political and economic relationship with China. In addition, the willingness of the government of the PRC to support the Mainland China and Hong Kong economies and markets is uncertain, and changes in government policy could significantly affect the markets in both Hong Kong and China. For example, a government may restrict investment in companies or industries considered important to national interests, or intervene in the financial markets, such as by imposing trading restrictions, or banning or curtailing short selling. The PRC also maintains strict currency controls and imposes repatriation restrictions in order to achieve economic, trade and political objectives and regularly intervenes in the currency market. The imposition of currency controls and repatriation restrictions may negatively impact the performance and liquidity of a fund as capital may become trapped in the PRC. Chinese yuan currency exchange rates can be very volatile and can change quickly and unpredictably. A small number of companies and industries may generally represent a relatively large portion of the Greater China market. Consequently, a fund may experience greater price volatility and significantly lower liquidity than a portfolio invested solely in equity securities of U.S. issuers. These companies and industries also may be subject to greater sensitivity to adverse political, economic or regulatory developments generally affecting the market (see "Risk Factors – Foreign Securities").

To the extent a fund invests in securities of Chinese issuers, it may be subject to certain risks associated with variable interest entities ("VIEs"). VIEs are widely used by China-based companies where China restricts or prohibits foreign ownership in certain sectors, including telecommunications, technology, media, and education. In a typical VIE structure, a shell company is set up in an offshore jurisdiction and enters into contractual arrangements with a China-based operating company. The VIE lists on a U.S. exchange and investors then purchase the stock issued by the VIE. The VIE structure is designed to provide investors with economic exposure to the Chinese company that replicates equity ownership, without providing actual equity ownership.

VIE structures do not offer the same level of investor protections as direct ownership and investors may experience losses if VIE structures are altered, contractual disputes emerge, or the legal status of the VIE structure is prohibited under Chinese law. Additionally, significant portions of the Chinese securities markets may also become rapidly illiquid, as Chinese issuers have the ability to suspend the trading of their equity securities, and have shown a willingness to exercise that option in response to market volatility and other events.

The legal status of the VIE structure remains uncertain under Chinese law. There is risk that the Chinese government may cease to tolerate such VIE structures at any time or impose new restrictions on the structure, in each case either generally or with respect to specific issuers. If new laws, rules or regulations relating to VIE structures are adopted, investors, including a fund, could suffer substantial, detrimental, and possibly permanent losses with little or no recourse available.

In addition, VIEs may be delisted if they do not meet U.S. accounting standards and auditor oversight requirements. Delisting would significantly decrease the liquidity and value of the securities of these companies, decrease the ability of a fund to invest in such securities and may increase the expenses of a fund if it is required to seek alternative markets in which to invest in such securities.

## High Yield (High Risk) Securities

General. A fund may invest in high yield (high risk) securities, consistent with its investment objectives and policies. High yield (high risk) securities (also known as "junk bonds") are those rated below investment grade and comparable unrated securities. These securities offer yields that fluctuate over time, but generally are superior to the yields offered by higher-rated securities. However, securities rated below investment grade also have greater risks than higher-rated securities as described below. Investments in securities rated below-investment-grade that are eligible for purchase by certain funds are described as "speculative" by Moody's, S&P, and Fitch. Investment in lower rated corporate debt securities ("high yield securities" or "junk bonds") and securities of distressed companies generally provides greater income and increased opportunity for capital appreciation than investments in higher quality securities, but they also typically entail greater price volatility and principal and income risk. Securities of distressed companies include both debt and equity securities. High yield securities and debt securities of distressed companies are regarded as predominantly speculative with respect to the issuer's continuing ability to meet principal and interest payments. Issuers of high yield and distressed company securities may be involved in restructurings or bankruptcy proceedings that may not be successful. Analysis of the creditworthiness of issuers of debt securities that are high yield or debt securities of distressed companies may be more complex than for issuers of higher quality debt securities. High yield securities and debt securities of distressed companies may be more susceptible to real or perceived adverse economic and competitive industry conditions than investment grade securities. The prices of these securities have been found to be less sensitive to interest-rate changes than higher-rated investments, but more sensitive to adverse economic downturns or individual corporate developments. A projection of an economic downturn or of a period of rising interest rates, for example, could cause a decline in prices of high yield securities and debt securities of distressed companies because the advent of a recession could lessen the ability of a highly leveraged company to make principal and interest payments on its debt securities. If an issuer of securities defaults, in addition to risking payment of all or a portion of interest and principal, the funds, by investing in such securities, may incur additional expenses to seek recovery of their respective investments. In the case of securities structured as zero-coupon or pay-in-kind securities, their market prices are affected to a greater extent by interest rate changes, and therefore tend to be more volatile than securities which pay interest periodically and in cash. The funds seek to reduce these risks through diversification, credit analysis and attention to current developments and trends in both the economy and financial markets.

**Interest Rate Risk.** To the extent that a fund invests in fixed-income securities, the NAV of the fund's shares can be expected to change as general levels of interest rates fluctuate. However, the market values of securities rated below investment grade (and comparable unrated securities) tend to

react less to fluctuations in interest rate levels than do those of higher-rated securities. Except to the extent that values are affected independently by other factors (such as developments relating to a specific issuer) when interest rates decline, the value of a fixed-income fund generally rise. Conversely, when interest rates rise, the value of a fixed-income fund will decline.

**Liquidity.** The secondary markets for high yield corporate and sovereign debt securities are not as liquid as the secondary markets for investment grade securities. The secondary markets for high yield debt securities are concentrated in relatively few market makers and participants are mostly institutional investors. In addition, the trading volume for high yield debt securities is generally lower than for investment grade securities. Furthermore, the secondary markets could contract under adverse market or economic conditions independent of any specific adverse changes in the condition of a particular issuer.

These factors may have an adverse effect on the ability of funds investing in high yield securities to dispose of particular portfolio investments. These factors also may limit funds that invest in high yield securities from obtaining accurate market quotations to value securities and calculate NAV. If a fund investing in high yield debt securities is not able to obtain precise or accurate market quotations for a particular security, it will be more difficult for the subadvisor to value the fund's investments.

Less liquid secondary markets also may affect a fund's ability to sell securities at their fair value. Each fund may invest in illiquid securities, subject to certain restrictions (see "Additional Investment Policies and Other Instruments"). These securities may be more difficult to value and to sell at fair value. If the secondary markets for high yield debt securities are affected by adverse economic conditions, the proportion of a fund's assets invested in illiquid securities may increase.

**Below-Investment Grade Corporate Debt Securities.** While the market values of securities rated below investment grade (and comparable unrated securities) tend to react less to fluctuations in interest rate levels than do those of higher-rated securities, the market values of below-investment grade corporate debt securities tend to be more sensitive to individual corporate developments and changes in economic conditions than higher-rated securities.

In addition, these securities generally present a higher degree of credit risk. Issuers of these securities are often highly leveraged and may not have more traditional methods of financing available to them. Therefore, their ability to service their debt obligations during an economic downturn or during sustained periods of rising interest rates may be impaired. The risk of loss due to default by such issuers is significantly greater than with investment grade securities because such securities generally are unsecured and frequently are subordinated to the prior payment of senior indebtedness.

**Below-Investment Grade Foreign Sovereign Debt Securities.** Investing in below-investment grade foreign sovereign debt securities will expose a fund to the consequences of political, social or economic changes in the developing and emerging market countries that issue the securities. The ability and willingness of sovereign obligors in these countries to pay principal and interest on such debt when due may depend on general economic and political conditions within the relevant country. Developing and emerging market countries have historically experienced (and may continue to experience) high inflation and interest rates, exchange rate trade difficulties, extreme poverty and unemployment. Many of these countries also are characterized by political uncertainty or instability.

The ability of a foreign sovereign obligor to make timely payments on its external debt obligations also will be strongly influenced by:

- the obligor's balance of payments, including export performance;
- the obligor's access to international credits and investments;
- · fluctuations in interest rates; and
- the extent of the obligor's foreign reserves.

**Defaulted Securities.** The risk of loss due to default may be considerably greater with lower-quality securities because they are generally unsecured and are often subordinated to other debt of the issuer. The purchase of defaulted debt securities involves risks such as the possibility of complete loss of the investment where the issuer does not restructure to enable it to resume principal and interest payments. If the issuer of a security in a fund's portfolio defaults, the fund may have unrealized losses on the security, which may lower the fund's NAV. Defaulted securities tend to lose much of their value before they default. Thus, a fund's NAV may be adversely affected before an issuer defaults. In addition, a fund may incur additional expenses if it must try to recover principal or interest payments on a defaulted security.

Defaulted debt securities may be illiquid and, as such, will be part of the percentage limits on investments in illiquid securities discussed under "Illiquid Securities."

**Obligor's Balance of Payments.** A country whose exports are concentrated in a few commodities or whose economy depends on certain strategic imports could be vulnerable to fluctuations in international prices of these commodities or imports. To the extent that a country receives payment for its exports in currencies other than dollars, its ability to make debt payments denominated in dollars could be adversely affected.

**Obligor's Access to International Credits and Investments.** If a foreign sovereign obligor cannot generate sufficient earnings from foreign trade to service its external debt, it may need to depend on continuing loans and aid from foreign governments, commercial banks, and multilateral organizations, and inflows of foreign investment. The commitment on the part of these entities to make such disbursements may be conditioned on the government's implementation of economic reforms and/or economic performance and the timely service of its obligations. Failure in any of these efforts may result in the cancellation of these third parties' lending commitments, thereby further impairing the obligor's ability or willingness to service its debts on time.

**Obligor's Fluctuations in Interest Rates.** The cost of servicing external debt is generally adversely affected by rising international interest rates since many external debt obligations bear interest at rates that are adjusted based upon international interest rates.

**Obligor's Foreign Reserves.** The ability to service external debt also will depend on the level of the relevant government's international currency reserves and its access to foreign exchange. Currency devaluations may affect the ability of a sovereign obligor to obtain sufficient foreign exchange to service its external debt.

**The Consequences of a Default.** As a result of the previously listed factors, a governmental obligor may default on its obligations. If a default occurs, a fund holding foreign sovereign debt securities may have limited legal recourse against the issuer and/or guarantor. Remedies must, in some cases, be pursued in the courts of the defaulting party itself, and the ability of the holder of the foreign sovereign debt securities to obtain recourse may be subject to the political climate in the relevant country. In addition, no assurance can be given that the holders of commercial bank debt will not contest payments to the holders of other foreign sovereign debt obligations in the event of default under their commercial bank loan agreements.

Sovereign obligors in developing and emerging countries are among the world's largest debtors to commercial banks, other governments, international financial organizations and other financial institutions. These obligors have in the past experienced substantial difficulties in servicing their external debt obligations. This difficulty has 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.

Holders of certain foreign sovereign debt securities may be requested to participate in the restructuring of such obligations and to extend further loans to their issuers. There can be no assurance that the Brady Bonds and other foreign sovereign debt securities in which a fund may invest will not be subject to similar restructuring arrangements or to requests for new credit that may adversely affect the fund's holdings. 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.

**Securities in the Lowest Rating Categories.** Certain debt securities in which a fund may invest may have (or be considered comparable to securities having) the lowest ratings for non-subordinated debt instruments (e.g., securities rated "Caa" or lower by Moody's, "CCC" or lower by S&P or Fitch). These securities are considered to have the following characteristics:

- extremely poor prospects of ever attaining any real investment standing;
- current identifiable vulnerability to default;
- unlikely to have the capacity to pay interest and repay principal when due in the event of adverse business, financial or economic conditions;
- are speculative with respect to the issuer's capacity to pay interest and repay principal in accordance with the terms of the obligations; and/or
- are in default or not current in the payment of interest or principal.

Accordingly, it is possible that these types of characteristics could, in certain instances, reduce the value of securities held by a fund with a commensurate effect on the value of the fund's shares.

## Hong Kong Stock Connect Program and Bond Connect Program Risk

The fund may invest in eligible renminbi-denominated class A shares of equity securities that are listed and traded on certain Chinese stock exchanges ("China A-Shares") through the Hong Kong Stock Connect Program ("Stock Connect"), a mutual market access program designed to, among others, enable foreign investment in the PRC; and in renminbi-denominated bonds issued in the PRC by Chinese credit, government and quasi-governmental issuers ("RMB Bonds"), which are available on the CIBM to eligible foreign investors through, among others, the "Mutual Bond Market Access between Mainland China and Hong Kong" ("Bond Connect") program.

Trading in China A-Shares through Stock Connect and bonds through Bond Connect is subject to certain restrictions and risks. The fund's investment in China A-Shares may only be traded through Stock Connect and is not otherwise transferable. The list of securities eligible to be traded on either program may change from time to time. Securities listed on either program may lose purchase eligibility, which could adversely affect a fund's performance.

While Stock Connect is not subject to individual investment quotas, daily and aggregate investment quotas apply to all Stock Connect participants, which may restrict or preclude the fund's ability to invest in China A-Shares. For example, these quota limitations require that buy orders for China A-Shares be rejected once the remaining balance of the relevant quota drops to zero or the daily quota is exceeded (although the fund will be permitted to sell China A-Shares regardless of the quota balance). These limitations may restrict the fund from investing in China A-Shares on a timely basis, which could affect the fund's ability to effectively pursue its investment strategy. Investment quotas are also subject to change. Bond Connect is not subject to investment quotas.

Chinese regulations prohibit over-selling of China A-Shares. If the fund intends to sell China A-shares it holds, it must transfer those securities to the accounts of the fund's participant broker before the market opens. As a result, the fund may not be able to dispose of its holdings of China A-Shares in a timely manner.

Stock Connect also is generally available only on business days when both the exchange on which China A-Shares are offered and the Stock Exchange of Hong Kong are open and when banks in both markets are open on the corresponding settlement days. Therefore, an investment in China A-Shares through Stock Connect may subject the fund to a risk of price fluctuations on days where Chinese stock markets are open, but Stock Connect is not operating. Similarly, Bond Connect is only available on days when markets in both China and Hong Kong are open, which may limit the fund's ability to trade when it would be otherwise attractive to do so.

Stock Connect launched in November 2014 and Bond Connect launched in July 2017. Therefore, trading through Stock Connect and Bond Connect is subject to trading, clearance, and settlement procedures that may continue to develop as the programs mature, which could pose risks to the fund. Bond Connect is relatively new and its effects on the CIBM are uncertain. In addition, the trading, settlement and information technology systems required for non-Chinese investors in Bond Connect are relatively new. In the event of systems malfunctions or extreme market conditions, trading via Bond Connect could be disrupted. In addition, the rules governing the operation of Stock Connect and Bond Connect may be subject to further interpretation and guidance. There can be no assurance as to the programs' continued existence or whether future developments regarding the programs may restrict or adversely affect the fund's investments or returns. Additionally, the withholding tax treatment of dividends, interest, and capital gains payable to overseas investors may be subject to change. Furthermore, there is currently no specific formal guidance by the PRC tax authorities on the treatment of income tax and other tax categories payable in respect of trading in CIBM by eligible foreign institutional investors via Bond Connect. Any changes in PRC tax law, future clarifications thereof, and/or subsequent retroactive enforcement by the PRC tax authorities of any tax may result in a material loss to the fund.

Stock Connect and Bond Connect regulations provide that investors, such as the fund, enjoy the rights and benefits of equities purchased through Stock Connect and bonds purchased through Bond Connect. However, the nominee structure under Stock Connect requires that China A-Shares be held through the HKSCC as nominee on behalf of investors. For investments via Bond Connect, the relevant filings, registration with People's Bank of China, and account opening have to be carried out via an onshore settlement agent, offshore custody agent, registration agent, or other third parties (as the case may be). As such, the fund is subject to the risks of default or errors on the part of such third parties.

While the fund's ownership of China A-Shares will be reflected on the books of the custodian's records, the fund will only have beneficial rights in such A-Shares. The precise nature and rights of the fund as the beneficial owner of the equities through the HKSCC as nominee is not well defined under the law of the PRC. Although the China Securities Regulatory Commission has issued guidance indicating that participants in Stock Connect will be able to exercise rights of beneficial owners in the PRC, the exact nature and methods of enforcement of the rights and interests of the fund under PRC law is uncertain. In particular, the courts may consider that the nominee or custodian as registered holder of China A-Shares, has full ownership over the securities rather than the fund as the underlying beneficial owner. The HKSCC, as nominee holder, does not guarantee the title to China A-Shares held through it and is under no obligation to enforce title or other rights associated with ownership on behalf of beneficial owners. Consequently, title to these securities, or the rights associated with them, such as participation in corporate actions or shareholder meetings, cannot be assured.

While certain aspects of the Stock Connect trading process are subject to Hong Kong law, PRC rules applicable to share ownership will apply. In addition, transactions using Stock Connect are not subject to the Hong Kong investor compensation fund, which means that the fund will be unable to make monetary claims on the investor compensation fund that it might otherwise be entitled to with respect to investments in Hong Kong securities. Other risks associated with investments in PRC securities apply fully to China A-Shares purchased through Stock Connect.

Similarly, in China, the Hong Kong Monetary Authority Central Money Markets Unit holds Bond Connect securities on behalf of ultimate investors (such as the fund) in accounts maintained with a China-based custodian (either the China Central Depository & Clearing Co. or the Shanghai Clearing House). This recordkeeping system subjects the fund to various risks, including the risk that the fund may have a limited ability to enforce rights as a bondholder and the risks of settlement delays and counterparty default of the Hong Kong sub-custodian. In addition, enforcing the ownership rights of a beneficial holder of Bond Connect securities is untested and courts in China have limited experience in applying the concept of beneficial ownership.

China A-Shares traded via Stock Connect and bonds trading through Bond Connect are subject to various risks associated with the legal and technical framework of Stock Connect and Bond Connect, respectively. In the event that the relevant systems fail to function properly, trading through Stock Connect or Bond Connect could be disrupted. In the event of high trade volume or unexpected market conditions, Stock Connect and Bond Connect may be available only on a limited basis, if at all. Both the PRC and Hong Kong regulators are permitted, independently of each other, to suspend Stock Connect in response to certain market conditions. Similarly, in the event that the relevant Mainland Chinese authorities suspend account opening or trading on the CIBM via Bond Connect, the fund's ability to invest in Chinese bonds will be adversely affected and limited. In such event, the fund's ability to achieve its investment objective will be negatively affected and, after exhausting other trading alternatives, the fund may suffer substantial losses as a result.

## **Hybrid Instruments**

The risks of investing in hybrid instruments are a combination of the risks of investing in securities, options, futures, swaps, and currencies. Therefore, an investment in a hybrid instrument may include significant risks not associated with a similar investment in a traditional debt instrument with a fixed principal amount, is denominated in U.S. dollars, or that bears interest either at a fixed rate or a floating rate determined by reference to a common, nationally published benchmark. The risks of a particular hybrid instrument will depend upon the terms of the instrument, but may include, without limitation, the possibility of significant changes in the benchmarks or the prices of underlying assets to which the instrument is linked. These risks generally depend upon factors unrelated to the operations or credit quality of the issuer of the hybrid instrument and that may not be readily foreseen by the purchaser. Such factors include economic and political events, the supply and demand for the underlying assets, and interest rate movements. In

recent years, various benchmarks and prices for underlying assets have been highly volatile, and such volatility may be expected in the future. See "Hedging and Other Strategic Transactions" for a description of certain risks associated with investments in futures, options, and forward contracts. The principal risks of investing in hybrid instruments are as follows:

**Volatility.** Hybrid instruments are potentially more volatile and carry greater market risks than traditional debt instruments. Depending on the structure of the particular hybrid instrument, changes in a benchmark may be magnified by the terms of the hybrid instrument and have an even more dramatic and substantial effect upon the value of the hybrid instrument. Also, the prices of the hybrid instrument and the benchmark or underlying asset may not move in the same direction or at the same time.

**Leverage Risk.** Hybrid instruments may bear interest or pay preferred dividends at below market (or even relatively nominal) rates. Alternatively, hybrid instruments may bear interest at above market rates, but bear an increased risk of principal loss (or gain). For example, an increased risk of principal loss (or gain) may result if "leverage" is used to structure a hybrid instrument. Leverage risk occurs when the hybrid instrument is structured so that a change in a benchmark or underlying asset is multiplied to produce a greater value change in the hybrid instrument, thereby magnifying the risk of loss, as well as the potential for gain.

**Liquidity Risk.** Hybrid instruments also may carry liquidity risk since the instruments are often "customized" to meet the needs of a particular investor. Therefore, the number of investors that would be willing and able to buy such instruments in the secondary market may be smaller than for more traditional debt securities. In addition, because the purchase and sale of hybrid instruments could take place in an OTC market without the guarantee of a central clearing organization or in a transaction between a fund and the issuer of the hybrid instrument, the creditworthiness of the counterparty or issuer of the hybrid instrument would be an additional risk factor, which the fund would have to consider and monitor.

**Lack of U.S. Regulation.** Hybrid instruments may not be subject to regulation of the CFTC, which generally regulates the trading of swaps and commodity futures by U.S. persons, the SEC, which regulates the offer and sale of securities by and to U.S. persons, or any other governmental regulatory authority.

**Credit and Counterparty Risk.** The issuer or guarantor of a hybrid instrument may be unable or unwilling to make timely principal, interest or settlement payments, or otherwise honor its obligations. Funds that invest in hybrid instruments are subject to varying degrees of risk that the issuers of the securities will have their credit rating downgraded or will default, potentially reducing a fund's share price and income level.

The various risks discussed above with respect to hybrid instruments particularly the market risk of such instruments, may cause significant fluctuations in the NAV of a fund that invests in such instruments.

#### **Industry or Sector Investing**

When the fund invests a substantial portion of its assets in a particular industry or sector of the economy, the fund's investments are not as varied as the investments of most funds and are far less varied than the broad securities markets. As a result, the fund's performance tends to be more volatile than other funds, and the values of the fund's investments tend to go up and down more rapidly. In addition, to the extent that the fund invests significantly in a particular industry or sector, it is particularly susceptible to the impact of market, economic, regulatory and other factors affecting that industry or sector. The principal risks of investing in certain sectors are described below.

**Communication.** Companies in the communication sector are subject to the additional risks of rapid obsolescence due to technological advancement or development, lack of standardization or compatibility with existing technologies, an unfavorable regulatory environment, and a dependency on patent and copyright protection. The prices of the securities of companies in the communication sector may fluctuate widely due to both federal and state regulations governing rates of return and services that may be offered, fierce competition for market share, and competitive challenges in the U.S. from foreign competitors engaged in strategic joint ventures with U.S. companies, and in foreign markets from both U.S. and foreign competitors. In addition, recent industry consolidation trends may lead to increased regulation of communication companies in their primary markets.

**Consumer Discretionary.** The consumer discretionary sector may be affected by fluctuations in supply and demand and may also be adversely affected by changes in consumer spending as a result of world events, political and economic conditions, commodity price volatility, changes in exchange rates, imposition of import controls, increased competition, depletion of resources and labor relations.

Consumer Staples. Companies in the consumer staples sector may be affected by general economic conditions, commodity production and pricing, consumer confidence and spending, consumer preferences, interest rates, product cycles, marketing, competition, and government regulation. Other risks include changes in global economic, environmental and political events, and the depletion of resources. Companies in the consumer staples sector may also be negatively impacted by government regulations affecting their products. For example, government regulations may affect the permissibility of using various food additives and production methods of companies that make food products, which could affect company profitability. Tobacco companies, in particular, may be adversely affected by new laws, regulations and litigation. Companies in the consumer staples sector may also be subject to risks relating to the supply of, demand for, and prices of raw materials. The prices of raw materials fluctuate in response to a number of factors, including, changes in exchange rates, import and export controls, changes in international agricultural and trading policies, and seasonal and weather conditions, among others. In addition, the success of food, beverage, household and personal product companies, in particular, may be strongly affected by unpredictable factors, such as, demographics, consumer spending, and product trends.

**Energy.** Companies in the energy sector may be affected by energy prices, supply and demand fluctuations including in energy fuels, energy conservation, liabilities arising from government or civil actions, environmental and other government regulations, and geopolitical events including

political instability and war. The market value of companies in the local energy sector is heavily impacted by the levels and stability of global energy prices, energy conservation efforts, the success of exploration projects, exchange rates, interest rates, economic conditions, tax and other government regulations, increased competition and technological advances, as well as other factors. Companies in this sector may be subject to extensive government regulation and contractual fixed pricing, which may increase the cost of doing business and limit these companies' profits. A large part of the returns of these companies depends on few customers, including governmental entities and utilities. As a result, governmental budget constraints may have a significant negative effect on the stock prices of energy sector companies. Energy companies may also operate in, or engage in, transactions involving countries with less developed regulatory regimes or a history of expropriation, nationalization or other adverse policies. As a result, securities of companies in the energy field are subject to quick price and supply fluctuations caused by events relating to international politics. Other risks include liability from accidents resulting in injury or loss of life or property, pollution or other environmental problems, equipment malfunctions or mishandling of materials and a risk of loss from terrorism, political strife and natural disasters. Energy companies can also be heavily affected by the supply of, and demand for, their specific product or service and for energy products in general, and government subsidization. Energy companies may have high levels of debt and may be more likely to restructure their businesses if there are downturns in energy markets or the economy as a whole.

Global oil prices declined significantly at the beginning of 2020 and have experienced significant price volatility, including a period where an oil-price futures contract fell into negative territory for the first time in history, as demand for oil slowed and oil storage facilities had reached their storage capacities. The impact on such commodities markets from varying levels of demand may continue to be volatile for an extended period of time.

**Financial Services.** To the extent that a fund invests principally in securities of financial services companies, it is particularly vulnerable to events affecting that sector. Financial services companies may include, but are not limited to, commercial and industrial banks, savings and loan associations and their holding companies, consumer and industrial finance companies, diversified financial services companies, investment banking, securities brokerage and investment advisory companies, leasing companies and insurance companies. The types of companies that compose the financial services sector may change over time. These companies are all subject to extensive regulation, rapid business changes, volatile performance dependent upon the availability and cost of capital, prevailing interest rates and significant competition. General economic conditions significantly affect these companies. Credit and other losses resulting from the financial difficulty of borrowers or other third parties have a potentially adverse effect on companies in this sector. Investment banking, securities brokerage and investment advisory companies are particularly subject to government regulation and the risks inherent in securities trading and underwriting activities. In addition, all financial services companies face shrinking profit margins due to new competitors, the cost of new technology, and the pressure to compete globally.

Banking. Commercial banks (including "money center" regional and community banks), savings and loan associations and holding companies of the foregoing are especially subject to adverse effects of volatile interest rates, concentrations of loans in particular industries (such as real estate or energy) and significant competition. The profitability of these businesses is to a significant degree dependent upon the availability and cost of capital funds. Economic conditions in the real estate market may have a particularly strong effect on certain banks and savings associations. Commercial banks and savings associations are subject to extensive federal and, in many instances, state regulation. Neither such extensive regulation nor the federal insurance of deposits ensures the solvency or profitability of companies in this industry, and there is no assurance against losses in securities issued by such companies. Late in the first quarter of 2023, a number of U.S. domestic banks and foreign banks experienced financial difficulties and, in some cases, failures. Given the interconnectedness of the banking system, bank regulators took actions, including the Federal Reserve, which invoked the systemic risk exception, temporarily transferred all deposits-both insured and uninsured-and substantially all the assets of two failed banks into respective bridge banks and guaranteed depositors' full access to their funds. Despite such response, there can be no certainty that the actions taken by banking regulators to limit the effect of those difficulties and failures on other banks or other financial institutions or on the U.S. or foreign economies generally will be effective. It is possible that more banks or other financial institutions and economies.

Insurance. Insurance companies are particularly subject to government regulation and rate setting, potential anti-trust and tax law changes, and industry-wide pricing and competition cycles. Property and casualty insurance companies also may be affected by weather and other catastrophes. Life and health insurance companies may be affected by mortality and morbidity rates, including the effects of epidemics. Individual insurance companies may be exposed to reserve inadequacies, problems in investment portfolios (for example, due to real estate or "junk" bond holdings) and failures of reinsurance carriers.

**Health Sciences.** Companies in this sector are subject to the additional risks of increased competition within the health care industry, changes in legislation or government regulations, reductions in government funding, product liability or other litigation and the obsolescence of popular products. The prices of the securities of health sciences companies may fluctuate widely due to government regulation and approval of their products and services, which may have a significant effect on their price and availability. In addition, the types of products or services produced or provided by these companies may quickly become obsolete. Moreover, liability for products that are later alleged to be harmful or unsafe may be substantial and may have a significant impact on a company's market value or share price.

**Industrials.** Companies in the industrials sector may be affected by general economic conditions, commodity production and pricing, supply and demand fluctuations, environmental and other government regulations, geopolitical events, interest rates, insurance costs, technological developments, liabilities arising from governmental or civil actions, labor relations, import controls and government spending. The value of securities issued by companies in the industrials sector may also be adversely affected by supply and demand related to their specific products or

services and industrials sector products in general, as well as liability for environmental damage and product liability claims and government regulations. For example, the products of manufacturing companies may face obsolescence due to rapid technological developments and frequent new product introduction. Certain companies within this sector, particularly aerospace and defense companies, may be heavily affected by government spending policies because companies involved in this industry rely, to a significant extent, on government demand for their products and services, and, therefore, the financial condition of, and investor interest in, these companies are significantly influenced by governmental defense spending policies, which are typically under pressure from efforts to control the U.S. (and other) government budgets. In addition, securities of industrials companies in transportation may be cyclical and have occasional sharp price movements which may result from economic changes, fuel prices, labor relations and insurance costs, and transportation companies in certain countries may also be subject to significant government regulation and oversight, which may adversely affect their businesses.

Internet-Related Investments. The value of companies engaged in Internet-related activities, which is a developing industry, is particularly vulnerable to: (a) rapidly changing technology; (b) extensive government regulation; and (c) relatively high risk of obsolescence caused by scientific and technological advances. In addition, companies engaged in Internet-related activities are difficult to value and many have high share prices relative to their earnings which they may not be able to maintain over the long-term. Moreover, many Internet companies are not yet profitable and will need additional financing to continue their operations. There is no guarantee that such financing will be available when needed. Since many Internet companies are start-up companies, the risks associated with investing in small companies are heightened for these companies. A fund that invests a significant portion of its assets in Internet-related companies should be considered extremely risky even as compared to other funds that invest primarily in small company securities.

Materials. Companies in the materials sector may be affected by general economic conditions, commodity production and prices, consumer preferences, interest rates, exchange rates, product cycles, marketing, competition, resource depletion, and environmental, import/export and other government regulations. Other risks may include liabilities for environmental damage and general civil liabilities, and mandated expenditures for safety and pollution control. The materials sector may also be affected by economic cycles, technological progress, and labor relations. At times, worldwide production of industrial materials has been greater than demand as a result of over-building or economic downturns, leading to poor investment returns or losses. These risks are heightened for companies in the materials sector located in foreign markets.

**Natural Resources.** A fund's investments in natural resources companies are especially affected by variations in the commodities markets (which may be due to market events, regulatory developments or other factors that such fund cannot control) and such companies may lack the resources and the broad business lines to weather hard times. Natural resources companies can be significantly affected by events relating to domestic or international political and economic developments, energy conservation efforts, the success of exploration projects, reduced availability of transporting, processing, storing or delivering natural resources, extreme weather or other natural disasters, and threats of attack by terrorists on energy assets. Additionally, natural resource companies are subject to substantial government regulation, including environmental regulation and liability for environmental damage, and changes in the regulatory environment for energy companies may adversely impact their profitability. At times, the performance of these investments may lag the performance of other sectors or the market as a whole.

Investments in certain commodity-linked instruments, such as crude oil and crude oil products, can be susceptible to negative prices due to a surplus in production caused by global events, including restrictions or reductions in global travel. Exposure to such commodity-linked instruments may adversely affect an issuer's returns or the performance of the fund.

Global oil prices are susceptible to and have experienced significant volatility, including a period where an oil-price futures contract fell into negative territory for the first time in history in early 2020 as demand for oil slowed and oil storage facilities reached their storage capacities. The impact on the natural resources sector from varying levels of demand may continue to be volatile for an extended period of time.

**Technology.** Technology companies rely heavily on technological advances and face intense competition, both domestically and internationally, which may have an adverse effect on profit margins. Shortening of product cycle and manufacturing capacity increases may subject technology companies to aggressive pricing. Technology companies may have limited product lines, markets, financial resources or personnel. The products of technology companies may face product obsolescence due to rapid technological developments and frequent new product introduction, unpredictable changes in growth rates and competition for the services of qualified personnel. Technology companies may not successfully introduce new products, develop and maintain a loyal customer base or achieve general market acceptance for their products.

Stocks of technology companies, especially those of smaller, less-seasoned companies, tend to be more volatile than the overall market. Companies in the technology sector are also heavily dependent on patent and intellectual property rights, the loss or impairment of which may adversely affect the profitability of these companies. Technology companies engaged in manufacturing, such as semiconductor companies, often operate internationally which could expose them to risks associated with instability and changes in economic and political conditions, foreign currency fluctuations, changes in foreign regulations, competition from subsidized foreign competitors with lower production costs and other risks inherent to international business.

**Utilities.** Companies in the utilities sector may be affected by general economic conditions, supply and demand, financing and operating costs, rate caps, interest rates, liabilities arising from governmental or civil actions, consumer confidence and spending, competition, technological progress, energy prices, resource conservation and depletion, man-made or natural disasters, geopolitical events, and environmental and other government regulations. The value of securities issued by companies in the utilities sector may be negatively impacted by variations in exchange rates, domestic and international competition, energy conservation and governmental limitations on rates charged to customers. Although rate changes of a regulated utility usually vary in approximate correlation with financing costs, due to political and regulatory factors rate changes usually happen only

after a delay after the changes in financing costs. Deregulation may subject utility companies to increased competition and can negatively affect their profitability as it permits utility companies to diversify outside of their original geographic regions and customary lines of business, causing them to engage in more uncertain ventures. Deregulation can also eliminate restrictions on the profits of certain utility companies, but can simultaneously expose these companies to an increased risk of loss. Although opportunities may permit certain utility companies to earn more than their traditional regulated rates of return, companies in the utilities industry may have difficulty obtaining an adequate return on invested capital, raising capital, or financing large construction projects during periods of inflation or unsettled capital markets. Utility companies may also be subject to increased costs because of the effects of man-made or natural disasters. Current and future regulations or legislation can make it more difficult for utility companies to operate profitably. Government regulators monitor and control utility revenues and costs, and thus may restrict utility profits. There is no assurance that regulatory authorities will grant rate increases in the future, or that those increases will be adequate to permit the payment of dividends on stocks issued by a utility company. Because utility companies are faced with the same obstacles, issues and regulatory burdens, their securities may react similarly and more in unison to these or other market conditions.

#### Initial Public Offerings ("IPOs")

IPOs may have a magnified impact on the performance of a fund with a small asset base. The impact of IPOs on a fund's performance likely will decrease as the fund's asset size increases, which could reduce the fund's returns. IPOs may not be consistently available to a fund for investment, particularly as the fund's asset base grows. IPO shares frequently are volatile in price due to the absence of a prior public market, the small number of shares available for trading and limited information about the issuer. Therefore, a fund may hold IPO shares for a very short period of time. This may increase the turnover of a fund and may lead to increased expenses for a fund, such as commissions and transaction costs. In addition, IPO shares can experience an immediate drop in value if the demand for the securities does not continue to support the offering price.

#### **Investing in Developed Countries Risk**

Many countries with developed markets have recently experienced significant economic pressures. These countries generally tend to rely on the services sectors (e.g., the financial services sector) as the primary source of economic growth and may be susceptible to the risks of individual service sectors. For example, companies in the financial services sector are subject to governmental regulation and, recently, government intervention, which may adversely affect the scope of their activities, the prices they can charge and amount of capital they must maintain. Recent dislocations in the financial sector and perceived or actual governmental influence over certain financial companies may lead to credit rating downgrades and as a result, impact, among other things, revenue growth for such companies. If financial companies experience a prolonged decline in revenue growth, certain developed countries that rely heavily on financial companies as an economic driver may experience a correlative slowdown. Recently, new concerns have emerged with respect to the economic health of certain developed countries. These concerns primarily stem from heavy indebtedness of many developed countries and their perceived inability to continue to service high debt loads without simultaneously implementing stringent austerity measures. Such concerns have led to tremendous downward pressure on the economies of these countries. As a result, it is possible that interest rates on debt of certain developed countries may rise to levels that make it difficult for such countries to service. Spending on health care and retirement pensions in most developed countries has risen dramatically over the last few years. Medical innovation, extended life expectancy and higher public expectations are likely to continue the increase in health care and pension costs. Any increase in health care and pension costs will likely have a negative impact on the economic growth of many developed countries. Certain developed countries rely on imports of certain key items, such as crude oil, natural gas, and other commodities. As a result, an increase in demand for, or price fluctuations of, certain commodities may negatively affect developed country economies. Developed market countries generally are dependent on the economies of certain key trading partners. Changes in any one economy may cause an adverse impact on several developed countries. In addition, heavy regulation of, among others, labor and product markets may have an adverse effect on certain issuers. Such regulations may negatively affect economic growth or cause prolonged periods of recession. Such risks, among others, may adversely affect the value of the fund's investments.

#### **Investment Companies**

The funds may invest in shares of other investment companies, including both open- and closed-end investment companies (including single country funds, ETFs, and BDCs). When making such an investment, the fund will be indirectly exposed to all the risks of such investment companies. In general, the investing funds will bear a pro rata portion of the other investment company's fees and expenses, which will reduce the total return in the investing funds. Certain types of investment companies, such as closed-end investment companies, issue a fixed number of shares that trade on a stock exchange and may involve the payment of substantial premiums above the value of such investment companies' portfolio securities when traded OTC or at discounts to their NAVs. Others are continuously offered at NAV, but also may be traded in the secondary market.

In addition, the funds may invest in private investment funds, vehicles, or structures. A fund also may invest in debt-equity conversion funds, which are funds established to exchange foreign bank debt of countries whose principal repayments are in arrears into a portfolio of listed and unlisted equities, subject to certain repatriation restrictions.

Exchange-Traded Funds. The fund may invest in ETFs, which are a type of security bought and sold on a securities exchange. The fund could purchase shares of an ETF to gain exposure to a portion of the U.S. or a foreign market. The risks of owning shares of an ETF include the risks of directly owning the underlying securities and other instruments the ETF holds. A lack of liquidity in an ETF (e.g., absence of an active trading market) could result in the ETF being more volatile than its underlying securities. The existence of extreme market volatility or potential lack of an active trading market for an ETF's shares could result in the ETF's shares trading at a significant premium or discount to its NAV. An ETF has its own fees and expenses, which are indirectly borne by the fund. The fund may also incur brokerage and other related costs when it purchases and sells ETFs. Also, in the case of passively-managed

ETFs, there is a risk that an ETF may fail to closely track the index or market segment that it is designed to track due to delays in the ETF's implementation of changes to the composition of the index or other factors.

Business Development Companies. A BDC is a less-common type of closed-end investment company that more closely resembles an operating company than a typical investment company. BDCs typically invest in and lend to small- and medium-sized private and certain public companies that may not have access to public equity markets to raise capital. BDCs invest in such diverse industries as health care, chemical and manufacturing, technology and service companies. BDCs generally invest in less mature private companies, which involve greater risk than well-established, publicly traded companies. BDCs are unique in that at least 70% of their investments must be made in private and certain public U.S. businesses, and BDCs are required to make available significant managerial assistance to their portfolio companies. Generally, little public information exists for private and thinly traded companies, and there is a risk that investors may not be able to make a fully informed investment decision. With investments in debt instruments issued by such portfolio companies, there is a risk that the issuer may default on its payments or declare bankruptcy.

#### **Investment Grade Fixed-Income Securities in the Lowest Rating Category**

Investment grade fixed-income securities in the lowest rating category (i.e., rated "Baa" by Moody's and "BBB" by S&P or Fitch, and comparable unrated securities) involve a higher degree of risk than fixed-income securities in the higher rating categories. While such securities are considered investment grade quality and are deemed to have adequate capacity for payment of principal and interest, such securities lack outstanding investment characteristics and have speculative characteristics as well. For example, changes in economic conditions or other circumstances are more likely to lead to a weakened capacity to make principal and interest payments than is the case with higher grade securities.

#### Japan Risk

A fund that holds Japanese securities may be affected significantly by economic, regulatory, or political developments affecting Japanese issuers. The Japanese securities markets may have less liquidity and may be more volatile than U.S. or other securities markets and market developments may affect Japanese markets differently from U.S. or other securities markets. Direct or indirect government intervention to stabilize the Japanese securities markets, as well as cross-shareholdings in Japanese companies, may affect trading prices and volumes in these markets. Also, there is generally less publicly available information about Japanese companies than about those U.S. companies that are subject to the reporting requirements of the SEC, and Japanese companies are subject to accounting, auditing, and financial reporting standards and requirements that differ from those applicable to U.S. reporting companies.

Securities prices in Japan are subject to political, economic, financial, and social factors that apply in Japan. The Japanese economy, after achieving high growth in the 1980s, faltered dramatically in the 1990s. While Japan's recent economic performance has shown improvements with positive gross domestic product (GDP) growth, the Japanese government continues to deal with high tax and unemployment rates, unstable banking and financial service sectors, and low consumer spending. Should any or all of these problems persist or worsen, a fund invested in such securities could be adversely affected. A small number of industries, including the electronic machinery industry, comprise a large portion of the Japanese market, and therefore weakness in any of these industries could have a profound negative impact on the entire market.

#### **LIBOR Discontinuation Risk**

Certain debt securities, derivatives and other financial instruments have traditionally utilized LIBOR as the reference or benchmark rate for interest rate calculations. However, following allegations of manipulation and concerns regarding liquidity, the U.K. Financial Conduct Authority ("UK FCA") announced that LIBOR would be discontinued on June 30, 2023. As of September 30, 2024, the UK FCA has confirmed that all publications of LIBOR, including all synthetic publications of the 1-, 3-, and 6-month U.S. dollar LIBOR settings, have ceased.

Although the transition process away from LIBOR was well-defined in advance of the discontinuation dates, the impact on certain debt securities, derivatives and other financial instruments remains uncertain. Market participants have adopted alternative rates such as Secured Overnight Financing Rate ("SOFR") or otherwise amended financial instruments referencing LIBOR to include fallback provisions and other measures that contemplated the discontinuation of LIBOR or other similar market disruption events, but neither the effect of the transition process nor the viability of such measures is known. To facilitate the transition of legacy derivatives contracts referencing LIBOR, the International Swaps and Derivatives Association, Inc. launched a protocol to incorporate fallback provisions. However, there are obstacles to converting certain longer term securities and transactions to a new benchmark or benchmarks and the effectiveness of one alternative reference rate versus multiple alternative reference rates in new or existing financial instruments and products has not been determined. Certain replacement rates to LIBOR, such as SOFR, which is a broad measure of secured overnight U.S. Treasury repo rates, are materially different from LIBOR, necessitating changes in the applicable spread for financial instruments transitioning away from LIBOR to accommodate the differences.

The utilization of an alternative reference rate, or the transition process to an alternative reference rate, may adversely affect the fund's performance.

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 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. The IRS may provide additional guidance, with potential retroactive effect.

#### **Lower Rated Fixed-Income Securities**

Lower rated fixed-income securities are defined as securities rated below-investment grade (e.g., rated "Ba" and below by Moody's, or "BB" and below by S&P or Fitch). The principal risks of investing in these securities are as follows:

**Risk to Principal and Income.** Investing in lower rated fixed-income securities is considered speculative. While these securities generally provide greater income potential than investments in higher rated securities, there is a greater risk that principal and interest payments will not be made. Issuers of these securities may even go into default or become bankrupt.

**Price Volatility.** The price of lower rated fixed-income securities may be more volatile than securities in the higher rating categories. This volatility may increase during periods of economic uncertainty or change. The price of these securities is affected more than higher rated fixed-income securities by the market's perception of their credit quality especially during times of adverse publicity. In the past, economic downturns or an increase in interest rates have, at times, caused more defaults by issuers of these securities and may do so in the future. Economic downturns and increases in interest rates have an even greater effect on highly leveraged issuers of these securities.

**Liquidity.** The market for lower rated fixed-income securities may have more limited trading than the market for investment grade fixed-income securities. Therefore, it may be more difficult to sell these securities and these securities may have to be sold at prices below their market value in order to meet redemption requests or to respond to changes in market conditions.

**Dependence on Subadvisor's Own Credit Analysis.** While a subadvisor to a fund may rely on ratings by established credit rating agencies, it also will supplement such ratings with its own independent review of the credit quality of the issuer. Therefore, the assessment of the credit risk of lower rated fixed-income securities is more dependent on a subadvisor's evaluation than the assessment of the credit risk of higher rated securities.

**Additional Risks Regarding Lower Rated Corporate Fixed-Income Securities.** Lower rated corporate debt securities (and comparable unrated securities) tend to be more sensitive to individual corporate developments and changes in economic conditions than higher-rated corporate fixed-income securities.

Issuers of lower rated corporate debt securities also may be highly leveraged, increasing the risk that principal and income will not be repaid.

Additional Risks Regarding Lower Rated Foreign Government Fixed-Income Securities. Lower rated foreign government fixed-income securities are subject to the risks of investing in emerging market countries described under "Risk Factors—Foreign Securities." In addition, the ability and willingness of a foreign government to make payments on debt when due may be affected by the prevailing economic and political conditions within the country. Emerging market countries may experience high inflation, interest rates and unemployment as well as exchange rate fluctuations that adversely affect trade and political uncertainty or instability. These factors increase the risk that a foreign government will not make payments when due.

## **Market Events**

Events in certain sectors historically have resulted, and may in the future result, in an unusually high degree of volatility in the financial markets, both domestic and foreign. These events have included, but are not limited to: bankruptcies, corporate restructurings, and other similar events; bank failures; governmental efforts to limit short selling and high frequency trading; measures to address U.S. federal and state budget deficits; social, political, and economic instability in Europe; economic stimulus by the Japanese central bank; dramatic changes in energy prices and currency exchange rates; and China's economic slowdown. Interconnected global economies and financial markets increase the possibility that conditions in one country or region might adversely impact issuers in a different country or region. Both domestic and foreign equity markets have experienced increased volatility and turmoil, with issuers that have exposure to the real estate, mortgage, and credit markets particularly affected. Financial institutions could suffer losses as interest rates rise or economic conditions deteriorate.

In addition, relatively high market volatility and reduced liquidity in credit and fixed-income markets may adversely affect many issuers worldwide. Actions taken by the Fed or foreign central banks to stimulate or stabilize economic growth, such as interventions in currency markets, could cause high volatility in the equity and fixed-income markets. Reduced liquidity may result in less money being available to purchase raw materials, goods, and services from emerging markets, which may, in turn, bring down the prices of these economic staples. It may also result in emerging-market issuers having more difficulty obtaining financing, which may, in turn, cause a decline in their securities prices.

In response to certain economic conditions, including periods of high inflation, governmental authorities and regulators may respond with significant fiscal and monetary policy changes such as raising interest rates. The fund may be subject to heightened interest rate risk when the Fed raises interest rates. Recent and potential future changes in government monetary policy may affect interest rates. It is difficult to accurately predict the timing, frequency or magnitude of potential interest rate increases or decreases by the Fed and the evaluation of macro-economic and other conditions that could cause a change in approach in the future. If the Fed and other central banks increase the federal funds rate and equivalent rates, such increases generally will cause market interest rates to rise and could cause the value of a fund's investments, and the fund's NAV, to decline, potentially suddenly and significantly. As a result, the fund may experience high redemptions and, as a result, increased portfolio turnover, which could increase the costs that the fund incurs and may negatively impact the fund's performance.

In addition, as the Fed increases the target Fed funds rate, any such rate increases, among other factors, could cause markets to experience continuing high volatility. A significant increase in interest rates may cause a decline in the market for equity securities. These events and the possible resulting market volatility may have an adverse effect on the fund.

Political turmoil within the United States and abroad may also impact the fund. Although the U.S. government has honored its credit obligations, it remains possible that the United States could default on its obligations. While it is impossible to predict the consequences of such an unprecedented event, it is likely that a default by the United States would be highly disruptive to the U.S. and global securities markets and could significantly impair the value of the fund's investments. Similarly, political events within the United States at times have resulted, and may in the future result, in a shutdown of government services, which could negatively affect the U.S. economy, decrease the value of many fund investments, and increase uncertainty in or impair the operation of the U.S. or other securities markets. The imposition by the U.S. of import tariffs on goods from foreign countries and reciprocal tariffs levied on U.S. goods may lead to price volatility and instability in U.S. and global investment markets. Among other effects, tariffs may increase the cost of production for certain goods or reduce demand for products, which could affect the performance of the fund's investments. It is not known whether, or to what extent, any tariff or other trade protections may affect the fund or its investments.

Uncertainties surrounding the sovereign debt of a number of EU countries and the viability of the EU have disrupted and may in the future disrupt markets in the United States and around the world. If one or more countries leave the EU, as the UK did in January of 2020 (commonly referred to as "Brexit"), or the EU dissolves, the global securities markets likely will be significantly disrupted.

A widespread health crisis such as a global pandemic could cause substantial market volatility, exchange trading suspensions and closures, which may lead to less liquidity in certain instruments, industries, sectors or the markets generally, and may ultimately affect fund performance. For example, the coronavirus (COVID-19) pandemic has resulted and may continue to result in significant disruptions to global business activity and market volatility due to disruptions in market access, resource availability, facilities operations, imposition of tariffs, export controls and supply chain disruption, among others. The impact of a health crisis and other epidemics and pandemics that may arise in the future, could affect the global economy in ways that cannot necessarily be foreseen at the present time. A health crisis may exacerbate other pre-existing political, social and economic risks. Any such impact could adversely affect the fund's performance, resulting in losses to your investment.

Political and military events, including in Ukraine, North Korea, Russia, Venezuela, Iran, Syria, and other areas of the Middle East, and nationalist unrest in Europe and South America, also may cause market disruptions.

As a result of continued political tensions and armed conflicts, including the Russian invasion of Ukraine commencing in February of 2022, the extent and ultimate result of which are unknown at this time, the United States and the EU, along with the regulatory bodies of a number of countries, have imposed economic sanctions on certain Russian corporate entities and individuals, and certain sectors of Russia's economy, which may result in, among other things, the continued devaluation of Russian currency, a downgrade in the country's credit rating, and/or a decline in the value and liquidity of Russian securities, property or interests. These sanctions could also result in the immediate freeze of Russian securities and/or funds invested in prohibited assets, impairing the ability of a fund to buy, sell, receive or deliver those securities and/or assets. These sanctions or the threat of additional sanctions could also result in Russia taking counter measures or retaliatory actions, which may further impair the value and liquidity of Russian securities. The United States and other nations or international organizations may also impose additional economic sanctions or take other actions that may adversely affect Russia-exposed issuers and companies in various sectors of the Russian economy. Any or all of these potential results could lead Russia's economy into a recession. Economic sanctions and other actions against Russian institutions, companies, and individuals resulting from the ongoing conflict may also have a substantial negative impact on other economies and securities markets both regionally and globally, as well as on companies with operations in the conflict region, the extent to which is unknown at this time. The United States and the EU have also imposed similar sanctions on Belarus for its support of Russia's invasion of Ukraine. Additional sanctions may be imposed on Russia, including substantial negative impacts on the regional and global economies and securities markets.

In addition, there is a risk that the prices of goods and services in the United States and many foreign economies may decline over time, known as deflation. Deflation may have an adverse effect on stock prices and creditworthiness and may make defaults on debt more likely. If a country's economy slips into a deflationary pattern, it could last for a prolonged period and may be difficult to reverse. Further, there is a risk that the present value of assets or income from investments will be less in the future, known as inflation. Inflation rates may change frequently and drastically as a result of various factors, including unexpected shifts in the domestic or global economy, and a fund's investments may be affected, which may reduce a fund's performance. Further, inflation may lead to the rise in interest rates, which may negatively affect the value of debt instruments held by the fund, resulting in a negative impact on a fund's performance. Generally, securities issued in emerging markets are subject to a greater risk of inflationary or deflationary forces, and more developed markets are better able to use monetary policy to normalize markets.

#### Master Limited Partnership (MLP) Risk

Investing in MLPs involves certain risks related to investing in the underlying assets of MLPs and risks associated with pooled investment vehicles. MLPs holding credit-related investments are subject to interest-rate risk and the risk of default on payment obligations by debt securities. In addition, investments in the debt and securities of MLPs involve certain other risks, including risks related to limited control and limited rights to vote on matters affecting MLPs, risks related to potential conflicts of interest between an MLP and the MLP's general partner, cash flow risks, dilution risks and risks related to the general partner's right to require unit-holders to sell their common units at an undesirable time or price. The fund's investments in MLPs may be subject to legal and other restrictions on resale or may be less liquid than publicly traded securities. Certain MLP securities may trade in lower

volumes due to their smaller capitalizations, and may be subject to more abrupt or erratic price movements and may lack sufficient market liquidity to enable the fund to effect sales at an advantageous time or without a substantial drop in price. If the fund is one of the largest investors in an MLP, it may be more difficult for the fund to buy and sell significant amounts of such investments without an unfavorable impact on prevailing market prices. Larger purchases or sales of MLP investments by the fund in a short period of time may cause abnormal movements in the market price of these investments. As a result, these investments may be difficult to dispose of at an advantageous price when the fund desires to do so. During periods of interest rate volatility, these investments may not provide attractive returns, which may adversely impact the overall performance of the fund.

MLPs in which the fund may invest operate oil, natural gas, petroleum, or other facilities within the energy sector. As a result, the fund will be susceptible to adverse economic, environmental, or regulatory occurrences impacting the energy sector. MLPs and other companies operating in the energy sector are subject to specific risks, including, among others, fluctuations in commodity prices; reduced consumer demand for commodities such as oil, natural gas, or petroleum products; reduced availability of natural gas or other commodities for transporting, processing, storing, or delivering; slowdowns in new construction; extreme weather or other natural disasters; and threats of attack by terrorists on energy assets. Additionally, changes in the regulatory environment for energy companies may adversely impact their profitability. Over time, depletion of natural gas reserves and other energy reserves may also affect the profitability of energy companies.

Global oil prices declined significantly at the beginning of 2020 and have experienced significant price volatility, including a period where an oil-price futures contract fell into negative territory for the first time in history, as demand for oil slowed and oil storage facilities reached their storage capacities. Varying levels of demand and production and continued oil price volatility may continue to adversely impact MLPs and energy infrastructure companies.

To the extent a distribution received by the fund from an MLP is treated as a return of capital, the fund's adjusted tax basis in the interests of the MLP may be reduced, which will result in an increase in an amount of income or gain (or decrease in the amount of loss) that will be recognized by the fund for tax purposes upon the sale of any such interests or upon subsequent distributions in respect of such interests. After the fund's tax basis in an MLP has been reduced to zero, subsequent distributions from the MLP will be treated as ordinary income. Changes in the tax character of MLP distributions, as well as late or corrected tax reporting by MLPs, may result in the fund issuing corrected 1099s to its shareholders.

#### **Mortgage-Backed and Asset-Backed Securities**

**Mortgage-Backed Securities.** Mortgage-backed securities represent participating interests in pools of residential mortgage loans that are guaranteed by the U.S. government, its agencies or instrumentalities. However, the guarantee of these types of securities relates to the principal and interest payments and not the market value of such securities. In addition, the guarantee only relates to the mortgage-backed securities held by a fund and not the purchase of shares of the fund.

Mortgage-backed securities are issued by lenders such as mortgage bankers, commercial banks, and savings and loan associations. Such securities differ from conventional debt securities, which provide for the periodic payment of interest in fixed amounts (usually semiannually) with principal payments at maturity or on specified dates. Mortgage-backed securities provide periodic payments that are, in effect, a "pass-through" of the interest and principal payments (including any prepayments) made by the individual borrowers on the pooled mortgage loans. A mortgage-backed security will mature when all the mortgages in the pool mature or are prepaid. Therefore, mortgage-backed securities do not have a fixed maturity, and their expected maturities may vary when interest rates rise or fall.

When interest rates fall, homeowners are more likely to prepay their mortgage loans. An increased rate of prepayments on a fund's mortgage-backed securities will result in an unforeseen loss of interest income to the fund as the fund may be required to reinvest assets at a lower interest rate. Because prepayments increase when interest rates fall, the prices of mortgage-backed securities do not increase as much as other fixed-income securities when interest rates fall.

When interest rates rise, homeowners are less likely to prepay their mortgage loans. A decreased rate of prepayments lengthens the expected maturity of a mortgage-backed security. Therefore, the prices of mortgage-backed securities may decrease more than prices of other fixed-income securities when interest rates rise.

The yield of mortgage-backed securities is based on the average life of the underlying pool of mortgage loans. The actual life of any particular pool may be shortened by unscheduled or early payments of principal and interest. Principal prepayments may result from the sale of the underlying property or the refinancing or foreclosure of underlying mortgages. The occurrence of prepayments is affected by a wide range of economic, demographic and social factors and, accordingly, it is not possible to accurately predict the average life of a particular pool. The actual prepayment experience of a pool of mortgage loans may cause the yield realized by a fund to differ from the yield calculated on the basis of the average life of the pool. In addition, if a fund purchases mortgage-backed securities at a premium, the premium may be lost in the event of early prepayment, which may result in a loss to the fund.

Prepayments tend to increase during periods of falling interest rates and decline during periods of rising interest rates. Monthly interest payments received by a fund have a compounding effect, which will increase the yield to shareholders as compared to debt obligations that pay interest semiannually. Because of the reinvestment of prepayments of principal at current rates, mortgage-backed securities may be less effective than Treasury bonds of similar maturity at maintaining yields during periods of declining interest rates. Also, although the value of debt securities may increase as interest rates decline, the value of these pass-through type of securities may not increase as much due to their prepayment feature.

**Collateralized Mortgage Obligations.** CMOs are mortgage-backed securities issued in separate classes with different stated maturities. As the mortgage pool experiences prepayments, the pool pays off investors in classes with shorter maturities first. By investing in CMOs, a fund may manage the prepayment risk of mortgage-backed securities. However, prepayments may cause the actual maturity of a CMO to be substantially shorter than its stated maturity.

**Asset-Backed Securities.** Asset-backed securities include interests in pools of debt securities, commercial or consumer loans, or other receivables. The value of these securities depends on many factors, including changes in interest rates, the availability of information concerning the pool and its structure, the credit quality of the underlying assets, the market's perception of the servicer of the pool, and any credit enhancement provided. In addition, asset-backed securities have prepayment risks similar to mortgage-backed securities.

# **Multinational Companies Risk**

To the extent that the fund invests in the securities of companies with foreign business operations, it may be riskier than funds that focus on companies with primarily U.S. operations. Multinational companies may face certain political and economic risks, such as foreign controls over currency exchange; restrictions on monetary repatriation; possible seizure, nationalization or expropriation of assets; and political, economic or social instability. These risks are greater for companies with significant operations in developing countries.

# **Municipal Obligations**

If localities and/or authorities in a given state default on their debt obligations, this may in turn negatively affect the marketability and, therefore, the liquidity of such state's municipal instruments. The credit risk of municipal securities is directly related to a state's financial condition, and is subject to change rapidly and without notice. The credit ratings of municipal obligations also are affected by the credit ratings of their insurers, which may be and have been negatively affected by adverse economic conditions, such as the subprime mortgage crisis. A drop in a municipal obligation's credit rating also may affect its marketability, which may in turn impact a fund's performance. In addition, the inability of bond issuers to market municipal bonds may lead to "failed auctions," which would reset periodic rates to rates in excess of those that would otherwise prevail in a short-term market. Also, the value of municipal obligations may be difficult to measure in a given economic environment, since valuation subject to external influences may not reflect the intrinsic, underlying value of a state's municipal obligations. These events may lower a fund's NAV, and the length and severity of such market turbulence may be difficult to determine.

## Natural Disasters, Adverse Weather Conditions, and Climate Change

Certain areas of the world may be exposed to adverse weather conditions, such as major natural disasters and other extreme weather events, including hurricanes, earthquakes, typhoons, floods, tidal waves, tsunamis, volcanic eruptions, wildfires, droughts, windstorms, coastal storm surges, heat waves, and rising sea levels, among others. Some countries and regions may not have the infrastructure or resources to respond to natural disasters, making them more economically sensitive to environmental events. Such disasters, and the resulting damage, could have a severe and negative impact on the fund's investment portfolio and, in the longer term, could impair the ability of issuers in which the fund invests to conduct their businesses in the manner normally conducted. Adverse weather conditions also may have a particularly significant negative effect on issuers in the agricultural sector and on insurance companies that insure against the impact of natural disasters.

Climate change, which is the result of a change in global or regional climate patterns, may increase the frequency and intensity of such adverse weather conditions, resulting in increased economic impact, and may pose long-term risks to a fund's investments. The future impact of climate change is difficult to predict but may include changes in demand for certain goods and services, supply chain disruption, changes in production costs, increased legislation, regulation, international accords and compliance-related costs, changes in property and security values, availability of natural resources and displacement of peoples.

Legal, technological, political and scientific developments regarding climate change may create new opportunities or risks for issuers in which the fund invests. These developments may create demand for new products or services, including, but not limited to, increased demand for goods that result in lower emissions, increased demand for generation and transmission of energy from alternative energy sources and increased competition to develop innovative new products and technologies. These developments may also decrease demand for existing products or services, including, but not limited to, decreased demand for goods that produce significant greenhouse gas emissions and decreased demand for services related to carbon based energy sources, such as drilling services or equipment maintenance services.

# **Negative Interest Rates**

Certain countries have recently experienced negative interest rates on deposits and debt instruments have traded at negative yields. A negative interest rate policy is an unconventional central bank monetary policy tool where nominal target interest rates are set with a negative value (i.e., below zero percent) intended to help create self-sustaining growth in the local economy. Negative interest rates may become more prevalent among non-U.S. issuers, and potentially within the U.S. For example, if a bank charges negative interest, instead of receiving interest on deposits, a depositor must pay the bank fees to keep money with the bank.

These market conditions may increase a fund's exposures to interest rate risk. To the extent a fund has a bank deposit or holds a debt instrument with a negative interest rate to maturity, the fund would generate a negative return on that investment. While negative yields can be expected to reduce demand for fixed-income investments trading at a negative interest rate, investors may be willing to continue to purchase such investments for a number of reasons including, but not limited to, price insensitivity, arbitrage opportunities across fixed-income markets or rules-based investment strategies. If negative interest rates become more prevalent in the market, it is expected that investors will seek to reallocate assets to other

income-producing assets such as investment grade and high-yield debt instruments, or equity investments that pay a dividend. This increased demand for higher yielding assets may cause the price of such instruments to rise while triggering a corresponding decrease in yield and the value of debt instruments over time.

#### Non-Diversification

A fund that is non-diversified is not limited as to the percentage of its assets that may be invested in any one issuer, or as to the percentage of the outstanding voting securities of such issuer that may be owned, except by the fund's own investment restrictions. In contrast, a diversified fund, as to at least 75% of the value of its total assets, generally may not, except with respect to government securities and securities of other investment companies, invest more than five percent of its total assets in the securities, or own more than ten percent of the outstanding voting securities, of any one issuer. In determining the issuer of a municipal security, each state, each political subdivision, agency, and instrumentality of each state and each multi-state agency of which such state is a member is considered a separate issuer. In the event that securities are backed only by assets and revenues of a particular instrumentality, facility or subdivision, such entity is considered the issuer.

A fund that is non-diversified may invest a high percentage of its assets in the securities of a small number of issuers, may invest more of its assets in the securities of a single issuer, and may be affected more than a diversified fund by a change in the financial condition of any of these issuers or by the financial markets' assessment of any of these issuers.

## **Operational and Cybersecurity Risk**

With the increased use of technologies, such as mobile devices and "cloud"-based service offerings and the dependence on the internet and computer systems to perform necessary business functions, the fund's service providers are susceptible to operational and information or cybersecurity risks that could result in losses to the fund and its shareholders. Cybersecurity breaches are either intentional or unintentional events that allow an unauthorized party to gain access to fund assets, customer data, or proprietary information, or cause the fund or fund service provider to suffer data corruption or lose operational functionality. Intentional cybersecurity incidents include: unauthorized access to systems, networks, or devices (such as through "hacking" activity or "phishing"); infection from computer viruses or other malicious software code; and attacks that shut down, disable, slow, or otherwise disrupt operations, business processes, or website access or functionality. Cyberattacks can also be carried out in a manner that does not require gaining unauthorized access, such as causing denial-of-service attacks on the service providers' systems or websites rendering them unavailable to intended users or via "ransomware" that renders the systems inoperable until appropriate actions are taken. In addition, unintentional incidents can occur, such as the inadvertent release of confidential information.

A cybersecurity breach could result in the loss or theft of customer data or funds, loss or theft of proprietary information or corporate data, physical damage to a computer or network system, or costs associated with system repairs, any of which could have a substantial impact on the fund. For example, in a denial of service, fund shareholders could lose access to their electronic accounts indefinitely, and employees of the Advisor, the subadvisor, or the fund's other service providers may not be able to access electronic systems to perform critical duties for the fund, such as trading, NAV calculation, shareholder accounting, or fulfillment of fund share purchases and redemptions. Cybersecurity incidents could cause the fund, the Advisor, the subadvisor, or other service provider to incur regulatory penalties, reputational damage, compliance costs associated with corrective measures, litigation costs, or financial loss. They may also result in violations of applicable privacy and other laws. In addition, such incidents could affect issuers in which the fund invests, thereby causing the fund's investments to lose value.

Cyber-events have the potential to affect materially the fund and the advisor's relationships with accounts, shareholders, clients, customers, employees, products, and service providers. The funds have established risk management systems reasonably designed to seek to reduce the risks associated with cyber-events. There is no guarantee that the funds will be able to prevent or mitigate the impact of any or all cyber-events.

The funds are exposed to operational risk arising from a number of factors, including, but not limited to, human error, processing and communication errors, errors of the fund's service providers, counterparties, or other third parties, failed or inadequate processes, and technology or system failures.

The Advisor, the subadvisor, and their affiliates have established risk management systems that seek to reduce cybersecurity and operational risks, and business continuity plans in the event of a cybersecurity breach or operational failure. However, there are inherent limitations in such plans, including that certain risks have not been identified, and there is no guarantee that such efforts will succeed, especially since none of the Advisor, the subadvisor, or their affiliates controls the cybersecurity or operations systems of the fund's third-party service providers (including the fund's custodian), or those of the issuers of securities in which the funds invest.

In addition, other disruptive events, including (but not limited to) natural disasters and public health crises, may adversely affect the fund's ability to conduct business, in particular if the fund's employees or the employees of its service providers are unable or unwilling to perform their responsibilities as a result of any such event. Even if the fund's employees and the employees of its service providers are able to work remotely, those remote work arrangements could result in the fund's business operations being less efficient than under normal circumstances, could lead to delays in its processing of transactions, and could increase the risk of cyber-events.

#### **Preferred and Convertible Securities Risk**

Preferred stock generally has a preference as to dividends and liquidation over an issuer's common stock but ranks junior to debt securities in an issuer's capital structure. Unlike interest payments on debt securities, preferred stock dividends are payable only if declared by the issuer's board of directors. Also, preferred stock may be subject to optional or mandatory redemption provisions. The market values of convertible securities tend to fall

as interest rates rise and rise as interest rates fall. The value of convertible preferred stock can depend heavily upon the value of the security into which such convertible preferred stock is converted, depending on whether the market price of the underlying security exceeds the conversion price.

# **Privately Held and Newly Public Companies**

Investments in the stocks of privately held companies and newly public companies involve greater risks than investments in stocks of companies that have traded publicly on an exchange for extended time periods. Investments in such companies are less liquid and may be difficult to value. There may be significantly less information available about these companies' business models, quality of management, earnings growth potential, and other criteria used to evaluate their investment prospects. The extent (if at all) to which securities of privately held companies or newly public companies may be sold without negatively impacting its market value may be impaired by reduced market activity or participation, legal restrictions, or other economic and market impediments. Funds that invest in securities of privately held companies tend to have a greater exposure to liquidity risk than funds that do not invest in securities of privately held companies.

## **Rebalancing Risks Involving Funds of Funds**

The funds of funds seek to achieve their investment objectives by investing in, among other things, other John Hancock funds, as permitted by Section 12 of the 1940 Act (affiliated underlying funds). In addition, a fund that is not a fund of funds may serve as an affiliated underlying fund for one or more funds of funds. The funds of funds will reallocate or rebalance assets among the affiliated underlying funds (collectively, "Rebalancings") on a daily basis. The following discussion provides information on the risks related to Rebalancings, which risks are applicable to the affiliated underlying funds undergoing Rebalancings, as well as to those funds of funds that hold affiliated underlying funds undergoing Rebalancings.

From time to time, one or more of the affiliated underlying funds may experience relatively large redemptions or investments due to Rebalancings, as effected by the funds of funds' Affiliated Subadvisor. Shareholders should note that Rebalancings may adversely affect the affiliated underlying funds. The affiliated underlying funds subject to redemptions by a fund of funds may find it necessary to sell securities, and the affiliated underlying funds that receive additional cash from a fund of funds will find it necessary to invest the cash. The impact of Rebalancings is likely to be greater when a fund of funds owns, redeems, or invests in, a substantial portion of an affiliated underlying fund. Rebalancings could adversely affect the performance of one or more affiliated underlying funds and, therefore, the performance of one or more funds of funds.

Possible adverse effects of Rebalancings on the affiliated underlying funds include:

- 1 The affiliated underlying funds could be required to sell securities or to invest cash, at times when they may not otherwise desire to do so.
- 2 Rebalancings may increase brokerage and/or other transaction costs of the affiliated underlying funds.
- 3 When a fund of funds owns a substantial portion of an affiliated underlying fund, a large redemption by the fund of funds could cause that affiliated underlying fund's expenses to increase and could result in its portfolio becoming too small to be economically viable.
- 4 Rebalancings could accelerate the realization of taxable capital gains in affiliated underlying funds subject to large redemptions if sales of securities results in capital gains.

The Advisor, which serves as the investment advisor to both the funds of funds and the affiliated underlying funds, has delegated the day-to-day portfolio management of the funds of funds and many of the affiliated underlying funds to the Affiliated Subadvisors, affiliates of the Advisor. The Advisor monitors both the funds and the affiliated underlying funds. The Affiliated Subadvisors manage the assets of both the funds and many of the affiliated underlying funds (the "Affiliated Subadvised Funds"). The Affiliated Subadvisors may allocate up to all of a funds of funds' assets to Affiliated Subadvised Funds and accordingly have an incentive to allocate more fund of funds assets to such Affiliated Subadvised Funds. The Advisor and the Affiliated Subadvisors monitor the impact of Rebalancings on the affiliated underlying funds and attempt to minimize any adverse effect of the Rebalancings on the underlying funds, consistent with pursuing the investment objective of the relevant affiliated underlying funds. Moreover, an Affiliated Subadvisor has a duty to allocate assets to an Affiliated Subadvised Fund only when such Subadvisor believes it is in the best interests of fund of funds shareholders. Minimizing any adverse effect of the Rebalancings on the underlying funds may impact the redemption schedule in connection with a Rebalancing. As part of its oversight of the funds and the subadvisors, the Advisor will monitor to ensure that allocations are conducted in accordance with these principles. This conflict of interest is also considered by the Independent Trustees when approving or replacing affiliated subadvisors and in periodically reviewing allocations to Affiliated Subadvised Funds.

As discussed above, the funds of funds periodically reallocate their investments among underlying investments. In an effort to be fully invested at all times and also to avoid temporary periods of under-investment, an affiliated underlying fund may buy securities and other instruments in anticipation of or with knowledge of future purchases of affiliated underlying fund shares resulting from a reallocation of assets by the funds of funds to the affiliated underlying fund. Until such purchases of affiliated underlying fund shares by a fund of funds settle (normally between one and three days), the affiliated underlying fund may have investment exposure in excess of its net assets. Shareholders who transact with the affiliated underlying fund during the period beginning when the affiliated underlying fund first starts buying securities in anticipation of a purchase order from a fund until such purchase order settles may incur more loss or realize more gain than they otherwise might have in the absence of the excess investment exposure. The funds of funds may purchase and redeem shares of underlying funds each business day through the use of an algorithm that operates pursuant to standing instructions to allocate purchase and redemption orders among underlying funds. Each day, pursuant to the algorithm, a fund of funds will purchase or redeem shares of an underlying fund at the NAV for the underlying fund calculated that day. This algorithm is used solely for rebalancing a fund of funds' investments in an effort to maintain previously determined allocation percentages.

#### **Russian Securities Risk**

Throughout the past decade, the United States, the EU, and other nations have imposed a series of economic sanctions on the Russian Federation. In addition to imposing new import and export controls on Russia and blocking financial transactions with certain Russian elites, oligarchs, and political and national security leaders, the United States, the EU, and other nations have imposed sanctions on companies in certain sectors of the Russian economy, including the financial services, energy, metals and mining, engineering, technology, and defense and defense-related materials sectors. These sanctions could impair the fund's ability to continue to price, buy, sell, receive, or deliver securities of certain Russian issuers. For example, a fund may be prohibited from investing in securities issued by companies subject to such sanctions. The fund could determine at any time that certain of the most affected securities have little or no value.

The extent and duration of Russia's military actions and the global response to such actions are impossible to predict. More Russian companies could be sanctioned in the future, and the threat of additional sanctions could itself result in further declines in the value and liquidity of certain securities. Widespread divestment of interests in Russia or certain Russian businesses could result in additional declines in the value of Russian securities. Additionally, market disruptions could have a substantial negative impact on other economics and securities markets both regionally and globally, as well as global supply chains and inflation.

The Russian government may respond to these sanctions and others by freezing Russian assets held by the fund, thereby prohibiting the fund from selling or otherwise transacting in these investments. In such circumstances, the fund might be forced to liquidate non-restricted assets in order to satisfy shareholder redemptions. Such liquidation of fund assets might also result in the fund receiving substantially lower prices for its portfolio securities.

#### Securities Linked to the Real Estate Market

Investing in securities of companies in the real estate industry subjects a fund to the risks associated with the direct ownership of real estate. These risks include, but are not limited to:

- declines in the value of real estate;
- risks related to general and local economic conditions;
- possible lack of availability of mortgage portfolios;
- · overbuilding;
- extended vacancies of properties;
- increased competition;
- increases in property taxes and operating expenses;
- change in zoning laws;
- losses due to costs resulting from the clean-up of environmental problems;
- liability to third parties for damages resulting from environmental problems;
- casualty or condemnation losses;
- limitations on rents:
- changes in neighborhood values and the appeal of properties to tenants; and
- changes in interest rates.

Therefore, if a fund invests a substantial amount of its assets in securities of companies in the real estate industry, the value of the fund's shares may change at different rates compared to the value of shares of a fund with investments in a mix of different industries.

Securities of companies in the real estate industry have been and may continue to be negatively affected by widespread health crises such as a global pandemic. Potential impacts on the real estate market may include lower occupancy rates, decreased lease payments, defaults and foreclosures, among other consequences. These impacts could adversely affect corporate borrowers and mortgage lenders, the value of mortgage-backed securities, the bonds of municipalities that depend on tax revenues and tourist dollars generated by such properties, and insurers of the property and/or of corporate, municipal or mortgage-backed securities. It is not known how long such impacts, or any future impacts of other significant events, will last.

Securities of companies in the real estate industry include REITs, including equity REITs and mortgage REITs. Equity REITs may be affected by changes in the value of the underlying property owned by the trusts, while mortgage REITs may be affected by the quality of any credit extended. Further, equity and mortgage REITs are dependent upon management skills and generally may not be diversified. Equity and mortgage REITs also are subject to heavy cash flow dependency, defaults by borrowers or lessees, and self-liquidations. In addition, equity, mortgage, and hybrid REITs could possibly fail to qualify for tax free pass-through of income under the Code, or to maintain their exemptions from registration under the 1940 Act. The above factors also may adversely affect a borrower's or a lessee's ability to meet its obligations to a REIT. In the event of a default by a borrower or lessee, a REIT may experience delays in enforcing its rights as a mortgagee or lessor and may incur substantial costs associated with protecting its investments.

In addition, even the larger REITs in the industry tend to be small to medium-sized companies in relation to the equity markets as a whole. See "Small and Medium Size and Unseasoned Companies" for a discussion of the risks associated with investments in these companies.

## **Small and Medium Size and Unseasoned Companies**

**Survival of Small or Unseasoned Companies.** Companies that are small or unseasoned (i.e., less than three years of operating history) are more likely than larger or established companies to fail or not to accomplish their goals. As a result, the value of their securities could decline significantly. These companies are less likely to survive since they are often dependent upon a small number of products and may have limited financial resources and a small management group.

**Changes in Earnings and Business Prospects.** Small or unseasoned companies often have a greater degree of change in earnings and business prospects than larger or established companies, resulting in more volatility in the price of their securities.

**Liquidity.** The securities of small or unseasoned companies may have limited marketability. This factor could cause the value of the fund's investments to decrease if it needs to sell such securities when there are few interested buyers.

**Impact of Buying or Selling Shares.** Small or unseasoned companies usually have fewer outstanding shares than larger or established companies. Therefore, it may be more difficult to buy or sell large amounts of these shares without unfavorably impacting the price of the security.

**Publicly Available Information.** There may be less publicly available information about small or unseasoned companies. Therefore, when making a decision to purchase a security for the fund, a subadvisor may not be aware of problems associated with the company issuing the security.

**Medium Size Companies.** Investments in the securities of medium sized companies present risks similar to those associated with small or unseasoned companies although to a lesser degree due to the larger size of the companies.

## **Special Purpose Acquisition Companies**

The fund may invest in stock, warrants, and other securities of SPACs or similar special purpose entities that pool funds to seek potential acquisition opportunities. SPACs are collective investment structures that allow public stock market investors to invest in private equity type transactions ("PIPE"). Until an acquisition is completed, a SPAC generally invests its assets in US government securities, money market securities and cash. The fund may enter into a contingent commitment with a SPAC to purchase PIPE shares if and when the SPAC completes its merger or acquisition.

Because SPACs and similar entities do not have an operating history or ongoing business other than seeking acquisitions, the value of their securities is particularly dependent on the ability of the SPAC's management to identify and complete a profitable acquisition. Some SPACs may pursue acquisitions only within certain industries or regions, which may increase the volatility of their prices. An investment in a SPAC is subject to a variety of risks, including that (i) a significant portion of the monies raised by the SPAC for the purpose of identifying and effecting an acquisition or merger may be expended during the search for a target transaction; (ii) an attractive acquisition or merger target may not be identified at all and the SPAC will be required to return any remaining monies to shareholders; (iii) any proposed merger or acquisition may be unable to obtain the requisite approval, if any, of shareholders; (iv) an acquisition or merger once effected may prove unsuccessful and an investment in the SPAC may lose value; (v) the warrants or other rights with respect to the SPAC held by a fund may expire worthless or may be repurchased or retired by the SPAC at an unfavorable price; (vi) a fund may be delayed in receiving any redemption or liquidation proceeds from a SPAC to which it is entitled; (vii) an investment in a SPAC may be diluted by additional later offerings of interests in the SPAC or by other investors exercising existing rights to purchase shares of the SPAC; (viii) no or only a thinly traded market for shares of or interests in a SPAC may develop, leaving a fund unable to sell its interest in a SPAC or to sell its interest only at a price below what the fund believes is the SPAC interest's intrinsic value; and (ix) the values of investments in SPACs may be highly volatile and may depreciate significantly over time.

Purchased PIPE shares will be restricted from trading until the registration statement for the shares is declared effective. Upon registration, the shares can be freely sold; however, in certain circumstances, the issuer may have the right to temporarily suspend trading of the shares in the first year after the merger. The securities issued by a SPAC, which are typically traded either in the OTC market or on an exchange, may be considered illiquid, more difficult to value, and/or be subject to restrictions on resale.

## **Stripped Securities**

Stripped securities are the separate income or principal components of a debt security. The risks associated with stripped securities are similar to those of other debt securities, although stripped securities may be more volatile, and the value of certain types of stripped securities may move in the same direction as interest rates. U.S. Treasury securities that have been stripped by a Federal Reserve Bank are obligations issued by the U.S. Treasury.

#### **Trust Preferred Securities**

The fund may invest in trust preferred securities. Trust preferred securities have the characteristics of both subordinated debt and preferred stock. Generally, trust preferred securities are issued by a trust that is wholly-owned by a financial institution or other corporate entity, typically a bank holding company. The financial institution creates the trust and owns the trust's common securities. The trust uses the sale proceeds of its common securities to purchase subordinated debt issued by the financial institution. The financial institution uses the proceeds from the subordinated debt sale to increase its capital while the trust receives periodic interest payments from the financial institution for holding the subordinated debt. The trust uses the funds received to make dividend payments to the holders of the trust preferred securities. The primary advantage of this structure is that the trust preferred securities are treated by the financial institution as debt securities for tax purposes and as equity for the calculation of capital requirements.

Trust preferred securities typically bear a market rate coupon comparable to interest rates available on debt of a similarly rated issuer. Typical characteristics include long-term maturities, early redemption by the issuer, periodic fixed or variable interest payments, and maturities at face value. Holders of trust preferred securities have limited voting rights to control the activities of the trust and no voting rights with respect to the financial

institution. The market value of trust preferred securities may be more volatile than those of conventional debt securities. Trust preferred securities may be issued in reliance on Rule 144A under the 1933 Act and subject to restrictions on resale. There can be no assurance as to the liquidity of trust preferred securities and the ability of holders, such as a fund, to sell their holdings. The condition of the financial institution is looked at to identify the risks of the trust preferred securities as the trust typically has no business operations other than to issue the trust preferred securities. If the financial institution defaults on interest payments to the trust, the trust will not be able to make dividend payments to holders of its securities, such as a fund.

#### **U.S. Government Securities**

U.S. government securities include securities issued or guaranteed by the U.S. government or by an agency or instrumentality of the U.S. government. Not all U.S. government securities are backed by the full faith and credit of the United States. Some are supported only by the credit of the issuing agency or instrumentality, which depends entirely on its own resources to repay the debt. U.S. government securities that are backed by the full faith and credit of the United States include U.S. Treasuries and mortgage-backed securities guaranteed by GNMA. Securities that are only supported by the credit of the issuing agency or instrumentality include those issued by Fannie Mae, the FHLBs and Freddie Mac.

## **REGULATION OF COMMODITY INTERESTS**

The CFTC has adopted regulations that subject registered investment companies and/or their investment advisors to regulation by the CFTC if the registered investment company invests more than a prescribed level of its NAV in commodity futures, options on commodities or commodity futures, swaps, or other financial instruments regulated under the CEA ("commodity interests"), or if the registered investment company markets itself as providing investment exposure to such commodity interests. The Advisor is registered as a CPO under the CEA and is a National Futures Association member firm; however, the Advisor does not act in the capacity of a registered CPO with respect to the fund.

Although the Advisor is a registered CPO and is a National Futures Association member firm, the Advisor has claimed an exemption from CPO registration pursuant to CFTC Rule 4.5 with respect to the fund. To remain eligible for this exemption, the fund must comply with certain limitations, including limits on trading in commodity interests, and restrictions on the manner in which the fund markets its commodity interests trading activities. These limitations may restrict the fund's ability to pursue its investment strategy, increase the costs of implementing its strategy, increase its expenses and/or adversely affect its total return.

Please see "Government Regulation of Derivatives" for more information regarding governmental regulations of derivatives and similar transactions.

# **HEDGING AND OTHER STRATEGIC TRANSACTIONS**

Hedging refers to protecting against possible changes in the market value of securities or other assets that a fund already owns or plans to buy or protecting unrealized gains in the fund. These strategies also may be used to gain exposure to a particular market. The hedging and other strategic transactions that may be used by a fund, but only if and to the extent that such transactions are consistent with its investment objective and policies, are described below:

- exchange-listed and OTC put and call options on securities, equity indices, volatility indices, financial futures contracts, currencies, fixed-income
  indices and other financial instruments;
- financial futures contracts (including stock index futures);
- interest rate transactions;\*
- currency transactions;\*\*
- warrants and rights (including non-standard warrants and participatory risks);
- swaps (including interest rate, index, dividend, inflation, variance, equity, and volatility swaps, credit default swaps, swap options and currency swaps); and
- structured notes, including hybrid or "index" securities.
- \* A fund's interest rate transactions may take the form of swaps, caps, floors and collars.
- \*\* A fund's currency transactions may take the form of currency forward contracts, currency futures contracts, currency swaps and options on currencies or currency futures contracts.

Hedging and other strategic transactions may be used for the following purposes:

- to attempt to protect against possible changes in the market value of securities held or to be purchased by a fund resulting from securities markets or currency exchange rate fluctuations;
- to protect a fund's unrealized gains in the value of its securities;
- to facilitate the sale of a fund's securities for investment purposes;
- to manage the effective maturity or duration of a fund's securities;
- to establish a position in the derivatives markets as a method of gaining exposure to a particular geographic region, market, industry, issuer, or security; or
- to increase exposure to a foreign currency or to shift exposure to foreign currency fluctuations from one country to another.

To the extent that the fund uses hedging or another strategic transaction to gain, shift or manage exposure to a particular geographic region, market, industry, issuer, security, currency, or other asset, the fund will be exposed to the risks of investing in that asset as well as the risks inherent in the specific hedging or other strategic transaction used to gain such exposure.

For purposes of determining compliance with the fund's investment policies, strategies and restrictions, the fund will generally consider the market value of derivative instruments, unless the nature of the derivative instrument warrants the use of the instrument's notional value to more accurately reflect the economic exposure represented by the derivative position.

Because of the uncertainties under federal tax laws as to whether income from commodity-linked derivative instruments and certain other instruments would constitute "qualifying income" to a RIC, no fund is permitted to invest in such instruments unless the subadvisor obtains prior written approval from the Trust's CCO. The CCO, as a member of the Advisor's Complex Securities Committee, evaluates with the committee the appropriateness of the investment.

## **General Characteristics of Options**

Put options and call options typically have similar structural characteristics and operational mechanics regardless of the underlying instrument on which they are purchased or sold. Many hedging and other strategic transactions involving options are subject to the requirements outlined in the "Government Regulation of Derivatives" section.

**Put Options.** A put option gives the purchaser of the option, upon payment of a premium, the right to sell (and the writer the obligation to buy) the underlying security, commodity, index, currency or other instrument at the exercise price. A fund's purchase of a put option on a security, for example, might be designed to protect its holdings in the underlying instrument (or, in some cases, a similar instrument) against a substantial decline in the market value of such instrument by giving a fund the right to sell the instrument at the option exercise price.

If, and to the extent authorized to do so, the fund may, for various purposes, purchase and sell put options on securities (whether or not it holds the securities in its portfolio) and on securities indices, currencies and futures contracts. A fund will not sell put options if, as a result, more than 50% of the fund's assets would be required to be segregated to cover its potential obligations under put options other than those with respect to futures contracts.

**Risk of Selling Put Options.** In selling put options, a fund faces the risk that it may be required to buy the underlying security at a disadvantageous price above the market price.

**Call Options.** A call option, upon payment of a premium, gives the purchaser of the option the right to buy (and the seller the obligation to sell) the underlying instrument at the exercise price. A fund's purchase of a call option on an underlying instrument might be intended to protect a fund against an increase in the price of the underlying instrument that it intends to purchase in the future by fixing the price at which it may purchase the instrument. An "American" style put or call option may be exercised at any time during the option period, whereas a "European" style put or call option may be exercised only upon expiration or during a fixed period prior to expiration. If and to the extent authorized to do so, a fund may purchase and sell call options on securities (whether or not it holds the securities).

**Partial Hedge or Income to the Fund.** If a fund sells a call option, the premium that it receives may serve as a partial hedge, to the extent of the option premium, against a decrease in the value of the underlying securities or instruments held by a fund or will increase a fund's income. Similarly, the sale of put options also can provide fund gains.

**Covering of Options.** All call options sold by a fund are subject to the requirements outlined in the "Government Regulation of Derivatives" section.

**Risk of Selling Call Options.** Even though a fund will receive the option premium to help protect it against loss, a call option sold by a fund will expose it during the term of the option to possible loss of the opportunity to sell the underlying security or instrument with a gain.

**Exchange-listed Options.** Exchange-listed options are issued by a regulated intermediary such as the Options Clearing Corporation (the "OCC"), which guarantees the performance of the obligations of the parties to the options. The discussion below uses the OCC as an example, but also is applicable to other similar financial intermediaries.

OCC-issued and exchange-listed options, with certain exceptions, generally settle by physical delivery of the underlying security or currency, although in the future, cash settlement may become available. Index options and Eurodollar instruments (which are described below under "Eurodollar Instruments") are cash settled for the net amount, if any, by which the option is "in-the-money" at the time the option is exercised. "In-the-money" means the amount by which the value of the underlying instrument exceeds, in the case of a call option, or is less than, in the case of a put option, the exercise price of the option. Frequently, rather than taking or making delivery of the underlying instrument through the process of exercising the option, listed options are closed by entering into offsetting purchase or sale transactions that do not result in ownership of the new option.

A fund's ability to close out its position as a purchaser or seller of an OCC-issued or exchange-listed put or call option is dependent, in part, upon the liquidity of the particular option market. Among the possible reasons for the absence of a liquid option market on an exchange are:

- insufficient trading interest in certain options;
- restrictions on transactions imposed by an exchange:
- trading halts, suspensions or other restrictions imposed with respect to particular classes or series of options or underlying securities, including reaching daily price limits;
- interruption of the normal operations of the OCC or an exchange;

- inadequacy of the facilities of an exchange or the OCC to handle current trading volume; or
- a decision by one or more exchanges to discontinue the trading of options (or a particular class or series of options), in which event the relevant market for that option on that exchange would cease to exist, although any such outstanding options on that exchange would continue to be exercisable in accordance with their terms.

The hours of trading for listed options may not coincide with the hours during which the underlying financial instruments are traded. To the extent that the option markets close before the markets for the underlying financial instruments, significant price and rate movements can take place in the underlying markets that would not be reflected in the corresponding option markets.

**OTC Options.** OTC options are purchased from or sold to counterparties such as securities dealers or financial institutions through direct bilateral agreement with the counterparty. In contrast to exchange-listed options, which generally have standardized terms and performance mechanics, all of the terms of an OTC option, including such terms as method of settlement, term, exercise price, premium, guaranties and security, are determined by negotiation of the parties. It is anticipated that a fund authorized to use OTC options generally will only enter into OTC options that have cash settlement provisions, although it will not be required to do so.

Unless the parties provide for it, no central clearing or guaranty function is involved in an OTC option. As a result, if a counterparty fails to make or take delivery of the security, currency or other instrument underlying an OTC option it has entered into with a fund or fails to make a cash settlement payment due in accordance with the terms of that option, the fund will lose any premium it paid for the option as well as any anticipated benefit of the transaction. Thus, the subadvisor must assess the creditworthiness of each such counterparty or any guarantor or credit enhancement of the counterparty's credit to determine the likelihood that the terms of the OTC option will be met. A fund will enter into OTC option transactions only with U.S. government securities dealers recognized by the Federal Reserve Bank of New York as "primary dealers," or broker dealers, domestic or foreign banks, or other financial institutions that are deemed creditworthy by the subadvisor. In the absence of a change in the current position of the SEC's staff, OTC options purchased by a fund and the amount of the fund's obligation pursuant to an OTC option sold by the fund (the cost of the sell-back plus the in-the-money amount, if any) will be deemed illiquid.

**Types of Options That May Be Purchased.** A fund may purchase and sell call options on securities indices, currencies, and futures contracts, as well as on Eurodollar instruments that are traded on U.S. and foreign securities exchanges and in the OTC markets.

## **General Characteristics of Futures Contracts and Options on Futures Contracts**

A fund may trade financial futures contracts (including stock index futures contracts, which are described below) or purchase or sell put and call options on those contracts for the following purposes:

- as a hedge against anticipated interest rate, currency or market changes;
- for duration management;
- for risk management purposes; and
- to gain exposure to a securities market.

Futures contracts are generally bought and sold on the commodities exchanges where they are listed with payment of initial and variation margin as described below. The sale of a futures contract creates a firm obligation by a fund, as seller, to deliver to the buyer the specific type of financial instrument called for in the contract at a specific future time for a specified price (or, with respect to certain instruments, the net cash amount). Options on futures contracts are similar to options on securities except that an option on a futures contract gives the purchaser the right, in return for the premium paid, to assume a position in a futures contract and obligates the seller to deliver that position.

A fund will only engage in transactions in futures contracts and related options subject to complying with the Derivatives Rule. The Derivatives Rule requirements are outlined in the "Government Regulation of Derivatives" section. A fund will engage in transactions in futures contracts and related options only to the extent such transactions are consistent with the requirements of the Code in order to maintain its qualification as a RIC for federal income tax purposes.

Margin. Maintaining a futures contract or selling an option on a futures contract will typically require a fund to deposit with a financial intermediary, as security for its obligations, an amount of cash or other specified assets ("initial margin") that initially is from 1% to 10% of the face amount of the contract (but may be higher in some circumstances). Additional cash or assets ("variation margin") may be required to be deposited thereafter daily as the mark-to-market value of the futures contract fluctuates. The purchase of an option on a financial futures contract involves payment of a premium for the option without any further obligation on the part of a fund. If a fund exercises an option on a futures contract it will be obligated to post initial margin (and potentially variation margin) for the resulting futures position just as it would for any futures position.

**Settlement.** Futures contracts and options thereon are generally settled by entering into an offsetting transaction, but no assurance can be given that a position can be offset prior to settlement or that delivery will occur.

#### **Stock Index Futures**

**Definition.** A stock index futures contract (an "Index Future") is a contract to buy a certain number of units of the relevant index at a specified future date at a price agreed upon when the contract is made. A unit is the value at a given time of the relevant index.

**Uses of Index Futures.** Below are some examples of how a fund may use Index Futures:

- In connection with a fund's investment in equity securities, a fund may invest in Index Futures while the subadvisor seeks favorable terms from brokers to effect transactions in equity securities selected for purchase.
- A fund also may invest in Index Futures when the subadvisor believes that there are not enough attractive equity securities available to maintain the standards of diversity and liquidity set for the fund's pending investment in such equity securities when they do become available.
- Through the use of Index Futures, a fund may maintain a pool of assets with diversified risk without incurring the substantial brokerage costs that may be associated with investment in multiple issuers. This may permit a fund to avoid potential market and liquidity problems (e.g., driving up or forcing down the price by quickly purchasing or selling shares of a portfolio security) that may result from increases or decreases in positions already held by a fund.
- A fund also may invest in Index Futures in order to hedge its equity positions.

Hedging and other strategic transactions involving futures contracts, options on futures contracts and swaps will be purchased, sold or entered into primarily for bona fide hedging, risk management (including duration management) or appropriate portfolio management purposes, including gaining exposure to a particular securities market.

#### **Options on Securities Indices and Other Financial Indices**

A fund may purchase and sell call and put options on securities indices and other financial indices ("Options on Financial Indices"). In so doing, a fund may achieve many of the same objectives it would achieve through the sale or purchase of options on individual securities or other instruments.

**Description of Options on Financial Indices.** Options on Financial Indices are similar to options on a security or other instrument except that, rather than settling by physical delivery of the underlying instrument, Options on Financial Indices settle by cash settlement. Cash settlement means that the holder has the right to receive, upon exercise of the option, an amount of cash if the closing level of the index upon which the option is based exceeds, in the case of a call (or is less than, in the case of a put) the exercise price of the option. This amount of cash is equal to the excess of the closing price of the index over the exercise price of the option, which also may be multiplied by a formula value. The seller of the option is obligated to make delivery of this amount. The gain or loss on an option on an index depends on price movements in the instruments comprising the market or other composite on which the underlying index is based, rather than price movements in individual securities, as is the case for options on securities. In the case of an OTC option, physical delivery may be used instead of cash settlement. By purchasing or selling Options on Financial Indices, a fund may achieve many of the same objectives it would achieve through the sale or purchase of options on individual securities or other instruments.

#### **Currency Transactions**

A fund may be authorized to engage in currency transactions with counterparties to hedge the value of portfolio securities denominated in particular currencies against fluctuations in relative value, to gain exposure to a currency without purchasing securities denominated in that currency, to facilitate the settlement of equity trades or to exchange one currency for another. If a fund enters into a currency hedging transaction, the fund will comply with the regulatory limitations outlined in the "Government Regulation of Derivatives" section. Currency transactions may include:

- forward currency contracts;
- exchange-listed currency futures contracts and options thereon;
- exchange-listed and OTC options on currencies;
- · currency swaps; and
- spot transactions (i.e., transactions on a cash basis based on prevailing market rates).

A forward currency contract involves a privately negotiated obligation to purchase or sell (with delivery generally required) a specific currency at a future date at a price set at the time of the contract. A currency swap is an agreement to exchange cash flows based on the notional difference among two or more currencies and operates similarly to an interest rate swap, which is described under "Swap Agreements and Options on Swap Agreements." A fund may enter into currency transactions only with counterparties that are deemed creditworthy by the subadvisor. Nevertheless, engaging in currency transactions will expose a fund to counterparty risk.

A fund's dealings in forward currency contracts and other currency transactions such as futures contracts, options, options on futures contracts and swaps may be used for hedging and similar purposes, possibly including transaction hedging, position hedging, cross hedging and proxy hedging. A fund also may use foreign currency options and foreign currency forward contracts to increase exposure to a foreign currency, to shift exposure to foreign currency fluctuation from one country to another or to facilitate the settlement of equity trades.

A fund also may engage in non-deliverable forward transactions to manage currency risk or to gain exposure to a currency without purchasing securities denominated in that currency. A non-deliverable forward is a transaction that represents an agreement between a fund and a counterparty (usually a commercial bank) to buy or sell a specified (notional) amount of a particular currency at an agreed-upon foreign exchange rate on an agreed-upon future date. Unlike other currency transactions, there is no physical delivery of the currency on the settlement of a non-deliverable forward transaction. Rather, the fund and the counterparty agree to net the settlement by making a payment in U.S. dollars or another fully convertible currency that represents any differential between the foreign exchange rate agreed upon at the inception of the non-deliverable forward agreement and the actual exchange rate on the agreed-upon future date. Thus, the actual gain or loss of a given non-deliverable forward transaction is calculated by multiplying the transaction's notional amount by the difference between the agreed-upon forward exchange rate and the actual exchange rate when the transaction is completed.

Since a fund generally may only close out a non-deliverable forward with the particular counterparty, there is a risk that the counterparty will default on its obligation to pay under the agreement. If the counterparty defaults, the fund will have contractual remedies pursuant to the agreement related to the transaction, but there is no assurance that contract counterparties will be able to meet their obligations pursuant to such agreements or that, in the event of a default, the fund will succeed in pursuing contractual remedies. The fund thus assumes the risk that it may be delayed or prevented from obtaining payments owed to it pursuant to non-deliverable forward transactions.

In addition, where the currency exchange rates that are the subject of a given non-deliverable forward transaction do not move in the direction or to the extent anticipated, a fund could sustain losses on the non-deliverable forward transaction. A fund's investment in a particular non-deliverable forward transaction will be affected favorably or unfavorably by factors that affect the subject currencies, including economic, political and legal developments that impact the applicable countries, as well as exchange control regulations of the applicable countries. These risks are heightened when a non-deliverable forward transaction involves currencies of emerging market countries because such currencies can be volatile and there is a greater risk that such currencies will be devalued against the U.S. dollar or other currencies.

**Transaction Hedging.** Transaction hedging involves entering into a currency transaction with respect to specific assets or liabilities of a fund, which generally will arise in connection with the purchase or sale of the portfolio securities or the receipt of income from them.

**Position Hedging.** Position hedging involves entering into a currency transaction with respect to portfolio securities positions denominated or generally quoted in that currency.

**Cross Hedging.** A fund may be authorized to cross-hedge currencies by entering into transactions to purchase or sell one or more currencies that are expected to increase or decline in value relative to other currencies to which the fund has or in which the fund expects to have exposure.

**Proxy Hedging.** To reduce the effect of currency fluctuations on the value of existing or anticipated holdings of its securities, a fund also may be authorized to engage in proxy hedging. Proxy hedging is often used when the currency to which a fund's holdings are exposed is generally difficult to hedge or specifically difficult to hedge against the dollar. Proxy hedging entails entering into a forward contract to sell a currency, the changes in the value of which are generally considered to be linked to a currency or currencies in which some or all of a fund's securities are or are expected to be denominated, and to buy dollars. The amount of the contract would not exceed the market value of the fund's securities denominated in linked currencies.

#### **Combined Transactions**

The fund may be authorized to enter into multiple transactions, including multiple options transactions, multiple futures transactions, multiple currency transactions (including forward currency contracts), multiple interest rate transactions and any combination of futures, options, currency and interest rate transactions. A combined transaction usually will contain elements of risk that are present in each of its component transactions. Although a fund normally will enter into combined transactions to reduce risk or otherwise more effectively achieve the desired portfolio management goal, it is possible that the combination will instead increase the risks or hinder achievement of the fund's investment objective.

# **Swap Agreements and Options on Swap Agreements**

Among the hedging and other strategic transactions into which a fund may be authorized to enter are swap transactions, including, but not limited to, swap agreements on interest rates, security or commodity indexes, specific securities and commodities, currency exchange rates, and credit and event-linked swaps. To the extent that a fund may invest in foreign currency-denominated securities, it also may invest in currency exchange rate swap agreements.

A fund may enter into swap transactions for any legal purpose consistent with its investment objective and policies, such as to attempt to obtain or preserve a particular return or spread at a lower cost than obtaining a return or spread through purchases and/or sales of instruments in other markets, to protect against currency fluctuations, as a duration management technique, to protect against any increase in the price of securities the fund anticipates purchasing at a later date, or to gain exposure to certain markets in the most economical way possible.

OTC swap agreements are two-party contracts entered into primarily by institutional investors for periods ranging from a few weeks to one or more years. In a standard "swap" transaction, two parties agree to exchange the returns (or differentials in rates of return) earned or realized on particular predetermined investments or instruments, which may be adjusted for an interest factor. The gross returns to be exchanged or "swapped" between the parties are generally calculated with respect to a "notional amount," i.e., the return on or increase in value of a particular dollar amount invested at a particular interest rate, in a particular foreign currency, or in a "basket" of securities or commodities representing a particular index. A "quanto" or "differential" swap combines both an interest rate and a currency transaction. Other forms of swap agreements include interest rate caps, under which, in return for a premium, one party agrees to make payments to the other to the extent that interest rates exceed a specified rate, or "cap"; interest rate floors, under which, in return for a premium, one party agrees to make payments to the other to the extent that interest rates fall below a specified rate, or "floor"; and interest rate collars, under which a party sells a cap and purchases a floor or vice versa in an attempt to protect itself against interest rate movements exceeding given minimum or maximum levels. Consistent with a fund's investment objectives and general investment policies, a fund may be authorized to invest in commodity swap agreements. For example, an investment in a commodity swap agreement may involve the exchange of floating-rate interest payments for the total return on a commodity index. In a total return commodity swap, a fund will receive the price appreciation of a commodity index, a portion of the index, or a single commodity in exchange for paying an agreed-upon fee. If the commodity swap is for one period, a fund may pay a fixed fee, established at the outset of the swap. However, if th

payments, a fund may pay an adjustable or floating fee. With a "floating" rate, the fee may be pegged to a base rate, such as SOFR, and is adjusted each period. Therefore, if interest rates increase over the term of the swap contract, a fund may be required to pay a higher fee at each swap reset date.

A fund may be authorized to enter into options on swap agreements ("Swap Options"). A Swap Option is a contract that gives a counterparty the right (but not the obligation) in return for payment of a premium, to enter into a new swap agreement or to shorten, extend, cancel or otherwise modify an existing swap agreement, at some designated future time on specified terms. A fund also may be authorized to write (sell) and purchase put and call Swap Options.

Depending on the terms of the particular agreement, a fund generally will incur a greater degree of risk when it writes a Swap Option than it will incur when it purchases a Swap Option. When a fund purchases a swap option, it risks losing only the amount of the premium it has paid should it decide to let the option expire unexercised. However, when the fund writes a Swap Option, upon exercise of the option the fund will become obligated according to the terms of the underlying agreement. Most other types of swap agreements entered into by a fund would calculate the obligations of the parties to the agreement on a "net basis." Consequently, a fund's current obligations (or rights) under a swap agreement generally will be equal only to the net amount to be paid or received under the agreement based on the relative values of the positions held by each party to the agreement (the "net amount"). A fund's current obligations under a swap agreement will be accrued daily (offset against any amounts owed to the fund). A fund's use of swap agreements or Swap Options are subject to the regulatory limitations outlined in the "Government Regulation of Derivatives" section.

Whether a fund's use of swap agreements or Swap Options will be successful in furthering its investment objective will depend on the subadvisor's ability to predict correctly whether certain types of investments are likely to produce greater returns than other investments. Because OTC swaps are two-party contracts and because they may have terms of greater than seven days, they may be considered to be illiquid. Moreover, a fund bears the risk of loss of the amount expected to be received under a swap agreement in the event of the default or bankruptcy of a swap agreement counterparty. A fund will enter into swap agreements only with counterparties that meet certain standards of creditworthiness. Certain restrictions imposed on a fund by the Code may limit its ability to use swap agreements. Current regulatory initiatives, described below, and potential future regulation could adversely affect a fund's ability to terminate existing swap agreements or to realize amounts to be received under such agreements. A fund will not enter into a swap agreement with any single party if the net amount owed to the fund under existing contracts with that party would exceed 5% of the fund's total assets.

Swaps are highly specialized instruments that require investment techniques, risk analyses, and tax planning different from those associated with traditional investments. The use of a swap requires an understanding not only of the referenced asset, rate, or index but also of the swap itself, without the benefit of observing the performance of the swap under all possible market conditions. Swap agreements may be subject to liquidity risk, which exists when a particular swap is difficult to purchase or sell. If a swap transaction is particularly large or if the relevant market is illiquid (as is the case with many OTC swaps), it may not be possible to initiate a transaction or liquidate a position at an advantageous time or price, which may result in significant losses. In addition, a swap transaction may be subject to a fund's limitation on investments in illiquid securities.

Like most other investments, swap agreements are subject to the risk that the market value of the instrument will change in a way detrimental to a fund's interest. A fund bears the risk that the subadvisor will not accurately forecast future market trends or the values of assets, reference rates, indexes, or other economic factors in establishing swap positions for it. If the subadvisor attempts to use a swap as a hedge against, or as a substitute for, an investment, the fund will be exposed to the risk that the swap will have or will develop imperfect or no correlation with the investment. This could cause substantial losses for the fund. While hedging strategies involving swap instruments can reduce the risk of loss, they also can reduce the opportunity for gain or even result in losses by offsetting favorable price movements in other investments.

The swaps market was largely unregulated prior to the enactment of federal legislation known as the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). Among other things, the Dodd-Frank Act sets forth a new regulatory framework for certain OTC derivatives, such as swaps, in which the fund may be authorized to invest. The Dodd-Frank Act requires many swap transactions to be executed on registered exchanges or through swap execution facilities, cleared through a regulated clearinghouse, and publicly reported. In addition, many market participants are now regulated as swap dealers and are, or will be, subject to certain minimum capital and margin requirements and business conduct standards. The statutory requirements of the Dodd-Frank Act have primarily been implemented through rules and regulations adopted by the SEC and/or the CFTC, although some rules have not been fully implemented.

As of the date of this SAI, central clearing is required only for certain market participants trading certain instruments, although central clearing for additional instruments is expected to be implemented by the CFTC. In addition, as described below, uncleared OTC swaps may be subject to regulatory collateral requirements that could adversely affect a fund's ability to enter into swaps in the OTC market. These developments could cause a fund to terminate new or existing swap agreements, realize amounts to be received under such instruments at an inopportune time, or increase the costs associated with trading derivatives. It is still not possible to determine the complete impact of the Dodd-Frank Act and related regulations on the funds. Swap dealers, major swap market participants, and swap counterparties may also experience other new and/or additional regulations, requirements, compliance burdens, and associated costs. The Dodd-Frank Act and rules promulgated thereunder may exert a negative effect on a fund's ability to meet its investment objective. The swap market could be disrupted or limited as a result of the legislation, and the new requirements may increase the cost of a fund's investments and of doing business, which could adversely affect the fund's ability to buy or sell OTC derivatives. Prudential regulators issued final rules that will require banks subject to their supervision to exchange variation and initial margin in respect of their obligations arising under uncleared swap agreements. The CFTC adopted similar rules that apply to CFTC-registered swap dealers that are not banks. Such rules may require the

funds to segregate additional assets in order to meet the new variation and initial margin requirements when they enter into uncleared swap agreements. The variation margin and initial margin requirements are now effective.

In addition, regulations adopted by prudential regulators require certain banks to include in a range of financial contracts, including derivative and short-term funding transactions terms delaying or restricting a counterparty's default, termination and other rights in the event that the bank and/or its affiliates become subject to certain types of resolution or insolvency proceedings. The regulations could limit a fund's ability to exercise a range of cross-default rights if its counterparty, or an affiliate of the counterparty, is subject to bankruptcy or similar proceedings. Such regulations could further negatively impact the fund's use of derivatives.

Additional information about certain swap agreements that the funds may utilize is provided below.

Credit default swap agreements ("CDS"). CDS may have as reference obligations one or more securities that are not currently held by a fund. The protection "buyer" in a CDS is generally obligated to pay the protection "seller" an upfront or a periodic stream of payments over the term of the CDS provided that no credit event, such as a default, on a reference obligation has occurred. If a credit event occurs, the seller generally must pay the buyer the "par value" (full notional value) of the CDS in exchange for an equal face amount of deliverable obligations of the reference entity described in the CDS, or the seller may be required to deliver the related net cash amount, if the CDS is cash settled. A fund may be either the buyer or seller in the transaction. If a fund is a buyer and no credit event occurs, the fund may recover nothing if the CDS is held through its termination date. However, if a credit event occurs, the buyer generally may elect to receive the full notional value of the CDS in exchange for an equal face amount of deliverable obligations of the reference entity whose value may have significantly decreased. As a seller, a fund generally receives an upfront payment or a fixed rate of income throughout the term of the CDS, provided that there is no credit event. As the seller, a fund would effectively add leverage to the fund because, in addition to its total net assets, the fund would be subject to investment exposure on the notional amount of the CDS. If a fund enters into a CDS, the fund may be required to report the CDS as a "listed transaction" for tax shelter reporting purposes on the fund's federal income tax return. If the IRS were to determine that the CDS is a tax shelter, a fund could be subject to penalties under the Code.

Credit default swap indices are indices that reflect the performance of a basket of credit default swaps and are subject to the same risks as CDS. The fund's return from investment in a credit default swap index may not match the return of the referenced index. Further, investment in a credit default swap index could result in losses if the referenced index does not perform as expected. Unexpected changes in the composition of the index may also affect performance of the credit default swap index. If a referenced index has a dramatic intraday move that causes a material decline in the fund's net assets, the terms of the fund's credit default swap index may permit the counterparty to immediately close out the transaction. In that event, the fund may be unable to enter into another credit default swap index or otherwise achieve desired exposure, even if the referenced index reverses all or a portion of its intraday move.

A fund also may be authorized to enter into credit default swaps on index tranches. CDS on index tranches give the fund, as a seller of credit protection, the opportunity to take on exposures to specific segments of the CDS index default loss distribution. Each tranche has a different sensitivity to credit risk correlations among entities in the index. One of the main benefits of index tranches is higher liquidity. This has been achieved mainly through standardization, yet it is also due to the liquidity in the single-name CDS and CDS index markets. In contrast, possibly owing to the limited liquidity in the corporate bond market, securities referencing corporate bond indexes have not been traded actively.

CDS involve greater risks than if a fund had invested in the reference obligation directly since, in addition to general market risks, CDS are subject to illiquidity risk, counterparty risk and credit risk. A fund will enter into CDS only with counterparties that meet certain standards of creditworthiness. A buyer generally also will lose its investment and recover nothing should no credit event occur and the CDS is held to its termination date. If a credit event were to occur, the value of any deliverable obligation received by the seller, coupled with the upfront or periodic payments previously received, may be less than the full notional value it pays to the buyer, resulting in a loss of value to the seller. A fund's obligations under a CDS will be accrued daily (offset against any amounts owing to the fund). A fund's ability to be a "buyer" or "seller" of CDS is subject to the regulatory limitations outlined in the "Government Regulation of Derivatives" section.

Dividend swap agreements. A dividend swap agreement is a financial instrument where two parties contract to exchange a set of future cash flows at set dates in the future. One party agrees to pay the other the future dividend flow on a stock or basket of stocks in an index, in return for which the other party gives the first call options. Dividend swaps generally are traded OTC rather than on an exchange.

Inflation swap agreements. An inflation swap agreement is a contract in which one party agrees to pay the cumulative percentage increase in a price index (e.g., the CPI with respect to CPI swaps) over the term of the swap (with some lag on the inflation index), and the other pays a compounded fixed rate. Inflation swap agreements may be used to protect a fund's NAV against an unexpected change in the rate of inflation measured by an inflation index since the value of these agreements is expected to increase if unexpected inflation increases.

Interest rate swap agreements. An interest rate swap agreement involves the exchange of cash flows based on interest rate specifications and a specified principal amount, often a fixed payment for a floating payment that is linked to an interest rate. An interest rate lock specifies a future interest rate to be paid. In an interest rate cap, one party receives payments at the end of each period in which a specified interest rate on a specified principal amount exceeds an agreed-upon rate; conversely, in an interest rate floor, one party may receive payments if a specified interest rate on a specified principal amount falls below an agreed-upon rate. Caps and floors have an effect similar to buying or writing options. Interest rate collars involve selling a cap and purchasing a floor, or vice versa, to protect a fund against interest rate movements exceeding given minimum or maximum levels.

Total return swap agreements. A total return swap agreement is a contract whereby one party agrees to make a series of payments to another party based on the change in the market value of the assets underlying such contract (which can include a security, commodity, index or baskets thereof) during the specified period. In exchange, the other party to the contract agrees to make a series of payments calculated by reference to an interest rate and/or some other agreed-upon amount (including the change in market value of other underlying assets). A fund may use total return swaps to gain exposure to an asset without owning it or taking physical custody of it. For example, by investing in total return commodity swaps, a fund will receive the price appreciation of a commodity, commodity index or portion thereof in exchange for payment of an agreed-upon fee.

Variance swap agreements. Variance swap agreements involve an agreement by two parties to exchange cash flows based on the measured variance (or square of volatility) of a specified underlying asset. One party agrees to exchange a "fixed rate" or strike price payment for the "floating rate" or realized price variance on the underlying asset with respect to the notional amount. At inception, the strike price chosen is generally fixed at a level such that the fair value of the swap is zero. As a result, no money changes hands at the initiation of the contract. At the expiration date, the amount paid by one party to the other is the difference between the realized price variance of the underlying asset and the strike price multiplied by the notional amount. A receiver of the realized price variance would receive a payment when the realized price variance of the underlying asset is greater than the strike price and would make a payment when that variance is less than the strike price and would receive a payment when that variance is less than the strike price and would receive a payment when that variance is less than the strike price. This type of agreement is essentially a forward contract on the future realized price variance of the underlying asset.

#### **Warrants and Rights**

Warrants and rights generally give the holder the right to receive, upon exercise and prior to the expiration date, a security of the issuer at a stated price. Funds typically use warrants and rights in a manner similar to their use of options on securities, as described in "General Characteristics of Options" above and elsewhere in this SAI. Risks associated with the use of warrants and rights are generally similar to risks associated with the use of options. Unlike most options, however, warrants and rights are issued in specific amounts, and warrants generally have longer terms than options. Warrants and rights are not likely to be as liquid as exchange-traded options backed by a recognized clearing agency. In addition, the terms of warrants or rights may limit a fund's ability to exercise the warrants or rights at such time, or in such quantities, as the fund would otherwise wish.

Non-Standard Warrants and Participatory Notes. From time to time, a fund may use non-standard warrants, including low exercise price warrants or low exercise price options ("LEPOs"), and participatory notes ("P-Notes") to gain exposure to issuers in certain countries. LEPOs are different from standard warrants in that they do not give their holders the right to receive a security of the issuer upon exercise. Rather, LEPOs pay the holder the difference in price of the underlying security between the date the LEPO was purchased and the date it is sold. P-Notes are a type of equity-linked derivative that generally are traded OTC and constitute general unsecured contractual obligations of the banks, broker dealers or other financial institutions that issue them. Generally, banks and broker dealers associated with non-U.S.-based brokerage firms buy securities listed on certain foreign exchanges and then issue P-Notes that are designed to replicate the performance of certain issuers and markets. The performance results of P-Notes will not replicate exactly the performance of the issuers or markets that the notes seek to replicate due to transaction costs and other expenses. The return on a P-Note that is linked to a particular underlying security generally is increased to the extent of any dividends paid in connection with the underlying security. However, the holder of a P-Note typically does not receive voting or other rights as it would if it directly owned the underlying security, and P-Notes present similar risks to investing directly in the underlying security. Additionally, LEPOs and P-Notes entail the same risks as other OTC derivatives. These include the risk that the counterparty or issuer of the LEPO or P-Note may not be able to fulfill its obligations, that the holder and counterparty or issuer may disagree as to the meaning or application of contractual terms, or that the instrument may not perform as expected. See "Principal risks—Credit and Counterparty risk" in the Prospectus, as applicable, and "Risk of Hedging and Other Strategic Transactions" below. Additionally, while LEPOs or P-Notes may be listed on an exchange, there is no guarantee that a liquid market will exist or that the counterparty or issuer of a LEPO or P-Note will be willing to repurchase such instrument when a fund wishes to sell it.

# **Risk of Hedging and Other Strategic Transactions**

Hedging and other strategic transactions are subject to special risks, including:

- possible default by the counterparty to the transaction;
- markets for the securities used in these transactions could be illiquid; and
- to the extent the subadvisor's assessment of market movements is incorrect, the risk that the use of the hedging and other strategic transactions could result in losses to the fund.

Losses resulting from the use of hedging and other strategic transactions will reduce a fund's NAV, and possibly income. Losses can be greater than if hedging and other strategic transactions had not been used.

**Options and Futures Transactions.** Options transactions are subject to the following additional risks:

- option transactions could force the sale or purchase of portfolio securities at inopportune times or for prices higher than current market values (in the case of put options) or lower than current market values (in the case of call options), or could cause a fund to hold a security it might otherwise sell (in the case of a call option);
- calls written on securities that a fund does not own are riskier than calls written on securities owned by the fund because there is no underlying security held by the fund that can act as a partial hedge, and there also is a risk, especially with less liquid securities, that the securities may not be available for purchase; and

• options markets could become illiquid in some circumstances and certain OTC options could have no markets. As a result, in certain markets, a fund might not be able to close out a transaction without incurring substantial losses.

Futures transactions are subject to the following additional risks:

- the degree of correlation between price movements of futures contracts and price movements in the related securities position of a fund could create the possibility that losses on the hedging instrument are greater than gains in the value of the fund's position.
- futures markets could become illiquid. As a result, in certain markets, a fund might not be able to close out a transaction without incurring substantial losses.

Although a fund's use of futures and options for hedging should tend to minimize the risk of loss due to a decline in the value of the hedged position, at the same time, it will tend to limit the potential gain that might result from an increase in value.

## **Government Regulation of Derivatives**

The regulation of the U.S. and non-U.S. derivatives markets has undergone substantial change in recent years and such change may continue. In particular, on October 28, 2020, the SEC adopted new regulations governing the use of derivatives by registered investment companies ("Rule 18f-4" or the "Derivatives Rule"). Funds were required to implement and comply with Rule 18f-4 by August 19, 2022. Rule 18f-4 eliminates the asset segregation framework formerly used by funds to comply with Section 18 of the 1940 Act, as amended.

The Derivatives Rule mandates that a fund adopt and/or implement: (i) value-at-risk limitations ("VaR"); (ii) a written derivatives risk management program; (iii) new Board oversight responsibilities; and (iv) new reporting and recordkeeping requirements. In the event that a fund's derivative exposure is 10% or less of its net assets, excluding certain currency and interest rate hedging transactions, it can elect to be classified as a limited derivatives user ("Limited Derivatives User") under the Derivatives Rule, in which case the fund is not subject to the full requirements of the Derivatives Rule. Limited Derivatives Users are excepted from VaR testing, implementing a derivatives risk management program, and certain Board oversight and reporting requirements mandated by the Derivatives Rule. However, a Limited Derivatives User is still required to implement written compliance policies and procedures reasonably designed to manage its derivatives risks.

The Derivatives Rule also provides special treatment for reverse repurchase agreements, similar financing transactions and unfunded commitment agreements. Specifically, a fund may elect whether to treat reverse repurchase agreements and similar financing transactions as "derivatives transactions" subject to the requirements of the Derivatives Rule or as senior securities equivalent to bank borrowings for purposes of Section 18 of the 1940 Act. Repurchase agreements are not subject to the Derivatives Rule, but are still subject to other provisions of the 1940 Act. In addition, when-issued or forward settling securities transactions that physically settle within 35-days are deemed not to involve a senior security.

Furthermore, it is possible that additional government regulation of various types of derivative instruments may limit or prevent a fund from using such instruments as part of its investment strategy in the future, which could negatively impact the fund. New position limits imposed on a fund or its counterparty may also impact the fund's ability to invest in futures, options, and swaps in a manner that efficiently meets its investment objective.

Use of extensive hedging and other strategic transactions by a fund will require, among other things, that the fund post collateral with counterparties or clearinghouses, and/or are subject to the Derivatives Rule regulatory limitations as outlined above.

**Futures Contracts and Options on Futures Contracts.** In the case of a futures contract, or an option on a futures contract, a fund must deposit initial margin and, in some instances, daily variation margin, to meet its obligations under the contract. These assets may consist of cash, cash equivalents, liquid debt, equity securities or other acceptable assets.

## **INVESTMENT RESTRICTIONS**

The fund's investment restrictions are subject to, and may be impacted and limited by, the federal securities laws, rules and regulations, including the 1940 Act and Rule 18f-4 thereunder.

The Trust is subject to fundamental investment restrictions in implementing the investment policies of the fund. Fundamental restrictions may be changed only by a vote of the lesser of: (i) 67% or more of the shares represented at a meeting at which more than 50% of the outstanding shares are represented; or (ii) more than 50% of the outstanding shares.

When submitting an investment restriction change to the holders of the fund's outstanding voting securities, the matter shall be deemed to have been effectively acted upon with respect to a particular fund if a majority of the outstanding voting securities of the fund votes for the approval of the matter, notwithstanding: (1) that the matter has not been approved by the holders of a majority of the outstanding voting securities of any other series of the Trust affected by the matter; and (2) that the matter has not been approved by the vote of a majority of the outstanding voting securities of the Trust as a whole.

## **Fundamental Investment Restrictions**

Unless the fund is specifically excepted by the terms of a restriction:

(1) **Concentration.** The fund will not concentrate its investments in a particular industry, as that term is used in the 1940 Act, as amended, and as interpreted or modified by regulatory authority having jurisdiction, from time to time.

- **Borrowing.** The fund may not borrow money, except as permitted under the 1940 Act, as amended, and as interpreted or modified by regulatory authority having jurisdiction, from time to time.
- (3) **Underwriting.** The fund may not engage in the business of underwriting securities issued by others, except to the extent that the fund may be deemed to be an underwriter in connection with the disposition of portfolio securities.
- (4) **Real Estate.** The fund may not purchase or sell real estate, which term does not include securities of companies which deal in real estate or mortgages or investments secured by real estate or interests therein, except that each fund reserves freedom of action to hold and to sell real estate acquired as a result of the fund's ownership of securities.
- (5) **Commodities.** The fund may not purchase or sell commodities, except as permitted under the 1940 Act, as amended, and as interpreted or modified by regulatory authority having jurisdiction, from time to time.
- (6) Loans. The fund may not make loans except as permitted under the 1940 Act, as amended, and as interpreted or modified by regulatory authority having jurisdiction, from time to time.
- (7) **Senior Securities.** The fund may not issue senior securities, except as permitted under the 1940 Act, as amended, and as interpreted or modified by regulatory authority having jurisdiction, from time to time.

For purposes of Fundamental Restriction No. 7, purchasing securities on a when-issued, forward commitment or delayed delivery basis and engaging in hedging and other strategic transactions will not be deemed to constitute the issuance of a senior security.

The following discussion provides additional information about the Fundamental Restrictions set forth above.

Concentration. While the 1940 Act does not define what constitutes "concentration" in an industry, the staff of the SEC takes the position that any fund that invests more than 25% of its total assets in a particular industry (excluding the U.S. government, its agencies or instrumentalities) is deemed to be "concentrated" in that industry. With respect to the fund's investment in loan participations, if any, the fund treats both the borrower and the financial intermediary under a loan participation as issuers for purposes of determining whether the fund has concentrated in a particular industry. For purposes of a fund's policy, securities issued by state and municipal governments and their agencies, authorities and instrumentalities are only not deemed to be part of an industry to the extent such securities are tax-exempt.

Borrowing. The 1940 Act permits a fund to borrow money in amounts of up to one-third of its total assets, at the time of borrowing, from banks for any purpose (the fund's total assets include the amounts being borrowed). To limit the risks attendant to borrowing, the 1940 Act requires a fund to maintain at all times an "asset coverage" of at least 300% of the amount of its borrowings, not including borrowings for temporary purposes in an amount not exceeding 5% of the value of its total assets. "Asset coverage" means the ratio that the value of the fund's total assets (including amounts borrowed), minus liabilities other than borrowings, bears to the aggregate amount of all borrowings.

Commodities. Under the federal securities and commodities laws, certain financial instruments such as futures contracts and options thereon, including currency futures, stock index futures or interest rate futures, and certain swaps, including currency swaps, interest rate swaps, swaps on broad-based securities indices, and certain credit default swaps, may, under certain circumstances, also be considered to be commodities. Nevertheless, the 1940 Act does not prohibit investments in physical commodities or contracts related to physical commodities. Funds typically invest in futures contracts and related options on these and other types of commodity contracts for hedging purposes, to implement tax or cash management strategies, or to enhance returns.

Loans. Although the 1940 Act does not prohibit a fund from making loans, SEC staff interpretations currently prohibit funds from lending more than one-third of their total assets, except through the purchase of debt obligations or the use of repurchase agreements. A repurchase agreement is an agreement to purchase a security, coupled with an agreement to sell that security back to the original seller on an agreed-upon date at a price that reflects current interest rates. The SEC frequently treats repurchase agreements as loans.

Senior Securities. "Senior securities" are defined as fund obligations that have a priority over a fund's shares with respect to the payment of dividends or the distribution of fund assets. The 1940 Act prohibits a fund from issuing any class of senior securities or selling any senior securities of which it is the issuer, except that the fund is permitted to borrow from a bank so long as, immediately after such borrowings, there is an asset coverage of at least 300% for all borrowings of the fund (not including borrowings for temporary purposes in an amount not exceeding 5% of the value of the fund's total assets). In the event that such asset coverage falls below this percentage, a fund must reduce the amount of its borrowings within three days (not including Sundays and holidays) so that the asset coverage is restored to at least 300%. The fundamental investment restriction regarding senior securities will be interpreted so as to permit collateral arrangements with respect to swaps, options, forward or futures contracts or other derivatives, or the posting of initial or variation margin. The Derivatives Rule provides an exemption to enter into certain transactions deemed to be senior securities subject to compliance with the limitations outlined in "Government Regulation of Derivatives."

Except with respect to the fundamental investment restriction on borrowing, if a percentage restriction is adhered to at the time of an investment, a later increase or decrease in the investment's percentage of the value of a fund's total assets resulting from a change in such values or assets will not constitute a violation of the percentage restriction. Any subsequent change in a rating assigned by any rating service to a security (or, if unrated, any change in the subadvisor's assessment of the security), or change in the percentage of fund assets invested in certain securities or other instruments, or change in the average duration of a fund's investment portfolio, resulting from market fluctuations or other changes in the fund's total assets will not require the fund to dispose of an investment until the subadvisor determines that it is practicable to sell or close out the investment without undue

market or tax consequences to the fund. In the event that rating services assign different ratings to the same security, the subadvisor will determine which rating it believes best reflects the security's quality and risk at that time, which may be the highest of the several assigned ratings.

# Investment Policies that May Be Changed Only on 60 Days' Prior Written Notice to Shareholders

In order to comply with Rule 35d-1 under the 1940 Act, the 80% investment policy for the fund is subject to change only upon 60 days' prior written notice to shareholders. Refer to the Prospectus for the fund's "Principal investment strategies."

# **PORTFOLIO TURNOVER**

The annual rate of portfolio turnover will normally differ for each fund and may vary from year to year as well as within a year. A high rate of portfolio turnover (100% or more) generally involves correspondingly greater brokerage commission expenses, which must be borne directly by the fund. Portfolio turnover is calculated by dividing the lesser of purchases or sales of portfolio securities during the fiscal period by the monthly average of the value of the fund's portfolio securities. (Excluded from the computation are all securities, including options, with maturities at the time of acquisition of one year or less). Portfolio turnover rates exclude securities received or delivered from in-kind transactions. Portfolio turnover rates can change from year to year due to various factors, including among others, portfolio adjustments made in response to market conditions.

Because the fund is newly formed, no portfolio turnover rates are available.

## THOSE RESPONSIBLE FOR MANAGEMENT

The business of the Trust, an open-end management investment company, is managed by the Board, including certain Trustees who are not "interested persons" (as defined in the 1940 Act) of the fund or the Trust (the "Independent Trustees"). The Trustees elect officers who are responsible for the day-to-day operations of the fund or the Trust and who execute policies formulated by the Trustees. Several of the Trustees and officers of the Trust also are officers or directors of the Advisor. Each Trustee oversees the fund and other funds in the John Hancock Fund Complex (as defined below).

The tables below present certain information regarding the Trustees and officers of the Trust, including their principal occupations which, unless specific dates are shown, are of at least five years' duration. In addition, the tables include information concerning other directorships held by each Trustee in other registered investment companies or publicly traded companies. Information is listed separately for each Trustee who is an "interested person" (as defined in the 1940 Act) of the Trust (each a "Non-Independent Trustee") and the Independent Trustees. As of April 30, 2025, the "John Hancock Fund Complex" consisted of 186 funds (including separate series of series mutual funds). Each Trustee, other than William K. Bacic, Kristie M. Feinberg, and Thomas R. Wright, has been elected to serve on the Board. Each of James R. Boyle, William H. Cunningham, Grace K. Fey, Deborah C. Jackson, and Hassell H. McClellan was elected to serve on the Board by the Trust's initial shareholder. Each of Andrew G. Arnott, Noni L. Ellison, Dean C. Garfield, and Frances G. Rathke was most recently elected to serve on the Board at a shareholder meeting held on September 9, 2022. The Board appointed William K. Bacic and Thomas R. Wright to serve as Independent Trustees effective August 1, 2024. The Board appointed Kristie M. Feinberg to serve as a Non-Independent Trustee effective June 30, 2025. The address of each Trustee and officer of the Trust is 200 Berkeley Street, Boston, Massachusetts 02116.

Name (Birth Year)	Current Position(s) with the Trust <sup>1</sup>	Principal Occupation(s) and Other Directorships During the Past 5 Years	Number of Funds in John Hancock Fund Complex Overseen by Trustee
Non-Independent T	rustees		
Andrew G. Arnott <sup>2</sup> (1971)	Trustee (since 2017)	Global Head of Retail for Manulife (since 2022); Head of Wealth and Asset Management, United States and Europe, for John Hancock and Manulife (2018-2023); Director and Chairman, John Hancock Investment Management LLC (2005-2023, including prior positions); Director and Chairman, John Hancock Variable Trust Advisers LLC (2006-2023, including prior positions); Director and Chairman, John Hancock Investment Management Distributors LLC (2004-2023, including prior positions); President of various trusts within the John Hancock Fund Complex (since 2007, including prior positions).  Trustee of various trusts within the John Hancock Fund Complex (since 2017).	183

Name (Birth Year)	Current Position(s) with the Trust <sup>1</sup>	Principal Occupation(s) and Other Directorships During the Past 5 Years	Hancock Fund Complex Overseen by Trustee
Non-Independent T	rustees		
Kristie M. Feinberg <sup>2</sup> (1975)	Trustee (since 2025) and President (Chief Executive Officer and Principal Executive Officer) (since 2023)	Head of Retail, Manulife Investment Management (since 2025); Head of Wealth & Asset Management, U.S. and Europe, for John Hancock and Manulife (2023–2025); Director and Chairman, John Hancock Investment Management LLC (since 2023); Director and Chairman, John Hancock Variable Trust Advisers LLC (since 2023); Director and Chairman, John Hancock Investment Management Distributors LLC (since 2023); CFO and Global Head of Strategy, Manulife Investment Management (2021–2023, including prior positions); CFO Americas & Global Head of Treasury, Invesco, Ltd., Invesco US (2019–2020, including prior positions); Senior Vice President, Corporate Treasurer and Business Controller, Oppenheimer Funds (2001–2019, including prior positions); President (Chief Executive Officer and Principal Executive Officer) of various trusts within the John Hancock Fund Complex (since 2023, including prior positions). Trustee of various trusts within the John Hancock Fund Complex (since 2025).	179

**Number of Funds in John** 

<sup>2</sup> The Trustee is a Non-Independent Trustee due to current or former positions with the Advisor and certain of its affiliates.

Current Position(s) with the Trust <sup>1</sup>	Principal Occupation(s) and Other Directorships During the Past 5 Years	Number of Funds in John Hancock Fund Complex Overseen by Trustee
Trustee (since 2024)	Director, Audit Committee Chairman, and Risk Committee Member, DWS USA Corp. (formerly, Deutsche Asset Management) (2018-2024); Senior Partner, Deloitte & Touche LLP (1978-retired 2017, including prior positions), specializing in the investment management industry.  Trustee of various trusts within the John Hancock Fund Complex (since 2024).	179
Trustee (since 2015)	Board Member, United of Omaha Life Insurance Company (since 2022); Board Member, Mutual of Omaha Investor Services, Inc. (since 2022); Foresters Financial, Chief Executive Officer (2018–2022) and board member (2017–2022); Manulife Financial and John Hancock, more than 20 years, retiring in 2012 as Chief Executive Officer, John Hancock and Senior Executive Vice President, Manulife Financial.	179
	Trustee of various trusts within the John Hancock Fund Complex (2005–2014 and since 2015).	
Trustee (since 2015)	Professor, University of Texas, Austin, Texas (since 1971); former Chancellor, University of Texas System and former President of the University of Texas, Austin, Texas; Director (since 2006), Lincoln National Corporation (insurance); Chairman of the Board, Nuclein (since 2020); Director, Southwest Airlines (2000 - 2024).  Trustee of various trusts within the John Hancock Fund Complex	183
	Trustee (since 2024)  Trustee (since 2015)	Trustee (since 2024)  Director, Audit Committee Chairman, and Risk Committee Member, DWS USA Corp. (formerly, Deutsche Asset Management) (2018-2024); Senior Partner, Deloitte & Touche LLP (1978-retired 2017, including prior positions), specializing in the investment management industry.  Trustee of various trusts within the John Hancock Fund Complex (since 2024).  Board Member, United of Omaha Life Insurance Company (since 2022); Board Member, Mutual of Omaha Investor Services, Inc. (since 2022); Foresters Financial, Chief Executive Officer (2018–2022) and board member (2017–2022); Manulife Financial and John Hancock, more than 20 years, retiring in 2012 as Chief Executive Officer, John Hancock and Senior Executive Vice President, Manulife Financial.  Trustee of various trusts within the John Hancock Fund Complex (2005–2014 and since 2015).  Trustee (since 2015)  Professor, University of Texas, Austin, Texas (since 1971); former Chancellor, University of Texas, Austin, Texas; Director (since 2006), Lincoln National Corporation (insurance); Chairman of the Board, Nuclein (since 2020); Director, Southwest Airlines (2000 -

<sup>1</sup> Because the Trust is not required to and does not hold regular annual shareholder meetings, each Trustee holds office for an indefinite term until his or her successor is duly elected and qualified or until he or she dies, retires, resigns, is removed or becomes disqualified. Trustees may be removed from the Trust (provided the aggregate number of Trustees after such removal shall not be less than one) with cause or without cause, by the action of two-thirds of the remaining Trustees or by action of two-thirds of the outstanding shares of the Trust.

Name (Birth Year)	Current Position(s) with the Trust <sup>1</sup>	Principal Occupation(s) and Other Directorships During the Past 5 Years	Number of Funds in John Hancock Fund Complex Overseen by Trustee		
Independent Trustees	Independent Trustees				
Noni L. Ellison (1971)	Trustee (since 2022)	Senior Vice President, General Counsel & Corporate Secretary, Tractor Supply Company (rural lifestyle retailer) (since 2021); General Counsel, Chief Compliance Officer & Corporate Secretary, Carestream Dental, L.L.C. (2017–2021); Associate General Counsel & Assistant Corporate Secretary, W.W. Grainger, Inc. (global industrial supplier) (2015–2017); Board Member, Goodwill of North Georgia, 2018 (FY2019)–2020 (FY2021); Board Member, Howard University School of Law Board of Visitors (since 2021); Board Member, University of Chicago Law School Board of Visitors (since 2016); Board member, Children's Healthcare of Atlanta Foundation Board (2021–2023); Board Member, Congressional Black Caucus Foundation (since 2024). Trustee of various trusts within the John Hancock Fund Complex (since 2022).	179		
Grace K. Fey (1946)	Trustee (since 2015)	Chief Executive Officer, Grace Fey Advisors (since 2007); Director and Executive Vice President, Frontier Capital Management Company (1988–2007); Director, Fiduciary Trust (since 2009).  Trustee of various trusts within the John Hancock Fund Complex	186		
		(since 2008).			
Dean C. Garfield (1968)	Trustee (since 2022)	Senior Vice-President, TKO Group (a premier sports and live entertainment company) (since 2025); Vice President, Netflix, Inc. (2019–2024); President & Chief Executive Officer, Information Technology Industry Council (2009–2019); NYU School of Law Board of Trustees (since 2021); Member, U.S. Department of Transportation, Advisory Committee on Automation (since 2021); President of the United States Trade Advisory Council (2010–2018); Board Member, College for Every Student (2017–2021); Board Member, The Seed School of Washington, D.C. (2012–2017); Advisory Board Member of the Block Center for Technology and Society (since 2019).	179		
		Trustee of various trusts within the John Hancock Fund Complex (since 2022).			
Deborah C. Jackson (1952)	Trustee (since 2015) and Vice Chairperson of the Board (since 2025)	President, Cambridge College, Cambridge, Massachusetts (2011–2023); Board of Directors, Amwell Corporation (since 2020); Board of Directors, Massachusetts Women's Forum (2018–2020); Board of Directors, National Association of Corporate Directors/New England (2015–2020); Chief Executive Officer, American Red Cross of Massachusetts Bay (2002–2011); Board of Directors of Eastern Bank Corporation (since 2001); Board of Directors of Eastern Bank Charitable Foundation (since 2001); Board of Directors of Boston Stock Exchange (2002–2008); Board of Directors of Harvard Pilgrim Healthcare (health benefits company) (2007–2011).  Trustee (since 2008) and Vice Chairperson of the Board (since	182		
		2025) of various trusts within the John Hancock Fund Complex.			
Hassell H. McClellan (1945)	Trustee (since 2015) and Chairperson of the Board (since 2017)	Trustee of Berklee College of Music (since 2022); Director/Trustee, Virtus Funds (2008–2020); Director, The Barnes Group (2010–2021); Associate Professor, The Wallace E. Carroll School of Management, Boston College (retired 2013). Trustee (since 2005) and Chairperson of the Board (since 2017)	186		
		of various trusts within the John Hancock Fund Complex.			

Name (Birth Year)	Current Position(s) with the Trust <sup>1</sup>	Principal Occupation(s) and Other Directorships During the Past 5 Years	Number of Funds in John Hancock Fund Complex Overseen by Trustee
Independent Trustees			
Frances G. Rathke (1960)	Trustee (since 2020)	Director, Audit Committee Chair, Oatly Group AB (plant-based drink company) (since 2021); Director, Audit Committee Chair and Compensation Committee Member, Green Mountain Power Corporation (since 2016); Director, Treasurer and Finance & Audit Committee Chair, Flynn Center for Performing Arts (since 2016); Director and Audit Committee Chair, Planet Fitness (since 2016); Chief Financial Officer and Treasurer, Keurig Green Mountain, Inc. (2003–retired 2015).  Trustee of various trusts within the John Hancock Fund Complex (since 2020).	179
Thomas R. Wright (1961)	Trustee (since 2024)	Chief Operating Officer, JMP Securities (2020-2023); Director of Equities, JMP Securities (2013-2023); Executive Committee Member, JMP Group (2013-2023); Global Head of Trading, Sanford C. Bernstein & Co. (2004-2012); and Head of European Equity Trading and Salestrading, Merrill, Lynch & Co. (1998-2004, including prior positions).  Trustee of various trusts within the John Hancock Fund Complex (since 2024).	179

<sup>1</sup> Because the Trust is not required to and does not hold regular annual shareholder meetings, each Trustee holds office for an indefinite term until his or her successor is duly elected and qualified or until he or she dies, retires, resigns, is removed or becomes disqualified. Trustees may be removed from the Trust (provided the aggregate number of Trustees after such removal shall not be less than one) with cause or without cause, by the action of two-thirds of the remaining Trustees or by action of two-thirds of the outstanding shares of the Trust.

# **Principal Officers who are not Trustees**

The following table presents information regarding the current principal officers of the Trust who are not Trustees, including their principal occupations which, unless specific dates are shown, are of at least five years' duration. Each of the officers is an affiliated person of the Advisor. All of the officers listed are officers or employees of the Advisor or its affiliates. All of the officers also are officers of all of the other funds for which the Advisor serves as investment advisor.

Name (Birth Year)	Current Position(s) with the Trust <sup>1</sup>	Principal Occupation(s) During the Past 5 Years	
Fernando A. Silva (1977)	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer) (since 2024)	Director, Fund Administration and Assistant Treasurer, John Hancock Funds (2016-2020); Assistant Treasurer, John Hancock Investment Management LLC and John Hancock Variable Trust Advisers LLC (since 2020); Assistant Vice President, John Hancock Life & Health Insurance Company, John Hancock Life Insurance Company (U.S.A.) and John Hancock Life Insurance Company of New York (since 2021); Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer) of various trusts within the John Hancock Fund Complex (since 2024).	
Salvatore Schiavone (1965)	Treasurer (since 2015)	Assistant Vice President, John Hancock Financial Services (since 2007); Vice President, John Hancock Investment Management LLC and John Hancock Variable Trust Advisers LLC (since 2007); Treasurer of various trusts within the John Hancock Fund Complex (since 2007, including prior positions).	
Christopher (Kit) Sechler (1973)	Secretary and Chief Legal Officer (since 2018)	Vice President and Deputy Chief Counsel, John Hancock Investment Management (since 2015); Assistant Vice President and Senior Counsel (2009–2015), John Hancock Investment Management; Assistant Secretary of John Hancock Investment Management LLC and John Hancock Variable Trust Advisers LLC (since 2009); Chief Legal Officer and Secretary of various trusts within the John Hancock Fund Complex (since 2009, including prior positions).	

Name (Birth Year)	Current Position(s) with the Trust <sup>1</sup>	Principal Occupation(s) During the Past 5 Years
Trevor Swanberg (1979)	Chief Compliance Officer (since 2020)	Chief Compliance Officer, John Hancock Investment Management LLC and John Hancock Variable Trust Advisers LLC (since 2020); Deputy Chief Compliance Officer, John Hancock Investment Management LLC and John Hancock Variable Trust Advisers LLC (2019–2020); Assistant Chief Compliance Officer, John Hancock Investment Management LLC and John Hancock Variable Trust Advisers LLC (2016–2019); Vice President, State Street Global Advisors (2015–2016); Chief Compliance Officer of various trusts within the John Hancock Fund Complex (since 2016, including prior positions).

1 Each officer holds office for an indefinite term until his or her successor is duly elected and qualified or until he or she dies, retires, resigns, is removed or becomes disqualified.

#### **Additional Information about the Trustees**

In addition to the description of each Trustee's Principal Occupation(s) and Other Directorships set forth above, the following provides further information about each Trustee's specific experience, qualifications, attributes or skills with respect to the Trust. The information in this section should not be understood to mean that any of the Trustees is an "expert" within the meaning of the federal securities laws.

The Board believes that the different perspectives, viewpoints, professional experience, education, and individual qualities of each Trustee represent a diversity of experiences and a variety of complementary skills and expertise. Each Trustee has experience as a Trustee of the Trust as well as experience as a Trustee of other John Hancock funds. It is the Trustees' belief that this allows the Board, as a whole, to oversee the business of the fund and the other funds in the John Hancock Fund Complex in a manner consistent with the best interests of the funds' shareholders. When considering potential nominees to fill vacancies on the Board, and as part of its annual self-evaluation, the Board reviews the mix of skills and other relevant experiences of the Trustees.

#### **Independent Trustees**

William K. Bacic – As a retired Certified Public Accountant, Mr. Bacic served as New England Managing Partner of a major independent registered public accounting firm, as well as a member of its U.S. Executive Committee, and has deep financial and accounting expertise. He served as the lead partner on the firm's largest financial services companies, primarily focused on the investment management industry and mutual funds. He also has expertise in corporate governance and regulatory matters as well as prior experience serving as a board member and audit committee chair of a large global asset management company.

James R. Boyle – Mr. Boyle has high-level executive, financial, operational, governance, regulatory and leadership experience in the financial services industry, including in the development and management of registered investment companies, variable annuities, retirement and insurance products. Mr. Boyle is the former President and CEO of a large international fraternal life insurance company and is the former President and CEO of multi-line life insurance and financial services companies. Mr. Boyle began his career as a Certified Public Accountant with Coopers & Lybrand.

William H. Cunningham – Mr. Cunningham has management and operational oversight experience as a former Chancellor and President of a major university. Mr. Cunningham regularly teaches a graduate course in corporate governance at the law school and at the Red McCombs School of Business at The University of Texas at Austin. He also has oversight and corporate governance experience as a current and former director of a number of operating companies, including an insurance company.

Noni L. Ellison – As a senior vice president, general counsel, and corporate secretary with over 25 years of executive leadership experience, Ms. Ellison has extensive management and business expertise in legal, regulatory, compliance, operational, quality assurance, international, finance and governance matters.

Grace K. Fey – Ms. Fey has significant governance, financial services, and asset management industry expertise based on her extensive non-profit board experience, as well as her experience as a consultant to non-profit and corporate boards, and as a former director and executive of an investment management firm.

Dean C. Garfield – As a former president and chief executive officer of a leading industry organization and current Senior Vice-President of a leading international sports and live entertainment company, Mr. Garfield has significant and diverse global executive operational, governance, regulatory, and leadership experience. He also has experience as a leader overseeing and implementing global public policy matters including strategic initiatives.

Deborah C. Jackson – Ms. Jackson has leadership, governance, management, and operational oversight experience as the lead director of a large bank, former president of a college, and as the former chief executive officer of a major charitable organization. She also has expertise in financial services matters and oversight and corporate governance experience as a current and former director of various other corporate organizations, including an insurance company, a regional stock exchange, a telemedicine company, and non-profit entities.

Hassell H. McClellan – As a former professor of finance and policy in the graduate management department of a major university, a director of a public company, and as a former director of several privately held companies, Mr. McClellan has experience in corporate and financial matters. He also has experience as a director of other investment companies not affiliated with the Trust.

Frances G. Rathke – Through her former positions in senior financial roles, as a former Certified Public Accountant, and as a consultant on strategic and financial matters, Ms. Rathke has experience as a leader overseeing, conceiving, implementing, and analyzing strategic and financial growth plans, and financial statements. Ms. Rathke also has experience in the auditing of financial statements and related materials. In addition, she has experience as a director of various organizations, including a publicly traded company and a non-profit entity.

Thomas R. Wright – As a retired Chief Operating Officer of a significant capital markets firm and a former Director of Equities and Executive Committee Member, Mr. Wright has deep executive, investment banking, portfolio management, securities brokerage, and equity research expertise. Mr. Wright has also served as the Global Head of Trading and Head of European Equity Trading and Salestrading at an investment bank and asset manager and has substantial securities industry and international trading and markets expertise.

#### **Non-Independent Trustees**

Andrew G. Arnott – As current and former President of various trusts within the John Hancock Fund Complex, and through his positions as Global Head of Retail for Manulife, and Trustee of the John Hancock Fund Complex, Mr. Arnott has experience in the management of investments, registered investment companies, variable annuities and retirement products, enabling him to provide management input to the Board.

Kristie M. Feinberg – As President and CEO of John Hancock Investment Management and of various trusts within the John Hancock Fund Complex, and through prior leadership roles at Manulife Investment Management including Head of Wealth & Asset Management, U.S. and Europe and CFO and Global Head of Strategy, Ms. Feinberg brings deep expertise in financial services. Her strong background in finance, strategy, and leadership, along with a proven track record of expanding product offerings and distribution, enables her to provide strategic insight and management input to the Board.

# **Duties of Trustees; Committee Structure**

The Trust is organized as a Massachusetts business trust. Under the Declaration of Trust, the Trustees are responsible for managing the affairs of the Trust, including the appointment of advisors and subadvisors. Each Trustee has the experience, skills, attributes or qualifications described above (see "Principal Occupation(s) and Other Directorships" and "Additional Information about the Trustees" above). The Board appoints officers who assist in managing the day-to-day affairs of the Trust. The Board met 5 times during the fiscal year ended April 30, 2025.

The Board has appointed an Independent Trustee as Chairperson. The Chairperson presides at meetings of the Trustees and may call meetings of the Board and any Board committee whenever he deems it necessary. The Chairperson participates in the preparation of the agenda for meetings of the Board and the identification of information to be presented to the Board with respect to matters to be acted upon by the Board. The Chairperson also acts as a liaison with the funds' management, officers, attorneys, and other Trustees generally between meetings. The Chairperson may perform such other functions as may be requested by the Board from time to time. The Board also has designated a Vice Chairperson to serve in the absence of the Chairperson. Except for any duties specified herein or pursuant to the Trust's Declaration of Trust or By-laws, or as assigned by the Board, the designation of a Trustee as Chairperson or Vice Chairperson does not impose on that Trustee any duties, obligations or liability that are greater than the duties, obligations or liability imposed on any other Trustee, generally. The Board has designated a number of standing committees as further described below, each of which has a Chairperson. The Board also may designate working groups or ad hoc committees as it deems appropriate.

The Board believes that this leadership structure is appropriate because it allows the Board to exercise informed and independent judgment over matters under its purview, and it allocates areas of responsibility among committees or working groups of Trustees and the full Board in a manner that enhances effective oversight. The Board considers leadership by an Independent Trustee as Chairperson to be integral to promoting effective independent oversight of the funds' operations and meaningful representation of the shareholders' interests, given the specific characteristics and circumstances of the funds. The Board also believes that having a super-majority of Independent Trustees is appropriate and in the best interest of the funds' shareholders. Nevertheless, the Board also believes that having interested persons serve on the Board brings corporate and financial viewpoints that are, in the Board's view, helpful elements in its decision-making process. In addition, the Board believes that Ms. Feinberg and Messrs. Arnott and Boyle as current or former senior executives of the Advisor (or of its parent company, Manulife Financial Corporation), and of other affiliates of the Advisor, provide the Board with the perspective of the Advisor in managing and sponsoring all of the Trust's series. The leadership structure of the Board may be changed, at any time and in the discretion of the Board, including in response to changes in circumstances or the characteristics of the Trust.

## **Board Committees**

The Board has established an Audit Committee; Compliance Committee; Contracts, Legal & Risk Committee; Nominating and Governance Committee; and Investment Committee. The current membership of each committee is set forth below.

**Audit Committee.** The Board has a standing Audit Committee composed solely of Independent Trustees (Messrs. Bacic and Cunningham and Ms. Rathke). Ms. Rathke serves as Chairperson of this Committee. Ms. Rathke and Mr. Bacic have each been designated by the Board as an "audit committee financial expert," as defined in SEC rules. This Committee reviews the internal and external accounting and auditing procedures of the Trust and, among other things, considers the selection of an independent registered public accounting firm for the Trust, approves all significant services proposed to be performed by its independent registered public accounting firm and considers the possible effect of such services on its independence. This Committee met 4 times during the fiscal year ended April 30, 2025.

**Compliance Committee.** The Board also has a standing Compliance Committee (Ms. Fey, Mr. Garfield and Ms. Jackson). Ms. Fey serves as Chairperson of this Committee. This Committee reviews and makes recommendations to the full Board regarding certain compliance matters relating to the Trust. This Committee met 4 times during the fiscal year ended April 30, 2025.

Contracts, Legal & Risk Committee. The Board also has a standing Contracts, Legal & Risk Committee (Mr. Boyle, Ms. Ellison, and Mr. Wright). Mr. Boyle serves as Chairperson of this Committee. This Committee oversees the initiation, operation, and renewal of the various contracts between the Trust and other entities. These contracts include advisory and subadvisory agreements, custodial and transfer agency agreements and arrangements with other service providers. The Committee also reviews the significant legal affairs of the funds, as well as any significant regulatory and legislative actions or proposals affecting or relating to the funds or their service providers. The Committee also assists the Board in its oversight role with respect to the processes pursuant to which the Advisor and the subadvisors identify, manage and report the various risks that affect or could affect the funds. This Committee met 4 times during the fiscal year ended April 30, 2025.

**Nominating and Governance Committee.** The Board also has a Nominating and Governance Committee composed of all of the Independent Trustees. This Committee will consider nominees recommended by Trust shareholders. Nominations should be forwarded to the attention of the Secretary of the Trust at 200 Berkeley Street, Boston, Massachusetts 02116. Any shareholder nomination must be submitted in compliance with all of the pertinent provisions of Rule 14a-8 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), in order to be considered by this Committee. This Committee met 5 times during the fiscal year ended April 30, 2025.

**Investment Committee.** The Board also has an Investment Committee composed of all of the Trustees. The Investment Committee has four subcommittees with the Trustees divided among the four subcommittees (each an "Investment Sub-Committee"). Messrs. Boyle and Cunningham and Mses. Ellison and Jackson serve as Chairpersons of the Investment Sub-Committees. Each Investment Sub-Committee reviews investment matters relating to a particular group of funds in the John Hancock Fund Complex and coordinates with the full Board regarding investment matters. The Investment Committee met 5 times during the fiscal year ended April 30, 2025.

Annually, the Board evaluates its performance and that of its Committees, including the effectiveness of the Board's Committee structure.

#### Risk Oversight

As registered investment companies, the funds are subject to a variety of risks, including investment risks (such as, among others, market risk, credit risk and interest rate risk), financial risks (such as, among others, settlement risk, liquidity risk and valuation risk), compliance risks, and operational risks. As a part of its overall activities, the Board oversees the funds' risk management activities that are implemented by the Advisor, the funds' CCO and other service providers to the funds. The Advisor has primary responsibility for the funds' risk management on a day-to-day basis as a part of its overall responsibilities. Each fund's subadvisor, subject to oversight of the Advisor, is primarily responsible for managing investment and financial risks as a part of its day-to-day investment responsibilities, as well as operational and compliance risks at its firm. The Advisor and the CCO also assist the Board in overseeing compliance with investment policies of the funds and regulatory requirements and monitor the implementation of the various compliance policies and procedures approved by the Board as a part of its oversight responsibilities.

The Advisor identifies to the Board the risks that it believes may affect the funds and develops processes and controls regarding such risks. However, risk management is a complex and dynamic undertaking and it is not always possible to comprehensively identify and/or mitigate all such risks at all times since risks are at times impacted by external events. In discharging its oversight responsibilities, the Board considers risk management issues throughout the year with the assistance of its various Committees as described below. Each Committee meets at least quarterly and presents reports to the Board, which may prompt further discussion of issues concerning the oversight of the funds' risk management. The Board as a whole also reviews written reports or presentations on a variety of risk issues as needed and may discuss particular risks that are not addressed in the Committee process.

The Board has established an Investment Committee, which consists of four Investment Sub-Committees. Each Investment Sub-Committee assists the Board in overseeing the significant investment policies of the relevant funds and the performance of their subadvisors. The Advisor monitors these policies and subadvisor activities and may recommend changes in connection with the funds to each relevant Investment Sub-Committee in response to subadvisor requests or other circumstances. On at least a quarterly basis, each Investment Sub-Committee reviews reports from the Advisor regarding the relevant funds' investment performance, which include information about investment and financial risks and how they are managed, and from the CCO or his/her designee regarding subadvisor compliance matters. In addition, each Investment Sub-Committee meets periodically with the portfolio managers of the funds' subadvisors to receive reports regarding management of the funds, including with respect to risk management processes.

The Audit Committee assists the Board in reviewing with the independent auditors, at various times throughout the year, matters relating to the funds' financial reporting. In addition, this Committee oversees the process of each fund's valuation of its portfolio securities, assisted by the Advisor's Pricing Committee (composed of officers of the Advisor), which calculates fair value determinations pursuant to procedures established by the Advisor and adopted by the Board.

With respect to valuation, the Advisor provides periodic reports to the Board and Investment Committee that enables the Board to oversee the Advisor, as each fund's valuation designee, in assessing, managing and reviewing material risks associated with fair valuation determinations, including material conflicts of interest. In addition, the Board reviews the Advisor's performance of an annual valuation risk assessment under which the Advisor seeks to identify and enumerate material valuation risks which are or may be impactful to the funds including, but not limited to (1) the types of investments held (or intended to be held) by the funds, giving consideration to those investments' characteristics; (2) potential market or sector shocks or dislocations which may affect the ongoing valuation operations; (3) the extent to which each fair value methodology uses unobservable inputs; (4) the proportion of each fund's investments that are fair valued as determined in good faith, as well as their contributions to a fund's returns; (5) the use of fair value methodologies that rely on inputs from third-party service providers; and (6) the appropriateness and application of the methods for determining and calculating fair value. The Advisor reports any material changes to the risk assessment, along with appropriate actions designed to manage such risks, to the Board.

The Compliance Committee assists the Board in overseeing the activities of the Trusts' CCO with respect to the compliance programs of the funds, the Advisor, the subadvisors, and certain of the funds' other service providers (the Distributor and transfer agent). This Committee and the Board receive and consider periodic reports from the CCO throughout the year, including the CCO's annual written report, which, among other things, summarizes material compliance issues that arose during the previous year and any remedial action taken to address these issues, as well as any material changes to the compliance programs.

The Contracts, Legal & Risk Committee assists the Board in its oversight role with respect to the processes pursuant to which the Advisor and the subadvisors identify, assess, manage and report the various risks that affect or could affect the funds. This Committee reviews reports from the funds' Advisor on a periodic basis regarding the risks facing the funds, and makes recommendations to the Board concerning risks and risk oversight matters as the Committee deems appropriate. This Committee also coordinates with the other Board Committees regarding risks relevant to the other Committees, as appropriate.

The Board considers liquidity risk management issues as part of its general oversight responsibilities and oversees the Trust's liquidity risk through, among other things, receiving periodic reporting and presentations that address liquidity matters. As required by rule 22e-4 under the 1940 Act, the Board, including a majority of the Independent Trustees, has approved the Trust's Liquidity Risk Management Program (the "LRM Program"), which is reasonably designed to assess and manage the Trust's liquidity risk, and has appointed the LRM Program Administrator that is responsible for administering the LRM Program. The Board receives liquidity risk management reports under the funds' LRM Program and reviews, no less frequently than annually, a written report prepared by the LRM Program Administrator that addresses, among other items, the operation of the LRM Program and assesses its adequacy and effectiveness of implementation as well as any material changes to the LRM Program.

As required by rule 18f-4 under the 1940 Act, funds that engage in derivatives transactions, other than limited derivatives users, generally must adopt and implement written derivatives risk management program (the "Derivatives Risk Management Program"), that is reasonably designed to manage the funds' derivatives risks, while taking into account the funds' derivatives and other investments. This program includes risk guidelines, stress testing, internal reporting and escalation and periodic review of the program. To the extent that the funds invest in derivatives, on a quarterly and annual, the Advisor will provide the Board with written reports that address the operation, adequacy and effectiveness of the funds' Derivatives Risk Management Program, which is generally designed to assess and manage derivatives risk.

In addressing issues regarding the funds' risk management between meetings, appropriate representatives of the Advisor communicate with the Chairperson of the Board, the relevant Committee Chair, or the Trusts' CCO, who is directly accountable to the Board. As appropriate, the Chairperson of the Board, the Committee Chairs and the Trustees confer among themselves, with the Trusts' CCO, the Advisor, other service providers, external fund counsel, and counsel to the Independent Trustees, to identify and review risk management issues that may be placed on the full Board's agenda and/or that of an appropriate Committee for review and discussion.

In addition, in its annual review of the funds' advisory, subadvisory and distribution agreements, the Board reviews information provided by the Advisor, the subadvisors and the Distributor relating to their operational capabilities, financial condition, risk management processes and resources.

The Board may, at any time and in its discretion, change the manner in which it conducts its risk oversight role.

The Advisor also has its own, independent interest in risk management. In this regard, the Advisor has appointed a Risk and Investment Operations Committee, consisting of senior personnel from each of the Advisor's functional departments. This Committee reports periodically to the Board and the Contracts, Legal & Risk Committee on risk management matters. The Advisor's risk management program is part of the overall risk management program of John Hancock, the Advisor's parent company. John Hancock's Chief Risk Officer supports the Advisor's risk management program, and at the Board's request will report on risk management matters.

## **Compensation of Trustees**

Trustees are reimbursed for travel and other out-of-pocket expenses. Effective January 1, 2025, each Independent Trustee receives in the aggregate from the Trust and the other open-end funds in the John Hancock Fund Complex an annual retainer of \$311,520, a fee of \$23,795.20 for each regular meeting of the Trustees (in person or via videoconference or teleconference) and a fee of \$5,000 for each special meeting of the Trustees (in person or via videoconference or teleconference). The Chairperson of the Board receives an additional retainer of \$221,728. The Vice Chairperson of the Board receives an additional retainer of \$20,000. The Chairperson of each of the Audit Committee, Compliance Committee, and Contracts, Legal & Risk Committee receives an additional \$40,000 retainer. The Chairperson of each Investment Sub-Committee receives an additional \$20,000 retainer.

The following table provides information regarding the compensation paid by the Trust and the other investment companies in the John Hancock Fund Complex to the Independent Trustees for their services during the fiscal year ended April 30, 2025.

## Compensation Table<sup>1</sup>

Name of Trustee	Total Compensation from Trust (\$)	Total Compensation from Trust and the John Hancock Fund Complex (\$) <sup>2</sup>
Independent Trustees		
William K. Bacic <sup>3</sup>	10,013	414,315

Name of Trustee	Total Compensation from Trust (\$)	Total Compensation from Trust and the John Hancock Fund Complex (\$) <sup>2</sup>
James R. Boyle	13,393	540,075
William H. Cunningham	11,709	555,075
Noni L. Ellison	11,447	470,075
Grace K. Fey	12,570	675,075
Dean C. Garfield	11,173	460,075
Deborah C. Jackson	11,985	577,575
Hassell H. McClellan	17,001	872,039
Steven R. Pruchansky <sup>4</sup>	6,534	270,520
Frances G. Rathke	12,245	500,075
Gregory A. Russo <sup>5</sup>	731	31,500
Thomas R. Wright <sup>3</sup>	10,013	414,315
Non-Independent Trustees		
Andrew G. Arnott	0	0
Kristie M. Feinberg <sup>6</sup>	N/A	N/A
Paul Lorentz <sup>7</sup>	0	0

- 1 The Trust does not have a pension or retirement plan for any of its Trustees or officers.
- 2 There were approximately 186 series in the John Hancock Fund Complex as of April 30, 2025.
- **3** Appointed to serve as Trustee effective August 1, 2024.
- 4 Mr. Pruchansky retired as Trustee effective December 31, 2024.
- **5** Mr. Russo retired as Trustee effective August 1, 2024.
- **6** Appointed to serve as Trustee effective June 30, 2025.
- 7 Mr. Lorentz no longer serves as Trustee effective June 30, 2025.

## **Trustee Ownership of Shares of the Funds**

The table below sets forth the dollar range of the value of the shares of the fund, and the dollar range of the aggregate value of the shares of all funds in the John Hancock Fund Complex overseen by a Trustee, owned beneficially by the Trustees as of December 31, 2024. For purposes of this table, beneficial ownership is defined to mean a direct or indirect pecuniary interest. Trustees may own shares beneficially through group annuity contracts. Exact dollar amounts of securities held are not listed in the table. Rather, dollar ranges are identified.

	John Hancock Disciplined Value	Total – John Hancock Fund
Trust/Funds	Select ETF	Complex
Independent Trustees		
William K. Bacic <sup>1</sup>	None	None
James R. Boyle	None	Over \$100,000
William H. Cunningham	None	Over \$100,000
Noni L. Ellison	None	Over \$100,000
Grace K. Fey	None	Over \$100,000
Dean C. Garfield	None	Over \$100,000
Deborah C. Jackson	None	Over \$100,000
Hassell H. McClellan	None	Over \$100,000
Frances G. Rathke	None	Over \$100,000
Thomas R. Wright <sup>1</sup>	None	None
Non-Independent Trustees		
Andrew G. Arnott	None	Over \$100,000
Kristie M. Feinberg <sup>2</sup>	N/A	N/A

- **1** Appointed to serve as Trustee effective August 1, 2024.
- 2 Appointed to serve as Trustee effective June 30, 2025.

# SHAREHOLDERS OF THE FUNDS

The fund will commence operations on or following the date of this SAI and, therefore, the officers and Trustees of the Trust as a group beneficially owned no shares of the fund as of the date of this SAI. John Hancock Life Insurance Company (U.S.A.) and/or its affiliates will own all of the outstanding shares of the fund on the commencement date and, therefore, may be deemed to control the fund. A shareholder who owns beneficially more than 25% of a fund's shares is deemed to be a control person of that fund and therefore could determine the outcome of a shareholder meeting with respect to a proposal directly affecting that fund.

# INVESTMENT MANAGEMENT ARRANGEMENTS AND OTHER SERVICES

## **Advisory Agreement**

The Advisor serves as investment advisor to the fund and is responsible for the supervision of the subadvisor services to the fund pursuant to the Advisory Agreement. Pursuant to the Advisory Agreement and subject to general oversight by the Board, the Advisor manages and supervises the investment operations and business affairs of the fund. The Advisor provides the fund with all necessary office facilities and equipment and any personnel necessary for the oversight and/or conduct of the investment operations of the fund. The Advisor also coordinates and oversees the services provided to the fund under other agreements, including custodial, administrative and transfer agency services. Additionally, the Advisor provides certain administrative and other non-advisory services to the fund pursuant to a separate Service Agreement, as discussed below.

The Advisor selects, contracts with, and compensates one or more subadvisors to manage on a day-to-day basis all or a portion of the fund's portfolio assets subject to oversight by the Advisor. The Advisor may elect to manage the investment and reinvestment of the assets of the fund directly, subject to the approval of the Board. In directly managing the assets, the Advisor will have similar responsibilities as those of subadvisor under a subadvisory agreement, which are briefly described below.

The Advisor is responsible for overseeing and implementing the fund's investment program and provides a variety of advisory oversight and investment research services, including: (i) monitoring fund portfolio compositions and risk profiles and (ii) evaluating fund investment characteristics, such as investment strategies, and recommending to the Board potential enhancements to such characteristics. The Advisor provides management and transition services associated with certain fund events (e.g., strategy, portfolio manager or subadvisor changes).

The Advisor has the responsibility to oversee the subadvisor and recommend to the Board: (i) the hiring, termination, and replacement of a subadvisor; and (ii) the allocation and reallocation of the fund's assets among multiple subadvisors, when appropriate. In this capacity, the Advisor negotiates with potential subadvisors and, once retained, among other things: (i) monitors the compliance of the subadvisor with the investment objectives and related policies of the fund; (ii) reviews the performance of the subadvisor; and (iii) reports periodically on such performance to the Board. The Advisor utilizes the expertise of a team of investment professionals in manager research and oversight who provide these research and monitoring services.

The Advisor is not liable for any error of judgment or mistake of law or for any loss suffered by the fund in connection with the matters to which the Advisory Agreement relates, except a loss resulting from willful misfeasance, bad faith or gross negligence on the part of the Advisor in the performance of its duties or from its reckless disregard of its obligations and duties under the Advisory Agreement.

Under the Advisory Agreement, the fund may use the name "John Hancock" or any name derived from or similar to it only for so long as the Advisory Agreement or any extension, renewal or amendment thereof remains in effect. If the Advisory Agreement is no longer in effect, the fund (to the extent that it lawfully can) will cease to use such name or any other name indicating that it is advised by or otherwise connected with the Advisor. In addition, the Advisor or JHLICO U.S.A., a subsidiary of Manulife Financial, may grant the nonexclusive right to use the name "John Hancock" or any similar name to any other corporation or entity, including but not limited to any investment company of which the JHLICO U.S.A. or any subsidiary or affiliate thereof or any successor to the business of any subsidiary or affiliate thereof shall be the investment advisor.

The continuation of the Advisory Agreement (discussed below) was approved by all Trustees. The Advisory Agreement will continue in effect from year to year, provided that the Agreement's continuance is approved annually both: (i) by the holders of a majority of the outstanding voting securities of the Trust or by the Trustees; and (ii) by a majority of the Trustees who are not parties to the Agreement, or "interested persons" of any such parties. The Agreement may be terminated on 60 days' written notice by any party or by a vote of a majority of the outstanding voting securities of the fund and will terminate automatically if assigned.

The Trust bears all costs of its organization and operation, including but not limited to expenses of preparing, printing and mailing all shareholders' reports, notices, prospectuses, proxy statements and reports to regulatory agencies; expenses relating to the issuance, registration and qualification of shares; government fees; interest charges; expenses of furnishing to shareholders their account statements; taxes; expenses of redeeming shares; brokerage and other expenses connected with the execution of portfolio securities transactions; expenses pursuant to the fund's plan of distribution; fees and expenses of custodians including those for keeping books and accounts maintaining a committed line of credit and calculating the NAV of shares; fees and expenses of transfer agents and dividend disbursing agents; legal, accounting, financial, management, tax and auditing fees and expenses of the fund (including an allocable portion of the cost of the Advisor's employees rendering such services to the fund); the compensation and expenses of officers and Trustees (other than persons serving as President or Trustee who are otherwise affiliated with the fund the Advisor or any of their affiliates); expenses of Trustees' and shareholders' meetings; trade association memberships; insurance premiums; and any extraordinary expenses.

Securities held by the fund also may be held by other funds or investment advisory clients for which the Advisor, the subadvisor or their respective affiliates provide investment advice. Because of different investment objectives or other factors, a particular security may be bought for one or more funds or clients when one or more are selling the same security. If opportunities for purchase or sale of securities by the Advisor or subadvisor for the fund or for other funds or clients for which the Advisor or subadvisor renders investment advice arise for consideration at or about the same time, transactions in such securities will be made, insofar as feasible, for the respective fund, funds or clients in a manner deemed equitable to all of them. To the extent that transactions on behalf of more than one client of the Advisor or subadvisor or their respective affiliates may increase the demand for securities being purchased or the supply of securities being sold, there may be an adverse effect on price.

From time to time, the Advisor may reduce its fee or make other arrangements to limit the fund's expenses to a specified percentage of average daily net assets. The Advisor retains the right to re-impose a fee and recover any other payments to the extent that, during the fiscal year in which such expense limitation is in place, the fund's annual expenses fall below this limit.

Advisor Compensation. As compensation for its advisory services under the Advisory Agreement, the Advisor receives a fee from the fund, computed separately for the fund. The fee for the fund is stated as an annual percentage of the current value of the "aggregate net assets" of the fund. "Aggregate net assets" of the fund include the net assets of the fund and, in many cases, the net assets of one or more other funds (or portions thereof) advised by the Advisor, but in each case only for the period during which the Advisor also serves as the advisor to the other fund(s) (or portions thereof). The fee for the fund is based on the applicable annual rate that, for each day, is equal to: (i) the sum of the amounts determined by applying the annual percentage rates for the fund to the applicable portions of aggregate net assets divided by: (ii) aggregate net assets (totaling the "Applicable Annual Fee Rate"). The fee for the fund accrues and is paid daily to the Advisor for each calendar day. The daily fee accruals are computed by multiplying the fraction of one over the number of calendar days in the year by the Applicable Annual Fee Rate, and multiplying this product by the net assets of the fund. The management fees that each fund currently is obligated to pay the Advisor are as set forth in its Prospectus.

Since the fund is newly-organized, it did not pay advisory fees during the last three fiscal periods.

#### **Service Agreement**

Pursuant to a Service Agreement, the Advisor is responsible for providing, at the expense of the Trust, certain financial, accounting and administrative services such as legal services, tax, accounting, valuation, financial reporting and performance, compliance and service provider oversight. Pursuant to the Service Agreement, the Advisor shall determine, subject to Board approval, the expenses to be reimbursed by the fund, including an overhead allocation. The payments under the Service Agreement are not intended to provide a profit to the Advisor. Instead, the Advisor provides the services under the Service Agreement because it also provides advisory services under the Advisory Agreement. The reimbursement shall be calculated and paid monthly in arrears.

The Advisor is not liable for any error of judgment or mistake of law or for any loss suffered by the fund in connection with the matters to which the Service Agreement relates, except losses resulting from willful misfeasance, bad faith or negligence by the Advisor in the performance of its duties or from reckless disregard by the Advisor of its obligations under the Agreement.

The Service Agreement had an initial term of two years, and continues thereafter so long as such continuance is specifically approved at least annually by a majority of the Board and a majority of the Independent Trustees. The Trust, on behalf of any or all of the funds, or the Advisor may terminate the Agreement at any time without penalty on 60 days' written notice to the other party. The Agreement may be amended by mutual written agreement of the parties, without obtaining shareholder approval.

Since the fund is newly-organized, it did not pay the Advisor fees for non-advisory services during the last three fiscal periods.

## **Subadvisory Agreement**

**Duties of the Subadvisor.** Under the terms of the current subadvisory agreement (the "Subadvisory Agreement"), the subadvisor manages the investment and reinvestment of the assets of the fund, subject to the supervision of the Board and the Advisor. The subadvisor formulates a continuous investment program for each such fund consistent with its investment objectives and policies outlined in the Prospectus. The subadvisor implements such programs by purchases and sales of securities and regularly reports to the Advisor and the Board with respect to the implementation of such programs. The subadvisor, at its expense, furnishes all necessary investment and management facilities, including salaries of personnel required for it to execute its duties, as well as administrative facilities, including bookkeeping, clerical personnel, and equipment necessary for the conduct of the investment affairs of the assigned fund. Additional information about the fund's portfolio managers, including other accounts managed, ownership of fund shares, and compensation structure, can be found at Appendix B to this SAI.

The Advisor has delegated to the subadvisor the responsibility to vote all proxies relating to the securities held by the fund. See "Other Services — Proxy Voting" below, for additional information.

Subadvisory Fees. As compensation for its services, the subadvisor receives fees from the Advisor computed separately for the fund.

Affiliated Subadvisors. The Advisor and the Affiliated Subadvisors are controlled by Manulife Financial.

Advisory arrangements involving Affiliated Subadvisors and investment in affiliated underlying funds present certain conflicts of interest. For each fund subadvised by an Affiliated Subadvisor, the Affiliated Subadvisor will benefit from increased subadvisory fees. In addition, MFC will benefit, not only from the net advisory fee retained by the Advisor but also from the subadvisory fee paid by the Advisor to the Affiliated Subadvisor. Consequently, the Affiliated Subadvisors and MFC may be viewed as benefiting financially from: (i) the appointment of or continued service of Affiliated

Subadvisors to manage the funds; and (ii) the allocation of the assets of the funds to the funds having Affiliated Subadvisors. Similarly, the Advisor may be viewed as having a conflict of interest in the allocation of the assets of the funds to affiliated underlying funds as opposed to unaffiliated underlying funds. However, both the Advisor, in recommending to the Board the appointment or continued service of Affiliated Subadvisors, and such Subadvisors, in allocating the assets of the funds, have a fiduciary duty to act in the best interests of the funds and their shareholders. The Advisor has a duty to recommend that Affiliated Subadvisors or unaffiliated subadvisors be selected, retained, or replaced only when the Advisor believes it is in the best interests of shareholders. In addition, under the Trust's "Manager of Managers" exemptive order received from the SEC, the Trust is required to obtain shareholder approval of any subadvisory agreement appointing an Affiliated Subadvisor as the subadvisor except as otherwise permitted by applicable SEC No-Action Letter to a fund (in the case of a new fund, the initial sole shareholder of the fund, an affiliate of the Advisor and MFC, may provide this approval). Similarly, each Affiliated Subadvisor has a duty to allocate assets to Affiliated Subadvised funds, and affiliated underlying funds more broadly, only when it believes this is in shareholders' best interests and without regard for the financial incentives inherent in making such allocations. Subject to this fiduciary duty, each Affiliated Subadvisor may, and will, allocate assets to funds having Affiliated Subadvisors, and may allocate assets to such funds even if similar alternative funds having unaffiliated subadvisors are available. When allocating to an underlying fund, the Affiliated Subadvisors will consider several factors including their expectations for the fund in the future. The Independent Trustees are aware of and monitor these conflicts of interest.

#### Additional Information Applicable to Subadvisory Agreement

**Term of the Subadvisory Agreement.** Each Subadvisory Agreement will initially continue in effect as to the fund for a period no more than two years from the date of its execution (or the execution of an amendment making the agreement applicable to that fund) and thereafter if such continuance is specifically approved at least annually either: (a) by the Trustees; or (b) by the vote of a majority of the outstanding voting securities of that fund. In either event, such continuance also shall be approved by the vote of the majority of the Trustees who are not interested persons of any party to the Subadvisory Agreement.

Any required shareholder approval of any continuance of any Subadvisory Agreement shall be effective with respect to any fund if a majority of the outstanding voting securities of that fund votes to approve such continuance, even if such continuance may not have been approved by a majority of the outstanding voting securities of: (a) any other series of the Trust affected by the Subadvisory Agreement; or (b) all of the series of the Trust.

**Failure of Shareholders to Approve Continuance of any Subadvisory Agreement.** If the outstanding voting securities of any fund fail to approve any continuance of any Subadvisory Agreement, the party may continue to act as investment subadvisor with respect to such fund pending the required approval of the continuance of the Subadvisory Agreement or a new agreement with either that party or a different subadvisor, or other definitive action.

**Termination of a Subadvisory Agreement.** A Subadvisory Agreement may be terminated at any time without the payment of any penalty on 60 days' written notice to the other party or parties to the Agreement, and also to the relevant fund. The following parties may terminate a Subadvisory Agreement:

- the Board;
- with respect to any fund, a majority of the outstanding voting securities of such fund;
- the Advisor; and
- the applicable subadvisor.

A Subadvisory Agreement will automatically terminate in the event of its assignment or upon termination of the Advisory Agreement.

Amendments to the Subadvisory Agreement. A Subadvisory Agreement may be amended by the parties to the agreement, provided that the amendment is approved by the vote of a majority of the outstanding voting securities of the relevant fund (except as noted below) and by the vote of a majority of the Independent Trustees. The required shareholder approval of any amendment to a Subadvisory Agreement shall be effective with respect to any fund if a majority of the outstanding voting securities of that fund votes to approve the amendment, even if the amendment may not have been approved by a majority of the outstanding voting securities of: (a) any other series of the Trust affected by the amendment; or (b) all the series of the Trust.

As noted under "Who's who — Investment advisor" in the Prospectus, an SEC order permits the Advisor, subject to approval by the Board and a majority of the Independent Trustees, to appoint a subadvisor (other than an Affiliated Subadvisor), or change a subadvisory fee or otherwise amend a subadvisory agreement (other than with an Affiliated Subadvisor) pursuant to an agreement that is not approved by shareholders.

#### **Other Services**

**Proxy Voting.** Based on the terms of the current Subadvisory Agreement, the Trust's proxy voting policies and procedures (the "Trust Procedures") delegate to the subadvisor of each of its funds the responsibility to vote all proxies relating to securities held by that fund in accordance with the subadvisor's proxy voting policies and procedures. A subadvisor has a duty to vote or not vote such proxies in the best interests of the fund it subadvises and its shareholders, and to avoid the influence of conflicts of interest. In the event that the Advisor assumes day-to-day management responsibilities for the fund, the Trust's Procedures delegate proxy voting responsibilities to the Advisor. Complete descriptions of the Trust Procedures and the proxy voting procedures of the Advisor and the subadvisor are set forth in Appendix C to this SAI.

It is possible that conflicts of interest could arise for the subadvisor when voting proxies. Such conflicts could arise, for example, when the subadvisor or its affiliate has an existing business relationship with the issuer of the security being voted or with a third party that has an interest in the vote. A conflict of interest also could arise when the fund, its Advisor or principal underwriter or any of their affiliates has an interest in the vote.

In the event the subadvisor becomes aware of a material conflict of interest, the Trust Procedures generally require the subadvisor to follow any conflicts procedures that may be included in the subadvisor's proxy voting procedures. Although conflicts procedures will vary among subadvisors, they generally include one or more of the following:

- (a) voting pursuant to the recommendation of a third party voting service;
- (b) voting pursuant to pre-determined voting guidelines; or
- (c) referring voting to a special compliance or oversight committee.

The specific conflicts procedures of the subadvisor are set forth in its proxy voting procedures included in Appendix C. While these conflicts procedures may reduce the influence of conflicts of interest on proxy voting, such influence will not necessarily be eliminated.

Although the subadvisor may have a duty to vote all proxies on behalf of the fund that it subadvises, it is possible that the subadvisor may not be able to vote proxies under certain circumstances. For example, it may be impracticable to translate in a timely manner voting materials that are written in a foreign language or to travel to a foreign country when voting in person rather than by proxy is required. In addition, if the voting of proxies for shares of a security prohibits a subadvisor from trading the shares in the marketplace for a period of time, the subadvisor may determine that it is not in the best interests of the fund to vote the proxies. In addition, consistent with its duty to vote proxies in the best interests of the fund's shareholders, a subadvisor may refrain from voting one or more of the fund's proxies if the subadvisor believes that the costs of voting such proxies may outweigh the potential benefits. For example, the subadvisor may choose not to recall securities where the subadvisor believes the costs of voting may outweigh the potential benefit of voting. A subadvisor also may choose not to recall securities that have been loaned in order to vote proxies for shares of the security since the fund would lose security lending income if the securities were recalled.

Information regarding how the fund voted proxies relating to portfolio securities during the most recent 12-month period ended June 30th is available: (1) without charge, upon request, by calling 800-225-5291; (2) on www.jhinvestments.com/etf; and (3) on the SEC's website at sec.gov.

# **RULE 12B-1 FEES**

Rule 12b-1 fees of up to 0.25% of the fund's average daily net assets per year may be paid to the fund's Distributor and may be used by the Distributor for any activities or expenses primarily intended to result in the sale of shares of the fund or the provision of investor services.

Because Rule 12b-1 fees may be paid out of the fund's assets on an ongoing basis, over time they may increase the cost of your investment and may cost shareholders more than other types of sales charges. Currently, no Rule 12b-1 fees are charged.

Your broker dealer or agent may charge you a fee to effect transactions in creation units.

## FINANCIAL INTERMEDIARY COMPENSATION

The Advisor and/or its subsidiaries or affiliates ("Hancock Entities") may pay certain broker dealers, banks, and other financial intermediaries ("Intermediaries") for certain activities related to the fund or other John Hancock funds ("Payments"). Any Payments made by Hancock Entities will be made from their own assets and not from the assets of the fund. Although a portion of Hancock Entities' revenue comes directly or indirectly in part from fees paid by the fund and other John Hancock funds, Payments do not increase the price paid by investors for the purchase of shares of, or the cost of owning, the fund or other John Hancock funds. Hancock Entities may make Payments for Intermediaries' participating in activities that are designed to make registered representatives, other professionals, and individual investors more knowledgeable about the fund or for other activities, such as participation in marketing activities and presentations, educational training programs, the support of technology platforms and/or reporting systems ("Education Costs"). Hancock Entities may also make Payments to Intermediaries for certain printing, publishing, and mailing costs associated with the fund or materials relating to ETFs in general ("Publishing Costs"). In addition, Hancock Entities may make Payments to Intermediaries that make Shares and certain other John Hancock funds available to their clients, for otherwise promoting the fund and other John Hancock funds, and/or for the receipt of analytical data in relation to sales of fund shares. Payments of this type are sometimes referred to as revenue sharing payments.

The Advisor has established services arrangements with certain Intermediaries. Under these arrangements, certain John Hancock ETFs are available through programs pursuant to which the Intermediary agrees not to charge its customers trading commissions when those customers purchase or sell shares of such ETFs online, subject to certain conditions. The Intermediaries receive remuneration from the Advisor for record keeping, shareholder services and other services, including the development, maintenance and promotion of the program as a whole. As of the date of this SAI, as amended or supplemented from time to time, Cetera Financial Group, Inc., Charles Schwab & Co., Inc., Fidelity Brokerage Services LLC, LPL Financial LLC, National Financial Services LLC, and Raymond James and Associates, Inc. are intermediaries which may have in the past received, and are expected in the future to receive, such contractual payments.

Payments to an Intermediary may be significant to the Intermediary, and amounts that Intermediaries pay to your salesperson or other investment professional may also be significant for your salesperson or other investment professional. Because an Intermediary may make decisions about which investment options it will recommend or make available to its clients or what services to provide for various products based on payments it receives or is

eligible to receive, Payments create conflicts of interest between the Intermediary and its clients and these financial incentives may cause the Intermediary to recommend the fund and other John Hancock funds over other investments. The same conflict of interest exists with respect to your salesperson or other investment professional if he or she receives similar payments from his or her Intermediary firm.

Hancock Entities may determine to make Payments based on any number of metrics. For example, Hancock Entities may make Payments at year-end or other intervals in a fixed amount, an amount based upon an Intermediary's services at defined levels or an amount based on the Intermediary's net sales of one or more John Hancock funds in a year or other period, any of which arrangements may include an agreed-upon minimum or maximum payment, or any combination of the foregoing. As of the date of this SAI, John Hancock anticipates that the Payments paid by Hancock Entities in connection with the fund will be immaterial to Hancock Entities in the aggregate for the next year. Please contact your salesperson or other investment professional for more information regarding any Payments his or her Intermediary firm may receive. Any payments made by the Hancock Entities to an Intermediary may create the incentive for an Intermediary to encourage customers to buy shares of John Hancock funds.

## **CREATIONS AND REDEMPTIONS**

The Trust issues and sells shares of the fund only in Creation Units on a continuous basis through the Distributor, without a sales load, at the NAV next determined after receipt of an order in proper form as described in the Participant Agreement (as defined below), on any Business Day (as defined below).

In its discretion, the Advisor reserves the right to increase or decrease the number of the fund's Shares that constitute a Creation Unit. The Board reserves the right to declare a split or a consolidation in the number of shares outstanding of the fund, and to make a corresponding change in the number of shares constituting a Creation Unit, in the event that the per share price in the secondary market rises (or declines) to an amount that falls outside the range deemed desirable by the Board.

A "Business Day" with respect to the fund is each day the NYSE, the Exchange and the Trust are open, including any day that the fund is required to be open under Section 22(e) of the 1940 Act, which excludes weekends and the following holidays: New Year's Day, Martin Luther King, Jr. Day, Presidents' Day, Good Friday, Memorial Day, Juneteenth, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. Orders from Authorized Participants (defined below) to create or redeem Creation Units will only be accepted on a Business Day.

## **Fund Deposit**

The consideration for purchase of Creation Units consists of Deposit Securities and the Cash Component or, alternatively, a Cash Deposit. Together, the Deposit Securities and Cash Component or, alternatively, the Cash Deposit, constitute the "Fund Deposit," which represents the minimum initial and subsequent investment amount for a Creation Unit of the fund. The portfolio of securities required may be different than the portfolio of securities such fund will deliver upon redemption of fund shares.

In the event the fund requires Deposit Securities and a Cash Component in consideration for purchasing a Creation Unit, the function of the Cash Component is to compensate for any differences between the NAV per Creation Unit and the Deposit Amount (as defined below). The Cash Component would be an amount equal to the difference between the NAV of the shares (per Creation Unit) and the "Deposit Amount," which is an amount equal to the market value of the Deposit Securities. If the Cash Component is a positive number (the NAV per Creation Unit exceeds the Deposit Amount), the Authorized Participant (defined below) will deliver the Cash Component. If the Cash Component is a negative number (the NAV per Creation Unit is less than the Deposit Amount), the Authorized Participant will receive the Cash Component. Computation of the Cash Component excludes any stamp duty or other similar fees and expenses payable upon transfer of beneficial ownership of the Deposit Securities, which shall be the sole responsibility of the Authorized Participant. The Cash Component may also include a "Dividend Equivalent Payment," which enables the fund to make a complete distribution of dividends on the next dividend payment date, and is an amount equal, on a per Creation Unit basis, to the dividends on all the securities held by the fund with ex-dividend dates within the accumulation period for such distribution (the "Accumulation Period"), net of expenses and liabilities for such period, as if all of the securities had been held by the Trust for the entire Accumulation Period. The Accumulation Period begins on the ex-dividend date for the fund and ends on the next ex-dividend date.

State Street, through the National Securities Clearing Corporation ("NSCC"), makes available on each Business Day, prior to the opening of business (subject to amendments) on the Exchange (currently 9:30 A.M., Eastern time), a list of the names and the required number of each Deposit Security and the amount of the Cash Component that the fund would accept as a Fund Deposit that Business Day.

In the event the fund requires Deposit Securities and a Cash Component in consideration for purchasing a Creation Unit, the fund may determine, upon receiving a purchase order from an Authorized Participant (defined below), to accept a basket of securities or cash that differs from Deposit Securities or to permit the substitution of an amount of cash (i.e., a "cash in lieu" amount) to be added to the Cash Component to replace any Deposit Security.

#### **Procedures for Creating Creation Units**

To be eligible to place orders and to create a Creation Unit of the fund, an entity must be: an "Authorized Participant" which is a member or participant of a clearing agency registered with the SEC, which has a written agreement with a fund or one of its service providers that allows the Authorized Participant to place orders for the purchase and redemption of Creation Units ("Participant Agreement"). All shares of the fund, however created, will be entered on the records of DTC in the name of its nominee for the account of a DTC Participant.

Except as described below, and in all cases subject to the terms of the applicable Participant Agreement, all orders to create Creation Units of the fund must be received by the Transfer Agent no later than the closing time of the regular trading session of the Exchange ("Closing Time") (ordinarily 4:00 p.m., Eastern time) in each case on the date such order is placed for creation of Creation Units to be effected based on the NAV of shares of such fund as next determined after receipt of an order in proper form. Non-standard orders must be received by the Transfer Agent no later than 3:00 p.m., Eastern time. On days when the Exchange closes earlier than normal (such as the day before a holiday), the fund requires standard orders to create Creation Units to be placed by the earlier closing time and non-standard orders to create Creation Units must be received no later than one hour prior to the earlier closing time. Notwithstanding the foregoing, the Trust may, but is not required to, permit non-standard orders until 4:00 p.m., Eastern time, or until the market close (in the event the Exchange closes early). The date on which an order to create Creation Units (or an order to redeem Creation Units, as discussed below) is placed is referred to as the "Transmittal Date." Orders must be transmitted by an Authorized Participant via the internet or by telephone or other transmission method acceptable to the Transfer Agent pursuant to procedures set forth in the Participant Agreement. Economic or market disruptions or changes, or telephone or other communication failure may impede the ability to reach the Transfer Agent or an Authorized Participant.

All investor orders to create Creation Units shall be placed with an Authorized Participant in the form required by such Authorized Participant. In addition, an Authorized Participant may request that an investor make certain representations or enter into agreements with respect to an order (to provide for payments of cash). Investors should be aware that their particular broker may not have executed a Participant Agreement and, therefore, orders to create Creation Units of the fund will have to be placed by the investor's broker through an Authorized Participant. In such cases, there may be additional charges to such investor.

Creation Units may be created in advance of the receipt by the Trust of all or a portion of the Fund Deposit. In such cases, the Authorized Participant will remain liable for the full deposit of the missing portion(s) of the Fund Deposit and will be required to post collateral with the Trust consisting of cash up to 115% of the marked-to-market value of such missing portion(s). The Trust may use such collateral to buy the missing portion(s) of the Fund Deposit at any time and will subject such Authorized Participant to liability for any shortfall between the cost to the Trust of purchasing such securities and the value of such collateral. The Trust will have no liability for any such shortfall. The Trust will return any unused portion of the collateral to the Authorized Participant once the entire Fund Deposit has been properly received by the Custodian and deposited into the Trust.

Orders for Creation Units that are effected outside the Clearing Process are likely to require transmittal by the DTC Participant earlier on the Transmittal Date than orders effected using the Clearing Process. Those persons placing orders outside the Clearing Process should ascertain the deadlines applicable to DTC and the Federal Reserve Bank wire system by contacting the operations department of the broker or depository institution effectuating such transfer of Deposit Securities and Cash Component.

Orders to create Creation Units of the fund may be placed through the Clearing Process utilizing procedures applicable to domestic funds for domestic securities ("Domestic Funds") (see "—Placement of Creation Orders Using Clearing Process") or outside the Clearing Process utilizing the procedures applicable to either Domestic Funds or foreign funds for foreign securities ("Foreign Funds") (see "—Placement of Creation Orders Outside Clearing Process—Foreign Funds"). In the event that the fund includes both domestic and foreign securities, the time for submitting orders is as stated in the "Placement of Creation Orders Outside Clearing Process—Foreign Funds" and "Placement of Redemption Orders Outside Clearing Process—Foreign Funds" sections below shall operate.

**Placement of Creation Orders Using Clearing Process.** Fund Deposits created through the Clearing Process, if available, must be delivered through a Participating Party that has executed a Participant Agreement.

The Participant Agreement authorizes the Custodian to transmit to NSCC on behalf of the Participating Party such trade instructions as are necessary to effect the Participating Party's creation order. Pursuant to such trade instructions from the Custodian to NSCC, the Participating Party agrees to transfer the requisite Deposit Securities (or contracts to purchase such Deposit Securities that are expected to be delivered in a "regular way" manner by the first (1<sup>st</sup>) Business Day) and the Cash Component to the Trust, together with such additional information as may be required by the Transfer Agent as set forth in the Participant Agreement. An order to create Creation Units of the fund through the Clearing Process is deemed received by the Transfer Agent on the Transmittal Date if (i) such order is received by the Transfer Agent not later than the Closing Time on such Transmittal Date and (ii) all other procedures set forth in the Participant Agreement are properly followed. All orders are subject to review and approval of the Distributor.

Placement of Creation Orders Outside Clearing Process—Domestic Funds. Fund Deposits created outside the Clearing Process must be delivered through a DTC Participant that has executed a Participant Agreement. A DTC Participant who wishes to place an order creating Creation Units of the fund to be effected outside the Clearing Process need not be a Participating Party, but such orders must state that the DTC Participant is not using the Clearing Process and that the creation of Creation Units will instead be effected through a transfer of securities and cash. The Fund Deposit transfer must be ordered by the DTC Participant in a timely fashion so as to ensure the delivery of the requisite number of Deposit Securities through DTC to the account of the Trust no later than 11:00 A.M. Eastern time, of the next Business Day immediately following the Transmittal Date. All questions as to the number of Deposit Securities to be delivered, and the validity, form and eligibility (including time of receipt) for the deposit of any tendered securities, will be determined by the Trust, whose determination shall be final and binding. The cash equal to the Cash Component must be transferred directly to the Custodian through the Federal Reserve wire system in a timely manner so as to be received by the Custodian no later than 2:00 P.M. Eastern time, on the next Business Day immediately following the Transmittal Date. An order to create Creation Units of the fund outside the Clearing Process is deemed received by the Transfer Agent on the Transmittal Date if (i) such order is received by the Transfer Agent not later than the Closing Time on such Transmittal Date; and (ii) all other procedures set forth in the Participant Agreement are properly followed. However, if the Custodian does not receive both the requisite Deposit Securities and the Cash Component in a timely fashion on the next Business Day immediately

following the Transmittal Date, such order will be cancelled. Upon written notice to the Transfer Agent, such cancelled order may be resubmitted the following Business Day using the Fund Deposit as newly constituted to reflect the current NAV of the applicable fund. The delivery of Creation Units so created is expected to occur no later than the first (1<sup>st</sup>) Business Day following the day on which the creation order is deemed received by the Custodian.

Additional transaction fees may be imposed with respect to transactions effected outside the Clearing Process (through a DTC participant) and in circumstances in which any cash can be used in lieu of Deposit Securities to create Creation Units. (See "Creation Transaction Fee" section below.)

Placement of Creation Orders Outside Clearing Process—Foreign Funds. The Transfer Agent will notify the Distributor, the Advisor, and the Custodian upon receipt of a Creation Order. The Custodian will then provide such information to the appropriate subcustodian. For the fund, the Custodian will cause the subcustodian of such fund to maintain an account into which the Deposit Securities (or the cash value of all or part of such securities, in the case of a permitted or required cash purchase or "cash-in-lieu" amount) will be delivered. Deposit Securities must be delivered to an account maintained at the applicable local custodian. The Trust must also receive, on or before the contractual settlement date, immediately available or same day funds estimated by the Custodian to be sufficient to pay the Cash Component next determined after receipt in proper form of the purchase order, together with the creation transaction fee described below.

Once the Transfer Agent has accepted a creation order, the Transfer Agent will confirm the issuance of a Creation Unit of the fund against receipt of payment, at such NAV as will have been calculated after receipt in proper form of such order. The Transfer Agent will then transmit a confirmation of acceptance of such order.

Creation Units will not be issued until the transfer of good title to the Trust of the Deposit Securities and the payment of the Cash Component have been completed. When the subcustodian has confirmed to the Custodian that the required Deposit Securities (or the cash value thereof) have been delivered to the account of the relevant subcustodian, the Distributor and the Advisor will be notified of such delivery and the Transfer Agent will issue and cause the delivery of the Creation Units.

Acceptance of Creation Orders. The Trust and the Distributor reserve the right to reject or revoke acceptance of a creation order transmitted to it in respect to the fund, for example if: (i) the order is not in proper form; (ii) the investor(s), upon obtaining the Shares ordered, would own 80% or more of the currently outstanding Shares of such fund; (iii) acceptance of the Fund Deposit would, in the opinion of counsel, be unlawful; or (iv) in the event that circumstances outside the control of the Trust, the Transfer Agent, the Distributor or the Advisor make it for all practical purposes impossible to process creation orders. Examples of such circumstances include acts of God; public service or utility problems such as fires, floods, extreme weather conditions and power outages resulting in telephone, facsimile and computer failures; market conditions or activities causing trading halts; systems failures involving computer or other information systems affecting the Trust, the Advisor, the Distributor, DTC, the Clearing Process, Federal Reserve, the Transfer Agent or any other participant in the creation process, and other extraordinary events. The Distributor shall notify the Authorized Participant acting on behalf of the creator of a Creation Unit of its rejection of the order of such person. The Trust, Transfer Agent, and the Distributor are under no duty, however, to give notification of any defects or irregularities in the delivery of Fund Deposits nor shall any of them incur any liability for the failure to give any such notification.

All questions as to the number of shares of Deposit Securities and the validity, form, eligibility, and acceptance for deposit of any securities to be delivered and the amount and form of the Cash Component, as applicable, shall be determined by the Trust, and the Trust's determination shall be final and binding.

Creation Transaction Fee. The following fixed creation transaction fee payable to the Custodian is imposed on each creation transaction: \$150 for in-kind or custom creation transactions, and \$100 for cash creation transactions for John Hancock Disciplined Value Select ETF, regardless of the number of Creation Units purchased in the transaction. In the case of cash creations or where the Trust permits a creator to substitute cash in lieu of depositing a portion of the Deposit Securities, the creator may be assessed an additional variable charge of up to 3% of the value of a Creation Unit to compensate the funds for the costs associated with purchasing the applicable securities (which may, in certain instances, be based on a good faith estimate of transaction costs). (See "Fund Deposit" section above.) As a result, in order to seek to replicate the in-kind creation order process, the Trust expects to purchase, in the secondary market or otherwise gain exposure to, the portfolio securities that could have been delivered as a result of an in-kind creation order pursuant to local law or market convention, or for other reasons ("Market Purchases"). In such cases where the Trust makes Market Purchases, the Authorized Participant will reimburse the Trust for, among other things, any difference between the market value at which the securities and/or financial instruments were purchased by the Trust and the cash in lieu amount (which amount, at the Advisor's discretion, may be capped), applicable registration fees, brokerage commissions and certain taxes. The Advisor may adjust the transaction fee to the extent the composition of the creation securities changes or cash in lieu is added to the Cash Component to protect ongoing shareholders. Creators of Creation Units are responsible for the costs of transferring the securities constituting the Deposit Securities to the account of the Trust. From time to time, all or a portion of a fund's fixed creation transaction fee may be waived and/or the Advisor may cover the cost of

**Redemption of Creation Units.** Shares may be redeemed only in Creation Units at their NAV next determined after receipt of a redemption request in proper form on a Business Day and only through a Participating Party or DTC Participant who has executed a Participant Agreement. The fund will not redeem Shares in amounts less than Creation Units (except the fund may redeem Shares in amounts less than a Creation Unit in the event the fund is being liquidated). Beneficial owners must accumulate enough Shares in the secondary market to constitute a Creation Unit in order to have such Shares redeemed by the Trust. There can be no assurance, however, that there will be sufficient liquidity in the public trading market at any time to permit

assembly of a Creation Unit. Authorized Participants should expect to incur brokerage and other costs in connection with assembling a sufficient number of Shares to constitute a redeemable Creation Unit. All redemptions are subject to the procedures contained in the applicable Participant Agreement.

With respect to the fund, State Street, through the NSCC, makes available immediately prior to the opening of business on the Exchange (currently 9:30 A.M., Eastern time) on each Business Day, the identity of a basket of securities ("Fund Securities") and/or an amount of cash (subject to possible amendment or correction) the fund may apply for redemption requests received in proper form (as described below) on that day. All orders are subject to acceptance by the Transfer Agent. Fund Securities received on redemption may not be identical to Deposit Securities that are applicable to creations of Creation Units.

The redemption proceeds for a Creation Unit will generally consist of Fund Securities plus cash in an amount equal to the difference between the NAV of the Shares being redeemed, as next determined after a receipt of a request in proper form, and the value of the Fund Securities, less the redemption transaction fee and variable fees described below. Notwithstanding the foregoing, the Trust will substitute a "cash-in-lieu" amount to replace any Fund Security that is a non-deliverable instrument. The Trust may permit a "cash-in-lieu" amount for any reason at the Trust's sole discretion but is not required to do so. The amount of cash paid out in such cases will be equivalent to the value of the instrument listed as a Fund Security. In the event that the Fund Securities have a value greater than the NAV of the Shares, a compensating cash payment equal to the difference is required to be made by an Authorized Participant. In addition, the fund reserves the right to honor a redemption request by delivering a basket of securities or cash that differs from the Fund Securities.

Redemptions of shares for Fund Securities will be subject to compliance with applicable U.S. federal and state securities laws, and the fund reserves the right to redeem Creation Units for cash to the extent that the Trust could not lawfully deliver specific Fund Securities upon redemptions or could not do so without first registering the Fund Securities under such laws. An Authorized Participant, or a beneficial owner of shares for which it is acting, subject to a legal restriction with respect to a particular security included in the redemption of a Creation Unit may be paid an equivalent amount of cash. This would specifically prohibit delivery of Fund Securities that are not registered in reliance upon Rule 144A under the 1933 Act to a redeeming beneficial owner of shares that is not a "qualified institutional buyer," as such term is defined under Rule 144A of the 1933 Act. The Authorized Participant may request the redeeming beneficial owner of the shares to complete an order form or to enter into agreements with respect to such matters as compensating cash payment.

The right of redemption may be suspended or the date of payment postponed with respect to the fund: (i) for any period during which the Exchange is closed (other than customary weekend and holiday closings); (ii) for any period during which trading on the Exchange is suspended or restricted; (iii) for any period during which an emergency exists as a result of which disposal by the fund of securities it owns or determination of such fund's NAV is not reasonably practicable; or (iv) in such other circumstances as permitted by the SEC.

If the Trust determines, based on information available to the Trust when a redemption request is submitted by an Authorized Participant, that (i) the short interest of the fund in the marketplace is greater than or equal to 100% and (ii) the orders in the aggregate from all Authorized Participants redeeming fund Shares on a Business Day represent 25% or more of the outstanding Shares of the fund, such Authorized Participant will be required to verify to the Trust the accuracy of its representations that are deemed to have been made by submitting a request for redemption. If, after receiving notice of the verification requirement, the Authorized Participant does not verify the accuracy of its representations that are deemed to have been made by submitting a request for redemption in accordance with this requirement, its redemption request will be considered not to have been received in proper form.

Redemption Transaction Fee. The following basic redemption transaction fee is the same no matter how many Creation Units are being redeemed pursuant to any one redemption request: \$150 for in-kind or custom redemption transactions, and \$100 for cash redemption transactions for John Hancock Disciplined Value Select ETF. An additional variable charge for cash redemptions or partial cash redemptions may also be imposed to compensate the fund for the costs associated with selling the applicable securities. As a result, in order to seek to replicate the in-kind redemption order process, the Trust expects to sell, in the secondary market, the portfolio securities or settle any financial instruments that may not be permitted to be re-registered in the name of the Participating Party as a result of an in-kind redemption order pursuant to local law or market convention, or for other reasons ("Market Sales"). In such cases where the Trust makes Market Sales, the Authorized Participant will reimburse the Trust for, among other things, any difference between the market value at which the securities and/or financial instruments were sold or settled by the Trust and the cash in lieu amount (which amount, at the Advisor's discretion, may be capped), applicable registration fees, brokerage commissions and certain taxes ("Transaction Costs"). The Advisor may adjust the transaction fee to the extent the composition of the redemption securities changes or cash in lieu is added to the Cash Component to protect ongoing shareholders. In no event will fees charged by the fund in connection with a redemption exceed 2% of the value of each Creation Unit. Investors who use the services of a broker or other such intermediary may be charged a fee for such services. To the extent the fund cannot recoup the amount of Transaction Costs incurred in connection with a redemption from the redeeming shareholder because of the 2% cap or otherwise, those Transaction Costs will be borne by the fund's remaining shareholders and negatively affect the fund's performance. From time to time, all or a portion of a fund's basic redemption transaction fee may be waived and/or the Advisor may cover the cost of any transaction fees when believed to be in the best interest of the fund.

Placement of Redemption Orders Using Clearing Process. Orders to redeem Creation Units of the fund through the Clearing Process, if available, must be delivered through a Participating Party that has executed the Participant Agreement. An order to redeem Creation Units of the fund using the Clearing Process is deemed received on the Transmittal Date if (i) such order is received by the Transfer Agent not later than 4:00 p.m. Eastern time on such Transmittal Date; and (ii) all other procedures set forth in the Participant Agreement are properly followed; such order will be effected based on the

NAV of the fund as next determined. An order to redeem Creation Units of the fund using the Clearing Process made in proper form but received by the fund after 4:00 P.M. Eastern time, will be deemed received on the next Business Day immediately following the Transmittal Date. The requisite Fund Securities (or contracts to purchase such Fund Securities which are expected to be delivered in a "regular way" manner) and the applicable cash payment are expected to be transferred by the first (1<sup>st</sup>) Business Day following the date on which such request for redemption is deemed received.

Placement of Redemption Orders Outside Clearing Process—Domestic Funds. Orders to redeem Creation Units of the fund outside the Clearing Process must be delivered through a DTC Participant that has executed the Participant Agreement. A DTC Participant who wishes to place an order for redemption of Creation Units of the fund to be effected outside the Clearing Process need not be a Participating Party, but such orders must state that the DTC Participant is not using the Clearing Process and that redemption of Creation Units of the fund will instead be effected through transfer of Creation Units of the fund directly through DTC. An order to redeem Creation Units of the fund outside the Clearing Process is deemed received by the Transfer Agent on the Transmittal Date if (i) such order is received by the Transfer Agent not later than 4:00 P.M. Eastern time on such Transmittal Date; (ii) such order is preceded or accompanied by the requisite number of Shares of Creation Units specified in such order, which delivery must be made through DTC to the Transfer Agent no later than 11:00 A.M. Eastern time, on such Transmittal Date; and (iii) all other procedures set forth in the Participant Agreement are properly followed.

After the Transfer Agent has deemed an order for redemption outside the Clearing Process received, the Transfer Agent will initiate procedures to transfer the requisite Fund Securities (or contracts to purchase such fund Securities) which are expected to be delivered within one Business Day and the cash redemption payment to the redeeming Beneficial Owner by the first (1<sup>st</sup>) Business Day following the Transmittal Date on which such redemption order is deemed received by the Transfer Agent. Additional transaction fees may be imposed with respect to transactions effected outside the Clearing Process. (See "Redemption Transaction Fee" section above).

Placement of Redemption Orders Outside Clearing Process—Foreign Funds. Arrangements satisfactory to the Trust must be in place for the Participating Party to transfer the Creation Units through DTC on or before the settlement date. Redemptions of Shares for Fund Securities will be subject to compliance with applicable U.S. federal and state securities laws and the fund (whether or not it otherwise permits or requires cash redemptions) reserves the right to redeem Creation Units for cash to the extent that the fund could not lawfully deliver specific Fund Securities upon redemptions or could not do so without first registering the Fund Securities under such laws.

In connection with taking delivery of Shares for Fund Securities upon redemption of Creation Units, a redeeming shareholder or entity acting on behalf of a redeeming shareholder must maintain appropriate custody arrangements with a qualified broker dealer, bank or other custody providers in each jurisdiction in which any of the Fund Securities are customarily traded, to which account such Fund Securities will be delivered. If neither the redeeming shareholder nor the entity acting on behalf of a redeeming shareholder has appropriate arrangements to take delivery of the Fund Securities in the applicable foreign jurisdiction and it is not possible to make other such arrangements, or if it is not possible to effect deliveries of the Fund Securities in such jurisdictions, the Trust may, in its discretion, exercise its option to redeem such Shares in cash, and the redeeming shareholder will be required to receive its redemption proceeds in cash.

Deliveries of redemption proceeds generally will be made within one business day. Due to the schedule of holidays in certain countries or for other reasons, however, the delivery of redemption proceeds may take longer than one business day after the day on which the redemption request is received in proper form. In such cases, the local market settlement procedures will not commence until the end of the local holiday periods. In addition to holidays, other unforeseeable closings in a non-U.S. market due to emergencies may also prevent the fund from delivering securities within the normal settlement period. Market closures during regular holidays in an applicable non-U.S. market that are not holidays observed in the U.S. market may prevent a fund from executing securities transactions within the normal settlement period. Unforeseeable closures of applicable non-U.S. markets may have a similar impact. During such closures, the fund may be required to rely on other methods to satisfy redemption requests, including the use of its line of credit, interfund lending facility, redemptions in kind, or such other liquidity means or facilities as the fund may have in place from time to time, or the delivery of redemption proceeds may be extended beyond the normal settlement cycle.

# **BOOK ENTRY ONLY SYSTEM**

DTC acts as securities depositary for the Shares. Shares of the fund are represented by securities registered in the name of DTC or its nominee and deposited with, or on behalf of, DTC. Certificates will not be issued for Shares.

DTC, a limited purpose trust company, was created to hold securities of the DTC Participants and to facilitate the clearance and settlement of securities transactions among the DTC Participants in such securities through electronic book entry changes in accounts of the DTC Participants, thereby eliminating the need for physical movement of securities certificates. DTC Participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations, some of whom (and/or their representatives) own DTC. More specifically, DTC is owned by a number of its DTC Participants and by the NYSE and the Financial Industry Regulatory Authority ("FINRA"). Access to the DTC system is also available to others such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a DTC Participant, either directly or indirectly (the "Indirect Participants").

Beneficial ownership of Shares is limited to DTC Participants, Indirect Participants and persons holding interests through DTC Participants and Indirect Participants. Ownership of beneficial interests in Shares (owners of such beneficial interests are referred to herein as "Beneficial Owners") is shown on, and the transfer of ownership is effected only through, records maintained by DTC (with respect to DTC Participants) and on the records of DTC

Participants (with respect to Indirect Participants and Beneficial Owners that are not DTC Participants). Beneficial Owners will receive from or through the DTC Participant a written confirmation relating to their purchase of Shares.

Conveyance of all notices, statements and other communications to Beneficial Owners is effected as follows. Pursuant to the Depositary Agreement between the Trust and DTC, DTC is required to make available to the Trust upon request and for a fee to be charged to the Trust a listing of the Shares holdings of each DTC Participant. The Trust shall inquire of each such DTC Participant as to the number of Beneficial Owners holding Shares, directly or indirectly, through such DTC Participant. The Trust shall provide each such DTC Participant with copies of such notice, statement or other communication, in such form, number and at such place as such DTC Participant may reasonably request, in order that such notice, statement or communication may be transmitted by such DTC Participant, directly or indirectly, to such Beneficial Owners. In addition, the Trust shall pay to each such DTC Participant a fair and reasonable amount as reimbursement for the expenses attendant to such transmittal, all subject to applicable statutory and regulatory requirements.

Share distributions shall be made to DTC or its nominee, Cede & Co., as the registered holder of all Shares. DTC or its nominee, upon receipt of any such distributions, shall credit immediately DTC Participants' accounts with payments in amounts proportionate to their respective beneficial interests in Shares as shown on the records of DTC or its nominee. Payments by DTC Participants to Indirect Participants and Beneficial Owners of Shares held through such DTC Participants will be governed by standing instructions and customary practices, as is now the case with securities held for the accounts of customers in bearer form or registered in a "street name," and will be the responsibility of such DTC Participants.

The Trust has no responsibility or liability for any aspects of the records relating to or notices to Beneficial Owners, or payments made on account of beneficial ownership interests in such Shares, or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests or for any other aspect of the relationship between DTC and the DTC Participants or the relationship between such DTC Participants and the Indirect Participants and Beneficial Owners owning through such DTC Participants.

DTC may determine to discontinue providing its service with respect to the Shares at any time by giving reasonable notice to the Trust and discharging its responsibilities with respect thereto under applicable law.

Under such circumstances, the Trust shall take action either to find a replacement for DTC to perform its functions at a comparable cost or, if such a replacement is unavailable, to issue and deliver printed certificates representing ownership of Shares, unless the Trust makes other arrangements with respect thereto satisfactory to the Exchange.

#### **Request for Multiple Copies of Shareholder Documents**

To reduce expenses, it is intended that only one copy of the fund's Prospectus and each annual and semi-annual report, when available, will be mailed to those addresses shared by two or more accounts. If you wish to receive individual copies of these documents, please contact the financial intermediary through which you hold your shares.

# **NET ASSET VALUE**

The NAV for each fund's Shares is normally determined each business day at the close of regular trading on the NYSE (typically 4:00 P.M. Eastern time) by dividing the fund's net assets (which may include realized and unrealized capital gain and income) by the number of its shares outstanding. The price of the fund's Shares bought and sold in the secondary market, like the price of all traded securities, is subject to factors such as supply and demand, as well as the current value of the portfolio securities held by the fund. Secondary market shares, available for purchase or sale on an intraday basis, do not have a fixed relationship either to the previous day's NAV nor the current day's NAV. Prices in the secondary market, therefore, may be below, at, or above the most recently calculated NAV of such Shares. Equity securities traded principally in foreign markets are valued using the last sale price or official closing price in the relevant exchange or market. On any day a foreign market is closed and the NYSE is open, any foreign securities will be valued using the last price or official closing price obtained from the relevant exchange on the prior business day and may be subject to adjustment. Trading of securities that are primarily listed on foreign exchanges may take place on weekends and U.S. business holidays on which the fund's NAV is not calculated. Consequently, the fund's portfolio securities may trade and the NAV of the fund redeemable securities may be significantly affected on days when a shareholder will not be able to purchase or redeem shares of the fund.

Portfolio securities are valued by various methods that are generally described below. Portfolio securities also may be fair valued by the Advisor's Pricing Committee in certain instances pursuant to procedures established by the Advisor and adopted by the Board. Equity securities are generally valued at the last sale price or, for certain markets, the official closing price as of the close of the relevant exchange. Securities not traded on a particular day are valued using last available bid prices. A security that is listed or traded on more than one exchange is typically valued at the price on the exchange where the security was acquired or most likely will be sold. In certain instances, the Pricing Committee may determine to value equity securities using prices obtained from another exchange or market if trading on the exchange or market on which prices are typically obtained did not open for trading as scheduled, or if trading closed earlier than scheduled, and trading occurred as normal on another exchange or market. Equity securities traded principally in foreign markets are typically valued using the last sale price or official closing price in the relevant exchange or market. On any day a foreign market is closed and the NYSE is open, any foreign securities will typically be valued using the last price or official closing price obtained from the relevant exchange on the prior business day. Debt obligations are typically valued based on evaluated prices provided by an independent pricing vendor. The value of securities denominated in foreign currencies is converted into U.S. dollars at the exchange rate supplied by an independent pricing vendor, generally determined as of 4:00 p.m. London time. Forward foreign currency contracts are valued at the prevailing forward

rates which are based on foreign currency exchange spot rates and forward points supplied by an independent pricing vendor. Exchange-traded options are valued at the mid-price of the last quoted bid and ask prices. Futures contracts whose settlement prices are determined as of the close of the NYSE are typically valued based on the settlement price, while other futures contracts are typically valued at the last traded price on the exchange on which they trade as of the close of the NYSE. Foreign equity index futures that trade in the electronic trading market subsequent to the close of regular trading may be valued at the last traded price in the electronic trading market as of the close of the NYSE. Swaps and unlisted options are generally valued using evaluated prices obtained from an independent pricing vendor. Shares of other open-end investment companies that are not ETFs (underlying funds) are valued based on the NAVs of such underlying funds.

Pricing vendors may use matrix pricing or valuation models that utilize certain inputs and assumptions to derive values, including transaction data, broker-dealer quotations, credit quality information, general market conditions, news, and other factors and assumptions. The fund may receive different prices when it sells odd-lot positions than it would receive for sales of institutional round lot positions. Pricing vendors generally value securities assuming orderly transactions of institutional round lot sizes, but a fund may hold or transact in such securities in smaller, odd lot sizes.

The Pricing Committee engages in oversight activities with respect to pricing vendors, which includes, among other things, monitoring significant or unusual price fluctuations above predetermined tolerance levels from the prior day, back-testing of pricing vendor prices against actual trades, conducting periodic due diligence meetings and reviews, and periodically reviewing the inputs, assumptions and methodologies used by these vendors. Nevertheless, market quotations, official closing prices, or information furnished by a pricing vendor could be inaccurate, which could lead to a security being valued incorrectly.

As noted in the fund's Prospectus, in certain instances, the Advisor's Pricing Committee may determine that a reported valuation does not reflect fair value, based on additional information available or other factors, and accordingly may determine in good faith the fair value of the asset in accordance with the procedures established by the Advisor and adopted by the Board. Any such fair value may differ from the reported valuation.

# POLICY REGARDING DISCLOSURE OF PORTFOLIO HOLDINGS

The fund's portfolio holdings are publicly disseminated each day the fund is open for business through financial reporting and news services, including publicly accessible Internet web sites. In addition, a basket composition file, which includes the security names and share quantities to deliver in exchange for Creation Units, together with estimates and actual cash components, is publicly disseminated daily prior to the opening of the Exchange via the NSCC, a clearing agency that is registered with the SEC. The basket represents one Creation Unit of the fund. The Trust, Advisor, Custodian, and Distributor will not disseminate non-public information concerning the Trust, except: (i) to a party for a legitimate business purpose related to the day-to-day operations of the fund or (ii) to any other party for a legitimate business or regulatory purpose, upon waiver or exception. The Trust, Advisor, Custodian, and Distributor will not disseminate non-public information concerning the Trust without considering (i) the purpose of providing such information; (ii) the procedures that will be used to ensure that such information remains confidential and is not traded upon; and (iii) whether such disclosure is in the best interest of the shareholders.

#### **DESCRIPTION OF FUND SHARES**

The Trustees are responsible for the management and supervision of the Trust. The Declaration of Trust permits the Trustees to issue an unlimited number of full and fractional shares of beneficial interest of the fund or other series of the Trust without par value. Under the Declaration of Trust, the Trustees have the authority to create and classify shares of beneficial interest in separate series and classes without further action by shareholders. As of the date of this SAI, the Trustees have authorized shares of 17 series of the Trust. Additional series may be added in the future. The Trustees also have authorized the issuance of one class of shares of the funds.

Each share of the fund represents an equal proportionate interest in the aggregate net assets attributable to the fund. In the event of liquidation, shareholders of the fund are entitled to share pro rata in the net assets of the fund that are available for distribution to these shareholders. Shares entitle their holders to one vote per share (and fractional votes for fractional shares), are freely transferable and have no preemptive, appraisal, or conversion rights. When issued, shares are fully paid and non-assessable, except as set forth below.

Unless otherwise required by the 1940 Act or the Declaration of Trust, the Trust has no intention of holding annual meetings of shareholders. Trust shareholders may remove a Trustee by the affirmative vote of at least two-thirds of the Trust's outstanding shares and the Trustees shall promptly call a meeting for such purpose when requested to do so in writing by the record holders of not less than 10% of the outstanding shares of the Trust. Shareholders may, under certain circumstances, communicate with other shareholders in connection with a request for a special meeting of shareholders. However, at any time that less than a majority of the Trustees holding office were elected by the shareholders, the Trustees will call a special meeting of shareholders for the purpose of electing Trustees.

Under Massachusetts law, shareholders of a Massachusetts business trust could, under certain circumstances, be held personally liable for acts or obligations of such trust or a series thereof. However, the Declaration of Trust contains an express disclaimer of shareholder liability for acts, obligations or affairs of the Trust. The Declaration of Trust also provides for indemnification out of the Trust's assets for all losses and expenses of any shareholder held personally liable by reason of being or having been a shareholder. The Declaration of Trust also provides that no series of the Trust shall be liable for the liabilities of any other series. Furthermore, no series of the Trust shall be liable for the liabilities of any other fund within the John Hancock Fund Complex. Liability is therefore limited to circumstances in which the fund itself would be unable to meet its obligations, and the possibility of this occurrence is remote.

The Declaration of Trust also provides that the Board may approve the merger of a relevant fund with an affiliated fund without shareholder approval, in accordance with the 1940 Act. This provision will permit the merger of affiliated funds without shareholder approval in certain circumstances to avoid incurring the expense of soliciting proxies when a combination does not raise significant issues for shareholders. For example, this provision would permit the combination of two small funds having the same portfolio managers, the same investment objectives, and the same fee structure in order to achieve economies of scale and thereby reduce fund expenses borne by shareholders. Such a merger will still require the Board (including a majority of the Independent Trustees) to determine that the merger is in the best interests of the combining funds and will not dilute the interest of existing shareholders. The Trustees would evaluate any and all information reasonably necessary to make their determination and consider and give appropriate weight to all pertinent factors in fulfilling their duty of care to shareholders.

Shareholders of an acquired fund will still be required to approve a combination that would result in a change in a fundamental investment policy, a material change to the terms of an advisory agreement, the institution of or an increase in Rule 12b-1 fees, or when the board of the surviving fund does not have a majority of Independent Trustees who were elected by its shareholders. Under Massachusetts law, shareholder approval is not required for fund mergers, consolidation, or sales of assets. Shareholder approval nevertheless will be obtained for combinations of affiliated funds when required by the 1940 Act. Shareholder approval also will be obtained for combinations with unaffiliated funds when deemed appropriate by the Trustees.

The Trust's amended and restated Declaration of Trust: (i) sets forth certain duties, responsibilities, and powers of the Trustees; (ii) clarifies that, other than as provided under federal securities laws, the shareholders may only bring actions involving a fund derivatively; (iii) provides that any action brought by a shareholder related to the fund will be brought in Massachusetts state or federal court, and that, if a claim is brought in a different jurisdiction and subsequently changed to a Massachusetts venue, the shareholder will be required to reimburse the fund for such expenses; and (iv) clarifies that shareholders are not intended to be third-party beneficiaries of fund contracts. The foregoing description of the Declaration of Trust is qualified in its entirety by the full text of the Declaration of Trust, effective as of January 22, 2016, which is available by writing to the Secretary of the Trust at 200 Berkeley Street, Boston, Massachusetts 02116, and also on the SEC's and Secretary of the Commonwealth of Massachusetts' websites.

## **ADDITIONAL INFORMATION CONCERNING TAXES**

The following discussion is a general and abbreviated summary of certain tax considerations affecting the fund and their shareholders. No attempt is made to present a detailed explanation of all federal, state, local and foreign tax concerns, and the discussions set forth here and in the Prospectus do not constitute tax advice. Investors are urged to consult their own tax advisors with specific questions relating to federal, state, local or foreign taxes.

The fund is treated as a separate entity for accounting and tax purposes and intends to qualify as a RIC under Subchapter M of the Code for each taxable year. In order to qualify for the special tax treatment accorded RICs and their shareholders, the fund must, among other things:

- (a) derive at least 90% of its gross income from dividends, interest, payments with respect to certain securities loans, and gains from the sale or other disposition of stock, securities, and foreign currencies, or other income (including but not limited to gains from options, futures, or forward contracts) derived with respect to its business of investing in such stock, securities, or currencies, and net income derived from interests in qualified publicly traded partnerships (as defined below);
- (b) distribute with respect to each taxable year at least the sum of 90% of its investment company taxable income (as that term is defined in the Code without regard to the deduction for dividends paid-generally, taxable ordinary income and the excess, if any, of net short-term capital gains over net long-term capital losses) and 90% of net tax-exempt interest income, for such year; and
- (c) diversify its holdings so that, at the end of each quarter of the fund's taxable year: (i) at least 50% of the market value of the fund's total assets is represented by cash and cash items, U.S. government securities, securities of other RICs, and other securities limited in respect of any one issuer to a value not greater than 5% of the value 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 (x) in the securities (other than those of the U.S. government or other RICs) of any one issuer or of two or more issuers that the fund controls and that are engaged in the same, similar, or related trades or businesses, or (y) in the securities of one or more qualified publicly traded partnerships (as defined below).

With respect to gains from the sale or other disposition of foreign currencies, the Treasury Department can, by regulation, exclude from qualifying income foreign currency gains which are not directly related to a RIC's principal business of investing in stock (or options or futures with respect to stock or securities), but no regulations have been proposed or adopted pursuant to this grant of regulatory authority.

In general, for purposes of the 90% gross income requirement described in paragraph (a) above, income derived from a partnership will be treated as qualifying income only to the extent such income is attributable to items of income of the partnership which would be qualifying income if realized by the RIC. However, 100% of the net income derived from an interest in a "qualified publicly traded partnership" will be treated as qualifying income. A "qualified publicly traded partnership that satisfies certain requirements with respect to the type of income it produces. In addition, although in general the passive loss rules of the Code do not apply to RICs, such rules do apply to a RIC with respect to items attributable to an interest in a qualified publicly traded partnership. Finally, for purposes of paragraph (c) above, the term "outstanding voting securities of such issuer" will include the equity securities of a qualified publicly traded partnership. If a fund invests in publicly traded partnerships, it might be required to recognize in its taxable year income in excess of its cash distributions from such publicly traded partnerships during that year. Such income, even if not reported to a fund by the publicly traded partnerships until after the end of that year, would nevertheless be subject to the RIC income distribution requirements and would be taken into account for purposes of the 4% excise tax described below.

Each fund may use "equalization payments" in determining the portion of its net investment income and net realized capital gains that have been distributed. A fund that elects to use equalization payments will allocate a portion of its investment income and capital gains to the amounts paid in redemption of fund shares, and such income and gains will be deemed to have been distributed by the fund for purposes of the distribution requirements described above. This may have the effect of reducing the amount of income and gains that the fund is required to distribute to shareholders in order for the fund to avoid federal income tax and excise tax and also may defer the recognition of taxable income by shareholders. This process does not affect the tax treatment of redeeming shareholders and, since the amount of any undistributed income and/or gains will be reflected in the value of the fund's shares, the total return on a shareholder's investment will not be reduced as a result of the fund's distribution policy. The IRS has not published any guidance concerning the methods to be used in allocating investment income and capital gain to redemptions of shares. In the event that the IRS determines that a fund is using an improper method of allocation and has under-distributed its net investment income or net realized capital gains for any taxable year, such fund may be liable for additional federal income or excise tax or may jeopardize its treatment as a RIC.

A fund may invest in certain commodity investments including commodity-based ETFs. Under an IRS revenue ruling effective after September 30, 2006, income from certain commodities-linked derivatives in which certain funds invest is not considered qualifying income for purposes of the 90% qualifying income test. This ruling limits the extent to which a fund may receive income from such commodity-linked derivatives to a maximum of 10% of its annual gross income.

As a result of qualifying as a RIC, a fund will not be subject to U.S. federal income tax on its investment company taxable income (as that term is defined in the Code, determined without regard to the deduction for dividends paid) and net capital gain (i.e., the excess of its net realized long-term capital gain over its net realized short-term capital loss), if any, that it distributes to its shareholders in each taxable year, provided that it distributes to its shareholders at least the sum of 90% of its investment company taxable income and 90% of its net exempt interest income for such taxable year.

A fund will be subject to a non-deductible 4% excise tax to the extent that the fund does not distribute by the end of each calendar year: (a) at least 98% of its ordinary income for the calendar year; (b) at least 98.2% of its capital gain net income for the one-year period ending, as a general rule, on October 31 of each year; and (c) 100% of the undistributed ordinary income and capital gain net income from the preceding calendar years (if any). For this purpose, any income or gain retained by a fund that is subject to corporate tax will be considered to have been distributed by year-end. To the extent possible, the fund intends to make sufficient distributions to avoid the application of both federal income and excise taxes. Under current law, distributions of net investment income and net capital gain are not taxed to a life insurance company to the extent applied to increase the reserves for the company's variable annuity and life insurance contracts.

If a fund fails to meet the annual gross income test or asset diversification test or fails to satisfy the 90% distribution requirement as described above, for any taxable year, the fund would incur income tax as a regular corporation on its taxable income and net capital gains for that year, it would lose its deduction for dividends paid to shareholders, and it would be subject to certain gain recognition and distribution requirements upon requalification. Further distributions of income by the fund to its shareholders would be treated as dividend income, although distributions to individual shareholders generally would constitute qualified dividend income subject to reduced federal income tax rates if the shareholder satisfies certain holding period requirements with respect to its shares in the fund and distributions to corporate shareholders generally should be eligible for the DRD. Compliance with the RIC 90% qualifying income test and with the asset diversification requirements is carefully monitored by the Advisor and the subadvisors and it is intended that the fund will comply with the requirements for qualification as a RIC.

If a fund fails to meet the annual gross income test described above, the fund will nevertheless be considered to have satisfied the test if (i) (a) such failure is due to reasonable cause and not due to willful neglect and (b) the fund reports the failure, and (ii) the fund pays an excise tax equal to the excess non-qualifying income. If a fund fails to meet the asset diversification test described above with respect to any quarter, the fund will nevertheless be considered to have satisfied the requirements for such quarter if the fund cures such failure within six months and either: (i) such failure is de minimis; or (ii) (a) such failure is due to reasonable cause and not due to willful neglect; and (b) the fund reports the failure and pays an excise tax.

A fund may make investments that produce income that is not matched by a corresponding cash distribution to the fund, such as investments in pay-in-kind bonds or in obligations such as certain Brady Bonds and zero-coupon securities having OID (i.e., an amount equal to the excess of the stated redemption price of the security at maturity over its issue price), or market discount (i.e., an amount equal to the excess of the stated redemption price at maturity of the security (appropriately adjusted if it also has OID) over its basis immediately after it was acquired) if the fund elects to accrue market discount on a current basis. In addition, income may continue to accrue for federal income tax purposes with respect to a non-performing investment. Any such income would be treated as income earned by the fund and therefore would be subject to the distribution requirements of the Code. Because such income may not be matched by a corresponding cash distribution to the fund, the fund may be required to borrow money or dispose of other securities to be able to make distributions to its investors. In addition, if an election is not made to currently accrue market discount with respect to a market discount bond, all or a portion of any deduction for any interest expense incurred to purchase or hold such bond may be deferred until such bond is sold or otherwise disposed of.

Investments in debt obligations that are at risk of or are in default present special tax issues for a fund. Tax rules are not entirely clear about issues such as when a fund may cease to accrue interest, OID, or market discount, when and to what extent deductions may be taken for bad debts or worthless securities, how payments received on obligations in default should be allocated between principal and income, and whether exchanges of debt obligations in a workout context are taxable. These and other issues will be addressed by a fund that holds such obligations in order to reduce the risk of distributing insufficient income to preserve its status as a RIC and seek to avoid becoming subject to federal income or excise tax.

A fund may make investments in convertible securities and exchange traded notes. Convertible debt ordinarily is treated as a "single property" consisting of a pure debt interest until conversion, after which the investment becomes an equity interest. If the security is issued at a premium (i.e., for cash in excess of the face amount payable on retirement), the creditor-holder may amortize the premium over the life of the bond. If the security is issued for cash at a price below its face amount, the creditor-holder must accrue OID in income over the life of the debt. The creditor-holder's exercise of the conversion privilege is treated as a nontaxable event. Mandatorily convertible debt, such as an exchange traded note issued in the form of an unsecured obligation that pays a return based on the performance of a specified market index, currency or commodity, is often treated as a contract to buy or sell the reference property rather than debt. Similarly, convertible preferred stock with a mandatory conversion feature is ordinarily, but not always, treated as equity rather than debt. In general, conversion of preferred stock for common stock of the same corporation is tax-free. Conversion of preferred stock for cash is a taxable redemption. Any redemption premium for preferred stock that is redeemable by the issuing company might be required to be amortized under OID principles.

Certain funds may engage in hedging or derivatives transactions involving foreign currencies, forward contracts, options and futures contracts (including options, futures and forward contracts on foreign currencies) and short sales (see "Hedging and Other Strategic Transactions"). Such transactions will be subject to special provisions of the Code that, among other things, may affect the character of gains and losses realized by a fund (that is, may affect whether gains or losses are ordinary or capital), accelerate recognition of income of a fund and defer recognition of certain of the fund's losses. These rules could therefore affect the character, amount and timing of distributions to shareholders. The futures that are traded on a regulated exchange, such as NYSE or NASDAQ, will be treated as Code Section 1256 contracts, and the capital gain/loss will be reflected as 40% short-term capital gain/loss and 60% long-term capital gain/loss. Any futures that are not traded on a regulated exchange will follow the 365 day rule of short-term capital or long-term capital treatment. In addition, these provisions: (1) will require a fund to "mark-to-market" certain types of positions in its portfolio (that is, treat them as if they were closed out); and (2) may cause a fund to recognize income without receiving cash with which to pay dividends or make distributions in amounts necessary to satisfy the distribution requirement and avoid the 4% excise tax. The fund intends to monitor its transactions, will make the appropriate tax elections and will make the appropriate entries in its books and records when it acquires any option, futures contract, forward contract or hedged investment in order to mitigate the effect of these rules.

Foreign exchange gains and losses realized by a fund in connection with certain transactions involving foreign currency denominated debt securities, certain foreign currency options, foreign currency forward contracts, foreign currencies, or payables or receivables denominated in a foreign currency are subject to Section 988 of the Code, which generally causes such gains and losses to be treated as ordinary income and losses and may affect the amount, timing and character of distributions to shareholders. If the net foreign exchange loss for a year treated as ordinary loss under Section 988 were to exceed a fund's investment company taxable income computed without regard to such loss, the resulting overall ordinary loss for such year would not be deductible by the fund or its shareholders in future years. Under such circumstances, distributions paid by the fund could be deemed return of capital.

Certain funds may be required to account for their transactions in forward rolls or swaps, caps, floors and collars in a manner that, under certain circumstances, may limit the extent of their participation in such transactions. Additionally, a fund may be required to recognize gain, but not loss, if a swap or other transaction is treated as a constructive sale of an appreciated financial position in a fund's portfolio. Additionally, some countries restrict repatriation which may make it difficult or impossible for a fund to obtain cash corresponding to its earnings or assets in those countries. However, a fund must distribute to shareholders for each taxable year substantially all of its net income and net capital gains, including such income or gain, to qualify as a RIC and avoid liability for any federal income or excise tax. Therefore, a fund may have to dispose of its portfolio securities under disadvantageous circumstances to generate cash, or borrow cash, to satisfy these distribution requirements.

Certain funds may invest in REITs and/or MLPs. Effective for taxable years beginning after December 31, 2017 and before January 1, 2026, the Code generally allows individuals and certain non-corporate entities a deduction for 20% of "qualified publicly traded partnership income," such as income from MLPs, and a deduction for 20% of qualified REIT dividends. Treasury regulations allow a RIC to pass the character of its qualified REIT dividends through to its shareholders provided certain holding period requirements are met. A similar pass-through by RICs of qualified publicly traded partnership income is not currently available. As a result, an investor who invests directly in MLPs will be able to receive the benefit of such deductions, while a shareholder in a fund that invests in MLPs currently will not.

If a fund invests in stock (including an option to acquire stock such as is inherent in a convertible bond) in certain foreign corporations that receive at least 75% of their annual gross income from passive sources (such as interest, dividends, certain rents and royalties or capital gain) or hold at least 50% of their assets in investments producing such passive income ("passive foreign investment companies" or "PFICs"), the fund could be subject to federal income tax and additional interest charges on "excess distributions" received from such companies or gain from the sale of stock in such companies, even if all income or gain actually received by the fund is timely distributed to its shareholders. The fund would not be able to pass through to its shareholders any credit or deduction for such a tax.

If a fund were to invest in a PFIC and elected to treat the PFIC as a "qualified electing fund" under the Code, in lieu of the foregoing requirements, the fund would be required to include in income each year a portion of the ordinary earnings and net capital gain of the qualified electing fund, even if not distributed to the fund. Alternatively, a fund can elect to mark-to-market at the end of each taxable year its shares in a PFIC; in this case, the fund would recognize as ordinary income any increase in the value of such shares, and as ordinary loss any decrease in such value to the extent it did not exceed prior increases included in income. Under either election, a fund might be required to recognize in a year income in excess of its distributions from PFICs and its proceeds from dispositions of PFIC stock during that year, and such income would nevertheless be subject to the distribution requirements and would be taken into account for purposes of the 4% excise tax.

A fund may be subject to withholding and other taxes imposed by foreign countries with respect to its investments in foreign securities. Some tax conventions between certain countries and the U.S. may reduce or eliminate such taxes. Such foreign taxes will reduce the amount a fund has available to distribute to shareholders. Rather than deducting these foreign taxes, if the fund invests more than 50% of its assets in the stock or securities of foreign corporations or foreign governments at the end of its taxable year, the fund may make an election to treat a proportionate amount of eligible foreign taxes as constituting a taxable distribution to each shareholder, which would, subject to certain limitations, generally allow the shareholder to either (i) credit that proportionate amount of taxes against U.S. Federal income tax liability as a foreign tax credit or (ii) to take that amount as an itemized deduction.

If this election is made, a shareholder generally subject to tax will be required to include in gross income (in addition to taxable dividends actually received) his or her pro rata share of the foreign taxes paid by the fund, and may be entitled either to deduct (as an itemized deduction) his or her pro rata share of foreign taxes in computing his or her taxable income or to use it (subject to limitations) as a foreign tax credit against his or her U.S. federal income tax liability. No deduction for foreign taxes may be claimed by a shareholder who does not itemize deductions. Each shareholder will be notified after the close of the fund's taxable year whether the foreign taxes paid by the fund will "pass-through" for that taxable year.

Shareholders may be unable to claim a credit for the full amount of their proportionate share of the foreign taxes paid by the fund. Various other limitations, including a minimum holding period requirement, apply to limit the credit and/or deduction for foreign taxes for purposes of regular federal tax and/or alternative minimum tax.

For United States federal income tax purposes, distributions paid out of a fund's current or accumulated earnings and profits will, except in the case of distributions of qualified dividend income and capital gain dividends described below, be taxable as ordinary dividend income. Certain income distributions paid by a fund (whether paid in cash or reinvested in additional fund shares) to individual taxpayers are taxed at rates applicable to net long-term capital gains (currently 20%, 15%, or 0%, depending on an individual's level of income). This tax treatment applies only if the shareholder owns fund shares for at least 61 days during the 121-day period beginning 60 days before the fund's ex-dividend date (or 91 days during the 181-day period beginning 90 days before the fund's ex-dividend date in the case of certain preferred stock dividends paid by the fund), certain other requirements are satisfied by the shareholder, and the dividends are attributable to qualified dividend income received by the fund itself. For this purpose, "qualified dividend income" means dividends received by a fund from United States corporations and "qualified foreign corporations," as well as certain dividends from underlying funds that are reported as qualified dividend income, provided that the fund satisfies certain holding period and other requirements in respect of the stock of such corporations and underlying funds. There can be no assurance as to what portion of a fund's dividend distributions will qualify as qualified dividend income. Dividends paid by funds that primarily invest in bonds and other debt securities generally will not qualify for the reduced tax rate applicable to qualified dividend income and will not qualify for the corporate dividends-received deduction. Distributions from a PFIC are not eligible for the reduced rate of tax on "qualified dividend income."

If a fund should have dividend income that qualifies for the reduced tax rate applicable to qualified dividend income, the maximum amount allowable will be reported by the fund. This amount will be reflected on Form 1099-DIV for the applicable calendar year.

For purposes of the dividends received deduction available to corporations, dividends received by a fund, if any, from U.S. domestic corporations in respect of the stock of such corporations held by the fund, for U.S. federal income tax purposes, for at least 46 days (91 days in the case of certain preferred stock) during a prescribed period extending before and after each such dividend and distributed and reported by the fund may be treated as qualifying dividends. Corporate shareholders must meet the holding period requirements stated above with respect to their shares of a fund for each dividend in order to qualify for the deduction and, if they have any debt that is deemed under the Code directly attributable to such shares, may be denied a portion of the dividends received deduction. Additionally, any corporate shareholder should consult its tax advisor regarding the possibility that its tax basis in its shares may be reduced, for federal income tax purposes, by reason of "extraordinary dividends" received with respect to the shares and, to the extent such basis would be reduced below zero, that current recognition of income would be required.

Certain distributions reported by a fund as Section 163(j) interest dividends may be treated as interest income by shareholders for purposes of the tax rules applicable to interest expense limitations under Section 163(j) of the Code. Such treatment by the shareholder is generally subject to holding period requirements and other potential limitations, although the holding period requirements are generally not applicable to dividends declared by money market funds and certain other funds that declare dividends daily and pay such dividends on a monthly or more frequent basis. The amount that a fund is eligible to report as a Section 163(j) dividend for a tax year is generally limited to the excess of the fund's business interest income over the sum of the fund's (i) business interest expense and (ii) other deductions properly allocable to the fund's business interest income.

No dividend reinvestment service is provided by the fund. Broker dealers may make available the DTC book-entry dividend reinvestment service for use by beneficial owners of the fund for reinvestment of their dividend distributions. Beneficial owners should contact their broker to determine the availability and costs of the service and the details of participation therein. Brokers may require beneficial owners to adhere to specific procedures and timetables. If this service is available and used, dividend distributions of both income and realized gains will be automatically reinvested in additional whole shares of the fund purchased in the secondary market.

For federal income tax purposes, a fund is permitted to carry forward a net capital loss incurred in any year to offset net capital gains, if any, in any subsequent year until such loss carryforwards have been fully used. Capital losses carried forward will retain their character as either short-term or long-term capital losses. A fund's ability to utilize capital loss carryforwards in a given year or in total may be limited. To the extent subsequent net capital gains are offset by such losses, they would not result in federal income tax liability to a fund and would not be distributed as such to shareholders.

Distributions of net capital gain, if any, reported as capital gains dividends are taxable to a shareholder as long-term capital gains, regardless of how long the shareholder has held fund shares. A distribution of an amount in excess of a fund's current and accumulated earnings and profits will be treated by a shareholder as a return of capital which is applied against and reduces the shareholder's basis in his or her shares. To the extent that the amount of any such distribution exceeds the shareholder's basis in his or her shares, the excess will be treated by the shareholder as gain from a sale or exchange of the shares. Distributions of gains from the sale of investments that a fund owned for one year or less will be taxable as ordinary income.

In determining its net capital gain, including in connection with determining the amount available to support a capital gain dividend, its taxable income and its earnings and profits, a fund generally may elect to treat part or all of any post-October capital loss (defined as any net capital loss attributable to the portion, if any, of the taxable year after October 31 or, if there is no such loss, the net long-term capital loss or net short-term capital loss attributable to any such portion of the taxable year) or late-year ordinary loss (generally, the sum of its (i) net ordinary loss, if any, from the sale, exchange or other taxable disposition of property, attributable to the portion, if any, of the taxable year after October 31, and its (ii) other net ordinary loss, if any, attributable to the portion, if any, of the taxable year after December 31) as if incurred in the succeeding taxable year.

A fund may elect to retain its net capital gain or a portion thereof for investment and be taxed at corporate rates on the amount retained. In such case, it may designate the retained amount as undistributed capital gains in a notice to its shareholders who will be treated as if each received a distribution of his pro rata share of such gain, with the result that each shareholder will: (i) be required to report his pro rata share of such gain on his tax return as long-term capital gain; (ii) receive a refundable tax credit for his pro rata share of tax paid by the fund on the gain; and (iii) increase the tax basis for his shares by an amount equal to the deemed distribution less the tax credit.

Selling shareholders generally will recognize gain or loss in an amount equal to the difference between the shareholder's adjusted tax basis in the shares sold and the sale proceeds. Such gain or loss will be treated as capital gain or loss if the shares are capital assets in the shareholder's hands and will be long-term or short-term, depending upon the shareholder's tax holding period for the shares and subject to the special rules described below. The maximum tax rate applicable to net capital gains recognized by individuals and other non-corporate taxpayers is generally 20% for gains recognized on the sale of capital assets held for more than one year (as well as certain capital gain distributions) (15% or 0% for individuals at certain income levels).

Any loss realized upon the sale or exchange of fund shares with a holding period of six months or less will be treated as a long-term capital loss to the extent of any capital gain distributions received (or amounts designated as undistributed capital gains) with respect to such shares. In addition, all or a portion of a loss realized on a sale or other disposition of fund shares may be disallowed under "wash sale" rules to the extent the shareholder acquires other shares of the same fund (whether through the reinvestment of distributions or otherwise) within a period of 61 days beginning 30 days before and ending 30 days after the date of disposition of the shares. Any disallowed loss will result in an adjustment to the shareholder's tax basis in some or all of the other shares acquired.

If the fund redeems a shareholder in-kind rather than in cash, the shareholder would realize the same gain or loss as if the shareholder had been redeemed in cash. Further, the shareholder's basis in the securities received in the in-kind redemption would be the securities' fair market value on the date of the in-kind redemption.

The benefits of the reduced tax rates applicable to long-term capital gains and qualified dividend income may be impacted by the application of the alternative minimum tax to individual shareholders.

Certain net investment income received by an individual having adjusted gross income in excess of \$200,000 (or \$250,000 for married individuals filing jointly) will be subject to a tax of 3.8%. Undistributed net investment income of trusts and estates in excess of a specified amount also will be subject to this tax. Dividends and capital gains distributed by a fund, and gain realized on redemption of fund shares, will constitute investment income of the type subject to this tax.

Special tax rules apply to investments through defined contribution plans and other tax-qualified plans. Shareholders should consult their tax advisor to determine the suitability of shares of a fund as an investment through such plans.

Dividends and distributions on a fund's shares are generally subject to federal income tax as described herein to the extent they do not exceed the fund's realized income and gains, even though such dividends and distributions may economically represent a return of a particular shareholder's investment. Such distributions are likely to occur in respect of shares purchased at a time when a fund's NAV reflects gains that are either unrealized or realized but not distributed. Such realized gains may be required to be distributed even when a fund's NAV also reflects unrealized losses. Such gains could be substantial, and the taxes incurred by a shareholder with respect to such distributions could have a material impact on the value of the shareholder's investment.

Certain distributions declared in October, November or December to shareholders of record of such month and paid in the following January will be taxed to shareholders as if received on December 31 of the year in which they were declared. In addition, certain other distributions made after the close of a taxable year of a fund may be "spilled back" and treated as paid by the fund (except for purposes of the non-deductible 4% federal excise tax) during such taxable year. In such case, shareholders will be treated as having received such dividends in the taxable year in which the distributions were actually made.

A fund will inform its shareholders of the source and tax status of all distributions promptly after the close of each calendar year.

A fund is required to report to shareholders and the IRS annually on Form 1099-B not only the gross proceeds of fund shares sold or redeemed but also their cost basis. Shareholders should contact their intermediaries with respect to reporting of cost basis and available elections with respect to their accounts. Shareholders should carefully review the cost basis information provided by the applicable intermediary and make any additional basis, holding period or other adjustments that are required when reporting these amounts on their federal income tax returns.

Withholding and remittance to the U.S. Treasury is required with respect to a percentage of the taxable dividends and other distributions paid to and proceeds of share sales made by any individual shareholder (including foreign individuals) who fails to furnish the fund with a correct taxpayer identification number, who has under-reported dividends or interest income, or who fails to certify to the applicable withholding agent that he or she is a United States person and is not subject to such withholding. The backup withholding tax rate is 24%. Distributions will not be subject to backup withholding to the extent they are subject to the withholding tax on foreign persons described in the next paragraph. Any tax withheld as a result of backup withholding does not constitute an additional tax imposed on the record owner of the account and may be claimed as a credit on the record owner's federal income tax return.

Non-U.S. investors not engaged in a U.S. trade or business with which their investment in a fund is effectively connected will be subject to U.S. federal income tax treatment that is different from that described above. Such non-U.S. investors may be subject to withholding tax at the rate of 30% (or a lower rate under an applicable tax treaty) on amounts treated as ordinary dividends from a fund. Capital gain distributions, if any, are not subject to the 30% withholding tax. Unless an effective IRS Form W-8BEN or other authorized withholding certificate is on file, backup withholding will apply to certain other payments from a fund. Non-U.S. investors should consult their tax advisors regarding such treatment and the application of foreign taxes to an investment in a fund. An investment in a fund may also potentially be subject to U.S. estate tax for non-U.S. investors.

Properly-reported dividends generally are exempt from U.S. federal withholding tax where they are (i) "interest-related dividends" paid in respect of a fund's "qualified net interest income" (generally, a fund's U.S. source interest income, other than certain contingent interest and interest from obligations of a corporation or partnership in which the fund is at least a 10% shareholder, reduced by expenses that are allocable to such income) or (ii) "short-term capital gain dividends" paid in respect of a fund's "qualified short-term gains" (generally, the excess of a fund's net short-term capital gain over the fund's long-term capital loss for such taxable year). Depending on its circumstances, a fund may report all, some or none of its potentially eligible dividends as such interest-related dividends or as short-term capital gain dividends and/or treat such dividends, in whole or in part, as ineligible for this exemption from withholding.

Under FATCA, a 30% U.S. withholding tax may apply to any U.S.-source "withholdable payments" made to a non-U.S. entity unless the non-U.S. entity enters into an agreement with either the IRS or a governmental authority in its own country, as applicable, to collect and provide substantial information regarding the entity's owners, including "specified United States persons" and "United States owned foreign entities," or otherwise demonstrates compliance with or exemption from FATCA. The term "withholdable payment" includes any payment of interest (even if the interest is otherwise exempt from the withholding rules described above) or dividends, in each case with respect to any U.S. investment. The IRS has issued proposed regulations, which have immediate effect, while pending, to eliminate the withholding tax that was scheduled to begin in 2019 with respect to U.S.-source investment sale proceeds. A specified United States person is essentially any U.S. person, other than publicly traded corporations, their affiliates, tax-exempt organizations, governments, banks, REITs, RICs, and common trust funds. A United States owned foreign entity is a foreign entity with one or more "substantial United States owners," generally defined as United States person owning a greater than 10% interest. Non-U.S. investors should consult their own tax advisers regarding the impact of this legislation on their investment in a fund.

If a shareholder realizes a loss on disposition of a fund's shares of \$2 million or more for an individual shareholder or \$10 million or more for a corporate shareholder, the shareholder must file with the IRS a disclosure statement on Form 8886. Direct shareholders of portfolio securities are in many cases excepted from this reporting requirement, but under current guidance, shareholders of a RIC are not excepted. Future guidance may extend the current exception from this reporting requirement to shareholders of most or all RICs.

The foregoing is a general and abbreviated summary of the applicable provisions of the Code and Treasury Regulations currently in effect. It is not intended to be a complete explanation or a substitute for consultation with individual tax advisors. For the complete provisions, reference should be made to the pertinent Code sections and the Treasury Regulations promulgated thereunder. The Code and Treasury Regulations are subject to change, possibly with retroactive effect.

## **PORTFOLIO BROKERAGE**

Pursuant to the Subadvisory Agreement, the subadvisor is responsible for placing all orders for the purchase and sale of portfolio securities of the fund. The subadvisor has no formula for the distribution of the fund's brokerage business; rather they place orders for the purchase and sale of securities with the primary objective of obtaining the most favorable overall results for the applicable fund. The cost of securities transactions for the fund will consist primarily of brokerage commissions or dealer or underwriter spreads. Fixed-income securities and money market instruments are generally traded on a net basis and do not normally involve either brokerage commissions or transfer taxes.

Occasionally, securities may be purchased directly from the issuer. For securities traded primarily in the OTC market, the subadvisor will, where possible, deal directly with dealers who make a market in the securities unless better prices and execution are available elsewhere. Such dealers usually act as principals for their own account.

**Selection of Brokers or Dealers to Effect Trades.** In selecting brokers or dealers to implement transactions, the subadvisor will give consideration to a number of factors, including:

- price, dealer spread or commission, if any;
- the reliability, integrity and financial condition of the broker dealer;
- size of the transaction;
- difficulty of execution;
- brokerage and research services provided (unless prohibited by applicable law); and
- · confidentiality and anonymity.

Consideration of these factors by the subadvisor, either in terms of a particular transaction or the subadvisor's overall responsibilities with respect to the fund and any other accounts managed by the subadvisor, could result in the applicable fund paying a commission or spread on a transaction that is in excess of the amount of commission or spread another broker dealer might have charged for executing the same transaction.

Soft Dollar Considerations. In selecting brokers and dealers, the subadvisor will give consideration to the value and quality of any research, statistical, quotation, brokerage or valuation services provided by the broker or dealer to the subadvisor. In placing a purchase or sale order, unless prohibited by applicable law, the subadvisor may use a broker whose commission in effecting the transaction is higher than that of some other broker if the subadvisor determines in good faith that the amount of the higher commission is reasonable in relation to the value of the brokerage and research services provided by such broker, viewed in terms of either the particular transaction or the subadvisor's overall responsibilities with respect to the fund and any other accounts managed by the subadvisor. In addition to statistical, quotation, brokerage or valuation services, the subadvisor may receive from brokers or dealers products or research that are used for both research and other purposes, such as administration or marketing. In such case, the subadvisor will make a good faith determination as to the portion attributable to research. Only the portion attributable to research will be paid through portfolio brokerage. The portion not attributable to research will be paid by the subadvisor. Research products and services may be acquired or received either directly from executing brokers or indirectly through other brokers in step-out transactions. A "step-out" is an arrangement by which the subadvisor executes a trade through one broker dealer but instructs that entity to step-out all or a portion of the trade to another broker dealer. This second broker dealer will clear and settle, and receive commissions for, the stepped-out portion. The second broker dealer may or may not have a trading desk of its own.

Under MiFID II, EU investment managers, including certain subadvisors to funds in the John Hancock Fund Complex, may only pay for research from brokers and dealers directly out of their own resources or by establishing "research payment accounts" for each client, rather than through client commissions. MiFID II limits the use of soft dollars by subadvisors located in the EU, if applicable, and in certain circumstances may result in other subadvisors reducing the use of soft dollars as to certain groups of clients or as to all clients.

The subadvisor also may receive research or research credits from brokers that are generated from underwriting commissions when purchasing new issues of fixed-income securities or other assets for the fund. These services, which in some cases also may be purchased for cash, include such matters as general economic and security market reviews, industry and company reviews, evaluations of securities and recommendations as to the purchase and sale of securities. Some of these services are of value to the subadvisor in advising several of its clients (including the fund), although not all of these services are necessarily useful and of value in managing the fund. The management fee paid by the fund is not reduced because the subadvisor and its affiliates receive such services.

As noted above, the subadvisor may purchase new issues of securities for the fund in underwritten fixed price offerings. In these situations, the underwriter or selling group member may provide the subadvisor with research in addition to selling the securities (at the fixed public offering price) to the fund or other advisory clients. Because the offerings are conducted at a fixed price, the ability to obtain research from a broker dealer in this situation provides knowledge that may benefit the fund, other subadvisor clients, and the subadvisor without incurring additional costs. These arrangements may not fall within the safe harbor in Section 28(e) of the Exchange Act, because the broker dealer is considered to be acting in a principal capacity in underwritten transactions. However, FINRA has adopted rules expressly permitting broker dealers to provide bona fide research to advisors in connection with fixed price offerings under certain circumstances. As a general matter in these situations, the underwriter or selling group member will provide research credits at a rate that is higher than that which is available for secondary market transactions.

Brokerage and research services provided by brokers and dealers include advice, either directly or through publications or writings, as to:

- the value of securities;
- the advisability of purchasing or selling securities;
- the availability of securities or purchasers or sellers of securities; and
- analyses and reports concerning: (a) issuers; (b) industries; (c) securities; (d) economic, political and legal factors and trends; and (e) portfolio strategy.

Research services are received primarily in the form of written reports, computer generated services, telephone contacts and personal meetings with security analysts. In addition, such services may be provided in the form of meetings arranged with corporate and industry spokespersons, economists, academicians and government representatives. In some cases, research services are generated by third parties but are provided to the subadvisor by or through a broker.

To the extent research services are used by the subadvisor, such services would tend to reduce such party's expenses. However, the subadvisors do not believe that an exact dollar value can be assigned to these services. Research services received by the subadvisor from brokers or dealers executing transactions for series of the Trust, which may not be used in connection with the fund, also will be available for the benefit of other funds managed by the subadvisor.

Allocation of Trades by the Subadvisor. The subadvisor manages a number of accounts other than the fund. Although investment determinations for the fund will be made by the subadvisor independently from the investment determinations it makes for any other account, investments deemed appropriate for the fund by the subadvisor also may be deemed appropriate by it for other accounts. Therefore, the same security may be purchased or sold at or about the same time for both the fund and other accounts. In such circumstances, the subadvisor may determine that orders for the purchase or sale of the same security for the fund and one or more other accounts should be combined. In this event the transactions will be priced and allocated in a manner deemed by the subadvisor to be equitable and in the best interests of the fund and such other accounts. While in some instances combined orders could adversely affect the price or volume of a security, the fund believes that its participation in such transactions on balance will produce better overall results for the fund.

For purchases of equity securities, when a complete order is not filled, a partial allocation will be made to each participating account pro rata based on the order size. For high demand issues (for example, initial public offerings), shares will be allocated pro rata by account size as well as on the basis of account objective, account size (a small account's allocation may be increased to provide it with a meaningful position), and the account's other holdings. In addition, an account's allocation may be increased if that account's portfolio manager was responsible for generating the investment idea or the portfolio manager intends to buy more shares in the secondary market. For fixed-income accounts, generally securities will be allocated when appropriate among accounts based on account size, except if the accounts have different objectives or if an account is too small to receive a meaningful allocation. For new issues, when a complete order is not filled, a partial allocation will be made to each account pro rata based on the order size. However, if a partial allocation is too small to be meaningful, it may be reallocated based on such factors as account objectives, strategies, duration benchmarks and credit and sector exposure. For example, value funds will likely not participate in initial public offerings as frequently as growth funds. In some instances, this investment procedure may adversely affect the price paid or received by the fund or the size of the position obtainable for it. On the other hand, to the extent permitted by law, the subadvisor may aggregate securities to be sold or purchased for the fund with those to be sold or purchased for other clients that it manages in order to obtain best execution.

Affiliated Underwriting Transactions by the Subadvisor. Under the 1940 Act, persons affiliated with the fund and persons who are affiliated with such affiliated persons are prohibited from dealing with the fund as principal in the purchase and sale of securities unless a permissive order allowing such transactions is obtained from the SEC. Since transactions in the OTC market usually involve transactions with the dealers acting as principal for their own accounts, the fund will not deal with affiliated persons in connection with such transactions. The Trust has approved procedures in conformity with Rule 10f-3 under the 1940 Act whereby the fund may purchase securities that are offered in underwritings in which an affiliate of the subadvisor participates. These procedures prohibit the fund from directly or indirectly benefiting a subadvisor affiliate in connection with such underwritings. In addition, for underwritings where a subadvisor affiliate participates as a principal underwriter, certain restrictions may apply that could, among other things, limit the amount of securities that the fund could purchase.

Affiliated Brokerage. Pursuant to procedures determined by the Trustees and consistent with the above policy of obtaining best net results, the fund may execute portfolio transactions with or through brokers affiliated with the Advisor or subadvisor ("Affiliated Brokers"). Affiliated Brokers may act as broker for the fund on exchange transactions, subject, however, to the general policy set forth above and the procedures adopted by the Trustees pursuant to the 1940 Act. Commissions paid to an Affiliated Broker must be at least as favorable as those that the Trustees believe to be contemporaneously charged by other brokers in connection with comparable transactions involving similar securities being purchased or sold. A transaction would not be placed with an Affiliated Broker if the fund would have to pay a commission rate less favorable than the Affiliated Broker's contemporaneous charges for comparable transactions for its other most favored, but unaffiliated, customers, except for accounts for which the Affiliated Broker acts as clearing broker for another brokerage firm, and any customers of the Affiliated Broker not comparable to the fund, as determined by a majority of the Trustees who are not "interested persons" (as defined in the 1940 Act) of the fund, the Advisor, the subadvisor or the Affiliated Broker. Because the Advisor or subadvisor that is affiliated with the Affiliated Broker has, as an investment advisor to the fund, the obligation to provide investment management services, which includes elements of research and related investment skills such research and related skills will not be used by the Affiliated Broker as a basis for negotiating commissions at a rate higher than that determined in accordance with the above criteria.

The Advisor's indirect parent, Manulife Financial, is the parent of a broker dealer, JH Distributors. JH Distributors is considered an Affiliated Broker.

Brokerage Commissions Paid. Since the fund is newly-organized, it did not pay brokerage commissions during the last three fiscal years.

**Brokerage Commissions Paid to Affiliated Brokers.** Since the fund is newly-organized, it did not pay brokerage commissions to affiliated brokers during the last three fiscal years.

#### TRANSFER AGENT SERVICES

State Street Bank, One Congress Street, Suite 1, Boston, Massachusetts 02114, is the transfer and dividend paying agent for the fund.

#### **DISTRIBUTION SERVICES**

Foreside Fund Services, LLC, a wholly owned subsidiary of Foreside Financial Group, LLC (dba ACA Group), is the distributor (also known as principal underwriter) of the shares of the fund and is located at Three Canal Plaza, Suite 100, Portland, Maine 04101. The Distributor is a registered broker dealer and is a member of FINRA. The Distributor is not affiliated with the Advisor or any other service provider for the fund.

#### LEGAL AND REGULATORY MATTERS

There are no legal proceedings to which the Trust, the Advisor, or the Distributor is a party that are likely to have a material adverse effect on the fund or the ability of either the Advisor or the Distributor to perform its contract with the fund.

#### INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

PricewaterhouseCoopers LLP, independent registered public accounting firm, is the independent registered public accounting firm for the fund. PricewaterhouseCoopers LLP has offices at 101 Seaport Boulevard, Suite 500, Boston, Massachusetts 02210.

#### **CUSTODY OF PORTFOLIO SECURITIES**

State Street, One Congress Street, Suite 1, Boston, Massachusetts 02114, currently acts as custodian and bookkeeping agent with respect to the fund's assets. State Street has selected various banks and trust companies in foreign countries to maintain custody of certain foreign securities. The fund also may use special purpose custodian banks from time to time for certain assets. State Street is authorized to use the facilities of the Depository Trust Company, the Participants Trust Company, and the book-entry system of the Federal Reserve Banks.

#### **CODES OF ETHICS**

The Trust, the Advisor, and the subadvisor to the fund have adopted Codes of Ethics that comply with Rule 17j-1 under the 1940 Act. Each Code of Ethics permits personnel subject to the Code of Ethics to invest in securities, including securities that may be purchased or held by the fund. The Distributor relies on the principal underwriters exception under Rule 17j-1(c)(3), specifically where the Distributor is not affiliated with the Trust or the Advisor, and no officer, director, or general partner of the Distributor serves as an officer, director, or general partner of the Trust or the Advisor.

#### **DISCLAIMERS**

# IOPV

THE FUND IS NOT SPONSORED, ENDORSED, SOLD OR MARKETED BY ICE DATA INDICES, LLC, OR ITS AFFILIATES (ICE DATA) OR THEIR RESPECTIVE THIRD PARTY SUPPLIERS.

ICE DATA OR ITS THIRD PARTY SUPPLIERS MAKE NO EXPRESS OR IMPLIED WARRANTIES, AND HEREBY EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE IOPVS, ETF STATISTICS, FUND OR ANY FUND DATA INCLUDED THEREIN. IN NO EVENT SHALL ICE DATA HAVE ANY LIABILITY FOR ANY SPECIAL, PUNITIVE, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

#### **DESCRIPTIONS OF CREDIT RATING SYMBOLS AND DEFINITIONS**

The ratings of Moody's Investors Service, Inc. ("Moody's"), S&P Global Ratings and Fitch Ratings ("Fitch") represent their respective opinions as of the date they are expressed and not statements of fact as to the quality of various long-term and short-term debt instruments they undertake to rate. It should be emphasized that ratings are general and are not absolute standards of quality. Consequently, debt instruments with the same maturity, coupon and rating may have different yields while debt instruments of the same maturity and coupon with different ratings may have the same yield.

Ratings do not constitute recommendations to buy, sell, or hold any security, nor do they comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of any payments of any security.

#### **IN GENERAL**

**Moody's.** 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.

Note that the content of this Appendix A, to the extent that it relates to the ratings determined by Moody's, is derived directly from Moody's electronic publication of "Ratings Symbols and Definitions" which is available at: https://ratings.moodys.com/api/rmc-documents/53954.

**S&P Global Ratings.** 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 ratings are an assessment of default risk but may incorporate an assessment of relative seniority or ultimate recovery in the event of default. Junior obligations are typically rated lower than senior obligations, to reflect the lower priority in bankruptcy.

Note that the content of this Appendix A, to the extent that it relates to the ratings determined by S&P Global Ratings, is derived directly from S&P Global Ratings' electronic publication of "S&P's Global Ratings Definitions," which is available at: https://www.standardandpoors.com/en\_US/web/guest/article/-/view/sourceld/504352.

**Fitch.** Fitch Ratings publishes credit ratings that are forward-looking opinions on the relative ability of an entity or obligation to meet financial commitments. Issuer default ratings (IDRs) are assigned to corporations, sovereign entities, financial institutions such as banks, leasing companies and insurers, and public finance entities (local and regional governments). Issue level ratings are also assigned, often include an expectation of recovery and may be notched above or below the issuer level rating. Issue ratings are assigned to secured and unsecured debt securities, loans, preferred stock and other instruments, Structured finance ratings are issue ratings to securities backed by receivables or other financial assets that consider the obligations' relative vulnerability to default.

Fitch's credit rating scale for issuers and issues is expressed using the categories 'AAA' to 'BBB' (investment grade) and 'BB' to 'D' (speculative grade) with an additional +/- for AA through CCC levels indicating relative differences of probability of default or recovery for issues. The terms "investment grade" and "speculative grade" are market conventions and do not imply any recommendation or endorsement of a specific security for investment purposes. Investment grade categories indicate relatively low to moderate credit risk, while ratings in the speculative categories signal either a higher level of credit risk or that a default has already occurred.

Note that the content of this Appendix A, to the extent that it relates to the ratings determined by Fitch, is derived directly from Fitch's electronic publication of "Definitions of Ratings and Other Forms of Opinion" which is available at: https://www.fitchratings.com/products/rating-definitions.

# GENERAL PURPOSE RATINGS LONG-TERM ISSUE RATINGS

#### MOODY'S GLOBAL LONG-TERM RATING SCALE

Long-term ratings are assigned to issuers or obligations with an original maturity of eleven months or more and reflect both on the likelihood of a default or impairment on contractual financial obligations and the expected financial loss suffered in the event of default or impairment.

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 considered 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:** Addition of a Modifier 1, 2 or 3: 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. By their terms, hybrid securities allow for the omission of scheduled dividends, interest, or principal payments, which can potentially result in impairment if such an omission occurs. Hybrid securities may also be subject to contractually allowable write-downs of principal that could result in impairment.

Together with the hybrid indicator, the long-term obligation rating assigned to a hybrid security is an expression of the relative credit risk associated with that security.

#### S&P GLOBAL RATINGS' LONG-TERM ISSUE CREDIT RATINGS

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 or impairment on contractual financial obligations and the expected financial loss suffered in the event of default or impairment.

**AAA:** An obligation rated 'AAA' has the highest rating assigned by S&P Global Ratings. The obligor's capacity to meet its financial commitment 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 commitment 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 commitment 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 exposures 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 commitment 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 to 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 the next five business days in the absence of a stated grace period or within the earlier of the stated grace period or the next 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 debt restructuring.

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

**Dual Ratings** – Dual ratings may be assigned to debt issues that have a put option or demand feature. The first component of the rating addresses the likelihood of repayment of principal and interest as due, and the second component of the rating addresses only the demand feature. The first component of the rating can relate to either a short-term or long-term transaction and accordingly use either short-term or long-term rating symbols.

The second component of the rating relates to the put option and is assigned a short-term rating symbol (for example, 'AAA/A-1+' or 'A-1+/A-1'). With U. S. municipal short-term demand debt, the U.S. municipal short-term note rating symbols are used for the first component of the rating (for example, 'SP-1+/A-1+').

#### FITCH CORPORATE FINANCE OBLIGATIONS - LONG-TERM RATING SCALES

Ratings of individual securities or financial obligations of a corporate issuer address relative vulnerability to default on an ordinal scale. In addition, for financial obligations in corporate finance, a measure of recovery given default on that liability is also included in the rating assessment. This notably applies to covered bond ratings, which incorporate both an indication of the probability of default and of the recovery given a default of this debt instrument.

**AAA:** Highest credit quality. 'AAA' ratings denote the lowest expectation of credit 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 credit 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 credit 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 credit 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 credit risk, particularly in the event of adverse changes in business or economic conditions over time; however, business or financial alternatives may be available to allow financial commitments to be met.

**B:** Highly speculative. 'B' ratings indicate that material credit risk is present.

**CCC:** Substantial credit risk. "CCC" ratings indicate that substantial credit risk is present.

**CC:** Very high levels of credit risk. "CC" ratings indicate very high levels of credit risk.

C: Exceptionally high levels of credit risk. "C" indicates exceptionally high levels of credit risk.

Corporate finance defaulted obligations typically are not assigned 'RD' or 'D' ratings but are instead rated in the 'CCC' to 'C' rating categories, depending on their recovery prospects and other relevant characteristics. This approach better aligns obligations that have comparable overall expected loss but varying vulnerability to default and loss.

**Note:** Addition of a Plus (+) or minus (-) sign: Within rating categories, Fitch may use modifiers. The modifiers "+" or "-" may be appended to a rating to denote relative status within major rating categories. For example, the rating category 'AA' has three notch-specific rating levels ('AA+'; 'AA-'; each a rating level). Such suffixes are not added to 'AAA' ratings and ratings below the 'CCC' category. For the short-term rating category of 'F1', a '+' may be appended. For Viability Ratings, the modifiers '+' or '-' may be appended to a rating to denote relative status within categories from 'aa' to 'ccc'.

# CORPORATE AND TAX-EXEMPT COMMERCIAL PAPER RATINGS SHORT-TERM ISSUE RATINGS

## MOODY'S GLOBAL SHORT-TERM RATING SCALE

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. Short-term ratings are assigned to obligations with an original maturity of thirteen months or less and reflect both the likelihood of a default or impairment on contractual financial obligations and the expected financial loss suffered in the event of default or impairment.

Moody's employs the following designations to indicate the relative repayment ability of rated issuers:

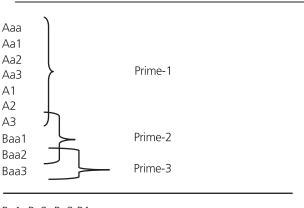
**P-1:** Ratings of Prime-1 reflect a superior ability to repay short-term obligations.

**P-2:** Ratings of Prime-2 reflect a strong ability to repay short-term obligations.

**P-3:** Ratings of Prime-3 reflect 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.

The following table indicates the long-term ratings consistent with different short-term ratings when such long-term ratings exist. (Note: Structured finance short-term ratings are usually based either on the short-term rating of a support provider or on an assessment of cash flows available to retire the financial obligation).



Ba1, Ba2, Ba3 B1, B2, B3 Caa1, Caa2, Caa3 Ca, C

Not Prime

## S&P GLOBAL RATINGS' SHORT-TERM ISSUE CREDIT RATINGS

S&P Global Ratings' short-term issue credit ratings are generally assigned to those obligations considered short-term in the relevant market, typically with an original maturity of no more than 365 days. Short-term issue credit ratings are also used to indicate the creditworthiness of an obligor with respect to put features on long-term obligations. A long-term issue credit rating is typically assigned to an obligation with an original maturity of greater than 365 days. Ratings are graded into several categories, ranging from 'A' for the highest-quality obligations to 'D' for the lowest. These categories are as follows:

- **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 commitment 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 debt restructuring.

**Dual Ratings** – Dual ratings may be assigned to debt issues that have a put option or demand feature. The first component of the rating addresses the likelihood of repayment of principal and interest as due, and the second component of the rating addresses only the demand feature. The first component of the rating can relate to either a short-term or long-term transaction and accordingly use either short-term or long-term rating symbols. The second component of the rating relates to the put option and is assigned a short-term rating symbol (for example, 'AAA/A-1+' or 'A-1+/A-1'). With U.S. municipal short-term demand debt, the U.S. municipal short-term note rating symbols are used for the first component of the rating (for example, 'SP-1+/A-1+').

#### FITCH'S SHORT-TERM ISSUER OR OBLIGATION RATINGS

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 deposit ratings may be adjusted for loss severity. Short-term deposit ratings may be adjusted for loss severity.

"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.

**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.

#### **TAX-EXEMPT NOTE RATINGS**

#### MOODY'S U.S. MUNICIPAL SHORT-TERM DEBT RATINGS

While the global short-term 'prime' rating scale is applied to US municipal tax-exempt commercial A-8 paper, these programs are typically backed by external letters of credit or liquidity facilities and their short-term prime ratings usually map to the long-term rating of the enhancing bank or financial institution and not to the municipality's rating. Other short-term municipal obligations, which generally have different funding sources for repayment, are rated using two additional short-term rating scales (i.e., the MIG and VMIG scale discussed below).

The Municipal Investment Grade (MIG) scale is used to rate US municipal bond anticipation notes of up to five years maturity. Municipal notes rated on the MIG scale may be secured by either pledged revenues or proceeds of a take-out financing received prior to note maturity. MIG ratings expire at the maturity of the obligation, and the issuer's long-term rating is only one consideration in assigning the MIG ratings. MIG ratings are divided into three levels—MIG 1 through MIG 3—while speculative grade short-term obligations are designated SG.

- **MIG 1:** This designation denotes superior credit quality. Excellent protection is afforded by established cash flows, highly reliable liquidity support, or demonstrated broad-based access to the market for refinancing.
- MIG 2: This designation denotes strong credit quality. Margins of protection are ample, although not as large as in the preceding group.
- MIG 3: This designation denotes acceptable credit quality. Liquidity and cash-flow protection may be narrow, and market access for refinancing is likely to be less well-established.
- **SG:** This designation denotes speculative-grade credit quality. Debt instruments in this category may lack sufficient margins of protection.

Variable Municipal Investment Grade (VMIG) ratings of demand obligations with unconditional liquidity support are mapped from the short-term debt rating (or counterparty assessment) of the support provider, or the underlying obligor in the absence of third party liquidity support, with VMIG 1 corresponding to P-1, VMIG 2 to P-2, VMIG 3 to P-3 and SG to not prime. For example, the VMIG rating for an industrial revenue bond with Company XYZ as the underlying obligor would normally have the same numerical modifier as Company XYZ's prime rating. Transitions of VMIG ratings of demand obligations with conditional liquidity support, as shown in the diagram below, differ from transitions on the Prime scale to reflect the risk that external liquidity support will terminate if the issuer's long-term rating drops below investment grade.

**VMIG 1:** This designation denotes superior credit quality. Excellent protection is afforded by the superior short-term credit strength of the liquidity provider and structural and legal protections.

**VMIG 2:** This designation denotes strong credit quality. Good protection is afforded by the strong short-term credit strength of the liquidity provider and structural and legal protections.

**VMIG 3:** This designation denotes acceptable credit quality. Adequate protection is afforded by the satisfactory short-term credit strength of the liquidity provider and structural and legal protections.

**SG:** This designation denotes speculative-grade credit quality. Demand features rated in this category may be supported by a liquidity provider that does not have a sufficiently strong short-term rating or may lack the structural and/or legal protections.

\* For VRDBs supported with conditional liquidity support, short-term ratings transition down at higher long-term ratings to reflect the risk of termination of liquidity support as a result of a downgrade below investment grade.

VMIG ratings of VRDBs with unconditional liquidity support reflect the short-term debt rating (or counterparty assessment) of the liquidity support provider with VMIG 1 corresponding to P-1, VMIG 2 to P-2, VMIG 3 to P-3 and SG to not prime.

For more complete discussion of these rating transitions, please see Annex B of Moody's Methodology titled Variable Rate Instruments Supported by Conditional Liquidity Facilities.

### **US Municipal Short-Term Versus Long-Term Ratings**

NOTES	LONG-TERM RATING	DEMAND OBLIGATIONS WITH CONDITIONAL LIQUIDITY SUPPORT
MIG 1	Aaa	VMIG 1
	Aa1	
	Aa2	
	Aa3	
	A1	
	A2	
MIG 2	A3	VMIG 2
MIG 3	Baa1	VMIG 3*
	Baa2	SG
	Baa3	
SG	Ba1, Ba2, Ba3 B1,	
	B2, B3 Caa1, Caa2,	
	Caa3 Ca, C	

<sup>\*</sup> For SBPA-backed VRDBs, the rating transitions are higher to allow for distance to downgrade to below investment grade due to the presence of automatic termination events in the SBPAs.

#### S&P GLOBAL RATINGS' MUNICIPAL SHORT-TERM NOTE RATINGS

An S&P Global Ratings municipal note rating reflects S&P Global Ratings' opinion about the liquidity factors and market access risks unique to the notes. Notes due in three years or less will likely receive a note rating. Notes with an original maturity of more than three years will most likely receive a long-term debt rating. In determining which type of rating, if any, to assign, S&P Global Ratings' analysis will review the following considerations:

- Amortization schedule the larger the final maturity relative to other maturities, the more likely it will be treated as a note; and
- Source of payment the more dependent the issue is on the market for its refinancing, the more likely it will be treated as a note.

Note rating symbols are as follows:

- **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 debt restructuring, or 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.

## FITCH PUBLIC FINANCE RATINGS

See FITCH SHORT-TERM ISSUER OR OBLIGATIONS RATINGS above.

#### **BOSTON PARTNERS GLOBAL INVESTORS, INC.**

## ("Boston Partners")

#### PORTFOLIO MANAGERS AND OTHER ACCOUNTS MANAGED

David Cohen, CFA, and Joshua White, CFA, are jointly and primarily responsible for the day-to-day management of the fund's portfolio.

The following table provides information regarding other accounts for which each portfolio manager listed above has day-to-day management responsibilities. Accounts are grouped into three categories: (i) other investment companies (and series thereof); (ii) other pooled investment vehicles; and (iii) other accounts. To the extent that any of these accounts pay advisory fees that are based on account performance ("performance-based fees"), information on those accounts is specifically broken out. In addition, any assets denominated in foreign currencies have been converted into U.S. dollars using the exchange rates as of the applicable date. Also shown below the table is each portfolio manager's investment in the fund or funds he manages and similarly managed accounts.

The following table provides information as of April 30, 2025:

	Other Registered Investment Companies		Other Pooled Investment Vehicles		Other Accounts	
Portfolio Manager	Number of Accounts	Assets (in millions)	Number of Accounts	Assets (in millions)	Number of Accounts	Assets (in millions)
David Cohen	2	\$339	2	\$2,007	153	\$20,085
Joshua White	2	\$339	2	\$2,007	153	\$20,085

**Performance-Based Fees for Other Accounts Managed.** Of the accounts listed in the table above, those for which the subadvisor receives a fee based on investment performance are listed in the table below.

	Other Registered Investment Companies		Other Pooled Investment Vehicles		Other Accounts	
Portfolio Manager	Number of Accounts	Assets (in millions)	Number of Accounts	Assets (in millions)	Number of Accounts	Assets (in millions)
David Cohen	0	\$0	0	\$0	4	\$1,399
Joshua White	0	\$0	0	\$0	4	\$1,399

#### **Ownership of the Funds and Similarly Managed Accounts**

The following table shows the dollar range of fund shares and shares of similarly managed accounts beneficially owned by the portfolio managers listed above as of April 30, 2025. For purposes of this table, "similarly managed accounts" include all accounts that are managed (i) by the same portfolio managers that are jointly and primarily responsible for the day-to-day management of the fund; and (ii) with an investment style, objective, policies and strategies substantially similar to those that are used to manage the fund. Each portfolio manager's ownership of fund shares is stated in the footnote(s) below the table.

Portfolio Manager	Dollar Range of Shares Owned <sup>1</sup>
David Cohen	over \$1,000,000
Joshua White	over \$1,000,000

1 As of April 30, 2025, David Cohen and Joshua White beneficially owned none and none, respectively, of John Hancock Disciplined Value Select ETF.

#### POTENTIAL CONFLICTS OF INTEREST

Compensation is determined based on several factors including performance, productivity, firm results and teamwork. Portfolio managers benefit from Boston Partners revenues and profitability. But no portfolio managers are compensated based directly on fee revenue earned by Boston Partners on particular accounts in a way that would create a material conflict of interest in favoring particular accounts over other accounts.

Execution and research services provided by brokers may not always be utilized in connection with the fund or other client accounts that may have provided the commission or a portion of the commission paid to the broker providing the services. Boston Partners allocates brokerage commissions for these services in a manner that it believes is fair and equitable and consistent with its fiduciary obligations to each of its clients.

Boston Partners views all assets under management in a particular investment strategy as one portfolio. When the firm decides that a given security warrants a 1% position in client portfolios, it buys 1% in all portfolios unless individual client guidelines prohibit the firm from purchasing the security for such portfolio. Boston Partners generally aggregates the target share amount for each account into one large order and distributes the shares on a prorated basis across the accounts.

If a portfolio manager identifies a limited investment opportunity that may be suitable for more than one fund or other client account, the fund may not be able to take full advantage of that opportunity. To mitigate this conflict of interest, Boston Partners aggregates orders of the funds it advises with orders from each of its other client accounts in order to ensure that all clients are treated fairly and equitably over time and consistent with its fiduciary obligations to each of its clients.

Accounts are generally precluded from simultaneously holding a security long and short. There are certain circumstances that would permit a long/short portfolio to take a short position in a security that is held long in another strategy. This happens very infrequently, and the contra position is generally not related to the fundamental views of the security (i.e. - initiating a long position in a security at year-end to take advantage of tax-loss selling as a short-term investment, or initiating a position based solely on its relative weight in the benchmark). However, in certain situations, the investment constraints of a strategy, including but not limited to country, region, industry, or benchmark, may result in a different investment thesis for the same security. Each situation is fully vetted and approved by the firm's Chief Investment Officer or his designee.

#### COMPENSATION

All investment professionals receive a compensation package comprised of an industry competitive base salary, a discretionary bonus and long-term incentives. Through our bonus program, key investment professionals are rewarded primarily for strong investment performance. We believe this aligns our Boston Partners team firmly with our clients' objectives and provides the financial and work environment incentives which keep our teams in place and has led to industry leading investment staff continuity and extremely low unplanned staff turnover.

Typically, bonuses are based upon a combination of one or more of the following four criteria:

- Individual Contribution: an evaluation of the professional's individual contribution based on the expectations established at the beginning of each year;
- Product Investment Performance: performance of the investment product(s) with which the individual is involved versus the pre-designed index, based on the excess return;
- Investment Team Performance: the financial results of the investment group with our client's assets;
- Firm-wide Performance: the overall financial performance of Boston Partners.
- Our long-term incentive program effectively confers a significant 20-30% ownership interest in the value of the business to key employees. Annual awards are made by the Compensation Committee and are meant to equate to an additional 10-20% of the participants cash bonus awards.

The compensation program focuses on long term performance with an emphasis on 3- and 5-year results. The timing of receiving deferred compensation reinforces this emphasis. Roughly 50% of compensation is based on qualitative measures and roughly 50% is based on quantitative measures. These compensation percentages can vary based on an individual's role in the firm.

Total revenues generated by any particular product affect the total available bonus pool for the analysts and portfolio managers associated with that product. The discretionary bonus assessment is conducted annually. Returns are evaluated on a pre-tax basis.

**Firm:** Boston Partners maintains a long-term incentive program which effectively confers a 20-30% ownership stake in Boston Partners and is funded by the profitability and growth of the business. All investment professionals participate in this plan which serves as a long-term wealth building tool that aligns the interests of our clients with the people responsible for managing their portfolios.

**Direct Investments:** Boston Partners offers or sub-advises several mutual fund vehicles that allow portfolio managers and other employees to invest directly alongside our clients. In fact, it is common for senior portfolio managers to invest \$1 million or more in the strategy or strategies that they manage. Direct investments are also facilitated through Boston Partner's 401(k) plan as Boston Partners managed mutual funds are widely available, investments are entirely voluntary, and are significantly used within the plan.

**Deferred Compensation:** An important aspect of Boston Partner's incentive program is deferred compensation. Annual incentive compensation as well as long-term incentive compensation is deferred in part or in total for typically 3 to 5 years. Deferred compensation promotes organizational stability and also facilitates significant re-investment in Boston Partners strategies. Deferred compensation is invested in established Boston Partners strategies. In addition, Boston Partners utilizes deferred compensation to fund seed investments in new investment offerings. This allows for the establishment of a portfolio, the building of a track record and ultimately bring a new investment strategy to the marketplace.

## APPENDIX C - PROXY VOTING POLICIES AND PROCEDURES

The Trust Procedures and the proxy voting procedures of the Advisor and the subadvisor are set forth in Appendix C.

C-1



05E: Proxy Voting Policies and Procedures for the Adviser

General Compliance Policies for Trust & Adviser

Section 5: Fiduciary Standards & Affiliated Persons Issues

Applies to	Adviser
Risk Theme	Proxy Voting
Policy Owner	Jim Interrante
Effective Date	06-30-2025

#### Overview

The SEC adopted Rule 206(4)-6 under the Advisers Act, which requires investment advisers with voting authority to adopt and implement written policies and procedures that are reasonably designed to ensure that the investment adviser votes client securities in the best interest of clients. The procedures must include how the investment adviser addresses material conflicts that may arise between the interests of the investment adviser and those of its clients. The Advisers are registered investment advisers under the Advisers Act and serve as the investment advisers to the John Hancock Funds. The Advisers generally retain one or more sub-advisers to manage the assets of the Funds, including voting proxies with respect to a Fund's portfolio securities. From time to time, however, the Advisers may elect to manage directly the assets of a Fund, including voting proxies with respect to such Fund's portfolio securities, or a Fund's Board may otherwise delegate to the Advisers authority to vote such proxies. John Hancock Investment Management LLC ("JHIM") also provides discretionary and non-discretionary advice to clients using model portfolios in a variety of investment styles ("Model Portfolios"). However, JHIM does not vote proxies for securities held in any non-discretionary accounts managed using the Model Portfolios. Rule 206(4)-6 under the Advisers Act requires that a registered investment adviser adopt and implement written policies and procedures reasonably designed to ensure that it votes proxies with respect to a client's securities in the best interest of the client.

Firms are required by Advisers Act Rule 204-2(c)(2) to maintain records of their voting policies and procedures, a copy of each proxy statement that the investment adviser receives regarding client securities, a record of each vote cast by the investment adviser on behalf of a client, a copy of any document created by the investment adviser that was material to making a decision how to vote proxies on behalf of a client, and a copy of each written client request for information on how the adviser voted proxies on behalf of the client, as well as a copy of any written response by the investment adviser to any written or oral client request for information on how the adviser voted that client's proxies.

Investment companies must disclose information about the policies and procedures used to vote proxies on the investment company's portfolio securities and must file the fund's entire proxy voting record with the SEC annually on Form N-PX.

Advisers that are subject to the reporting requirements of Section 13(f) of the Securities Exchange Act of 1934 (the "Exchange Act") are required by Exchange Act Rule 14Ad-1 to file Form N-PX annually to report how they voted proxies regarding certain executive compensation matters (known as "say-on-pay" matters). However, an Adviser that has a disclosed policy of not voting proxies, and that did not in fact vote during the reporting period, must only complete a notice report filing on Form N-PX marking the appropriate box on the cover page to confirm these facts.

Pursuant thereto, the Advisers have adopted and implemented these proxy voting policies and procedures (the "Proxy Procedures").

## **Policy**

It is the Advisers' policy to comply with Rule 206(4)-6 and Rule 204-2(c)(2) under the Advisers Act and Rule 14Ad-1 under the Exchange Act as described above. The Advisers' policy is to vote proxies in the best interests of its clients for whom it has proxy voting authority. In general, the Advisers delegate proxy voting decisions to the sub-advisers managing the funds. If an instance occurs where a conflict of interest arises between the shareholders and a particular sub-adviser, however, the Adviser retains the right to influence and/or direct the conflicting proxy voting decisions. The Advisers' Proxy Voting Committee oversees the resolution of proxy voting conflicts for its clients and fund shareholders.

05E. Advisers Proxy Voting Policy

#### Filing of Proxy Voting Record on Form N-PX

The Advisers will annually file their proxy voting notice report with the SEC on Form N-PX. Form N-PX shall be filed for the twelve months ended June 30th and no later than August 31st of that year.

#### **Regulatory Requirement**

Rule 206(4)-6 under the Advisers Act and Rule 14Ad-1 under the Exchange Act

## Reporting

Advisers will provide the John Hancock Funds Board with notice and a copy of any amendments or revisions to the Procedures and will report quarterly to the Funds Board all material changes to these Proxy Procedures.

The CCO's annual written compliance report to the Funds Board will contain a summary of material changes to the Proxy Procedures during the period covered by the report.

If the Advisers or the Designated Person vote any proxies for the Funds in a manner inconsistent with either these Proxy Procedures or a Fund's proxy voting policies and procedures, the CCO will provide the Funds Board with a report detailing such exceptions.

If the Advisers or the Designated Person vote any proxies for clients other than the Funds in a manner inconsistent with these Proxy Voting Procedures, the Adviser will provide its Board of Directors with a report detailing such exceptions.

JHIM will not intentionally disclose to anyone else, including other investors and/or officers and directors of an issuer in which an Advisers' clients invest, our voting intention prior to casting the vote.

JHIM engages a third-party proxy voting vendor to keep records of proxy voting available for inspection by Separately Managed Account ("SMA") sponsor clients, regulatory authorities, or government agencies.

#### **Procedure**

## **Fiduciary Duty**

The Advisers have a fiduciary duty to vote proxies in the best interest of its clients, the Funds and its shareholders.

#### Voting of Proxies - Advisers of Funds

The Advisers will vote proxies with respect to a Fund's portfolio securities when authorized to do so by the Fund and subject to the Fund's proxy voting policies and procedures and any further direction or delegation of authority by the Fund's Board. The decision on how to vote a proxy will be made by the person(s) to whom the Advisers have from time to time delegated such responsibility (the "Designated Person"). The Designated Person may include the Fund's portfolio manager(s) or a Proxy Voting Committee, as described below.

When voting proxies with respect to a Fund's portfolio securities, the following standards will apply:

 The Designated Person will vote based on what it believes is in the best interest of the Fund and its shareholders and in accordance with the Fund's investment guidelines.

- Each voting decision will be made independently. To assist with the analysis of voting issues and/or to carry out the actual voting process the Designated Person may enlist the services of (1) reputable professionals (who may include persons employed by or otherwise associated with the Advisers or any of its affiliated persons) or (2) independent proxy evaluation services such as Institutional Shareholder Services. However, the ultimate decision as to how to vote a proxy will remain the responsibility of the Designated Person.
- The Advisers believe that a good management team of a company will generally act in the best interests of the company. Therefore, the Designated Person will take into consideration as a key factor in voting proxies with respect to securities of a company that are held by the Fund the quality of the company's management. In general, the Designated Person will vote as recommended by company management except in situations where the Designated Person believes such recommended vote is not in the best interests of the Fund and its shareholders.
- As a general principle, voting with respect to the same portfolio securities held by more than one Fund should be consistent among those
  Funds having substantially the same investment mandates.
- The Advisers will provide the Fund, from time to time in accordance with the Fund's proxy voting policies and procedures and any applicable laws and regulations, a record of the Advisers' voting of proxies with respect to the Fund's portfolio securities.

#### Voting Proxies of Underlying Funds of a Fund of Funds

The Advisers or the Designated Person will vote proxies with respect to the shares of a Fund that are held by another Fund that operates as a Fund of Funds") in the manner provided in the proxy voting policies and procedures of the Fund of Funds (including such policies and procedures relating to material conflicts of interest) or as otherwise directed by the board of trustees or directors of the Fund of Funds.

#### Voting of Proxies - SubAdvisers of Funds

In the case of proxies voted by a sub-adviser to a Fund pursuant to the Fund's proxy voting procedures, the Advisers will request the sub-adviser to certify to the Advisers that the sub-adviser has voted the Fund's proxies as required by the Fund's proxy voting policies and procedures and that such proxy votes were executed in a manner consistent with these Proxy Procedures and to provide the Advisers with a report detailing any instances where the sub-adviser voted any proxies in a manner inconsistent with the Fund's proxy voting policies and procedures. The CCO of the Advisers will then report to the Board on a quarterly basis regarding the sub-adviser certification and report to the Board any instance where the sub-adviser voted any proxies in a manner inconsistent with the Fund's proxy voting policies and procedures.

The Fund Administration Department maintains procedures affecting all administration functions for the mutual funds. These procedures detail the disclosure and administration of the Trust's proxy voting records.

The Trust's Chief Legal Counsel is responsible for including, in the SAI of each Trust, information about the proxy voting of the Advisers and each sub-adviser.

#### **Voting Proxies of Model Portfolio Clients**

When Model Portfolio clients have granted JHIM authority to vote securities in their account, we will vote in accordance with the following procedures. JHIM has deployed the services of a proxy voting services provider to ensure the timely casting of votes, and to provide relevant and timely proxy voting research to inform our voting decisions. Through this process, the proxy voting services provider populates initial recommended voting decisions that are aligned with the JHIM voting principles. These voting recommendations are then submitted, processed, and ultimately tabulated.

#### 05E. Advisers Proxy Voting Policy

JHIM retains the authority and operational functionality to submit different voting instructions after these initial recommendations from the proxy voting services provider have been submitted, based on JHIM's assessment of each situation. As JHIM reviews voting recommendations and decisions, as articulated below, JHIM has the ability to change voting instructions based on those reviews. JHIM periodically reviews the detailed policies created by the proxy voting service provider to ensure consistency with our voting principles, to the extent this is possible.

JHIM also has an internal proxy voting committee ("committee") comprising senior managers from across JHIM. The committee meets on an as-needed basis to review, discuss, and provide prior written approval in instances where JHIM intends to cast a vote that is different than the recommendation of the proxy voting services provider or for "refer" items, which are items where the proxy voting service provider does not have a vote recommendation. These two instances are outlined in greater detail below.

JHIM may also engage with model providers as it pertains to votes being made related to securities held in strategies offered in partnership with each respective model provider. JHIM may elect to do this so as to incorporate as much information into JHIM's ultimate decision-making.

JHIM may refrain from voting a proxy where we have agreed with a client in advance to limit the situations in which we will execute votes. JHIM may also refrain from voting due to logistical considerations that may have a detrimental effect on our ability to vote. These issues may include, but are not limited to:

- Costs associated with voting the proxy exceed the expected benefits to clients;
- Underlying securities have been lent out pursuant to a client's securities lending program and have not been subject to recall;
- Short notice of a shareholder meeting;
- Requirements to vote proxies in person;
- Restrictions on a nonnational's ability to exercise votes, determined by local market regulation;
- Restrictions on the sale of securities in proximity to the shareholder meeting (i.e., share blocking);
- Requirements to provide local agents with power of attorney to facilitate the voting instructions (such proxies are voted on a best-efforts basis); or
- The inability of a client's custodian to forward and process proxies electronically.

As noted, if JHIM believes it is in their best interest or the best interest of a client to vote proxies in a manner inconsistent with the policy, they will submit new voting instructions to the Proxy Voting Committee in writing with rationale for the new instructions. The Committee will review the change and ensure that the rationale is sound. JHIM will execute the votes accordingly.

Additionally, on occasion, there may be proxy votes that are not within the research and recommendation coverage universe of the proxy voting service provider. JHIM employees responsible for the proxy votes will provide voting recommendations to the Proxy Voting Committee, and those items may be escalated to the Committee for review to ensure that the voting decision rationale is sound. JHIM will execute the votes accordingly.

## Engagement of the proxy voting service provider

JHIM has contracted with a third-party proxy service provider to assist with the proxy voting process for its Model Portfolio clients. JHIM will instruct custodians of SMA sponsor client accounts to forward all proxy statements and materials received in respect of SMA sponsor client accounts to the proxy service provider.

JHIM has engaged its proxy voting service provider to:

- Research and make voting recommendations;
- Ensure proxies are voted and submitted in a timely manner;
- Provide alerts when issuers file additional materials related to proxy voting matters;
- Perform other administrative functions of proxy voting;
- Maintain records of proxy statements and provide copies of such proxy statements promptly upon request;
- · Maintain records of votes cast; and
- Provide recommendations with respect to proxy voting matters in general.

#### **Material Conflicts of Interest**

In carrying out its proxy voting responsibilities, the Advisers will monitor and resolve potential material conflicts ("Material Conflicts") between the interests of (a) a Fund or client and (b) the Advisers or any of its affiliated persons. Affiliates of the Advisers include Manulife Financial Corporation and its subsidiaries. Material Conflicts may arise, for example, if a proxy vote relates to matters involving any of these companies or other issuers in which the Advisers or any of their affiliates has a substantial equity or other interest. JHIM shall consider any of the following circumstances a potential material conflict of interest:

- JHIM has a business relationship or potential relationship with the issuer; or
- John Hancock Fund Trustee has a business relationship with the issuer.

If the Advisers or a Designated Person become aware that a proxy voting issue may present a potential Material Conflict, the issue will be referred to the Advisers' Legal Department and/or the Office of the CCO. If the Legal Department and/or the Office of the CCO, as applicable determines that a potential Material Conflict does exist, a Proxy Voting Committee will be appointed to consider and resolve the issue. The Proxy Voting Committee may make any determination that it considers reasonable and may, if it chooses, seek additional information to assist in its determination on how to vote the proxy.

#### **Proxy Voting Committee(s)**

The Advisers will from time to time, and on such temporary or longer-term basis as they deem appropriate, establish one or more Proxy Voting Committees. A Proxy Voting Committee shall include the Advisers' CCO and may include legal counsel. The terms of reference and the procedures under which a Proxy Voting Committee will operate will be reviewed from time to time by the Legal and Compliance Department. Records of the deliberations and proxy voting recommendations of a Proxy Voting Committee will be maintained in accordance with applicable law, if any, and these Proxy Procedures.

#### Proxy voting service provider oversight

The Adviser is responsible for the proper oversight of any service providers hired to assist it in the proxy voting process. This oversight includes:

Annual due diligence: The Adviser's Vendor Management and Product Management teams conduct an annual due diligence review of the proxy voting research service provider. This oversight includes an evaluation of the service provider's industry reputation, points of risk, compliance with laws and regulations, and technology infrastructure. JHIM also reviews the provider's capabilities to meet JHIM's requirements, including reporting competencies; the adequacy and quality of the proxy advisory firm's staffing and personnel; the quality and accuracy of sources of data and information; the strength of policies and procedures that enable it to make proxy voting recommendations based on current and accurate information; and the strength of policies and procedures to address conflicts of interest of the service provider related to its voting recommendations. Observations and findings of note are shared with the Proxy Voting Committee and JHIM will engage ISS directly to address or resolve any areas of concern.

#### 05E. Advisers Proxy Voting Policy

Regular Updates: JHIM also requests that the proxy voting research service provider deliver updates regarding any business changes that alter that firm's ability to provide independent proxy voting advice and services aligned with our policies.

Additional oversight in process: JHIM has additional control mechanisms built into the proxy voting process to act as checks on the service provider and ensure that decisions are made in the best interest of our clients. These mechanisms include:

- Sampling prepopulated votes: Where we use a third-party research provider for either voting recommendations or voting execution (or both), we may assess prepopulated votes shown on the vendor's electronic voting platform to ensure alignment with the voting principles.
- Decision scrutiny from the Proxy Voting Committee: Where our voting policies and procedures do not address how to vote on a particular matter, or where the matter is highly contested or controversial (e.g.,proxy contests, "just vote no" campaigns, or in conflict of interest matters), review by the Proxy Voting Committee is necessary to ensure votes cast on behalf of its client are cast in the client's best interest.

## **Key Contacts**

Global Manager Research Proxy Voting Committee

#### **Escalation/Reporting Violations**

All John Hancock employees are required to report any known or suspected violation of this policy to the CCO of the Funds.

#### **Related Policies and Procedures**

Trust Proxy Voting Policy

## **Document Retention Requirements**

The Advisers will retain (or arrange for the retention by a third party of) such records relating to proxy voting pursuant to these Proxy Procedures as may be required from time to time by applicable law and regulations, including the following:

- 1. These Proxy Procedures and all amendments hereto;
- 2. All proxy statements received regarding a SMA Sponsor or Fund portfolio securities;
- 3. Records of all votes cast on behalf of a Fund or SMA Sponsor;
- 4. Records of all Fund or SMA Sponsor requests for proxy voting information, including any written response by the Adviser to any (written or oral) Fund or SMA Sponsor for information on how the Adviser voted proxies on behalf of the requesting Fund or SMA Sponsor;
- 5. Any documents prepared by the Designated Person or a Proxy Voting Committee that were material to or memorialized the basis for a voting decision;
- 6. All records relating to communications with the Funds or SMA Sponsors regarding Conflicts; and
- 7. All minutes of meetings of Proxy Voting Committees.

Documents will be maintained for the period set forth in the Records Retention Schedule. See Compliance Policy: Books and Records.

# Version History

Date	Effective Date	Approving Party
1	01-01-2012	
2	02-01-2015	
3	Sept. 2015	
4	05-01-2017	
5	12-01-2019	
6	08-20-2024	CCO
7	06-30-2025	Proxy Voting Committee



## 07H: Proxy Voting Procedures

General Compliance Policies for Trust & Adviser

Section 7: Disclosures, Filings, and Reporting

Applies to Trust

Risk Theme Proxy Voting
Policy Owner Jim Interrante
Effective Date 08-20-2024

07H. Proxy Voting Procedures

#### Overview

Each fund of the Trust or any other registered investment company (or series thereof) (each, a "fund") is required to disclose its proxy voting policies and procedures in its registration statement and, pursuant to Rule 30b1-4 under the 1940 Act, file annually with the Securities and Exchange Commission and make available to shareholders its actual proxy voting record.

#### **Investment Company Act**

An investment company is required to disclose in its SAI either (a) a summary of the policies and procedures that it uses to determine how to vote proxies relating to portfolio securities or (b) a copy of its proxy voting policies.

A fund is also required by Rule 30b1-4 of the Investment Company Act of 1940 to file Form N-PX annually with the SEC, which contains a record of how the fund voted proxies relating to portfolio securities. For each matter relating to a portfolio security considered at any shareholder meeting, Form N-PX is required to include, among other information, the name of the issuer of the security, a brief identification of the matter voted on, whether and how the fund cast its vote, and whether such vote was for or against management. In addition, a fund is required to disclose in its SAI and its annual and semi-annual reports to shareholders that such voting record may be obtained by shareholders, either by calling a toll-free number, through the fund's website, or on the Securities and Exchange Commission's website at www.sec.gov.

#### **Advisers Act**

Under Advisers Act Rule 206(4)-6, investment advisers are required to adopt proxy voting policies and procedures, and investment companies typically rely on the policies of their advisers or sub-advisers.

#### **Policy**

The Majority of the Independent Board of Trustees (the "Board") of each registered investment company of the Trusts, has adopted these proxy voting policies and procedures (the "Trust Proxy Policy").

It is the Advisers' policy to comply with Rule 206(4)-6 of the Advisers Act and Rule 30b1-4 of the 1940 Act as described above. In general, Advisers defer proxy voting decisions to the sub-advisers managing the Funds. It is the policy of the Trusts to delegate the responsibility for voting proxies relating to portfolio securities held by a Fund to the Fund's respective Adviser or, if the Fund's Adviser has delegated portfolio management responsibilities to one or more investment sub-adviser(s), to the fund's sub-adviser(s), subject to the Board's continued oversight. The sub-adviser for each Fund shall vote all proxies relating to securities held by each Fund and in that connection, and subject to any further policies and procedures contained herein, shall use proxy voting policies and procedures adopted by each sub-adviser in conformance with Rule 206(4)-6 under the Advisers Act.

If an instance occurs where a conflict of interest arises between the shareholders and the designated sub-adviser, however, Advisers retain the right to influence and/or direct the conflicting proxy voting decisions in the best interest of shareholders.

## **Delegation of Proxy Voting Responsibilities**

It is the policy of the Trust to delegate the responsibility for voting proxies relating to portfolio securities held by a fund to the fund's investment adviser ("adviser") or, if the fund's adviser has delegated portfolio management responsibilities to one or more investment sub-adviser(s), to the fund's sub-adviser(s), subject to the Board's continued oversight. The sub-adviser for each fund shall vote all proxies relating to securities held by each fund and in that connection, and subject to any further policies and procedures contained herein, shall use proxy voting policies and procedures adopted by each sub-adviser in conformance with Rule 206(4)-6 under the Investment Advisers Act of 1940, as amended (the "Advisers Act").

#### 07H. Proxy Voting Procedures

Except as noted below under Material Conflicts of Interest, the Trust Proxy Policy with respect to a Fund shall incorporate that adopted by the Fund's sub-adviser with respect to voting proxies held by its clients (the "Sub-adviser Proxy Policy"). Each Sub-adviser Policy, as it may be amended from time to time, is hereby incorporated by reference into the Trust Proxy Policy. Each sub-adviser to a Fund is directed to comply with these policies and procedures in voting proxies relating to portfolio securities held by a fund, subject to oversight by the Fund's adviser and by the Board. Each Adviser to a Fund retains the responsibility, and is directed, to oversee each sub-adviser's compliance with these policies and procedures, and to adopt and implement such additional policies and procedures as it deems necessary or appropriate to discharge its oversight responsibility. Additionally, the Trust's Chief Compliance Officer ("CCO") shall conduct such monitoring and supervisory activities as the CCO or the Board deems necessary or appropriate in order to appropriately discharge the CCO's role in overseeing the sub-advisers' compliance with these policies and procedures.

The delegation by the Board of the authority to vote proxies relating to portfolio securities of the funds is entirely voluntary and may be revoked by the Board, in whole or in part, at any time.

### Voting Proxies of Underlying Funds of a Fund of Funds

## A. Where the Fund of Funds is not the Sole Shareholder of the Underlying Fund

With respect to voting proxies relating to the shares of an underlying fund (an "Underlying Fund") held by a Fund of the Trust operating as a fund of funds (a "Fund of Funds") in reliance on Section 12(d)(1)(G) of the 1940 Act where the Underlying Fund has shareholders other than the Fund of Funds which are not other Fund of Funds, the Fund of Funds will vote proxies relating to shares of the Underlying Fund in the same proportion as the vote of all other holders of such Underlying Fund shares.

## B. Where the Fund of Funds is the Sole Shareholder of the Underlying Fund

In the event that one or more Funds of Funds are the sole shareholders of an Underlying Fund, the Adviser to the Fund of Funds or the Trusts will vote proxies relating to the shares of the Underlying Fund as set forth below unless the Board elects to have the Fund of Funds seek voting instructions from the shareholders of the Funds of Funds in which case the Fund of Funds will vote proxies relating to shares of the Underlying Fund in the same proportion as the instructions timely received from such shareholders.

1. Where Both the Underlying Fund and the Fund of Funds are Voting on Substantially Identical Proposals

In the event that the Underlying Fund and the Fund of Funds are voting on substantially identical proposals (the "Substantially Identical Proposal"), then the Adviser or the Fund of Funds will vote proxies relating to shares of the Underlying Fund in the same proportion as the vote of the shareholders of the Fund of Funds on the Substantially Identical Proposal.

- 2. Where the Underlying Fund is Voting on a Proposal that is Not Being Voted on by the Fund of Funds
  - (a) Where there is No Material Conflict of Interest Between the Interests of the Shareholders of the Underlying Fund and the Adviser Relating to the Proposal

In the event that the Fund of Funds is voting on a proposal of the Underlying Fund and the Fund of Funds is not also voting on a substantially identical proposal and there is no material conflict of interest between the interests of the shareholders of the Underlying Fund and the Adviser relating to the Proposal, then the Adviser will vote proxies relating to the shares of the Underlying Fund pursuant to its Proxy Voting Procedures.

(b) Where there is a Material Conflict of Interest Between the Interests of the Shareholders of the Underlying Fund and the Adviser Relating to the Proposal

In the event that the Fund of Funds is voting on a proposal of the Underlying Fund and the Fund of Funds is not also voting on a substantially identical proposal and there is a material conflict of interest between the interests of the shareholders of the Underlying Fund and the Adviser relating to the Proposal, then the Fund of Funds will seek voting instructions from the shareholders of the Fund of Funds on the proposal and will vote proxies relating to shares of the Underlying Fund in the same proportion as the instructions timely received from such shareholders. A material conflict is generally defined as a proposal involving a matter in which the Adviser or one of its affiliates has a material economic interest.

#### **Material Conflicts of Interest**

If (1) a sub-adviser to a Fund becomes aware that a vote presents a material conflict between the interests of (a) shareholders of the Fund; and (b) the Fund's Adviser, sub-adviser, principal underwriter, or any of their affiliated persons, and (2) the sub-adviser does not propose to vote on the particular issue in the manner prescribed by its Sub-adviser Proxy Policy or the material conflict of interest procedures set forth in its Sub-adviser Proxy Policy are otherwise triggered, then the sub-adviser will follow the material conflict of interest procedures set forth in its Sub-adviser Proxy Policy when voting such proxies.

If a Sub-adviser Proxy Policy provides that in the case of a material conflict of interest between Fund shareholders and another party, the sub-adviser will ask the Board to provide voting instructions, the sub-adviser shall vote the proxies, in its discretion, as recommended by an independent third party, in the manner prescribed by its Sub-adviser Proxy Policy or abstain from voting the proxies.

#### **Proxy Voting Committee(s)**

The Advisers will from time to time, and on such temporary or longer-term basis as they deem appropriate, establish one or more Proxy Voting Committees. A Proxy Voting Committee shall include the Advisers' CCO and may include legal counsel. The terms of reference and the procedures under which a Proxy Voting Committee will be reviewed from time to time by the Legal and Compliance Department. Records of the deliberations and proxy voting recommendations of a Proxy Voting Committee will be maintained in accordance with applicable law, if any, and these Proxy Procedures. Requested shareholder proposals or other Shareholder Advocacy in the name of a Fund must be submitted for consideration pursuant to the Shareholder Advocacy Policy and Procedures.

#### **Securities Lending Program**

Certain of the Funds participate in a securities lending program with the Trusts through an agent lender. When a Fund's securities are out on loan, they are transferred into the borrower's name and are voted by the borrower, in its discretion. Where a sub-adviser determines, however, that a proxy vote (or other shareholder action) is materially important to the client's account, the sub-adviser should request that the agent recall the security prior to the record date to allow the sub-adviser to vote the securities.

#### Disclosure of Proxy Voting Policies and Procedures in the Trust's Statement of Additional Information ("SAI")

The Trust shall include in its SAI a summary of the Trust Proxy Policy and of the Sub-adviser Proxy Policy included therein. (In lieu of including a summary of these policies and procedures, the Trust may include each full Trust Proxy Policy and Sub-adviser Proxy Policy in the SAI.)

#### 07H. Proxy Voting Procedures

#### Disclosure of Proxy Voting Policies and Procedures in Annual and Semi-Annual Shareholder Reports

The Trusts shall disclose in annual and semi-annual shareholder reports that a description of the Trust Proxy Policy, including the Sub-adviser Proxy Policy, and the Trusts' proxy voting record for the most recent 12 months ended June 30 are available on the Securities and Exchange Commission's ("SEC") website, and without charge, upon request, by calling a specified toll-free telephone number. The Trusts will send these documents within three business days of receipt of a request, by first-class mail or other means designed to ensure equally prompt delivery. The Fund Administration Department is responsible for preparing appropriate disclosure regarding proxy voting for inclusion in shareholder reports and distributing reports. The Legal Department supporting the Trusts is responsible for reviewing such disclosure once it is prepared by the Fund Administration Department.

#### Filing of Proxy Voting Record on Form N-PX

The Trusts will annually file their complete proxy voting record with the SEC on Form N-PX. The Form N-PX shall be filed for the twelve months ended June 30 no later than August 31 of that year. The Fund Administration department, supported by the Legal Department supporting the Trusts, is responsible for the annual filing.

### Regulatory Requirement

Rule 206(4)-6 of the Advisers Act and Rule 30b1-4 of the 1940 Act

#### Reporting

**Disclosures in SAI:** The Trusts shall disclose in annual and semi-annual shareholder reports that a description of the Trust Proxy Policy, including the Sub-adviser Proxy Policy, and the Trusts' proxy voting record for the most recent 12 months ended June 30.

Form N-PX: The proxy voting service will file Form N-PX for each twelve-month period ending on June 30. The filing must be submitted to the SEC on or before August 31 of each year.

#### **Procedure**

#### Review of Sub-advisers' Proxy Voting

The Trusts have delegated proxy voting authority with respect to Fund portfolio securities in accordance with the Trust Policy, as set forth above.

Consistent with this delegation, each sub-adviser is responsible for the following:

- 1. Implementing written policies and procedures, in compliance with Rule 206(4)-6 under the Advisers Act, reasonably designed to ensure that the sub-adviser votes portfolio securities in the best interest of shareholders of the Trusts.
- 2. Providing the Advisers with a copy and description of the Sub-adviser Proxy Policy prior to being approved by the Board as a sub-adviser, accompanied by a certification that represents that the Sub-adviser Proxy Policy has been adopted in conformance with Rule 206(4)-6 under the Advisers Act. Thereafter, providing the Advisers with notice of any amendment or revision to that Sub-adviser Proxy Policy or with a description thereof. The Advisers are required to report all material changes to a Sub-adviser Proxy Policy quarterly to the Board. The CCO's annual written compliance report to the Board will contain a summary of the material changes to each Sub-adviser Proxy Policy during the period covered by the report.
- 3. Providing the Adviser with a quarterly certification indicating that the sub-adviser did vote proxies of the funds and that the proxy votes were executed in a manner consistent with the Sub-adviser Proxy Policy. If the sub-adviser voted any proxies in a manner inconsistent with the Sub-adviser Proxy Policy, the sub-adviser will provide the Adviser with a report detailing the exceptions.

#### **Adviser Responsibilities**

The Trusts have retained a proxy voting service to coordinate, collect, and maintain all proxy-related information, and to prepare and file the Trust's reports on Form N-PX with the SEC.

The Advisers, in accordance with their general oversight responsibilities, will periodically review the voting records maintained by the proxy voting service in accordance with the following procedures:

- 1. Receive a file with the proxy voting information directly from each sub-adviser on a quarterly basis.
- 2. Select a sample of proxy votes from the files submitted by the sub-advisers and compare them against the proxy voting service files for accuracy of the votes.
- 3. Deliver instructions to shareholders on how to access proxy voting information via the Trust's semi-annual and annual shareholder reports.

The Fund Administration Department, in conjunction with the Legal Department supporting the Trusts, is responsible for the foregoing procedures.

## **Proxy Voting Service Responsibilities**

Proxy voting services retained by the Trusts are required to undertake the following procedures:

#### Aggregation of Votes:

The proxy voting service's proxy disclosure system will collect fund-specific and/or account-level voting records, including votes cast by multiple sub-advisers or third-party voting services.

#### Reporting:

The proxy voting service's proxy disclosure system will provide the following reporting features:

- 1. multiple report export options;
- 2. report customization by fund-account, portfolio manager, security, etc.; and
- 3. account details available for vote auditing.
- Form N-PX Preparation and Filing:

The Advisers will be responsible for oversight and completion of the filing of the Trusts' reports on Form N-PX with the SEC. The proxy voting service will prepare the EDGAR version of Form N-PX and will submit it to the adviser for review and approval prior to filing with the SEC. The proxy voting service will file Form N-PX for each twelve-month period ending on June 30. The filing must be submitted to the SEC on or before August 31 of each year. The Fund Administration Department, in conjunction with the Legal Department supporting the Trusts, is responsible for the foregoing procedures.

The Fund Administration Department in conjunction with the CCO oversees compliance with this policy.

The Fund Administration Department maintains operating procedures affecting the administration and disclosure of the Trusts' proxy voting records.

The Trusts' Chief Legal Counsel is responsible for including in the Trusts' SAI information regarding the Advisers' and each sub-advisers proxy voting policies as required by applicable rules and form requirements.

## **Key Contacts**

**Investment Compliance** 

## **Escalation/Reporting Violations**

All John Hancock employees are required to report any known or suspected violation of this policy to the CCO of the Funds.

## 07H. Proxy Voting Procedures

## **Related Policies and Procedures**

7B Registration Statements and Prospectuses

## **Document Retention Requirements**

The Fund Administration Department and The CCO's Office is responsible for maintaining all documentation created in connection with this policy. Documents will be maintained for the period set forth in the Records Retention Schedule. See Compliance Policy: Books and Records.

## **Version History**

Date	Effective Date	Approving Party
1	01-01-2012	
2	02-01-2015	
3	09-01-2015	
4	12-10-2019	
5	08-20-2024	CCO

# BOSTON PARTNERS GLOBAL INVESTORS, INC.

# **Proxy Voting Policies and Procedures**

February 2024

**Boston Partners** 

One Beacon Street, 30th Floor

Boston, MA 02108—www.boston-partners.com

#### PROXY VOTING POLICIES AND PROCEDURES

Boston Partners Global Investors, Inc. ("Boston Partners") is an investment adviser comprised of two divisions, Boston Partners and Weiss, Peck & Greer Partners ("WPG"). Boston Partners' Governance Committee (the "Committee") is comprised of representatives from portfolio management, securities analyst, portfolio research, quantitative research, investor relations, sustainability and engagement, and legal/compliance teams. The Committee is responsible for administering and overseeing Boston Partners' proxy voting process. The Committee makes decisions on proxy policy, establishes formal Boston Partners' Proxy Voting Policies (the "Proxy Voting Policies") and updates the Proxy Voting Policies as necessary, but no less frequently than annually. In addition, the Committee, in its sole discretion, delegates certain functions to internal departments and/or engages third-party vendors to assist in the proxy voting process. Finally, members of the Committee are responsible for evaluating and resolving conflicts of interest relating to Boston Partners' proxy voting process.

To assist Boston Partners in carrying out our responsibilities with respect to proxy activities, Boston Partners has engaged Institutional Shareholder Services Inc. ("ISS"), a third-party corporate governance research service, which is registered as an investment adviser. ISS receives all proxy-related materials for securities held in client accounts and votes the proposals in accordance with Boston Partners' Proxy Voting Policies. ISS assists Boston Partners with voting execution through an electronic vote management system that allows ISS to pre-populate and automatically submit votes in accordance with Boston Partners' Proxy Voting Policies. While Boston Partners may consider ISS's recommendations on proxy issues, Boston Partners bears ultimate responsibility for proxy voting decisions and can change votes via ISS' electronic voting platform at any time before a meeting's cut-off date. ISS also provides recordkeeping and vote-reporting services.

#### **How Boston Partners Votes**

For those clients who delegate proxy voting authority to Boston Partners, Boston Partners has full discretion over votes cast on behalf of clients. All proxy votes on behalf of clients are voted the same way; however, Boston Partners may refrain from voting proxies for certain clients in certain markets. These arrangements are outlined in respective client investment management agreements. Boston Partners may also refrain from voting proxies on behalf of clients when shares are out on loan; when share blocking is required to vote; where it is not possible to vote shares; where there are legal or operational difficulties; where Boston Partners believes the administrative burden and/ or associated cost exceeds the expected benefit to a client; or where not voting or abstaining produces the desired outcome.

Boston Partners meets with ISS at least annually to review ISS policy changes, themes, methodology, and to review the Proxy Voting Policies. The information is taken to the Committee to discuss and decide what changes, if any, need to be made to the Proxy Voting Policies for the upcoming year.

The Proxy Voting Policies provide standard positions on likely issues for the upcoming proxy season. In determining how proxies should be voted, including those proxies the Proxy Voting Policies do not address or where the Proxy Voting Policies' application is ambiguous, Boston Partners primarily focuses on maximizing the economic value of its clients' investments. This is accomplished through engagements with Boston Partners' analysts and issuers, as well as independent research conducted by Boston Partners' Sustainability and Engagement Team. In the case of social and political responsibility issues that, in its view, do not primarily involve financial considerations, it is Boston Partners' objective to support shareholder proposals that it believes promote good corporate citizenship. If Boston Partners believes that any research provided by ISS or other sources is incorrect, that research is ignored in the proxy voting decision, which is escalated to the Committee so that all relevant facts can be discussed, and a final vote determination can be made. Boston Partners is alerted to proposals that may require more detailed analysis via daily system generated refer notification emails. These emails prompt the Committee Secretary to call a Committee meeting to discuss the items in question.

Although Boston Partners has instructed ISS to vote in accordance with the Proxy Voting Policies, Boston Partners retains the right to deviate from the Proxy Voting Policies if, in its estimation, doing so would be in the best interest of clients.

#### **Conflicts**

Boston Partners believes clients are sufficiently insulated from any actual or perceived conflicts Boston Partners may encounter between its interests and those of its clients because Boston Partners votes proxies based on the predetermined Proxy Voting Policies. However, as noted, Boston Partners may deviate from the Proxy Voting Policies in certain circumstances, or the Proxy Voting Policies may not address certain proxy voting proposals. If a member of Boston Partners' research or portfolio management team recommends that Boston Partners vote a particular proxy proposal in a manner inconsistent with the Proxy Voting Policies or if the Proxy Voting

Policies do not address a particular proposal, Boston Partners will adhere to certain procedures designed to ensure that the decision to vote the particular proxy proposal is based on the best interest of Boston Partners' clients. These procedures require the individual requesting a deviation from the Proxy Voting Policies to complete a Conflicts Questionnaire (the "Questionnaire") along with written documentation of the economic rationale supporting the request. The Questionnaire seeks to identify possible relationships with the parties involved in the proxy that may not be apparent. Based on the responses to the Questionnaire, the Committee (or a subset of the Committee) will determine whether it believes a material conflict of interest is found to exist, Boston Partners will vote in accordance with client instructions, seek the recommendation of an independent third-party or resolve the conflict in such other manner as Boston Partners believes is appropriate, including by making its own determination that a particular vote is, notwithstanding the conflict, in the best interest of clients.

## **Oversight**

Meetings and upcoming votes are reviewed by the Committee Secretary with a focus on votes against management. Votes on behalf of Boston Partners' clients are reviewed and compared against ISS' recommendations. When auditing vote instructions, which Boston Partners does at least annually, ballots voted for a specified period are requested from ISS, and a sample of those meetings are reviewed by Boston Partners' Operations Team. The information is then forwarded to compliance/ the Committee Secretary for review. Any perceived exceptions are reviewed with ISS and an analysis of what the potential vote impact would have been is conducted. ISS' most recent SOC-1 indicates they have their own control and audit personnel and procedures, and a sample of ballots are randomly selected on a quarterly basis. ISS compares ballots to applicable vote instructions recorded in their database. Due diligence meetings with ISS are conducted periodically.

#### **Disclosures**

A copy of Boston Partners' Proxy Voting Policies and Procedures, as updated from time to time, as well as information regarding the voting of securities for a client account are available upon request from your Boston Partners relationship manager. A copy of Boston Partners' Proxy Voting Policies and Procedures are also available at https://www.boston-partners.com/. For general inquires, contact (617) 832-8162.