iShares® Trust

Statement of Additional Information

Dated June 30, 2023
(as revised April 8, 2024)

This combined Statement of Additional Information ("SAI") is not a prospectus. It should be read in conjunction with the current prospectuses (each, a "Prospectus" and collectively, the "Prospectuses") for the following series of iShares Trust (the "Trust"):

Fund	Ticker	Listing Exchange
iShares 0-3 Month Treasury Bond ETF	SGOV	NYSE Arca
iShares 1-3 Year Treasury Bond ETF	SHY	Nasdaq
iShares 1-5 Year Investment Grade Corporate Bond ETF	IGSB	Nasdaq
iShares 3-7 Year Treasury Bond ETF	IEI	Nasdaq
iShares 5-10 Year Investment Grade Corporate Bond ETF	IGIB	Nasdaq
iShares 7-10 Year Treasury Bond ETF	IEF	Nasdaq
iShares 10+ Year Investment Grade Corporate Bond ETF	IGLB	NYSE Arca
iShares 10-20 Year Treasury Bond ETF	TLH	NYSE Arca
iShares 20+ Year Treasury Bond ETF	TLT	Nasdaq
iShares 25+ Year Treasury STRIPS Bond ETF	GOVZ	Cboe BZX
iShares Agency Bond ETF	AGZ	NYSE Arca
iShares BBB Rated Corporate Bond ETF	LQDB	NYSE Arca
iShares Broad USD Investment Grade Corporate Bond ETF	USIG	Nasdaq
iShares California Muni Bond ETF	CMF	NYSE Arca
iShares Core 5-10 Year USD Bond ETF	IMTB	NYSE Arca
iShares Core 10+ Year USD Bond ETF	ILTB	NYSE Arca
iShares Core U.S. Aggregate Bond ETF	AGG	NYSE Arca
iShares ESG Advanced Investment Grade Corporate Bond ETF	ELQD	NYSE Arca
iShares ESG Advanced Total USD Bond Market ETF	EUSB	NYSE Arca
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	SUSB	Nasdaq
iShares ESG Aware U.S. Aggregate Bond ETF	EAGG	NYSE Arca
iShares ESG Aware USD Corporate Bond ETF	SUSC	Nasdaq
iShares Government/Credit Bond ETF	GBF	NYSE Arca
iShares High Yield Systematic Bond ETF	HYDB	Cboe BZX
iShares iBoxx $ High Yield Corporate Bond ETF	HYG	NYSE Arca
iShares iBoxx $ Investment Grade Corporate Bond ETF	LQD	NYSE Arca
iShares Intermediate Government/Credit Bond ETF	GVI	Cboe BZX
iShares Investment Grade Systematic Bond ETF	IGEB	Cboe BZX
iShares MBS ETF	MBB	Nasdaq
iShares National Muni Bond ETF	MUB	NYSE Arca
iShares New York Muni Bond ETF	NYF	NYSE Arca
iShares Short-Term National Muni Bond ETF	SUB	NYSE Arca
iShares Short Treasury Bond ETF	SHV	Nasdaq
iShares USD Systematic Bond ETF	USBF	Nasdaq

The Prospectuses for the above-listed funds (each, a "Fund" and collectively, the "Funds") are dated June 30, 2023, as amended and supplemented from time to time. Capitalized terms used herein that are not defined have the same meaning as in the applicable Prospectus, unless otherwise noted. The Financial Statements and Notes contained in the applicable Annual Report and Semi-Annual Report of the Trust for the Funds are incorporated by reference into and are deemed to be part of this SAI. A copy of each Fund's Prospectus, Annual Report and Semi-Annual Report may be obtained without charge by writing to the Trust's distributor, BlackRock Investments, LLC (the "Distributor" or "BRIL"), 1 University Square Drive, Princeton, NJ 08540, calling 1-800-iShares (1-800-474-2737) or visiting www.iShares.com. Each Fund's Prospectus is incorporated by reference into this SAI.

References to the Investment Company Act of 1940, as amended (the “Investment Company Act” or the “1940 Act”), or other applicable law, will include any rules promulgated thereunder and any guidance, interpretations or modifications by the Securities and Exchange Commission (the “SEC”), SEC staff or other authority with appropriate jurisdiction, including court interpretations, and exemptive, no action or other relief or permission from the SEC, SEC staff or other authority.

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General Description of the Trust and its Funds

The Trust currently consists of more than 315 investment series or portfolios. The Trust was organized as a Delaware statutory trust on December 16, 1999 and is authorized to have multiple series or portfolios. The Trust is an open-end management investment company registered with the SEC under the 1940 Act. The offering of the Trust's shares is registered under the Securities Act of 1933, as amended (the "1933 Act"). This SAI relates to the following Funds:

- iShares 0-3 Month Treasury Bond ETF
- iShares 1-3 Year Treasury Bond ETF
- iShares 1-5 Year Investment Grade Corporate Bond ETF
- iShares 3-7 Year Treasury Bond ETF
- iShares 5-10 Year Investment Grade Corporate Bond ETF
- iShares 7-10 Year Treasury Bond ETF
- iShares 10+ Year Investment Grade Corporate Bond ETF
- iShares 10-20 Year Treasury Bond ETF
- iShares 20+ Year Treasury Bond ETF
- iShares 25+ Year Treasury STRIPS Bond ETF
- iShares Agency Bond ETF
- iShares BBB Rated Corporate Bond ETF
- iShares Broad USD Investment Grade Corporate Bond ETF
- iShares California Muni Bond ETF
- iShares Core 5-10 Year USD Bond ETF
- iShares Core 10+ Year USD Bond ETF
- iShares Core U.S. Aggregate Bond ETF
- iShares ESG Advanced Investment Grade Corporate Bond ETF
- iShares ESG Advanced Total USD Bond Market ETF
- iShares ESG Aware 1-5 Year USD Corporate Bond ETF
- iShares ESG Aware U.S. Aggregate Bond ETF
- iShares ESG Aware USD Corporate Bond ETF
- iShares Government/Credit Bond ETF
- iShares High Yield Systematic Bond ETF[1]
- iShares iBoxx $ High Yield Corporate Bond ETF
- iShares iBoxx $ Investment Grade Corporate Bond ETF
- iShares Intermediate Government/Credit Bond ETF
- iShares Investment Grade Systematic Bond ETF[2]
- iShares MBS ETF
- iShares National Muni Bond ETF
- iShares New York Muni Bond ETF[3]
- iShares Short-Term National Muni Bond ETF
- iShares Short Treasury Bond ETF

- iShares USD Systematic Bond ETF[4]

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[1] On January 26, 2024, the name of the Fund changed from the iShares High Yield Bond Factor ETF to the iShares High Yield Systematic Bond ETF. On January 26, 2024, the Fund's Underlying Index changed from the BlackRock High Yield Defensive Bond Index to the BlackRock High Yield Systematic Bond Index.

[2] On January 26, 2024, the name of the Fund changed from the iShares Investment Grade Bond Factor ETF to the iShares Investment Grade Systematic Bond ETF. On January 26, 2024, the Fund's Underlying Index changed from the BlackRock Investment Grade Enhanced Bond Index to the BlackRock Investment Grade Systematic Bond Index.

[3] Effective February 1, 2024, the name of the Fund's Underlying Index changed from the ICE AMT Free New York Municipal Index to the ICE AMT-Free New York Plus Municipal Index.

[4] On January 26, 2024, the name of the Fund changed from the iShares USD Bond Factor ETF to the iShares USD Systematic Bond ETF. On January 26, 2024, the Fund's Underlying Index changed from the BlackRock USD Bond Factor Index to the BlackRock USD Systematic Bond Index.

Each Fund is managed by BlackRock Fund Advisors ("BFA"), an indirect wholly-owned subsidiary of BlackRock, Inc., and generally seeks to track the investment results of the specific benchmark index identified in the applicable Prospectus for that Fund (each, an "Underlying Index").

Each Fund offers and issues shares at their net asset value per share ("NAV") only in aggregations of a specified number of shares (each, a "Creation Unit"), generally in exchange for a designated portfolio of securities, assets or other positions (including any portion of such securities for which cash may be substituted) included in its Underlying Index (the "Deposit Securities" or "Creation Basket"), together with the deposit of a specified cash payment (the "Cash Component"). Shares of the Funds are listed for trading on national securities exchanges such as Cboe BZX Exchange, Inc. ("Cboe BZX"), The Nasdaq Stock Market LLC ("Nasdaq") or NYSE Arca, Inc. ("NYSE Arca") (each a "Listing Exchange"). Shares of each Fund are traded in the secondary market and elsewhere at market prices that may be at, above or below the Fund's NAV. Shares are redeemable only in Creation Units by Authorized Participants (as defined in the *Creation and Redemption of Creation Units-Role of the Authorized Participant* section of this SAI) and, generally, in exchange for portfolio securities and a Cash Amount (as defined in the *Redemption of Creation Units* section of this SAI). Creation Units typically are a specified number of shares, generally ranging from 10,000 to 100,000 shares or multiples thereof.

The Trust reserves the right to permit or require that creations and redemptions of shares are effected fully or partially in cash and reserves the right to permit or require the substitution of Deposit Securities in lieu of cash. Shares may be issued in advance of receipt of Deposit Securities, subject to various conditions, including a requirement that the Authorized Participant maintain with the Trust collateral as set forth in the handbook for Authorized Participants. The Trust may use such collateral at any time to purchase Deposit Securities. See the *Creation and Redemption of Creation Units* section of this SAI. Transaction fees and other costs associated with creations or redemptions that include a cash portion may be higher than the transaction fees and other costs associated with in-kind creations or redemptions. In all cases, conditions with respect to creations and redemptions of shares and fees will be limited in accordance with the requirements of SEC rules and regulations applicable to management investment companies offering redeemable securities.

Exchange Listing and Trading

A discussion of exchange listing and trading matters associated with an investment in each Fund is contained in the *Shareholder Information* section of each Fund's Prospectus. The discussion below supplements, and should be read in conjunction with, that section of the applicable Prospectus.

Shares of each Fund are listed for trading, and trade throughout the day, on the applicable Listing Exchange and in other secondary markets. Shares of certain Funds may also be listed on certain non-U.S. exchanges. There can be no assurance that the requirements of the Listing Exchange necessary to maintain the listing of shares of any Fund will continue to be met. The Listing Exchange may, but is not required to, remove the shares of a Fund from listing if, among other things: (i) a Fund is no longer eligible to operate in reliance on Rule 6c-11 under the Investment Company Act; (ii) any of the other listing requirements are not continuously maintained; or (iii) any event shall occur or condition shall exist that, in the opinion of the Listing Exchange, makes further dealings on the Listing Exchange inadvisable. The Listing Exchange will also remove shares of a Fund from listing and trading upon termination of such Fund.

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

The Trust reserves the right to adjust the share price of the Funds 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 Funds or an investor's equity interest in the Funds.

Investment Strategies and Risks

Each Fund seeks to achieve its objective by investing primarily in both fixed-income securities that compose its relevant Underlying Index and in investments that provide substantially similar exposure to securities in the Underlying Index. The Underlying Indexes for the iShares High Yield Systematic Bond ETF and iShares Investment Grade Systematic Bond ETF are based on a proprietary methodology created and sponsored by BlackRock Index Services, LLC (the "Index Provider"). The Index Provider is an affiliated person of the iShares High Yield Systematic Bond ETF and iShares Investment Grade Systematic Bond ETF and of BFA. Each Fund operates as an index fund and is not actively managed. Adverse performance of a security in a Fund's portfolio will ordinarily not result in the elimination of the security from the Fund's portfolio.

Each Fund engages in representative sampling, which is investing in a sample of securities selected by BFA to have a collective investment profile similar to that of the Fund's Underlying Index. Securities selected have aggregate investment characteristics (based on market value and industry weightings), fundamental characteristics (such as yield, credit rating, maturity and duration) and liquidity measures similar to those of the Fund's Underlying Index. A fund that uses representative sampling generally does not hold all of the securities that are in its underlying index.

Although the Funds do not seek leveraged returns, certain instruments used by the Funds may have a leveraging effect as described below.

Each of the iShares 0-3 Month Treasury Bond ETF, iShares 1-3 Year Treasury Bond ETF, iShares 3-7 Year Treasury Bond ETF, iShares 7-10 Year Treasury Bond ETF, iShares 10-20 Year Treasury Bond ETF, iShares 20+ Year Treasury Bond ETF, iShares 25+ Year Treasury STRIPS Bond ETF and iShares Short Treasury Bond ETF (the "Treasury Bond Funds") will invest at least 80% of its assets in the component securities of the Underlying Index, and the Fund will invest at least 90% of its assets in U.S. Treasury securities that BFA believes will help the Fund track the Underlying Index. Each Treasury Bond Fund will invest no more than 10% of its assets in futures, options and swaps contracts that BFA believes will help the Fund track the Underlying Index. Cash and cash equivalent investments associated with a derivative position will be treated as part of that position for the purposes of calculating the percentage of investments included in the Underlying Index. Each Treasury Bond Fund seeks to track the investment results of the Underlying Index before fees and expenses of the Fund.

Each of the iShares 1-5 Year Investment Grade Corporate Bond ETF, iShares 5-10 Year Investment Grade Corporate Bond ETF, iShares 10+ Year Investment Grade Corporate Bond ETF, iShares BBB Rated Corporate Bond ETF, iShares Broad USD Investment Grade Corporate Bond ETF, iShares Government/Credit Bond ETF, iShares High Yield Systematic Bond ETF, iShares iBoxx $ High Yield Corporate Bond ETF, iShares iBoxx $ Investment Grade Corporate Bond ETF, iShares Intermediate Government/Credit Bond ETF and iShares Investment Grade Systematic Bond ETF will invest at least 80% of its assets in the component securities of the Underlying Index, and the Fund will invest at least 90% of its assets in fixed income securities of the types included in the Underlying Index that BFA believes will help the Fund track the Underlying Index. Each Fund will invest no more than 10% of its assets in futures, options and swaps contracts that BFA believes will help the Fund track the Underlying Index as well as in fixed income securities other than the types included in the Underlying Index, but which BFA believes will help the Fund track the Underlying Index. Cash and cash equivalent investments associated with a derivative position will be treated as part of that position for the purposes of calculating the percentage of investments included in the Underlying Index. Each Fund seeks to track the investment results of the Underlying Index before fees and expenses of the Fund.

Each of the iShares Agency Bond ETF, iShares Core 5-10 Year USD Bond ETF, iShares Core 10+ Year USD Bond ETF, iShares Core U.S. Aggregate Bond ETF, iShares MBS ETF and iShares USD Systematic Bond ETF will invest at least 80% of its assets in the component securities of the Underlying Index and to-be-announced ("TBA") transactions that have economic characteristics that are substantially identical to the economic characteristics of the component securities of the Underlying Index, and the Fund will invest at least 90% of its assets in fixed income securities of the types included in the Underlying Index that BFA believes will help the Fund track the Underlying Index. Each Fund will invest no more than 10% of its assets in futures, options and swaps contracts that BFA believes will help the Fund track the Underlying Index as well as in fixed income securities other than the types included in the Underlying Index, but which BFA believes will help the Fund track the

Underlying Index. Cash and cash equivalent investments associated with a TBA position will be treated as part of that position for purposes of calculating the percentage of investments in the component securities of the Underlying Index. Cash and cash equivalent investments associated with a derivative position will be treated as part of that position for the purposes of calculating the percentage of investments included in the Underlying Index. Each Fund seeks to track the investment results of the Underlying Index before fees and expenses of the Fund. For example, the iShares Agency Bond ETF may invest in securities not included in the Underlying Index in order to reflect various corporate actions (such as mergers) and other changes in the Underlying Index (such as reconstitutions, additions and deletions).

Each of the iShares ESG Aware 1-5 Year USD Corporate Bond ETF, iShares ESG Advanced Investment Grade Corporate Bond ETF and iShares ESG Aware USD Corporate Bond ETF will invest at least 80% of its assets in the component securities of the Underlying Index, and the Fund will invest at least 90% of its assets in fixed income securities of the types included in the Underlying Index that BFA believes will help the Fund track the Underlying Index. The Fund will invest no more than 10% of its assets in futures, options, and swaps contracts that BFA believes will help the Fund track the Underlying Index as well as in fixed income securities other than the types included in the Underlying Index, but which BFA believes will help the Fund track the Underlying Index. Cash and cash equivalent investments associated with a derivative position will be treated as part of that position for the purposes of calculating the percentage of investments included in the Underlying Index. The Fund seeks to track the investment results of the Underlying Index before fees and expenses of the Fund.

Each of the iShares ESG Advanced Total USD Bond Market ETF and iShares ESG Aware U.S. Aggregate Bond ETF will invest at least 80% of its assets in the component securities of the Underlying Index and in investments that have economic characteristics that are substantially identical to the component securities of the Underlying Index *(i.e.*, TBAs), and the Fund will invest at least 90% of its assets in fixed income securities of the types included in the Underlying Index that BFA believes will help the Fund track the Underlying Index. The Fund will invest no more than 10% of its assets in futures, options, and swaps contracts that BFA believes will help the Fund track the Underlying Index as well as in fixed income securities other than the types included in the Underlying Index, but which BFA believes will help the Fund track the Underlying Index. Cash and cash equivalent investments associated with a derivative position will be treated as part of that position for the purposes of calculating the percentage of investments included in the Underlying Index. The Fund seeks to track the investment results of the Underlying Index before fees and expenses of the Fund.

Each of the iShares California Muni Bond ETF, iShares National Muni Bond ETF, iShares New York Muni Bond ETF and iShares Short-Term National Muni Bond ETF (the “Municipal Bond Funds”) will invest at least 80% of its assets in the component securities of the Underlying Index, and the Fund will invest at least 90% of its assets in fixed income securities of the types included in the Underlying Index that BFA believes will help the Fund track the Underlying Index. Each Municipal Bond Fund will invest no more than 10% of its assets in futures, options and swaps contracts that BFA believes will help the Fund track the Underlying Index as well as in fixed income securities other than the types included in the Underlying Index, but which BFA believes will help the Fund track the Underlying Index. Cash and cash equivalent investments associated with a derivative position will be treated as part of that position for the purposes of calculating the percentage of investments included in the Underlying Index. For example, each of the Municipal Bond Funds may invest in municipal bonds not included in its Underlying Index in order to reflect prospective changes in its Underlying Index (such as index reconstitutions, additions and deletions). Each of the iShares California Muni Bond ETF and iShares New York Muni Bond ETF generally holds municipal bond securities issued by its respective state and local municipalities whose interest payments are exempt from U.S. federal and state income tax, the federal alternative minimum tax (“AMT”), and the federal Medicare contribution tax of 3.8% on “net investment income.” Each of the iShares National Muni Bond ETF and iShares Short-Term National Muni Bond ETF will generally hold municipal bond securities issued by state and local municipalities whose interest payments are exempt from U.S. federal income tax, the federal AMT, and the federal Medicare contribution tax of 3.8% on “net investment income.” In addition, each Municipal Bond Fund intends to invest any cash assets in one or more affiliated municipal money market funds, which may be advised by BFA or its affiliates.

Asset-Backed Securities Risk. Asset-backed securities (“ABS”) represent interests in “pools” of assets, including consumer loans or receivables held in trust. ABS are “pass-through” securities, meaning that principal and interest payments, net of expenses, made by the borrower on the underlying assets are passed through to a Fund. ABS, like traditional fixed-income securities, are subject to credit, interest rate, call, prepayment, extension, valuation and illiquidity risk. Because of call, prepayment, and extension risk, however, ABS react differently to changes in interest rates than other bonds. Small movements in interest rates (both increases and decreases) may quickly and significantly reduce the value of certain ABS.

The price paid by a Fund for its ABS, the yield a Fund expects to receive from such securities and the average life of such securities are based on a number of factors, including the anticipated rate of prepayment of the underlying assets. During periods of difficulty in the credit markets, ABS may decline in value and become less liquid, more volatile, and more difficult to value.

The nature of the assets and the servicing of those assets may subject ABS to additional risks in comparison to mortgage-backed securities. For instance, certain ABS generally do not have the benefit of a security interest in collateral that is comparable in quality to mortgage-backed assets. The value of the collateral may also be insufficient to cover the principal amount of the obligation. Other ABS, such as those backed by credit card receivables, do not have the benefit of a security interest in collateral at all. Moreover, the values of ABS may be substantially dependent on the servicing of the underlying asset pools, and are therefore subject to risks associated with the negligence or malfeasance by their servicers and to the credit risk of their servicers.

ABS are often not backed by the full faith and credit of the U.S. government and are subject to risk of default on the underlying asset, particularly during periods of economic downturn.

Bonds. Each Fund invests a substantial portion of its assets in U.S. dollar-denominated bonds. A bond is an interest-bearing security issued by a U.S. or non-U.S. company or governmental unit. The issuer of a bond has a contractual obligation to pay interest at a stated rate on specific dates and to repay principal (the bond's face value) periodically or on a specified maturity date. Bonds generally are used by issuers to borrow money from investors.

An issuer may have the right to redeem or "call" a bond before maturity, in which case the Fund may have to reinvest the proceeds at lower market rates. Similarly, a fund may have to reinvest interest income or payments received when bonds mature, sometimes at lower market rates. Most bonds bear interest income at a "coupon" rate that is fixed for the life of the bond. The value of a fixed-rate bond usually rises when market interest rates fall, and falls when market interest rates rise. Accordingly, a fixed-rate bond's yield (income as a percent of the bond's current value) may differ from its coupon rate as its value rises or falls. When an investor purchases a fixed-rate bond at a price that is greater than its face value, the investor is purchasing the bond at a premium. Conversely, when an investor purchases a fixed-rate bond at a price that is less than its face value, the investor is purchasing the bond at a discount. Fixed-rate bonds that are purchased at a discount pay less current income than securities with comparable yields that are purchased at face value, with the result that prices for such fixed-rate securities can be more volatile than prices for such securities that are purchased at face value. Other types of bonds bear interest at an interest rate that is adjusted periodically. Interest rates on "floating rate" or "variable rate" bonds may be higher or lower than current market rates for fixed-rate bonds of comparable quality with similar final maturities. Because of their adjustable interest rates, the value of "floating rate" or "variable rate" bonds fluctuates much less in response to market interest rate movements than the value of fixed-rate bonds, but their value may decline if their interest rates do not rise as much, or as quickly, as interest rates in general. Each Fund may treat some of these bonds as having a shorter maturity for purposes of calculating the weighted average maturity of its investment portfolio. Generally, prices of higher quality issues tend to fluctuate less with changes in market interest rates than prices of lower quality issues and prices of longer maturity issues tend to fluctuate more than prices of shorter maturity issues. Bonds may be senior or subordinated obligations. Senior obligations generally have the first claim on an issuer's earnings and assets and, in the event of liquidation, are paid before subordinated obligations. Bonds may be unsecured (backed only by the issuer's general creditworthiness) or secured (backed by specified collateral).

Borrowing. Each Fund may borrow for temporary or emergency purposes, including to meet payments due from redemptions or to facilitate the settlement of securities or other transactions. The iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF, along with certain other iShares funds, have entered into a syndicated line of credit with the Bank of New York Mellon ("BNY"), which serves as administrative agent for itself and the other banks. The syndicated line of credit may be used for temporary or emergency purposes, including redemption, settlement of trades and rebalancing of portfolio holdings.

Interest rates related to the syndicated line of credit are based on the Secured Overnight Financing Rate ("SOFR") published by the Federal Reserve Bank of New York plus a spread. Pursuant to the terms of the credit agreement, if SOFR were to cease being published or representative, it would be replaced by a rate based on an alternate benchmark selected by BNY.

The purchase of securities while borrowings are outstanding may have the effect of leveraging a Fund. The incurrence of leverage increases a Fund's exposure to risk, and borrowed funds are subject to interest costs that will reduce net income. Purchasing securities while borrowings are outstanding creates special risks, such as the potential for greater volatility in the

NAV of Fund shares and in the yield on a Fund's portfolio. In addition, the interest expenses from borrowings may exceed the income generated by a Fund's portfolio and, therefore, the amount available (if any) for distribution to shareholders as dividends may be reduced. BFA may determine to maintain outstanding borrowings if it expects that the benefits to a Fund's shareholders will outweigh the current reduced return.

Certain types of borrowings by a Fund must be made from a bank or may result in a Fund being subject to covenants in credit agreements relating to asset coverage, portfolio composition requirements and other matters. It is not anticipated that observance of such covenants would impede BFA's management of a Fund's portfolio in accordance with a Fund's investment objectives and policies. However, a breach of any such covenants not cured within the specified cure period may result in acceleration of outstanding indebtedness and require a Fund to dispose of portfolio investments at a time when it may be disadvantageous to do so.

Brady Bonds. Certain of the Funds may invest in Brady bonds. Brady bonds are securities created through the exchange of existing commercial bank loans to public and private entities in certain emerging markets for new bonds in connection with debt restructurings. Brady bonds have been issued since 1989. In light of the history of defaults of countries issuing Brady bonds on their commercial bank loans, investments in Brady bonds may be viewed as speculative and subject to the same risks as emerging market securities. Brady bonds may be fully or partially collateralized or uncollateralized, are issued in U.S. dollars and are actively traded in over-the-counter ("OTC") secondary markets. Incomplete collateralization of interest or principal payment obligations results in increased credit risk. U.S. dollar-denominated collateralized Brady bonds, which may be either fixed-rate or floating rate bonds, are generally collateralized by U.S. Treasury securities.

Commercial Mortgage-Backed Securities Risk. The commercial mortgage-backed securities ("CMBS") in which a Fund invests may be issued by entities, such as banks, mortgage lenders or other institutions. These entities are not backed by the full faith and credit of the U.S. government, and there can be no assurance that the U.S. government would provide financial support to its agencies or instrumentalities where it is not obligated to do so.

CMBS depend on cash flows generated by underlying commercial real-estate loans, receivables or other assets, and can be significantly affected by changes in interest rates, the availability of information concerning the underlying assets and their structure, and the creditworthiness of the originators of the underlying assets.

Due to the nature of the loans they represent, CMBS are subject to a greater degree of prepayment and extension risk than many other forms of fixed-income securities. Small movements in interest rates (both increases and decreases) may quickly and significantly reduce the value of certain CMBS. Certain CMBS are issued in several classes with different levels of yield and credit protection. A Fund's investments in CMBS with several classes may be in the lower classes that have greater risks than the higher classes, including greater interest rate, credit, prepayment and extension risks.

In addition, the value of CMBS may be adversely affected by regulatory or tax changes. CMBS issued by non-government entities may offer higher yields than those issued by government entities, but also may be subject to greater volatility than government issues. In the recent past, the market for CMBS has experienced volatility and reduced liquidity.

Corporate Bonds. Each Fund (other than the iShares ESG Advanced Total USD Bond Market ETF, Treasury Bond Funds and the Municipal Bond Funds) may invest in investment-grade and/or high yield corporate bonds. High yield corporate bonds may be deemed speculative and more volatile than higher rated securities of similar maturity. The investment return of corporate bonds reflects interest earned on the security and changes in the market value of the security. The market value of a corporate bond may be affected by changes in the market rate of interest, the credit rating of the issuer, the issuer's performance and perceptions of the issuer in the marketplace. There is a risk that the issuers of the securities may not be able to meet their obligations on interest or principal payments at the time called for by an instrument.

Diversification Status. The following table sets forth the diversification status of each Fund:

Diversified Funds	Non-Diversified Funds
iShares 0-3 Month Treasury Bond ETF	iShares BBB Rated Corporate Bond ETF
iShares 1-3 Year Treasury Bond ETF	iShares California Muni Bond ETF
iShares 1-5 Year Investment Grade Corporate Bond ETF	iShares ESG Advanced Investment Grade Corporate Bond ETF

Diversified Funds	Non-Diversified Funds
iShares 3-7 Year Treasury Bond ETF	iShares New York Muni Bond ETF
iShares 5-10 Year Investment Grade Corporate Bond ETF	iShares USD Systematic Bond ETF
iShares 7-10 Year Treasury Bond ETF	
iShares 10+ Year Investment Grade Corporate Bond ETF	
iShares 10-20 Year Treasury Bond ETF	
iShares 20+ Year Treasury Bond ETF	
iShares 25+ Year Treasury STRIPS Bond ETF	
iShares Agency Bond ETF	
iShares Broad USD Investment Grade Corporate Bond ETF	
iShares Core 5-10 Year USD Bond ETF	
iShares Core 10+ Year USD Bond ETF	
iShares Core U.S. Aggregate Bond ETF	
iShares ESG Advanced Total USD Bond Market ETF	
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	
iShares ESG Aware USD Corporate Bond ETF	
iShares ESG Aware U.S. Aggregate Bond ETF	
iShares Government/Credit Bond ETF	
iShares High Yield Systematic Bond ETF	
iShares iBoxx $ High Yield Corporate Bond ETF	
iShares iBoxx $ Investment Grade Corporate Bond ETF	
iShares Intermediate Government/Credit Bond ETF	
iShares Investment Grade Systematic Bond ETF	
iShares MBS ETF	
iShares National Muni Bond ETF	
iShares Short-Term National Muni Bond ETF	
iShares Short Treasury Bond ETF	

A fund classified as “diversified” under the 1940 Act may not purchase securities of an issuer (other than (i) obligations issued or guaranteed by the U.S. government, its agencies or instrumentalities and (ii) securities of other investment companies) if, with respect to 75% of its total assets, (a) more than 5% of the fund’s total assets would be invested in securities of that issuer or (b) the fund would hold more than 10% of the outstanding voting securities of that issuer. With respect to the remaining 25% of its total assets, the fund may invest more than 5% of its assets in one issuer. Under the 1940 Act, a fund cannot change its classification from diversified to non-diversified without shareholder approval.

A “non-diversified” fund is a fund that is not limited by the 1940 Act with regard to the percentage of its assets that may be invested in the securities of a single issuer. The securities of a particular issuer (or securities of issuers in particular industries) may constitute a significant percentage of the underlying index of such a fund and, consequently, the fund’s investment portfolio. This may adversely affect a fund’s performance or subject the fund’s shares to greater price volatility than that experienced by more diversified investment companies.

Each Fund (whether diversified or non-diversified) intends to maintain the required level of diversification and otherwise conduct its operations so as to qualify as a regulated investment company ("RIC") for purposes of the U.S. Internal Revenue Code of 1986, as amended (the "Internal Revenue Code"), and to relieve the Fund of any liability for U.S. federal income tax to the extent that its earnings are distributed to shareholders, provided that the Fund satisfies a minimum distribution requirement. Compliance with the diversification requirements of the Internal Revenue Code may limit the investment flexibility of certain Funds and may make it less likely that the Funds will meet their respective investment objectives.

Futures, Options on Futures and Securities Options. Futures contracts, options on futures and securities options may be used by a Fund to simulate investment in its Underlying Index, to facilitate trading or to reduce transaction costs. Each Fund may enter into futures contracts and options on futures that are traded on a U.S. or non-U.S. futures exchange. Each Fund will not use futures, options on futures or securities options for speculative purposes. Each Fund intends to use futures and options on futures in accordance with Rule 4.5 of the Commodity Futures Trading Commission (the "CFTC") promulgated under the Commodity Exchange Act ("CEA"). BFA, with respect to certain Funds, has claimed an exclusion from the definition of the term "commodity pool operator" in accordance with Rule 4.5 so that BFA, with respect to such Funds, is not subject to registration or regulation as a commodity pool operator under the CEA. See the *Regulation Regarding Derivatives* section of this SAI for more information.

Futures contracts provide for the future sale by one party and purchase by another party of a specified amount of a specific instrument or index at a specified future time and at a specified price. Stock index contracts are based on investments that reflect the market value of common stock of the firms included in the investments. Each Fund may enter into futures contracts to purchase securities indexes when BFA anticipates purchasing the underlying securities and believes prices will rise before the purchase will be made. Upon entering into a futures contract, a Fund will be required to deposit with the broker an amount of cash or cash equivalents known as "initial margin," which is similar to a performance bond or good faith deposit on the contract and is returned to the Fund upon termination of the futures contract if all contractual obligations have been satisfied. Subsequent payments, known as "variation margin," will be made to and from the broker daily as the price of the instrument or index underlying the futures contract fluctuates, making the long and short positions in the futures contract more or less valuable, a process known as "marking-to-market." At any time prior to the expiration of a futures contract, each Fund may elect to close the position by taking an opposite position, which will operate to terminate the Fund's existing position in the contract. An option on a futures contract, as contrasted with a direct investment in such a contract, gives the purchaser the right, but no obligation, in return for the premium paid, to assume a position in the underlying futures contract at a specified exercise price at any time prior to the expiration date of the option. Upon exercise of an option, the delivery of the futures position by the writer of the option to the holder of the option will be accompanied by delivery of the accumulated balance in the writer's futures margin account that represents the amount by which the market price of the futures contract exceeds (in the case of a call) or is less than (in the case of a put) the exercise price of the option on the futures contract.

The potential for loss related to the purchase of an option on a futures contract is limited to the premium paid for the option plus transaction costs. Because the value of the option is fixed at the point of sale, there are no daily cash payments by the purchaser to reflect changes in the value of the underlying contract; however, the value of the option changes daily and that change would be reflected in the NAV of each Fund. The potential for loss related to writing call options is unlimited. The potential for loss related to writing put options is limited to the agreed-upon price per share, also known as the "strike price," less the premium received from writing the put. Certain of the Funds may purchase and write put and call options on futures contracts that are traded on an exchange as a hedge against changes in value of their portfolio securities or in anticipation of the purchase of securities, and may enter into closing transactions with respect to such options to terminate existing positions. There is no guarantee that such closing transactions can be effected.

Securities options may be used by a Fund to obtain access to securities in its Underlying Index or to dispose of securities in its Underlying Index at favorable prices, to invest cash in a securities index that offers similar exposure to that provided by its Underlying Index or otherwise to achieve the Fund's objective of tracking its Underlying Index. A call option gives a holder the right to purchase a specific security at a specified price ("exercise price") within a specified period of time. A put option gives a holder the right to sell a specific security at an exercise price within a specified period of time. The initial purchaser of a call option pays the "writer" a premium, which is paid at the time of purchase and is retained by the writer whether or not such option is exercised. Each Fund may purchase put options to hedge its portfolio against the risk of a decline in the market value of securities held and may purchase call options to hedge against an increase in the price of securities it is committed to purchase. Each Fund may write put and call options along with a long position in options to increase its ability to hedge against a change in the market value of the securities it holds or is committed to purchase. Each Fund may purchase or sell securities options on a U.S. or non-U.S. securities exchange or in the OTC market through a transaction with a dealer. Options on a securities index are typically settled on a net basis based on the appreciation or depreciation of the index level over the strike price. Options on single name securities may be cash- or physically-settled, depending upon the market in which they are traded. Options may be structured so as to be exercisable only on certain dates or on a daily basis. Options may also be structured to have conditions to exercise (*i.e.*, "Knock-in Events") or conditions that trigger termination (*i.e.*, "Knock-out Events").

High Yield Securities. Certain Funds may invest in non-investment grade securities. Non-investment grade or "high yield" fixed-income or convertible securities are commonly known to investors as "junk bonds" or "high yield bonds." These are generally debt securities that are rated below investment grade by one or more of the major rating agencies or are unrated securities that BFA believes are of comparable quality. While generally providing greater income and opportunity for gain, non-investment grade debt securities may be subject to greater risks than securities that have higher credit ratings, including a high risk of default, and their yields will fluctuate over time. High yield securities will generally be in the lower rating categories of recognized rating agencies (rated below Baa3 by Moody's Investors Service, Inc. ("Moody's") or below BBB- by Standard & Poor's® Global Ratings, a subsidiary of S&P Global ("S&P Global Ratings") or Fitch Ratings, Inc. ("Fitch")) or be unrated. The credit rating of a high yield security does not necessarily address its market value risk, and ratings may from time to time change, positively or negatively, to reflect developments regarding the issuer's financial condition. High yield securities are considered to be speculative with respect to the capacity of the issuer to timely repay principal and pay interest in accordance with the terms of the obligation and may have more credit risk than higher rated securities.

The major risks of high yield bond investments include the following:

- High yield bonds may be issued by less creditworthy issuers. These securities are vulnerable to adverse changes in the issuer's industry or to general economic conditions. Issuers of high yield bonds may be unable to meet their interest or principal payment obligations because of an economic downturn, specific issuer developments or the unavailability of additional financing.
- The issuers of high yield bonds may have a larger amount of outstanding debt relative to their assets than issuers of investment grade bonds. If the issuer experiences financial stress, it may be unable to meet its debt obligations. The issuer's ability to pay its debt obligations also may be lessened by specific issuer developments, or the unavailability of additional financing. Issuers of high yield securities are often in the growth stage of their development and/or involved in a reorganization or takeover.
- High yield bonds are frequently ranked junior to claims by other creditors. If the issuer cannot meet its obligations, the senior obligations are generally paid off before the junior obligations, which will potentially limit a Fund's ability to fully recover principal, to receive interest payments when senior securities are in default or to receive restructuring benefits paid to holders of more senior classes of debt. Thus, investors in high yield securities frequently have a lower degree of protection with respect to principal and interest payments than do investors in higher rated securities.
- High yield bonds frequently have redemption features that permit an issuer to repurchase the security from a Fund before it matures. If an issuer redeems the high yield bonds, a Fund may have to invest the proceeds in bonds with lower yields and may lose income.
- Prices of high yield bonds are subject to extreme fluctuations. Negative economic developments may have a greater impact on the prices of high yield bonds than on those of other higher rated fixed-income securities.
- Under certain economic and/or market conditions, a Fund may have difficulty disposing of certain high yield securities due to the limited number of investors in that sector of the market. There are fewer dealers in the high yield bond market, and there may be significant differences in the prices quoted for high yield bonds by dealers, and such quotations may not be the actual prices available for a purchase or sale. Judgment may play a greater role in the prices and values generated for such securities than in the case of securities trading in a more liquid market.
- The secondary markets for high yield securities are not as liquid as the secondary markets for higher rated securities. The secondary markets for high yield securities are concentrated in relatively few market makers and, participants in the markets are mostly institutional investors, including insurance companies, banks, other financial institutions and mutual funds. In addition, the trading volume for high yield securities is generally lower than that for higher rated securities and the secondary markets could contract under adverse market or economic conditions independent of any specific adverse changes in the condition of a particular issuer. Under certain economic and/or market conditions, a Fund may have difficulty disposing of certain high yield securities due to the limited number of

investors in that sector of the market. An illiquid secondary market may adversely affect the market price of the high yield security, which may result in increased difficulty selling the particular issue and obtaining accurate market quotations on the issue when valuing a Fund's assets. Market quotations on high yield securities are available only from a limited number of dealers, and such quotations may not be the actual prices available for a purchase or sale. When the secondary market for high yield securities becomes more illiquid, or in the absence of readily available market quotations for such securities, the relative lack of reliable objective data makes it more difficult to value such securities, and judgment plays a more important role in determining such valuations.

- A Fund may incur expenses to the extent necessary to seek recovery upon default or to negotiate new terms with a defaulting issuer.
- The high yield bond markets may react strongly to adverse news about an issuer or the economy, or to the perception or expectation of adverse news, whether or not it is based on fundamental analysis. Additionally, prices for high yield securities may be affected by legislative and regulatory developments. These developments could adversely affect a Fund's NAV and investment practices, the secondary market for high yield securities, the financial condition of issuers of these securities and the value and liquidity of outstanding high yield securities, especially in a thinly traded market. For example, federal legislation requiring the divestiture by federally insured savings and loan associations of their investments in high yield bonds and limiting the deductibility of interest by certain corporate issuers of high yield bonds adversely affected the market in the past.

Lending Portfolio Securities. Each Fund may lend portfolio securities to certain borrowers that BFA determines to be creditworthy, including borrowers affiliated with BFA. The borrowers provide collateral that is maintained in an amount at least equal to the current market value of the securities loaned. No securities loan shall be made on behalf of a Fund if, as a result, the aggregate value of all securities loans of the particular Fund exceeds one-third of the value of such Fund's total assets (including the value of the collateral received). A Fund may terminate a loan at any time and obtain the return of the securities loaned. Each Fund receives, by way of substitute payment, the value of any interest or cash or non-cash distributions paid on the loaned securities that it would have otherwise received if the securities were not on loan.

With respect to loans that are collateralized by cash, the borrower may be entitled to receive a fee based on the amount of cash collateral. The Funds are compensated by any positive difference between the amount earned on the reinvestment of cash collateral and the fee paid to the borrower. In the case of collateral other than cash, a Fund is compensated by a fee paid by the borrower equal to a percentage of the market value of the loaned securities. Any cash collateral received by the Fund for such loans, and uninvested cash, may be reinvested in certain short-term instruments either directly on behalf of each Fund or through one or more joint accounts or money market funds, including those affiliated with BFA; such investments are subject to investment risk.

Each Fund conducts its securities lending pursuant to an exemptive order from the SEC permitting it to lend portfolio securities to borrowers affiliated with the Fund and to retain an affiliate of the Fund to act as securities lending agent. To the extent that a Fund engages in securities lending, BlackRock Institutional Trust Company, N.A. ("BTC") acts as securities lending agent for the Fund, subject to the overall supervision of BFA. BTC administers the lending program in accordance with guidelines approved by the Trust's Board of Trustees (the "Board," the trustees of which are the "Trustees"). JPMorgan Chase Bank, N.A. ("JPMorgan") serves as custodian for the Funds in connection with certain securities lending activities.

Securities lending involves exposure to certain risks, including operational risk (i.e., the risk of losses resulting from problems in the settlement and accounting process), "gap" risk (i.e., the risk of a mismatch between the return on cash collateral reinvestments and the fees a Fund has agreed to pay a borrower), foreign exchange risk (i.e., the risk of a shortfall at default when a cash collateral investment is denominated in a currency other than the currency of the assets being loaned due to movements in foreign exchange rates), and credit, legal, counterparty and market risks (including the risk that market events could lead the Fund to recall loaned securities or to lend less or not at all, which could lead to reduced securities lending revenue). If a securities lending counterparty were to default, a Fund would be subject to the risk of a possible delay in receiving collateral or in recovering the loaned securities, or to a possible loss of rights in the collateral. In the event a borrower does not return a Fund's securities as agreed, the Fund's ability to participate in a corporate action event may be impacted, or the Fund may experience losses if the proceeds received from liquidating the collateral do not at least equal the value of the loaned security at the time the collateral is liquidated, plus the transaction costs incurred in purchasing replacement securities. This latter event could trigger adverse tax consequences for a Fund. A Fund could lose money if its short-term investment of the collateral declines in value over the period of the loan. Substitute payments received by a Fund representing dividends paid on securities loaned out by the Fund will not be considered qualified dividend income. BTC will take into account the tax effects on shareholders caused by this difference in connection with a Fund's securities lending program. Substitute payments received on tax-exempt securities loaned out will not be tax-exempt income. There could also be changes in the status of issuers under applicable laws and regulations, including tax regulations, that may impact the regulatory or tax treatment of loaned securities and could, for example, result in a delay in the payment of dividend equivalent payments owed to a Fund (as permitted by applicable law).

Regulations adopted by global prudential regulators require certain bank-regulated counterparties and certain of their affiliates to include in certain financial contracts, including many securities lending agreements, terms that delay or restrict the rights of counterparties, such as the Fund, to terminate such agreements, foreclose upon collateral, exercise other default rights or restrict transfers of credit support in the event that the counterparty and/or its affiliates are subject to certain types of resolution or insolvency proceedings. It is possible that these requirements, as well as potential additional government regulation and other developments in the market, could adversely affect the Fund's ability to terminate existing securities lending agreements or to realize amounts to be received under such agreements.

Liquidity Risk Management. Rule 22e-4 under the Investment Company Act (the "Liquidity Rule") requires open-end funds, including exchange-traded funds ("ETFs") such as the Funds, to establish a liquidity risk management program (the "Liquidity Program") and enhance disclosures regarding fund liquidity. As required by the Liquidity Rule, the Funds have implemented a Liquidity Program, and the Board, including a majority of the Independent Trustees of the Trust, has appointed BFA as the administrator of the Liquidity Program. Under the Liquidity Program, BFA assesses, manages, and periodically reviews each Fund's liquidity risk and classifies each investment held by a Fund as a "highly liquid investment," "moderately liquid investment," "less liquid investment" or "illiquid investment." The Liquidity Rule defines "liquidity risk" as the risk that a Fund could not meet requests to redeem shares issued by a Fund without significant dilution of the remaining investors' interest in a Fund. The liquidity of a Fund's portfolio investments is determined based on relevant market, trading and investment-specific considerations under the Liquidity Program. There are exclusions from certain portions of the liquidity risk management program requirements for "in-kind" ETFs, as defined in the Liquidity Rule. To the extent that an investment is deemed to be an illiquid investment or a less liquid investment, a Fund can expect to be exposed to greater liquidity risk.

Municipal Insurance. A municipal security may be covered by insurance that guarantees the bond's scheduled payment of interest and repayment of principal. This type of insurance may be obtained by either (i) the issuer at the time the bond is issued (primary market insurance), or (ii) another party after the bond has been issued (secondary market insurance).

Both primary and secondary market insurance guarantee timely and scheduled repayment of all principal and payment of all interest on a municipal security in the event of default by the issuer, and cover a municipal security to its maturity, enhancing its credit quality and value.

Municipal security insurance does not insure against market fluctuations or fluctuations in each of the Municipal Bond Funds' share price. In addition, a municipal security insurance policy will not cover: (i) repayment of a municipal security before maturity (redemption), (ii) nonpayment of principal or interest caused by negligence or bankruptcy of the paying agent, or (iii) prepayment or payment of an acceleration premium (except for a mandatory sinking fund redemption) or any other provision of a bond indenture that advances the maturity of the bond. A mandatory sinking fund redemption may be a provision of a municipal security issue whereby part of the municipal security issue may be retired before maturity.

Because a significant portion of the municipal securities issued and outstanding are insured by a small number of insurance companies, an event involving one or more of these insurance companies could have a significant adverse effect on the value of the securities insured by that insurance company and on the municipal markets as a whole.

Certain significant providers of insurance for municipal securities have recently incurred significant losses as a result of exposure to sub-prime mortgages and other lower credit quality investments that have experienced recent defaults or otherwise suffered extreme credit deterioration. As a result, such losses have reduced the insurers' capital and called into question their continued ability to perform their obligations under such insurance if they are called upon to do so in the future. While an insured municipal security will typically be deemed to have the rating of its insurer, if the insurer of a municipal security suffers a downgrade in its credit rating or if the market discounts the value of the insurance provided by the insurer, the value of the municipal security would be more, if not entirely, dependent on the rating of the municipal security independent of insurance.

Municipal Securities. Certain of the Funds invest in securities issued in the U.S. market by U.S. states and territories, municipalities and other political subdivisions, agencies, authorities and instrumentalities of states and multi-state agencies or authorities ("municipal securities"), the interest payments of which are not subject to U.S. federal income tax. The municipal securities which such Funds may purchase include general obligation bonds and limited obligation bonds (or "Revenue Bonds"), including industrial development bonds issued pursuant to former U.S. federal tax law.

General obligation bonds are obligations involving the credit of an issuer possessing taxing power and are payable from such issuer's general revenues and not from any particular source. Revenue Bonds are payable only from the revenues derived from a particular facility or class of facilities or, in some cases, from the proceeds of a special excise or other specific revenue source. Revenue Bonds that are issued to finance a particular project often depend on revenues from that project to make principal and interest payments. Adverse conditions and developments affecting a particular project can result in lower revenues to the issuer of the municipal securities. Additionally, the market values of Revenue Bonds may decline in times of higher inflation to the extent that revenues are fixed income streams. In other instances, the prices that certain Revenue Bond issuers are able to charge users of their assets may be linked to inflation, whether by government regulation, contractual arrangement or other factors. In this case, changes in the rate of inflation may affect the issuer's revenues. Additionally, rising interest rates could result in higher costs of capital for issuers of both general obligation bonds and Revenue Bonds, which could negatively impact their ability to meet payment obligations.

The market for municipal bonds may be less liquid than for taxable bonds. This means that it may be harder to buy and sell municipal securities, especially on short notice, than non-municipal securities. In addition, the municipal securities market is generally characterized as a buy and hold investment strategy. As a result, the accessibility of municipal securities in the market is generally greater closer to the original date of issue of the securities and lessens as the securities move further away from such issuance date.

Some longer-term municipal securities give the investor the right to "put" or sell the security at par (face value) within a specified number of days following the investor's request - usually one to seven days. This demand feature enhances a security's liquidity by shortening its effective maturity and enables it to trade at a price equal to or very close to par. If a demand feature terminates prior to being exercised, a Fund would hold the longer-term security, which could experience substantially more volatility.

Municipal securities are subject to credit and market risk. Generally, prices of higher quality issues tend to fluctuate more with changes in market interest rates than prices of lower quality issues and prices of longer maturity issues tend to fluctuate more than prices of shorter maturity issues.

Prices and yields on municipal securities are dependent on a variety of factors, including general money-market conditions, the financial condition of the issuer, general conditions of the municipal security market, the size of a particular offering, the maturity of the obligation and the rating of the issue. A number of these factors, including the ratings of particular issues, are subject to change from time to time. Information about the financial condition of an issuer of municipal securities may not be as extensive as that which is made available by corporations whose securities are publicly-traded. As a result, municipal securities may be more difficult to value than securities of public corporations.

Obligations of issuers of municipal securities are subject to insolvency concerns and, unlike obligations of corporate issuers, may not be subject to resolution in the event of insolvency or default through a bankruptcy proceeding. The U.S. Congress or state legislatures may seek to extend the time for payment of principal or interest, or both, or to impose other constraints upon enforcement of such obligations. In addition, municipal securities are subject to the risk that their tax treatment could be changed, thereby affecting the value of outstanding municipal securities. There is also the possibility that as a result of litigation or other conditions, such as passing of a referendum, the power or ability of issuers to meet their obligations for the payment of interest and principal on their municipal securities may be materially affected or their obligations may be found to be invalid or unenforceable. Such litigation or conditions may from time to time have the effect of introducing uncertainties in the market for municipal securities or certain segments thereof, or of materially affecting the credit risk with respect to particular bonds. Adverse economic, business, legal or political developments might affect all or a substantial portion of a Fund's municipal securities in the same manner.

Additionally, certain municipal securities are issued by entities dependent on revenue from a particular sector and thus are subject to the specific risks associated with that sector. These sectors are described in more detail below.

Risk of Investing in Health Care-Related Municipal Securities. Changes to state or federal policy tied to health care services could adversely affect the value of municipal securities backed by revenue from public hospitals and other health care facilities. Regulatory changes that govern cost reimbursements to health care providers under government-funded programs such as Medicare and Medicaid, including policies that award exclusive contracts to certain hospitals, may adversely affect the revenue streams backing certain municipal securities. Additionally, the expansion of healthcare facilities by some issuers may be subject to “determinations of need” by various regulators or other authorities. This process not only generally increases the time and expenses such expansions entail, but also makes expansion plans uncertain, thus potentially limiting the revenue and growth of healthcare facility operators. Moreover, local, state and federal governmental bodies are under increasing pressure to reduce medical spending and control healthcare costs, which could both adversely affect regulatory processes and public funding available for healthcare services and facilities. The value of healthcare-related municipal securities could also be affected by a variety of other factors that impact the underlying healthcare facilities including demand for services, the ability of the health care facility to provide the services required, competition with other facilities, and expenses (such as malpractice insurance premiums).

Risk of Investing in Infrastructure-Related Municipal Securities. Entities that issue municipal securities related to infrastructure (“infrastructure issuers”) may be subject to a variety of factors that could adversely affect their capacity to make principal and interest payments, such as high interest costs in connection with capital construction programs, high degrees of leverage, costs associated with governmental, environmental and other regulations, the effects of economic slowdowns, increased competition from other providers of services, uncertainties concerning costs, the level of government spending on infrastructure projects, and other factors. Such issuers may be adversely affected by commodity price volatility, changes in exchange rates, import controls, depletion of resources, technological developments, and labor relations. Infrastructure issuers can be significantly affected by government spending policies.

Leverage Risk. Infrastructure issuers can be highly indebted, which increases investment risk and other risks normally associated with debt financing, which could adversely affect such an issuer’s operations and the market value of related municipal securities in periods of rising interest rates.

Operations Risk. The failure of an infrastructure issuer to carry adequate insurance or to operate its assets appropriately could lead to significant losses. Infrastructure may be adversely affected by environmental clean-up costs and catastrophic events such as earthquakes, hurricanes and terrorist acts.

Regulatory Risk. Infrastructure projects may be subject to significant regulation by various governmental authorities and also may be affected by regulation of rates charged to customers, service interruption due to environmental, operational or other events, the imposition of special tariffs and changes in tax laws, regulatory policies and accounting standards.

Strategic Asset Risk. Infrastructure issuers may control significant strategic assets (e.g., major pipelines or highways), which are assets that have a national or regional profile, and may have monopolistic characteristics. Given their national or regional profile or irreplaceable nature, strategic assets could generate additional risk not common in other industry sectors and they may be targeted for terrorist acts or adverse political actions.

User Risk. Infrastructure issuers can be dependent upon a narrow user base. If these users do not patronize infrastructure projects as expected, significant revenues could be lost and may not be replaceable, in which case infrastructure issuers may fail to pay their obligations.

Risk of Investing in Municipal Securities Issued By School Districts. School districts rely, in part, on funding appropriations from, among others, the federal government and state governments. As a result, municipal securities issued by school districts may be adversely affected by political and economic changes at the state or federal levels, such as decreased tax or other revenues, spending reductions or changes in appropriations. Investors in these securities, similar to investors in municipal securities generally, face heightened risk of loss upon insolvency of the school district issuers because there is often no ready source of funding to pay the bonds other than the local tax base, which a bankruptcy court or administrator does not control.

Risk of Investing in Transportation Infrastructure-Related Municipal Securities. The transportation infrastructure industry may be adversely affected by economic changes, increases in fuel and other operating costs, labor relations, insurance costs, and, in many jurisdictions, the effects of regulatory changes or other government decisions. Municipal securities that are issued to finance a particular transportation project (e.g., toll roads) often depend on revenues from that project to make principal and interest payments.

Risk of Investing in Utility-Related Municipal Securities. Certain municipal securities are issued by public bodies, including state and municipal utility authorities, to, among other things, finance the operation or expansion of utility entities. Various future economic and other conditions may adversely affect utility entities, including inflation, increases in financing requirements, increases in raw material costs and other operating costs, changes in demand for services and the effects of environmental and other governmental regulations. Certain utilities are subject to specific risks. For example, gas utilities are subject to risks of supply conditions and increased competition from other providers of utility services. In addition, gas utilities are affected by gas prices, which may be magnified to the extent that a gas utility enters into long-term contracts for the purchase or sale of gas at a fixed price, since such prices may change significantly and to the disadvantage of the gas utility.

The types of municipal securities in which the Funds may invest include, but are not limited, to the following:

Industrial Development Bonds

Industrial development bonds generally are also Revenue Bonds and thus are not payable from the issuer's general revenues. The credit and quality of industrial development bonds are usually related to the credit of the corporate user of the facilities. Payment of interest on and repayment of principal of such bonds is the responsibility of the corporate user (and/or any guarantor).

Private Activity Bonds

Certain of the Funds may invest in private activity bonds, which are bonds issued by or on behalf of public authorities to obtain funds to provide privately operated housing facilities, airport, mass transit or port facilities, sewage disposal, solid waste disposal or hazardous waste treatment or disposal facilities and certain local facilities for water supply, gas or electricity. Other types of private activity bonds, the proceeds of which are used for the construction, equipment, repair or improvement of privately operated industrial or commercial facilities, may constitute municipal securities, although the current U.S. federal tax laws place substantial limitations on the size of such issues.

Municipal Lease Obligations

The Funds may invest in municipal lease obligations, including certificates of participation ("COPs") issued by government authorities or entities to finance the acquisition or construction of equipment, land and/or facilities. The COPs represent participations in a lease, an installment purchase contract, or a conditional sales contract relating to equipment, land or facilities. As a result of their structure, COPs are generally not subject to constitutional debt limitations or other statutory requirements that may apply to other municipal securities. Municipal governments may not be obligated to make lease or installment purchase payments in connection with COPs, and, in such circumstances, the COP will be secured only by the leased property. If the issuer of a COP does not fulfill its payment obligation, it may be difficult to sell the property and the proceeds of a sale may not cover the Fund's loss. Municipal lease obligations may be less liquid than conventional municipal bonds, but otherwise have the same general risk characteristics as other municipal securities.

Tender Option Bonds

Tender option bonds are synthetic floating rate or variable rate securities issued when long-term bonds are purchased in the primary or secondary market and then deposited into a trust. Custodial receipts are then issued to investors in these securities evidencing ownership interests in the trust. The remarketing agent for the trust sets a floating or variable rate on typically a weekly basis. The sponsor of a highly leveraged tender option bond trust generally will retain a liquidity provider to purchase the short-term floating rate interests at their original purchase price upon the occurrence of certain specified events. However, the liquidity provider may not be required to purchase the floating rate interests upon the occurrence of certain other events, for example, the downgrading of the municipal bonds owned by the tender option bond trust below investment-grade or certain events that indicate the issuer of the bonds may be entering bankruptcy. The general effect of these provisions is to pass to the holders of the floating rate interests the most severe credit risks associated with the municipal bonds owned by the tender option bond trust and to leave with the liquidity provider the interest rate risk (subject to a cap) and certain other risks associated with the municipal bonds. Tender option bonds may be considered derivatives, and may expose the Funds to the same risks as investments in derivatives, as well as risks associated with leverage, especially the risk of increased volatility. To the extent the Funds invest in tender option bonds, they also are exposed to credit risk associated with the liquidity provider retained by the sponsor of a tender bond option trust.

Variable Rate Demand Obligations

Variable rate demand obligations ("VRDOs") are tax-exempt obligations that contain a floating or variable interest rate adjustment formula and a right of demand on the part of the holder thereof to receive payment of the unpaid principal balance plus accrued interest upon a short notice period not to exceed seven days. There is the possibility that because of default or insolvency the demand feature of VRDOs may not be honored. The interest rates are adjustable at intervals (ranging from daily to up to one year) to some prevailing market rate for similar investments, such adjustment formula being calculated to maintain the market rate of the VRDOs at approximately the par value of the VRDOs on the adjustment date. The adjustments typically are based upon the Securities Industry and Financial Markets Association Index or some other appropriate interest rate adjustment index.

Because of the interest rate adjustment formula, VRDOs are not comparable to fixed-rate securities. During periods of declining interest rates, a Fund's yield on a VRDO will decrease and its shareholders will forego the opportunity for capital appreciation. During periods of rising interest rates, however, a Fund's yield on a VRDO will increase and its shareholders will have a reduced risk of capital depreciation.

Municipal Notes

Municipal notes (also known as municipal commercial paper) are shorter-term municipal debt obligations. They may provide interim financing in anticipation of tax collection, receipt of grants, bond sales or revenue receipts. If there is a shortfall in the anticipated proceeds, repayment on a municipal note may be delayed or the note may not be fully repaid, and the Funds may lose money.

Municipal commercial paper is generally unsecured and issued to meet short-term financing needs. The lack of security presents some risk of loss to the Funds since, in the event of an issuer's bankruptcy, unsecured creditors are repaid only out of the assets, if any, that remain after secured creditors are repaid.

Non-U.S. Securities. Certain obligations or securities of non-U.S. issuers may be deemed to be located in a particular country if: (i) the principal trading market for the security is in such country, (ii) the issuer is organized under the laws of such country, (iii) the issuer derives at least 50% of its revenues or profits from such country or has at least 50% of its assets situated in such country or, (iv) the issuer is the government of the particular country.

Privately Issued Securities. The iShares Core 5-10 Year USD Bond ETF and iShares Core 10+ Year USD Bond ETF may not invest in private placements, but may invest in certain bonds registered with the SEC or exempt from registration at the time of issuance, or offered pursuant to Rule 144A under the 1933 Act with or without registration rights ("Rule 144A Bonds").The iShares 1-5 Year Investment Grade Corporate Bond ETF, iShares 5-10 Year Investment Grade Corporate Bond ETF, iShares 10+ Year Investment Grade Corporate Bond ETF, iShares BBB Rated Corporate Bond ETF, iShares Broad USD Investment Grade Corporate Bond ETF, iShares Core 5-10 Year USD Bond ETF, iShares Core 10+ Year USD Bond ETF, iShares Core U.S. Aggregate Bond ETF, iShares ESG Advanced Investment Grade Corporate Bond ETF, iShares Government/Credit Bond ETF, iShares iBoxx $ High Yield Corporate Bond ETF, iShares iBoxx $ Investment Grade Corporate Bond ETF, iShares Intermediate Government/Credit Bond ETF and iShares USD Systematic Bond ETF may invest in privately issued securities, including those that may be resold only in accordance with Rule 144A or Regulation S under the 1933 Act ("Restricted Securities"). Rule 144A Bonds and Restricted Securities are not publicly-traded and are subject to a variety of restrictions, which limit a purchaser's ability to acquire or resell such securities. Accordingly, the liquidity of the market for specific Rule 144A Bonds and Restricted Securities may vary. Delay or difficulty in selling such securities may result in a loss to a Fund.

Ratings. An investment-grade rating generally means the security or issuer is rated investment-grade by one or more of Moody's, S&P Global Ratings, Fitch, or another credit rating agency designated as a nationally recognized statistical rating organization ("NRSRO") by the SEC, or is unrated but considered to be of equivalent quality by BFA. Generally, bonds rated Baa3 or above by Moody's or BBB- or above by S&P Global Ratings and Fitch are considered "investment-grade" securities, bonds rated Baa are considered medium grade obligations subject to moderate credit risk and may possess certain speculative characteristics, while bonds rated BBB are regarded as having adequate capacity to meet financial commitments.

Subsequent to purchase by a Fund, a rated security may cease to be rated or its rating may be reduced below an investment-grade rating. Bonds rated below Baa3 by Moody's or below BBB- by S&P Global Ratings or Fitch are considered below investment-grade quality and are obligations of issuers that are generally considered predominantly speculative with respect to the issuer's capacity to pay interest and repay principal according to the terms of the obligation and, therefore, carry greater investment risk, including the possibility of issuer default and bankruptcy and increased market price volatility. Such lower-rated securities are commonly referred to as "junk bonds" and are subject to a substantial degree of credit risk. Please see Appendix B of this SAI for a description of each rating category of Moody's, S&P Global Ratings and Fitch and BFA's treatment of investments that are not rated by any of the rating agencies.

Regulation Regarding Derivatives. The CFTC subjects advisers to registered investment companies to regulation by the CFTC if a fund that is advised by the adviser either (i) invests, directly or indirectly, more than a prescribed level of its liquidation value in CFTC-regulated futures, options and swaps ("CFTC Derivatives") or (ii) markets itself as providing investment exposure to such instruments. The CFTC also subjects advisers to registered investment companies to regulation by the CFTC if the registered investment company invests in one or more commodity pools. To the extent a Fund uses CFTC Derivatives, it intends to do so below such prescribed levels and intends not to market itself as a "commodity pool" or a vehicle for trading such instruments.

BFA has claimed an exclusion from the definition of the term "commodity pool operator" under the CEA pursuant to Rule 4.5 under the CEA with respect to each of the Funds. BFA is not, therefore, subject to registration or regulation as a "commodity pool operator" under the CEA with respect to the Funds.

Derivative contracts, including, without limitation, swaps, currency forwards, and non-deliverable forwards, are subject to regulation under the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act") in the U.S. and under comparable regimes in Europe, Asia and other non-U.S. jurisdictions. Swaps, non-deliverable forwards and certain other derivatives traded in the OTC market are subject to variation margin and initial margin requirements. Implementation of the margining and other provisions of the Dodd-Frank Act regarding clearing, mandatory trading, reporting and documentation of swaps and other derivatives have impacted and may continue to impact the costs to a Fund of trading these instruments and, as a result, may affect returns to investors in a Fund.

Rule 18f-4 under the Investment Company Act permits a Fund to enter into Derivatives Transactions (as defined below) and certain other transactions notwithstanding the restrictions on the issuance of "senior securities" under Section 18 of the Investment Company Act. Section 18 of the Investment Company Act, among other things, prohibits open-end funds, including the Funds, from issuing or selling any "senior security," other than borrowing from a bank (subject to a requirement to maintain 300% "asset coverage").

Under Rule 18f-4, "Derivatives Transactions" include the following: (1) any swap, security-based swap (including a contract for differences), futures contract, forward contract, option (excluding purchased options), any combination of the foregoing, or any similar instrument, under which a Fund is or may be required to make any payment or delivery of cash or other assets during the life of the instrument or at maturity or early termination, whether as margin or settlement payment or otherwise; (2) any short sale borrowing; (3) reverse repurchase agreements and similar financing transactions (e.g., recourse and non-recourse tender option bonds, and borrowed bonds), if a Fund elects to treat these transactions as Derivatives Transactions under Rule 18f-4; and (4) when-issued or forward-settling securities (e.g., firm and standby commitments, including to-be-announced ("TBA") commitments, and dollar rolls) and non-standard settlement cycle securities, unless the Fund intends to physically settle the transaction and the transaction will settle within 35 days of its trade date (the "Delayed-Settlement Securities Provision").

Unless a Fund is relying on the Limited Derivatives User Exception (as defined below), the Fund must comply with Rule 18f-4 with respect to its Derivatives Transactions. Rule 18f-4, among other things, requires a Fund to adopt and implement a comprehensive written derivatives risk management program ("DRMP") and comply with a relative or absolute limit on Fund leverage risk calculated based on value-at-risk ("VaR"). The DRMP is administered by a "derivatives risk manager," who is appointed by the Board, including a majority of Independent Directors/Trustees, and periodically reviews the DRMP and reports to the Board.

Rule 18f-4 provides an exception from the DRMP, VaR limit and certain other requirements if a Fund's "derivatives exposure" (as defined in Rule 18f-4) is limited to 10% of its net assets (as calculated in accordance with Rule 18f-4) and the Fund adopts and implements written policies and procedures reasonably designed to manage its derivatives risks (the "Limited Derivatives User Exception").

The iShares 1-5 Year Investment Grade Corporate Bond ETF, iShares 5-10 Year Investment Grade Corporate Bond ETF, iShares 10+ Year Investment Grade Corporate Bond ETF, iShares Core 5-10 Year USD Bond ETF, iShares Core 10+ Year USD Bond ETF, iShares Core U.S. Aggregate Bond ETF, iShares ESG Advanced Total USD Bond Market ETF, iShares ESG Aware U.S. Aggregate

Bond ETF, iShares ESG Aware USD Corporate Bond ETF, iShares iBoxx $ High Yield Corporate Bond ETF, iShares MBS ETF and iShares USD Systematic Bond ETF (the "No-Action Letter Funds") may also have investments in "underlying funds" (and such underlying funds themselves may invest in underlying funds) not advised by BFA (the term "underlying fund" for purposes of the no-action letter referenced below may include, but is not limited to, certain securitized vehicles, mortgage or international real estate investment trusts ("REITs"), business development companies and, investment companies that may invest in CFTC Derivatives or in any of the foregoing), and therefore may be viewed by the CFTC as commodity pools. BFA may not have transparency into the holdings of these underlying funds because they are not advised by BFA. To address this issue of lack of transparency, the CFTC staff issued a no-action letter on November 29, 2012 permitting the adviser of a fund that invests in such underlying funds and that would otherwise have filed a claim of exclusion pursuant to CFTC Rule 4.5 to delay registration as a "commodity pool operator" until six months from the date on which the CFTC issues additional guidance on the treatment of CFTC Derivatives held by underlying funds. BFA, the adviser of the No-Action Letter Funds, has filed a claim with the CFTC for the Funds to rely on this no-action relief. Accordingly, BFA is not currently subject to registration or regulation as a "commodity pool operator" under the CEA in respect of the Funds.

Repurchase Agreements. A repurchase agreement is an instrument under which the purchaser (*i.e.*, a Fund) acquires a security and the seller agrees, at the time of the sale, to repurchase the security at a mutually agreed-upon time and price, thereby determining the yield during the purchaser's holding period. Repurchase agreements may be construed to be collateralized loans by the purchaser to the seller secured by the securities transferred to the purchaser. If a repurchase agreement is construed to be a collateralized loan, the underlying securities will not be considered to be owned by a Fund but only to constitute collateral for the seller's obligation to pay the repurchase price, and, in the event of a default by the seller, the Fund may suffer time delays and incur costs or losses in connection with the disposition of the collateral.

In any repurchase transaction, the collateral for a repurchase agreement may include: (i) cash items; (ii) obligations issued by the U.S. government or its agencies or instrumentalities; or (iii) obligations that, at the time the repurchase agreement is entered into, are determined to (A) have exceptionally strong capacity to meet their financial obligations and (B) are sufficiently liquid such that they can be sold at approximately their carrying value in the ordinary course of business within seven days.

Repurchase agreements pose certain risks for a Fund that utilizes them. Such risks are not unique to the Funds, but are inherent in repurchase agreements. The Funds seek to minimize such risks, but because of the inherent legal uncertainties involved in repurchase agreements, such risks cannot be eliminated. Lower quality collateral and collateral with a longer maturity may be subject to greater price fluctuations than higher quality collateral and collateral with a shorter maturity. If the repurchase agreement counterparty were to default, lower quality collateral may be more difficult to liquidate than higher quality collateral. Should the counterparty default and the amount of collateral not be sufficient to cover the counterparty's repurchase obligation, a Fund would likely retain the status of an unsecured creditor of the counterparty (*i.e.*, the position a Fund would normally be in if it were to hold, pursuant to its investment policies, other unsecured debt securities of the defaulting counterparty) with respect to the amount of the shortfall. As an unsecured creditor, a Fund would be at risk of losing some or all of the principal and income involved in the transaction.

Reverse Repurchase Agreements. Reverse repurchase agreements involve the sale of securities with an agreement to repurchase the securities at an agreed-upon price, date and interest payment and have the characteristics of borrowing. Generally, the effect of such transactions is that a Fund can recover all or most of the cash invested in the portfolio securities involved during the term of the reverse repurchase agreement, while in many cases the Fund is able to keep some of the interest income associated with those securities. Such transactions are advantageous only if a Fund has an opportunity to earn a rate of interest on the cash derived from these transactions that is greater than the interest cost of obtaining the same amount of cash. Opportunities to realize earnings from the use of the proceeds equal to or greater than the interest required to be paid may not always be available, and a Fund intends to use the reverse repurchase technique only when BFA believes it will be advantageous to the Fund. The use of reverse repurchase agreements may exaggerate any increase or decrease in the value of a Fund's assets. The use of reverse repurchase agreements is a form of leverage, and the proceeds obtained by a Fund through reverse repurchase agreements may be invested in additional securities.

Rule 18f-4 under the Investment Company Act permits a Fund to enter into reverse repurchase agreements and similar financing transactions (*e.g.,* recourse and non-recourse tender option bonds, borrowed bonds) notwithstanding the limitation on the issuance of senior securities in Section 18 of the Investment Company Act, provided that a Fund either (i) complies with the 300% asset coverage ratio with respect to such transactions and any other borrowings in the aggregate, or (ii) treats such transactions as Derivatives Transactions under Rule 18f-4. (See "*Regulation Regarding Derivatives*" above.)

Securities of Investment Companies. Each Fund may invest in the securities of other investment companies (including money market funds) to the extent permitted by law, regulation, exemptive order or SEC staff guidance. Under the 1940 Act, a fund's investment in investment companies is limited to, subject to certain exceptions, (i) 3% of the total outstanding voting stock of any one investment company, (ii) 5% of the fund's total assets with respect to any one investment company, and (iii) 10% of the fund's total assets with respect to investment companies in the aggregate. To the extent allowed by law or regulation, the Funds intend from time to time to invest their assets in securities of investment companies, including, but not limited to, money market funds, including those advised by BFA or otherwise affiliated with BFA, in excess of the limits discussed above. Other investment companies in which a Fund invests can be expected to incur fees and expenses for operations, such as investment advisory and administration fees, which would be in addition to those incurred by a Fund. Pursuant to guidance issued by the SEC staff, fees and expenses of money market funds used for cash collateral received in connection with loans of securities are not treated as acquired fund fees and expenses, which reflect a Fund's *pro rata* share of the fees and expenses incurred by investing in other investment companies (as disclosed in the Prospectus, as applicable). The iShares National Muni Bond ETF may invest in shares of other iShares funds that provide substantially similar exposure to the securities in its Underlying Index. BFA will not charge advisory fees on that portion of the iShares National Muni Bond ETF's assets invested in shares of other iShares funds. The iShares Core U.S. Aggregate Bond ETF may invest in shares of other registered investment companies advised by BFA, or its affiliates that provide substantially similar exposure to the securities in its Underlying Index. BFA will not charge advisory fees on that portion of the iShares Core U.S. Aggregate Bond ETF's assets invested in shares of other registered investment companies advised by BFA, or its affiliates.

Short-Term Instruments and Temporary Investments. Each Fund may invest in short-term instruments, including variable rate demand notes, short-term municipal securities, short-term municipal money market funds and money market instruments, on an ongoing basis to provide liquidity or for other reasons. Money market instruments are generally short-term investments that may include, but are not limited to: (i) shares of money market funds (including those advised by BFA or otherwise affiliated with BFA); (ii) obligations issued or guaranteed by the U.S. government, its agencies or instrumentalities (including government-sponsored enterprises); (iii) negotiable certificates of deposit, bankers' acceptances, fixed-time deposits and other obligations of U.S. and non-U.S. banks (including non-U.S. branches) and similar institutions; (iv) commercial paper rated, at the date of purchase, "Prime-1" by Moody's, "F-1" by Fitch or "A-1" by S&P Global Ratings, or if unrated, of comparable quality as determined by BFA; (v) non-convertible corporate debt securities (*e.g.*, bonds and debentures) with remaining maturities at the date of purchase of not more than 397 days and that have been determined to present minimal credit risks, in accordance with the requirements set forth in Rule 2a-7 under the 1940 Act; (vi) repurchase agreements; and (vii) short-term U.S. dollar-denominated obligations of non-U.S. banks (including U.S. branches) that, in the opinion of BFA, are of comparable quality to obligations of U.S. banks that may be purchased by a Fund. Any of these instruments may be purchased on a current or forward-settled basis. Time deposits are non-negotiable deposits maintained in banking institutions for specified periods of time at stated interest rates. Bankers' acceptances are time drafts drawn on commercial banks by borrowers, usually in connection with international transactions.

Sovereign and Quasi-Sovereign Obligations. Certain of the Funds may invest in sovereign and quasi-sovereign obligations. An investment in sovereign debt obligations involves special risks not present in corporate debt obligations. Sovereign debt includes securities issued or guaranteed by a foreign sovereign government. Quasi-sovereign debt includes securities issued or guaranteed by an entity affiliated with or backed by a sovereign government. Quasi-sovereign debt obligations are typically less liquid and less standardized than sovereign debt obligations. The issuer of the sovereign debt that controls the repayment of the debt may be unable or unwilling to repay principal or interest when due, and a Fund may have limited recourse in the event of a default. Similar to other issuers, changes to the financial condition or credit rating of a non-U.S. government may cause the value of a sovereign debt to decline. During periods of economic uncertainty, the market prices of sovereign debt obligations may be more volatile than prices of U.S. debt obligations, which may affect a Fund's NAV. In the past, certain emerging market countries have encountered difficulties in servicing their debt obligations, withheld payments of principal and interest and declared moratoria on the payment of principal and interest on their sovereign debts. Several sovereign issuers have experienced volatility and adverse trends due to concerns about rising government debt levels, including Greece, Ireland, Italy, Portugal and Spain. In the past, sovereign issuers have also defaulted on their debt obligations, including Russia, Argentina, Indonesia and Uruguay.

A sovereign debtor's willingness or ability to repay principal and pay interest in a timely manner may be affected by, among other factors, its cash flow situation, the extent of its non-U.S. currency reserves, the availability of sufficient foreign exchange, the relative size of the debt service burden, the sovereign debtor's policy toward principal international lenders and local political constraints. Sovereign debtors may also be dependent on expected disbursements from foreign governments, multilateral agencies and other entities to reduce principal and interest arrears on their debt. The failure of a sovereign debtor to implement economic reforms, achieve specified levels of economic performance or repay principal or interest when due may result in the cancellation of third-party commitments to lend funds to the sovereign debtor, which may further impair such debtor's ability or willingness to service its debts. Quasi-sovereign debt obligations are typically less liquid and less standardized than government debt.

Swap Agreements. Swap agreements are contracts between parties in which one party agrees to make periodic payments to the other party based on a pre-determined underlying investment or notional amount. In return, the other party agrees to make periodic payments to the first party based on the return (or a differential in rate of return) earned or realized on the underlying investment or notional amount. Swap agreements will usually be performed on a net basis, with a Fund receiving or paying only the net amount of the two payments. The net amount of the excess, if any, of a Fund's obligations over its entitlements with respect to each swap is accrued on a daily basis.

Certain of the Funds may enter into swap agreements, including currency swaps, interest rate swaps and index swaps. The use of swaps is a highly specialized activity that involves investment techniques and risks different from those associated with ordinary portfolio security transactions. These transactions generally do not involve the delivery of securities or other underlying assets.

U.S. Agency Mortgage-Backed Securities Risk. Certain of the Funds invest in securities backed by pools of mortgages issued or guaranteed by the U.S. government or one of its agencies or sponsored entities, including Government National Mortgage Association ("Ginnie Mae"), Federal National Mortgage Association ("Fannie Mae"), and the Federal Home Loan Mortgage Corporation ("Freddie Mac"). The market for mortgage-backed securities ("MBS") has been adversely affected by the value of those MBS held and/or issued by these agencies and sponsored entities. If a U.S. government agency or sponsored entity issues securities in which certain of the Funds invest and such issuer is unable to meet its obligations or ceases to exist, and no plan is made for the repayment of securities, the performance of certain of the Funds will be adversely impacted.

Ginnie Mae. Established in 1968, Ginnie Mae is a wholly owned U.S. government corporation within the U.S. Department of Housing and Urban Development. Ginnie Mae is authorized to guarantee, with the backing of the full faith and credit of the U.S. government, the timely payment of principal and interest on securities issued by the institutions approved by Ginnie Mae (such as savings and loan institutions, commercial banks and mortgage banks), and backed by pools of mortgages insured by the Federal Housing Administration or guaranteed by the U.S. Department of Veterans Affairs. Ginnie Mae securities also are supported by the authority of Ginnie Mae to borrow funds from the U.S. Treasury Department to make payments under its guarantee. Any actual or potential disruption to Ginnie Mae, or the financial condition or credit of the U.S. government, could cause the value of Ginnie Mae securities to decline. In 2011, S&P Global Ratings downgraded U.S. Treasury securities from AAA rating to AA+ rating. A further downgrade of the ratings of U.S. government debt obligations, which are often used as a benchmark for other borrowing arrangements, could result in higher interest rates for individual and corporate borrowers, cause disruptions in the international bond markets and have a substantial negative effect on the U.S. economy. A downgrade of U.S. Treasury securities from another ratings agency or a further downgrade below AA+ rating by S&P Global Ratings may cause the value of Ginnie Mae securities to decline.

Fannie Mae and Freddie Mac. Fannie Mae was established as a federal agency in 1938 and in 1968 was chartered by Congress as a private shareholder-owned company. Securities issued by Fannie Mae are guaranteed as to timely payment of principal and interest by Fannie Mae. The securities are not backed by or entitled to the full faith and credit of the U.S. government, but are supported by the right of Fannie Mae to borrow from the U.S. Treasury Department.

Freddie Mac is a stockholder-owned corporation chartered by Congress in 1970. Securities issued by Freddie Mac entitle the holder to timely payment of interests, which is guaranteed by Freddie Mac. Freddie Mac also guarantees either ultimate collection or timely payment of all principal payments. While Freddie Mac generally does not guarantee timely payment of principal, Freddie Mac may remit the amount due on account of its guarantee of ultimate payment of principal at any time after default on an underlying mortgage, but in no event later than one year after it becomes payable. The securities are not backed by or entitled to the full faith and credit of the U.S. government or by any Federal Home Loan Banks, but are supported by the right of Freddie Mac to borrow from the U.S. Treasury Department.

In 2008, the Federal Housing Finance Agency placed each of Fannie Mae and Freddie Mac into government conservatorship in an effort to provide stability in the financial markets and put the government-sponsored entities in sound and solvent condition. In addition, the U.S. Treasury Department agreed to provide Fannie Mae and Freddie Mac up to $100 billion of capital each on an as needed basis to ensure that they continue to provide liquidity to the housing and mortgage markets.

Mortgage-Backed Securities. MBS issued or guaranteed by the U.S. government or one of its agencies or sponsored entities, such as Ginnie Mae, Fannie Mae, or Freddie Mac, represent interests in pools of mortgages in which payments of both principal and interest on the securities are generally made monthly, in effect "passing through" the payments made by borrowers on the mortgage loans that underlie the securities (net of any fees paid to the issuer or guarantor of the securities). MBS differ from other forms of debt securities, which normally provide for periodic payment of interest in fixed amounts with principal payments at maturity or specified call dates, while a MBS payments provide a combination of interest and principal throughout the a bond's term. As further described below, MBS may be structured as pass-through securities or collateralized mortgage obligations ("CMOs").

MBS are subject to the general risks associated with investing in real estate securities; that is, they may lose value if the value of the underlying real estate to which a pool of mortgages relates declines. In addition, investments in MBS involve certain specific risks. These risks include the failure of a party to meet its commitments under the related operative documents, adverse interest rate changes and the effects of prepayments on mortgage cash flows. The value of MBS, like that of traditional fixed-income securities, typically increases when interest rates fall and decreases when interest rates rise. However, MBS differ from traditional fixed-income securities because of their potential for prepayment without penalty. The price paid by a Fund for its MBS, the yield a Fund expects to receive from such securities and the weighted average life of the securities are based on a number of factors, including the anticipated rate of prepayment of the underlying mortgages. In a period of declining interest rates, borrowers may prepay the underlying mortgages more quickly than anticipated, thereby reducing the yield to maturity and the average life of the MBS. Moreover, when a Fund reinvests the proceeds of a prepayment in these circumstances, it will likely receive a rate of interest that is lower than the rate on the security that was prepaid.

To the extent that a Fund purchases MBS at a premium, mortgage foreclosures and principal prepayments may result in a loss to the extent of the premium paid. If a Fund buys such securities at a discount, both scheduled payments of principal and unscheduled prepayments will increase current and total returns and will accelerate the recognition of income, which, when distributed to shareholders, will be taxable as ordinary income. In a period of rising interest rates, prepayments of the underlying mortgages may occur at a slower than expected rate, creating maturity extension risk. This particular risk may effectively change a security that was considered short- or intermediate-term at the time of purchase into a long-term security. Since the value of long-term securities generally fluctuates more widely in response to changes in interest rates than that of shorter-term securities, maturity extension risk could increase the inherent volatility of a Fund. Under certain interest rate and prepayment scenarios, a Fund may fail to recoup fully its investment in MBS notwithstanding any direct or indirect U.S. governmental or agency guarantee.

Mortgage Pass-Through Securities. Some MBS, such as U.S. agency mortgage pass-through securities, represent a right to receive principal and interest payments collected on a pool of mortgages, which are passed through to security holders. In the basic mortgage pass-through structure, mortgages with similar issuer, term and coupon characteristics are collected and aggregated into a "pool" consisting of multiple mortgage loans. The pool is assigned a CUSIP number and undivided interests in the pool are traded and sold as pass-through securities. The holder of the security is entitled to a pro rata share of principal and interest payments (including unscheduled prepayments) from the pool of mortgage loans.

An investment in a specific pool of mortgage pass-through securities requires an analysis of the specific prepayment risk of mortgages within the covered pool (since mortgagors typically have the option to prepay their loans). The level of prepayments on a pool of MBS is difficult to predict and can impact the subsequent cash flows, value and yield of the mortgage pool. In addition, when trading specific mortgage pools, precise execution, delivery and settlement arrangements must be negotiated for each transaction.

To-Be-Announced Securities. A Fund may seek to gain exposure to U.S. agency mortgage pass-through securities by investing in TBA securities. "TBAs" refer to a commonly used mechanism for the forward settlement of U.S. agency MBS, and not to a separate type of MBS. Most transactions in fixed-rate MBS occur through the use of TBA transactions. TBA transactions generally are conducted in accordance with widely-accepted guidelines which establish commonly observed terms and conditions for execution, settlement, and delivery. In a TBA transaction, the buyer and seller decide on general trade parameters, such as the issuing agency, settlement date, par amount, and price. The actual mortgage pools delivered generally are determined two days prior to settlement date. Certain of the Funds may regularly enter into TBA agreements and "roll over" such agreements prior to the settlement date stipulated in such agreements. This type of TBA transaction is sometimes known as a "TBA roll." In a TBA roll, such Funds generally will sell the obligation to purchase the pools stipulated in the TBA agreement prior to the stipulated settlement date and will enter into a new TBA agreement for future delivery of pools of MBS. In addition, certain of the Funds may enter into TBA agreements and settle such transactions on the stipulated settlement date by accepting actual receipt or delivery of the pools of MBS stipulated in the TBA agreement.

Certain of the Funds may invest cash pending settlement of TBA transactions in money market instruments, repurchase agreements, or other high quality, liquid short-term instruments, including money market funds advised by BFA. Each such Fund will pay its *pro rata* share of fees and expenses of any money market fund that it may invest in, in addition to such Fund's own fees and expenses.

Collateralized Mortgage Obligations. U.S. agency MBS may also be structured in the form of CMOs. CMOs are created by dividing the principal and interest payments collected on a pool of mortgages into several revenue streams ("tranches") with different priority rights to portions of the underlying mortgage payments. Certain CMO tranches may represent a right to receive interest only, principal only, or an amount that remains after floating-rate tranches are paid (an "inverse floater"). These securities are frequently referred to as "mortgage derivatives" and may be extremely sensitive to changes in interest rates. Interest rates on inverse floaters, for example, vary inversely with a short-term floating rate (which may be reset periodically). Interest rates on inverse floaters will decrease when short-term rates increase and will increase when short-term rates decrease. These securities have the effect of providing a degree of investment leverage. In response to changes in market interest rates or other market conditions, the value of an inverse floater may increase or decrease at a multiple of the increase or decrease in the value of the underlying securities. If a Fund invests in CMO tranches issued by U.S. government agencies or sponsored entities and interest rates move in a manner not anticipated by BFA, it is possible that such a Fund could lose all or substantially all of its investment. Certain CMOs in which certain of the Funds may invest may also provide a degree of investment leverage, which could cause such a Fund to lose all or substantially all of its investment.

U.S. Government Obligations. Certain of the Funds may invest in various types of U.S. government obligations. U.S. government obligations are a type of bond and include securities issued or guaranteed as to principal and interest by the U.S. government, its agencies or instrumentalities. Payment of principal and interest on U.S. government obligations (i) may be backed by the full faith and credit of the U.S. or (ii) may be backed solely by the issuing or guaranteeing agency or instrumentality itself (as with Fannie Mae, Freddie Mac and Federal Home Loan Bank notes). In the latter case, each Fund must look principally to the agency or instrumentality issuing or guaranteeing the obligation for ultimate repayment, which agency or instrumentality may be privately owned. There can be no assurance that the U.S. government would provide financial support to its agencies or instrumentalities where it is not obligated to do so. As a general matter, the value of debt instruments, including U.S. government obligations, declines when market interest rates increase and rises when market interest rates decrease. Certain types of U.S. government obligations are subject to fluctuations in yield or value due to their structure or contract terms.

Some government agencies, including Fannie Mae and Freddie Mac, purchase and guarantee residential mortgages and form MBS that they issue to the market. These agencies also hold their own MBS as well as those of other institutions with funding from the agency debentures they issue. Recent events in the markets for MBS have adversely affected the value of those MBS held and/or issued by these agencies.

U.S.-Registered and Restricted Securities of Non-U.S. Issuers. The Funds (other than the iShares Agency Bond ETF, iShares MBS ETF, Municipal Bond Funds and Treasury Bond Funds) may invest in U.S.-registered, U.S. dollar-denominated bonds of non-U.S. governments, agencies, supranational entities and corporate issuers. The iShares 1-5 Year Investment Grade Corporate Bond ETF, iShares 5-10 Year Investment Grade Corporate Bond ETF, iShares 10+ Year Investment Grade Corporate Bond ETF, iShares BBB Rated Corporate Bond ETF, iShares Broad USD Investment Grade Corporate Bond ETF, iShares Core 5-10 Year USD Bond ETF, iShares Core 10+ Year USD Bond ETF, iShares Core U.S. Aggregate Bond ETF, iShares ESG Advanced Investment Grade Corporate Bond ETF, iShares ESG Advanced Total USD Bond Market ETF, iShares ESG Aware 1-5 Year Corporate Bond ETF, iShares ESG Aware U.S. Aggregate Bond ETF, iShares ESG Aware USD Corporate Bond ETF, iShares Government/Credit Bond ETF, iShares High Yield Systematic Bond ETF, iShares iBoxx $ High Yield Corporate Bond ETF, iShares iBoxx $ Investment Grade Corporate Bond ETF, iShares Intermediate Government/Credit Bond ETF, iShares Investment Grade Systematic Bond ETF and iShares USD Systematic Bond ETF may invest in Restricted Securities issued by non-U.S. issuers. Investing in U.S.-registered, U.S. dollar-denominated bonds or Restricted Securities issued by non-U.S. issuers involves some risks and considerations not typically associated with investing in U.S. issuers. These include differences in accounting, auditing and financial reporting standards; the possibility of expropriation or confiscatory taxation; adverse changes in investment or exchange control regulations; political instability, which could affect U.S. investments in foreign countries; and potential restrictions of the flow of international capital. Non-U.S. issuers may be subject to less governmental regulation than U.S. issuers. In addition, the risk that the issuer may fail to meet its obligations on these securities may be affected by fluctuations in non-U.S. currency exchange rates between the issuer's local currency and the U.S. dollar. Moreover, individual non-U.S. economies may differ favorably or unfavorably from the U.S. economy in such respects as growth of gross domestic product ("GDP"), rate of inflation, capital reinvestment, resource self-sufficiency and balance of payment positions.

Future Developments. The Board may, in the future, authorize each Fund to invest in securities contracts and investments other than those listed in this SAI and in the applicable Prospectus, provided they are consistent with each Fund's investment objective and do not violate any investment restrictions or policies.

General Considerations and Risks

A discussion of some of the principal risks associated with an investment in a Fund is contained in each Fund's Prospectus. An investment in a Fund should be made with an understanding that the value of the Fund's portfolio securities may fluctuate in accordance with changes in the financial condition of the issuers of the portfolio securities, the value of bonds in general, and other factors that affect the market. The order of the below risk factors does not indicate the significance of any particular risk factor.

Borrowing Risk. Borrowing may exaggerate changes in the NAV of Fund shares and in the return on a Fund's portfolio. Borrowing will cause a Fund to incur interest expense and other fees. The costs of borrowing may reduce a Fund's return. Borrowing may cause a Fund to liquidate positions when it may not be advantageous to do so to satisfy its obligations.

Call Risk. During periods of falling interest rates, an issuer of a callable bond held by certain Funds may "call" or repay the security before its stated maturity, and a Fund may have to reinvest the proceeds in securities with lower yields, which would result in a decline in the Fund's income, or in securities with greater risks or with other less favorable features.

Custody Risk. Custody risk refers to the risks inherent in the process of clearing and settling trades and to the holding of securities, cash and other assets by local banks, agents and depositories. Low trading volumes and volatile prices in less developed markets make trades harder to complete and settle, and governments or trade groups may compel local agents to hold securities in designated depositories that may not be subject to independent evaluation. Local agents are held only to the standards of care of their local markets, and thus may be subject to limited or no government oversight. Communications between the U.S. and emerging market countries may be unreliable, increasing the risk of delayed settlements or losses of security certificates. In general, the less developed a country's securities market is, the greater the likelihood of custody problems. Practices in relation to the settlement of securities transactions in emerging markets involve higher risks than those in developed markets, in part because of the use of brokers and counterparties that are often less well capitalized, and custody and registration of assets in some countries may be unreliable. The possibility of fraud, negligence or undue influence being exerted by the issuer or refusal to recognize ownership exists in some emerging markets, and, along with other factors, could result in ownership registration being lost. In addition, the laws of certain countries may put limits on a Fund's ability to recover its assets if a foreign bank or depository or issuer of a security or an agent of any of the foregoing goes bankrupt. A Fund would absorb any loss resulting from such custody problems and may have no successful claim for compensation.

Extension Risk. During periods of rising interest rates, certain debt obligations may be paid off substantially more slowly than originally anticipated and the value of those securities may fall sharply, resulting in a decline in a Fund's income and potentially in the value of a Fund's investments.

Illiquid Investments Risk. Each Fund may not acquire any illiquid investment if, immediately after the acquisition, the Fund would have invested more than 15% of its net assets in illiquid investments. An illiquid investment is any investment that a Fund reasonably expects cannot be sold or disposed of in current market conditions in seven calendar days or less without significantly changing the market value of the investment. The liquidity of an investment will be determined based on relevant market, trading and investment specific considerations as set out in the Liquidity Program as required by the Liquidity Rule. Illiquid investments may trade at a discount to comparable, more liquid investments and a Fund may not be able to dispose of illiquid investments in a timely fashion or at their expected prices. If illiquid investments exceed 15% of a Fund's net assets, the Liquidity Rule and the Liquidity Program will require that certain remedial actions be taken.

Issuer Insolvency Risk. Each Fund's potential exposure to financially or operationally troubled issuers involves a high degree of credit and market risk, which may be heightened during an economic downturn or recession. Should an issuer of securities held by a Fund become involved in a bankruptcy proceeding, reorganization or financial restructuring, a wide variety of considerations make an evaluation of the outcome of a Fund's exposure to the issuer uncertain.

During the period of a bankruptcy proceeding, reorganization or financial restructuring, it is unlikely that each Fund will receive any interest payments on the securities of the issuer. Each Fund will be subject to significant uncertainty as to whether the reorganization or restructuring will be completed, and each Fund may bear certain extraordinary expenses to protect and recover its investment. Each Fund will also be subject to significant uncertainty as to when and in what manner and for what value the obligations evidenced by the securities of the issuer held by a Fund will eventually be satisfied. Even if a plan of reorganization or restructuring is adopted with respect to the securities of the issuer held by each Fund, there can be no assurance that the securities or other assets received by a Fund in connection with such plan of reorganization or restructuring will not have a lower value or income potential than may have been anticipated or no value. A Fund may be unable to enforce its claims or rights in any collateral or may have its claims or security interest in any collateral challenged, disallowed or subordinated to the claims or security interests of other creditors. In addition, amendments to the U.S. Bankruptcy Code or other relevant laws could alter the expected outcome or introduce greater uncertainty regarding the outcome of each Fund's securities holdings in the issuer. In a bankruptcy proceeding, a reorganization or restructuring, the securities of the issuer held by a Fund could be re-characterized, or each Fund may receive different securities or other assets, including equity securities. These types of equity securities include, but are not limited to: common stock; preferred stock (including convertible preferred stock); bonds, notes and debentures convertible into common or preferred stock; stock purchase warrants and rights; equity interests in trusts; and depositary receipts. Equity securities are subject to changes in value, and their value may be more volatile than those of other asset classes. Holders of equity securities are subject to more risk than holders of debt securities because the status of equity holders is subordinate to debtholders in an issuer's capital structure. The value of equity securities received by each Fund could decline if the financial condition of the issuer deteriorates or if overall market and economic conditions, or conditions within the issuer's region or industry, deteriorate. Equity securities received by a Fund through a bankruptcy proceeding, reorganization or restructuring of an issuer would not be component securities of a Fund's Underlying Index, which could subject a Fund to additional tracking error risk.

To the extent that a Fund receives other assets in connection with a bankruptcy proceeding, reorganization or financial restructuring, a Fund may also be subject to additional risks associated with the assets received. One example of assets that a Fund could receive is an interest in one or more loans made to the issuer as part of a workout agreed to by a consortium of lienholders and creditors of the issuer. A Fund may receive such interests in loans to the extent permitted by the 1940 Act.

Securities or other assets received in a reorganization or restructuring typically entail a higher degree of risk than investments in securities of issuers that have not undergone a reorganization or restructuring and may be subject to heavy selling or downward pricing pressure after completion of the reorganization or restructuring. The post-reorganization/restructuring assets and securities may also be illiquid and difficult to sell or value. If a Fund participates in negotiations with respect to a plan of reorganization or restructuring with respect to securities of the issuer held by a Fund, each Fund also may be restricted from disposing such securities for a period of time. If a Fund becomes involved in such proceedings, each Fund may have more active participation in the affairs of the issuer than that assumed generally by an investor.

LIBOR Replacement Risk. A Fund may be exposed to financial instruments that are tied to the London Interbank Offered Rate ("LIBOR") to determine payment obligations, financing terms, hedging strategies or investment value. The United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced that a majority of USD LIBOR settings will no longer be published after June 30, 2023. All other LIBOR settings and certain other interbank offered rates ceased to be published after December 31, 2021. The Secured Overnight Financing Rate ("SOFR"), which is a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities in the repurchase agreement market, has been used increasingly on a voluntary basis in new instruments and transactions. Under U.S. regulations that implement a statutory fallback mechanism to replace LIBOR, benchmark rates based on SOFR will replace LIBOR in different categories of financial contracts after June 30, 2023.

Neither the effect of the LIBOR transition process nor its ultimate success can yet be known. While some existing LIBOR-based instruments may contemplate a scenario where LIBOR is no longer available by providing for an alternative rate-setting methodology, there may be significant uncertainty regarding the effectiveness of any such alternative methodologies to replicate LIBOR. Not all existing LIBOR-based instruments may have alternative rate-setting provisions and there remains uncertainty regarding the willingness and ability of issuers to add alternative rate-setting provisions in certain existing instruments. Parties to contracts, securities, or other instruments using LIBOR may disagree on transition rates or the application of transition regulation, potentially resulting in uncertainty of performance and the possibility of litigation. A Fund may have instruments linked to other interbank offered rates that may also cease to be published in the future.

Money Market Instruments Risk. A Fund may hold money market instruments. The value of money market instruments may be affected by changes in interest rates or in the credit ratings of the investments, among other things. If a significant amount of a Fund's assets is invested in money market instruments, it may be more difficult for the Fund to achieve its investment objective. An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. It is possible to lose money by investing in a money market fund. Money market funds other than U.S. government money market funds and retail money market funds "float" their NAV instead of using a stable $1.00 per share price.

Municipal Market Disruption Risk. The value of municipal securities may be affected by uncertainties in the municipal market related to legislation or litigation involving the taxation of municipal securities or the rights of municipal securities holders in the event of a bankruptcy. Proposals to restrict or eliminate the U.S. federal income tax exemption for interest on municipal securities are introduced before the U.S. Congress from time to time. Proposals also may be introduced before state legislatures that would affect the state tax treatment of a municipal fund's distributions. If such proposals were enacted, the availability of municipal securities and the value of a Municipal Bond Fund's holdings would be affected, and the Trustees would reevaluate the Fund's investment objective and policies. Municipal bankruptcies are relatively rare, and certain provisions of the U.S. Bankruptcy Code governing such bankruptcies are unclear and remain untested. Further, the application of state law to municipal issuers could produce varying results among the states or among municipal securities issuers within a state. These legal uncertainties could affect the municipal securities market generally, certain specific segments of the market, or the relative credit quality of particular securities. Any of these effects could have a significant impact on the prices of some or all of the municipal securities held by a Municipal Bond Fund.

Operational Risk. BFA and a Fund's other service providers may experience disruptions or operating errors such as processing errors or human errors, inadequate or failed internal or external processes, or systems or technology failures, that could negatively impact the Funds. While service providers are required to have appropriate operational risk management policies and procedures, their methods of operational risk management may differ from a Fund's in the setting of priorities, the personnel and resources available or the effectiveness of relevant controls. BFA, through its monitoring and oversight of service providers, seeks to ensure that service providers take appropriate precautions to avoid and mitigate risks that could lead to disruptions and operating errors. However, it is not possible for BFA or the other Fund service providers to identify all of the operational risks that may affect a Fund or to develop processes and controls to completely eliminate or mitigate their occurrence or effects.

Prepayment Risk. During periods of falling interest rates, issuers of certain debt obligations may repay principal prior to the security's maturity, which may cause a Fund to have to reinvest in securities with lower yields or higher risk of default, resulting in a decline in the Fund's income or return potential. Also, if a security subject to prepayment had been purchased at a premium, the value of the premium would be lost in the event of prepayment.

Repurchase Agreement Risk. A repurchase agreement is an instrument under which the purchaser (*i.e.*, a Fund) acquires a security and the seller agrees, at the time of the sale, to repurchase the security at a mutually agreed upon time and price. Repurchase agreements may be construed to be collateralized loans by the purchaser to the seller secured by the securities transferred to the purchaser. If a repurchase agreement is construed to be a collateralized loan, the underlying securities will not be considered to be owned by a Fund but only to constitute collateral for the seller's obligation to pay the repurchase price. If the seller defaults on its obligation under the agreement, a Fund may suffer delays and incur costs or lose money in exercising its rights under the agreement. If the seller fails to repurchase the security and the market value of the security declines, a Fund may lose money.

Risk of Derivatives. A derivative is a financial contract, the value of which depends on, or is derived from, the value of an underlying asset, such as a security, a commodity (such as gold or silver), a currency or an index (a measure of value or rates, such as the S&P 500 or the prime lending rate). Each Fund may invest in variable rate demand notes and obligations, and tender option bonds, which may be considered derivatives. Compared to securities, derivatives can be more sensitive to changes in interest rates or to sudden fluctuations in market prices and thus a Fund's losses may be greater if it invests in derivatives than if it invests only in conventional securities. Derivatives are also subject to counterparty risk, which is the risk that the other party in the transaction will not fulfill its contractual obligations. Derivatives generally involve the incurrence of leverage.

When a derivative is used as a hedge against a position that a Fund holds or is committed to purchase, any loss generated by the derivative generally should be substantially offset by gains on the hedged investment, and vice versa. While hedging can reduce or eliminate losses, it can also reduce or eliminate gains, and in some cases, hedging can cause losses that are not offset by gains, and the Fund will recognize losses on both the investment and the hedge. Hedges are sometimes subject to imperfect matching between the derivative and the underlying security, and there can be no assurance that a Fund's hedging transactions, which entail additional transaction costs, will be effective.

Risk of Futures and Options on Futures Transactions. There are several risks accompanying the utilization of futures contracts and options on futures contracts. A position in futures contracts and options on futures contracts may be closed only on the exchange on which the contract was made (or a linked exchange). While each Fund plans to utilize futures contracts only if an active market exists for such contracts, there is no guarantee that a liquid market will exist for the contract at a specified time. Furthermore, because, by definition, futures contracts project price levels in the future and not current levels of valuation, market circumstances may result in a discrepancy between the price of the bond index future and the movement in the relevant Underlying Index. In the event of adverse price movements, a Fund would continue to be required to make daily cash payments to maintain its required margin. In such situations, if a Fund has insufficient cash, it may have to sell portfolio securities to meet daily margin requirements at a time when it may be disadvantageous to do so. In addition, a Fund may be required to deliver the instruments underlying the futures contracts it has sold.

The risk of loss in trading futures contracts or uncovered call options in some strategies (*e.g.*, selling uncovered bond index futures contracts) is potentially unlimited. Each Fund does not plan to use futures and options contracts in this way. The risk of a futures position may still be large as traditionally measured due to the low margin deposits required. In many cases, a relatively small price movement in a futures contract may result in immediate and substantial loss or gain to the investor relative to the size of a required margin deposit. Each Fund, however, intends to utilize futures and options contracts in a manner designed to limit its risk exposure to levels comparable to a direct investment in the types of bonds in which it invests.

Utilization of futures and options on futures by a Fund involves the risk of imperfect or even negative correlation to its Underlying Index if the index underlying the futures contract differs from the Underlying Index. There is also the risk of loss by a Fund of margin deposits in the event of bankruptcy of a broker with whom a Fund has an open position in the futures contract or option. The purchase of put or call options will be based upon predictions by BFA as to anticipated trends, which predictions could prove to be incorrect.

Because the futures market generally imposes less burdensome margin requirements than the securities market, an increased amount of participation by speculators in the futures market could result in price fluctuations. Certain financial futures exchanges limit the amount of fluctuation permitted in futures contract prices during a single trading day. The daily limit establishes the maximum amount by which the price of a futures contract may vary either up or down from the previous day's settlement price at the end of a trading session. Once the daily limit has been reached in a particular type of contract, no trades may be made on that day at a price beyond that limit. It is possible that futures contract prices could move to the daily limit for several consecutive trading days with little or no trading, thereby preventing prompt liquidation of futures positions and subjecting each Fund to substantial losses. In the event of adverse price movements, each Fund would be required to make daily cash payments of variation margin.

Risk of Investing in Non-U.S. Agency Debt Securities. Uncollateralized bonds issued by agencies, subdivisions or instrumentalities of foreign governments are generally backed only by the creditworthiness and reputation of the entities issuing the bonds and may not be backed by the full faith and credit of the foreign government. Moreover, a foreign government that explicitly provides its full faith and credit to a particular entity may be, due to changed circumstances, unable or unwilling to actually provide that support. If a non-U.S. agency is unable to meet its obligations, the performance of a Fund will be adversely impacted. A non-U.S. agency's operations and financial condition are influenced by the foreign government's economic and other policies. Changes to the financial condition or credit rating of a foreign government may cause the value of debt issued by that particular foreign government's agencies, subdivisions or instrumentalities to decline. During periods of economic uncertainty, the trading of non-U.S. agency bonds may be less liquid while market prices may be more volatile than prices of U.S. agency bonds. Additional risks associated with non-U.S. agency investing include differences in accounting, auditing and financial reporting standards, adverse changes in investment or exchange control regulations, political instability, which could affect U.S. investments in foreign countries and cause restrictions on the flow of international capital.

Risk of Investing in Non-U.S. Debt Securities. Non-U.S. debt securities are traded on foreign exchanges and OTC in the respective countries covered by a Fund. The risks of investing in non-U.S. debt securities typically include market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in bond prices. Investing in a fund whose portfolio contains securities of non-U.S. issuers involves certain risks and considerations not typically associated with investing in the securities of U.S. issuers. These risks include securities markets that may lack sufficient liquidity or may be less efficient; generally greater price volatility; less publicly available information about issuers; the imposition of withholding or other taxes; the imposition of restrictions on the expatriation of funds or other assets of a Fund; higher transaction and custody costs; delays and risks attendant in settlement procedures; difficulties in enforcing contractual obligations; lower liquidity and significantly smaller market capitalization of most non-U.S. securities markets; different accounting and disclosure standards; lower levels of regulation of the securities markets; more substantial government interference with the economy; higher rates of inflation; greater social, economic, and political uncertainty; the risk of nationalization or expropriation of assets; and different bankruptcy and insolvency regimes which may stay or prevent recovery in the event of an issuer's default.

Risk of Swap Agreements. The risk of loss with respect to swaps is generally limited to the net amount of payments that a Fund is contractually obligated to make. Swap agreements are subject to the risk that the swap counterparty will default on its obligations. If such a default occurs, a Fund will have contractual remedies pursuant to the agreements related to the transaction. However, such remedies may be subject to bankruptcy and insolvency laws, which could affect such Fund's rights as a creditor (*e.g.*, a Fund may not receive the net amount of payments that it is contractually entitled to receive).

A Fund is required to post and collect variation margin and initial margin (comprised of specified liquid securities subject to haircuts) in connection with trading of OTC swaps. These requirements may raise the costs for a Fund's investment in swaps.

Securities Lending Risk. A Fund may engage in securities lending. Securities lending involves the risk that a Fund may lose money because the borrower of the loaned securities fails to return the securities in a timely manner or at all. A Fund could also lose money in the event of a decline in the value of collateral provided for loaned securities or a decline in the value of any investments made with cash collateral. These events could also trigger adverse tax consequences for a Fund.

Special Considerations Regarding Investments in California Municipal Securities

Following is a brief summary of some of the factors that may affect the financial condition of the State of California (referred to herein as the "State" or "California") and its political subdivisions. The summary is neither a complete nor a comprehensive description of these factors nor an analysis of financial conditions and may not be indicative of the financial condition of issuers of obligations or any particular projects financed with the proceeds of such obligations. Many factors not included in the summary, such as the ongoing and evolving economic and health-related impacts of the COVID-19 pandemic on the State, local and national economies, the uncertain impact of federal and State financial assistance available to address the impact of the COVID-19 pandemic, changes in federal policies related to trade, health care and immigration, social and environmental policies and conditions, the national and international markets for products produced in California, developments in municipal bankruptcies and significant unfunded pension and other post-employment benefit liabilities, could have an adverse impact on the financial condition of the State and its political subdivisions. The Fund is unable to predict whether or to what extent such factors or other factors may affect the issuers of the municipal securities, the market value or marketability of the municipal securities or the ability of the respective issuers of the municipal securities acquired by the Fund to pay interest on or principal of the municipal securities.

The Fund invests a high proportion of its assets in California municipal securities. The payment of interest on and preservation of principal in these securities are dependent upon the continuing ability of California issuers and/or obligors of State, municipal and public authority debt obligations to meet their obligations thereunder. In addition to general economic pressures, certain California constitutional amendments, legislative measures, executive orders, administrative regulations and voter initiatives could adversely affect a California issuer's ability to raise revenues to meet its financial obligations.

The following summary is based upon the most recent publicly available State budget documents, specifically, the 2023-24 Governor's Budget (defined below), which was released by the Governor of the State (the "Governor") on January 10,

2023; the May Revision to the 2023-24 Governor's Budget, which was released on May 12, 2022; the State Legislative Analyst's Office ("LAO") preliminary review of the May Revision; as well as offering statements relating to public debt offerings of the State. This summary has not been updated nor will it be updated during the year. Neither the Fund nor its legal counsel has independently verified this information. The information provided below is intended only as a general summary and is subject to change rapidly, substantially, and without notice, and the inclusion of such information herein shall not create any implication that there has been no change in the affairs of the State or issuers therein since the date of its preparation.

Certain statements included in this summary constitute "forward-looking statements." Such statements are generally identifiable by the terminology used such as "plan," "estimate," "expect," "budget" or similar words. The achievement of certain results or other expectations contained in such forward-looking statements involve known or unknown risks, uncertainties and other factors that may cause actual results, performance or achievements attained to be materially different from any future results, performances or achievements expressed or implied by such forward-looking statements.

Overview

State Budget Process. The State's fiscal year begins on July 1 and ends on June 30 of the following year. The annual State budget is proposed by the Governor by January 10 of each year for the next fiscal year (the "Governor's Budget"). The Governor released his initial budget proposal for fiscal year 2023-24 on January 10, 2023 (the "2023-24 Governor's Budget"). State law also requires the Governor to update the Governor's Budget projections and budgetary proposals by May 14 of each year. The Governor released his May Revision to the 2023-24 Governor's Budget on May 12, 2023 (the "May Revision"). The Governor is required to sign the budget by the start of the fiscal year on July 1. The Governor signed the fiscal year 2022-23 budget (the "2022-23 Budget") on June 27, 2022. The LAO releases analysis of the Governor's various budget proposals throughout the year.

The May Revision projected total general fund beginning balance, revenues and transfers of $233.2 billion for fiscal year 2023-24 (an approximately 10.5% decrease over estimated results for fiscal year 2022-23), authorized expenditures of $224.1 billion for fiscal year 2023-24 (an approximately 5.2% decrease from estimated results for fiscal year 2022-23), and projected that the State will end the 2023-24 fiscal year with total available general fund reserves of $37.2 billion (an approximately 25.5% decrease from estimated results for fiscal year 2022-23). The May Revision estimated General Fund revenues downward by $9.3 billion compared to the 2023-24 Governor's Budget.

Reported combined cash receipts for July 1, 2022 through March 30, 2023 were 3.7% ($4.7 billion) below the 2023-24 Governor's Budget forecast of $126.7 billion. Fiscal year-to-date shortfalls were due largely to lower personal income tax and corporate tax receipts. Due to winter storms and flooding in January, certain payments were delayed and tax filing deadlines for Californians in most counties were extended to May 15. These deadlines were further delayed to October 16, adding significant uncertainty to the interpretation of cash results.

COVID-19 Pandemic-General Impact. In response to the COVID-19 pandemic, the State, like other state and local government authorities, implemented, and revised from time to time, restrictions on mass gatherings that resulted in widespread closings and modifications of the operations of government, businesses, universities and schools. The State and the State Treasury General Fund (the "General Fund"), as well as local governments throughout the State, were initially adversely impacted by the health-related and economic impacts of the COVID-19 pandemic, which disrupted large sectors of the State economy and remains a risk to the State's finances as well as the finances of local governments. Disruptions were mitigated in part by large federal funding programs to address the pandemic and its impacts. California has benefitted from approximately $603 billion in federal assistance from direct payments to state and local governments and other assistance to individuals and organizations. Some of such federal funding to state and local governments has yet to be expended. The 2022-23 Budget projected federal funds to the State will decline $175 billion, or 55%, from $319 billion in 2021-22 to $144 billion in 2022-23. This decline is the result of several significant federal programs enacted in response to COVID-19 expiring in 2022-23. Actual and anticipated reimbursements from the federal government for costs associated with the State's response to recent wildfires and the pandemic are projected to total approximately $6.5 billion in the 2023-24 Governor's Budget forecast, compared to $13.4 billion in the 2022-23 Budget Act.

While it is impossible to describe in detail the impact on specific local bond issuances, the economic effects of the COVID-19 pandemic will continue to affect or impair the credit quality of a variety of local California issuances. Many of the largest cities in the State, including notably San Francisco, Los Angeles and Oakland, have experienced some of the highest office vacancy rates in the Country. While the long term consequences of the pandemic are yet to be known, and will vary among jurisdictions, these cities (among others) are projecting reduced local government property and other business related tax revenue due to the reduced value of office properties, resulting in projected budget shortfalls.

The ability of local governments to address any budget shortfalls are constrained by constitutional limitations, included limited taxing and borrowing powers and balanced budget requirements, among other factors. Unfunded pension and other post-retirement liabilities also weigh heavily upon many local governments and have been the principal cause of several well-publicized municipal bankruptcy filings.

Revenue Forecasts. The long-term General Fund revenue forecast table below shows the State's forecast for its main General Fund revenue sources as of the May Revision for fiscal years 2021-22 through 2026-27. Total General Fund revenue from these sources is projected to decline from $215.3 billion in 2021-22 to $204.8 billion in 2026-27. The State's economic outlook was modestly downgraded in the May Revision, due largely to actual economic data coming in slightly lower than projected and tighter monetary conditions from more cautious lending in the banking sector. At the same time, tax receipts continue to come in substantially lower than projected at the 2023-24 Governor's Budget. Capital gains realizations are assumed to decline from their record-high levels of 11.3% of personal income in 2021 to reach 5% of personal income by 2026. The May Revision forecasts that the General Fund faces an estimated budget shortfall of $31.5 billion in the 2023-24 fiscal year. See also, "Recent Financial Results" below.

Long-Term Revenue Forecast
(General Fund Revenue — Dollars in Billions)[1]

	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Personal Income Tax	$ 137.1	$122.8	$118.2	$118.9	$127.5	$ 141.8
Sales and Use Tax	$ 33.0	$ 33.1	$ 33.4	$ 34.4	$ 35.5	$ 36.3
Corporation Tax	$ 45.1	$ 42.1	$ 42.1	$ 43.4	$ 36.4	$ 26.6
Total[2]	$215.3	$197.9	$193.6	$196.7	$199.4	$204.8
Growth	19.3%	-8.1%	-2.2%	1.6%	1.4%	2.7%

[1] From the California Department of Finance, 2023-24 May Revision Forecast
[2] Totals may not add due to rounding.

The personal income tax is the State's largest revenue source and is expected to comprise 56.5% of all General Fund revenues and transfers in fiscal year 2023-24. As described herein, the State has a very progressive income tax structure with the top one percent of taxpayers generally paying more than 40% of all personal income tax. This reliance on a progressive income tax structure has resulted in more volatility in the State's revenue base. See "Recent Financial Results."

The May Revision revenue forecast is based on a scenario that assumes continued but slowing economic growth and does not assume a recession. Several risk factors could negatively impact the economy and lead to a recession, which could either be mild or more severe. A significant financial shock from tightening financial conditions, worsening of the recent banking crisis, persistent supply chain issues, continued elevated inflation, further stock market and asset price declines, and geopolitical turmoil are all issues that pose a risk to ongoing economic and revenue growth. The magnitude of the revenue loss from a recession would depend upon the depth and duration of a recession, as well as its relative impact on higher-income individuals. A mild recession could lead to General Fund revenue losses of over $20 billion relative to the State's forecasts for 2023-24.

The LAO estimates there is roughly two-thirds chance State revenues will come in below May Revision estimates.

Economic Factors

California is by far the most populous state in the nation; indeed, California is almost 33% larger than the second most-populous state, according to the most recent population estimates released by the United States Census Bureau. California's population was an estimated 39.0 million as of January 1, 2022, down 0.4% from the previous year. Prior to the COVID-19 pandemic, California's population growth slowed due to declining births correlated with changes in education, marriage, and work decisions; rising deaths from an aging population; and reduced net migration due to recent decreases in foreign immigration. The pandemic accelerated these trends and drove the State's population growth negative in fiscal years 2020-21 and 2021-22. The combined effects of pandemic restrictions and federal administrative backlogs continue to keep migration below pre-pandemic levels. Coupled with domestic out-migration, the slow rebound in international migration has contributed to California's recent population slow down. These trends are expected to continue as the population and labor force adjust to pandemic-induced changes, while the larger domestic movements driven by employment shifts seem to have subsided.

California's economy, the largest among the 50 states, has major components in high technology, trade, entertainment, manufacturing, tourism, construction and services. The relative proportion of the various components of the California economy closely resembles the make-up of the national economy. California's economy accounted for nearly 15% of the U.S. GDP in calendar year 2021. California remained the fifth largest economy in the world in 2021, with a GDP of $3.4 trillion in current dollars.

The State reported in April 2023 that California's median price for existing home sales reached a record high of $900,017 in May 2023, just over a year after exceeding $800,000 for the first time. However, as interest rate hikes pushed up mortgage rates, the demand for housing in the second half of 2022 began to fall and the median sale price for housing also fell, reaching $751,330 in December 2022, a 16.5% decline from May. California residential housing units authorized by building permits (seasonally adjusted) averaged approximately 120,000 through the first 10 months of 2022, the highest level since 2006. Multi-family units were up by 13.8% in 2021 relative to 2020, and single-family units were up by 11.6%.

Constitutional Limitations on Taxes, Other Charges, Appropriations and General Fund Revenues

Over the years, a number of constitutional amendments have been enacted, often through voter initiatives, that have increased the difficulty of raising State taxes or restricted the use of General Fund revenues. Some of the most significant of these approved constitutional amendments are described below. Because of the complex nature of these initiatives and the ambiguities and possible inconsistencies in their terms, it is not possible to predict with certainty the impact on California debt obligations or on the ability of the State or local governments to pay debt service on such California debt obligations. Further initiatives or legislative changes in laws or the California Constitution may also affect the ability of the State or local governments to repay their obligations.

Limitation on Property Taxes. Certain California debt obligations may be obligations of local government issuers that rely in whole or in part, directly or indirectly, on ad valorem property taxes as a source of revenue. The taxing powers of California local governments are limited by Article XIIIA of the California Constitution ("Article XIIIA"), enacted by the voters in 1978 and commonly known as "Proposition 13." Briefly, Article XIIIA limits the rate of ad valorem property taxes to 1% of the full cash value of real property and generally restricts the reassessment of property to 2% per year, except upon new construction or change of ownership (subject to a number of exemptions). Local government taxing entities, however, may raise ad valorem taxes above the 1% limit to pay debt service on voter-approved bonded indebtedness. See "Obligations of Other Issuers" herein.

Under Article XIIIA, the basic 1% ad valorem tax levy is applied against the assessed value of property as of the owner's date of acquisition (or as of March 1, 1975, if acquired earlier), subject to certain adjustments. This system has resulted in widely varying amounts of tax on similarly situated properties. Several lawsuits were filed challenging the acquisition-based assessment system of Proposition 13, but it was upheld by the U.S. Supreme Court in 1992.

For further discussion on Proposition 13, see "Local Governments — Constitutional and Statutory Limitations on Local Government" below. For further discussion on voter approval requirements under Article XIIIA, see "— Voter Requirements for Taxes and Fees" below.

Limitations on Other Taxes, Fees and Charges. In 1996, the voters of the State approved Proposition 218, called the "Right to Vote on Taxes Act." Proposition 218 added Article XIIIC ("Article XIIIC") and Article XIIID ("Article XIIID") to the State Constitution, each of which contains a number of provisions affecting the ability of local governments to levy and collect both existing and future taxes, assessments, fees and charges.

Article XIIIC requires that all new or increased local taxes be submitted to the voters before they become effective. Proposition 26, discussed below under the caption entitled "— Voter Requirements for Taxes and Fees," amended Article

XIIIC by adding an expansive definition of “taxes” to include many regulatory fees currently imposed by the State and its municipalities. Taxes for general governmental purposes require a majority vote and taxes for specific purposes require a two-thirds vote.

Article XIIID contains several provisions making it generally more difficult for local governments to levy and maintain “assessments” for municipal services and programs. Article XIIID also contains several provisions affecting “fees” and “charges,” defined for purposes of Article XIIID to mean “any levy other than an ad valorem tax, a special tax, or an assessment, imposed by a local government upon a parcel or upon a person as an incident of property ownership, including a user fee or charge for a property related service.” All new and existing property-related fees and charges must conform to requirements prohibiting, among other things, fees and charges that generate revenues exceeding the funds that are required to provide the property-related service or are used for unrelated purposes. Article XIIID imposes notice, hearing and protest procedures for levying or increasing property-related fees and charges, and, except for fees or charges for sewer, water and refuse collection services (or fees for electrical and gas service, which are not treated as “property related” for purposes of Article XIIID), no property-related fee or charge may be imposed or increased without majority approval by the property owners subject to the fee or charge or, at the option of the local government, two-thirds voter approval by the electorate residing in the affected area.

In addition to the provisions described above, Article XIIIC removes limitations on the initiative power in matters of local taxes, assessments, fees and charges. Consequently, local voters, by future initiative, could repeal, reduce or prohibit the future imposition or increase of any local tax, assessment, fee or charge. It is unclear how this right of local initiative may be used in cases where taxes or charges have been or will be specifically pledged to secure debt issues.

Limitations on the State’s Ability to Transfer Funds from Local Governments. In 2010, voters in the State approved Proposition 22, a constitutional initiative. Proposition 22, known as the “Local Taxpayer, Public Safety, and Transportation Protection Act of 2010,” eliminated or reduced the State’s authority to (i) temporarily shift property taxes from cities, counties and special districts to schools, (ii) use vehicle license fee revenues to reimburse local governments for State-mandated costs (i.e., the State will have to use other revenues to reimburse local governments), (iii) redirect property tax increment from redevelopment agencies (which have since been dissolved, see “Obligations of Other Issuers — Tax Increment and the Dissolution of Redevelopment Agencies” below) to any other local government, (iv) use State fuel tax revenues to pay debt service on State transportation bonds, or (v) borrow or change the distribution of State fuel tax revenues.

Voter Requirements for Taxes and Fees. Proposition 26, known as the “Supermajority Vote to Pass New Taxes and Fees Act” was approved by State voters in 2010. Proposition 26 amended provisions of Article XIIIA and Article XIIIC governing the imposition of taxes. Proposition 26 requires a two-thirds supermajority vote in the California State Legislature (the “State Legislature”) prior to the imposition of any change in State statute that results in any taxpayer paying a higher tax. This requirement eliminated the prior practice that allowed, via majority vote, one tax to be increased if another tax is lowered by an equivalent amount. Furthermore, any increase in a fee beyond the amount needed to provide the specific service or benefit is deemed a “tax” and thus would require two-thirds vote of any governmental units for passage. As noted, Proposition 26 requires taxes for general governmental purposes to be approved by a majority vote and taxes for specific purposes to be approved by a two-thirds vote. Proposition 26 applied retroactively to any measures passed on or after January 1, 2010.

Appropriations Limits. The State and its local governments are subject to an annual “appropriations limit” imposed by Article XIIIB of the California Constitution (“Article XIIIB”), enacted by the voters in 1979 and significantly amended by Propositions 98 and 111 in 1988 and 1990, respectively. Article XIIIB prohibits the State or any covered local government from spending “appropriations subject to limitation” in excess of the appropriations limit imposed. “Appropriations subject to limitation” are authorizations to spend “proceeds of taxes,” which consist of tax revenues and certain other funds, including proceeds from regulatory licenses, user charges or other fees, to the extent that such proceeds exceed the cost of providing the product or service, but “proceeds of taxes” exclude most State subventions to local governments. No limit is imposed on appropriations of funds that are not “proceeds of taxes,” such as reasonable user charges or fees and certain other non-tax funds, including bond proceeds.

Among the expenditures not included in the Article XIIIB appropriations limit are (i) the debt service cost of bonds issued or authorized prior to January 1, 1979, or subsequently authorized by the voters, (ii) appropriations to comply with mandates of courts or the federal government, (iii) appropriations for certain capital outlay projects, (iv) appropriations for tax refunds, (v) appropriations by the State of post-1989 increases in gasoline taxes and vehicle weight fees, (vi) appropriation of certain special taxes imposed by initiative (e.g., cigarette and tobacco taxes) and (vii) appropriations made in certain cases of emergency.

The appropriations limit for each year is adjusted annually to reflect changes in cost of living and population and any transfers of service responsibilities between government units. “Excess” revenues are measured over a two-year cycle. Local governments must return any excess to taxpayers by rate reductions. The State must refund 50% of any excess to taxpayers, with the other 50% paid to schools and community colleges. With more liberal annual adjustment factors since 1988, few local governments have been operating near their spending limits, but this condition may change over time. Local governments may by majority voter approval exceed their spending limits for up to four years.

The State has rarely exceeded its appropriations limit. In recent years, however, State appropriations have trended closer to the limit. Strong revenue growth, coupled with more moderate growth in the appropriations limit, served to reduce the room under the limit. Two of the three growth factors, the change in civilian population and the change in K-14 average daily attendance, have dropped to less than 1% and have been negative, respectively, in a number of recent years. The 2023-24 Budget estimates that the State will remain under the limit through fiscal year 2023-24.

Dedication of General Fund Revenues to Schools. The single largest portion of the State budget is support for K-14 schools. In 1988, the voters of the State approved Proposition 98, a combined initiative constitutional amendment and statute, which (subject to suspension by a two-thirds vote of the State Legislature and the Governor) guarantees local school districts and community college districts a minimum share of General Fund revenues (the “Proposition 98 Guarantee”) with the balance of school funding provided by a share of local property taxes. Proposition 98 is extremely complex and results in significant fiscal problems when General Fund revenues fall short of the projections on which the original appropriations to schools were made. For further discussion regarding Proposition 98, see “Proposition 98 and K-14 Funding” below.

Obligations of the State

The State has always paid when due the principal of and interest on its general obligation bonds, general obligation commercial paper notes, lease revenue obligations and short-term obligations, including revenue anticipation notes and revenue anticipation warrants. The State Constitution prohibits the creation of general obligation indebtedness of the State unless a bond measure is approved by a majority of the electorate voting at a general election or a direct primary.

Capital Facilities Financing. The State builds and acquires capital facilities primarily through the use of general obligation bonds and lease-purchase borrowing. Under the State Constitution, debt service on outstanding general obligation bonds is the second charge to the General Fund after support of the public school system and public institutions of higher education. New general obligation bonds, lease revenue bonds and other General Fund-supported debt are authorized by the voters and/or the State Legislature with lease revenue bonds generally authorized by the State Legislature. As of March 1, 2023, the State had approximately $69.7 billion of outstanding general obligation bonds payable principally from the State’s General Fund and approximately $27.2 billion of authorized and unissued General Fund-supported general obligation bonds. As of March 1, 2023, the State had approximately $8.0 billion in outstanding lease revenue bonds payable from lease payments paid from the operating budget of the respective lessees, the operating budgets of which are primarily, but not exclusively, derived from the General Fund. As of July 1, 2022, the State had $5.7 billion of authorized but unissued lease revenue bonds.

As of April 2023, debt service on General Fund-supported general obligation bonds and lease revenue debt was estimated to equal approximately 3.66% of General Fund revenues in fiscal year 2022-23 and 3.69% of General Fund revenues in fiscal year 2023-24. This debt service cost is calculated based on the amount of debt service to be paid without adjusting for reimbursement from various special funds and subsidy payments from the federal government for taxable “Build America Bonds.” Including those projected offsets would reduce debt service on General Fund-supported general obligation bonds and lease revenue debt to approximately 2.86% of General Fund revenues in fiscal year 2022-23 and 2.85% in fiscal year 2023-24. The actual General Fund debt ratio in future fiscal years will depend on a variety of factors, including actual debt issuance (which may include additional issuance approved in the future by the State Legislature and, for general obligation bonds, the voters), actual interest rates, debt service structure, and actual General Fund revenues and transfers.

Future Bond Issuance Plans. The amount of outstanding General Fund-supported debt, primarily general obligation bonds, may increase in coming years given the amount of authorized and unissued General Fund-supported bonds the State can issue. See “— Capital Facilities Financing” above. Based on estimates from the Department of Finance in April 2023, approximately $4.3 billion of new money general obligation bonds (some of which may initially be in the form of commercial paper notes) and approximately $65 million in lease revenue bonds are expected to be issued through the end of fiscal year 2022-23. In fiscal year 2023-24, the Department of Finance estimates issuance of approximately $5.9 billion of new money general obligation bonds (some of which may initially be in the form of commercial paper notes) and approximately $1.5 billion in new money lease revenue bonds. However, the exact amount that may be issued will depend on overall budget constraints, market conditions and other factors including updated information provided to the Department of Finance by other departments in the State regarding funding needs and actual spending. The State also issues refunding bonds as market conditions warrant.

Cash Management. As part of its cash management program, prior to fiscal year 2015-16, the State has regularly issued short-term obligations to meet cash flow needs. External borrowing were typically done with revenue anticipation notes that are payable later in the fiscal year in which they are issued. In April 2023, the State observed that, based on then current cash projections, the State is not expected to issue revenue anticipation notes through fiscal year 2023-24. In the 2022-23 Budget, the State assumed a cash cushion of unused internal borrowable resources of at least $33 billion at the end of each month through the end of fiscal year 2022-23.

The State is also authorized under certain circumstances to issue revenue anticipation warrants that are payable in the succeeding fiscal year, as well as registered refunding warrants issued to refund revenue anticipation warrants. The State has issued revenue anticipation warrants to bridge short-term cash flow shortages in five years since 1992. From time to time, the State Legislature has deferred various payments due under State statute in order to more closely align the State's revenues with its expenditures. This technique has been used in past budgets in order to reduce the State's need for external borrowing to bridge any cash flow deficit. Further, State law gives the State Controller some flexibility to delay payments to various payees, including State vendors, when the State Controller foresees a relatively short-term cash flow shortage. In addition, the State issued IOUs in lieu of cash payments in July and August 2009, the second such issuance since the 1930s.

Obligations of State Agencies

A number of State agencies and authorities issue obligations secured or payable from specified revenue streams. These obligations are not payable from the General Fund and carry different ratings than the State's general obligation bonds. None of these revenue bonds are backed by the State's faith and credit or taxing power. As of December 31, 2022, the various State revenue bond financing programs had approximately $44.4 billion in outstanding bonds, and the various State financing authorities had approximately $34.2 billion of outstanding revenue bonds. The Regents of the University of California has been one of the largest issuers of revenue bonds in recent years, with approximately $28.3 billion of outstanding revenue bonds secured by certain revenues of the University of California as of December 31, 2022. Other State agencies and authorities with significant bond programs include the California State University system, with approximately $8.6 billion of outstanding revenue bonds secured by certain revenues of the California State University; the State Department of Water Resources, which had approximately $2.9 billion of outstanding revenue bonds secured by power and water users; the California Health Facilities Financing Authority, which had $15.3 billion in outstanding revenue bonds secured primarily by revenues of various health facilities; and the California Education Facilities Authority, which had approximately $4.1 billion of outstanding revenue bonds secured primarily by revenues of various educational facilities, as of December 31, 2022.

Recent Financial Results

Historically, the principal sources of General Fund revenues are personal income tax, sales and use tax and corporation tax. The May Revision projected that personal income tax, sales and use tax and corporation tax will contribute 56.5%, 16.0% and 20.1%, respectively, of total General Fund revenues and transfers in fiscal year 2023-24, for a cumulative estimated total of 92.6% of General Fund revenues, with not transfer to the Budget Stabilization Account.

The State's personal income tax structure is highly progressive, with rates ranging from 1% to 12.3%. For example, for the 2020 tax year, the State reported that the top one percent of income earners paid over 49% of personal income taxes. This percentage has been greater than 40% in every year since 2004, except for 2009. The personal income tax was made even more progressive with the passage of Proposition 30 (defined below), which imposed additional taxes on earnings over $250,000, resulting in an income tax rate of 12.3% on earnings over $1 million. In November 2016, the voters in the State approved an extension of this portion of Proposition 30 through the end of calendar year 2030.

A large portion of personal income tax receipts is derived from capital gains realizations and stock option income. These revenue sources can be particularly volatile. For example, during the Great Recession (lasting from late-2007 to mid-2009), capital gains tax receipts dropped from nearly $9 billion in fiscal year 2007-08 to just under $3 billion in fiscal year 2009-10, a

67% decline. California does not have a lower rate for capital gains. All capital gains are taxed as ordinary income. The 2023-24 Governor's Budget projected that capital gains would account for 9.2% of General Fund tax revenues and transfers in fiscal year 2022-23 and 8.3% in fiscal year 2023-2024.

The State is required to maintain the Special Fund for Economic Uncertainties ("SFEU"), derived from General Fund revenues, as a reserve to meet cash needs of the General Fund, but the SFEU is required to be replenished as soon as sufficient revenues are available. Year-end balances in the SFEU are included for financial reporting purposes in the General Fund balance. The May Revision projected a balance in the SFEU of $3.8 billion at the end of fiscal year 2023-24. However, the amount in the SFEU at the end of any particular fiscal year may differ materially from the amount projected at the time the related Budget for that fiscal year was adopted.

Proposition 98 and K-14 Funding

Throughout the 1980s, State spending increased rapidly as the State population and economy also grew rapidly. Such spending included increased spending for many assistance programs to local governments, which were constrained by Proposition 13 and other laws. The largest State assistance program is to local public school districts. In 1988, the voters of the State approved Proposition 98, a combined initiative constitutional amendment and statute, which provides for the Proposition 98 Guarantee. The Proposition 98 Guarantee is calculated each fiscal year using one of three tests that apply under varying fiscal and economic conditions. Test 1 earmarks a minimum portion of State revenue for K-14 education, and Test 2 and Test 3 are based on prior-year Proposition 98 funding adjusted for key factors including changes in student enrollment, as measured by K-12 average daily attendance. Test 2 further adjusts for the change in inflation. The test that provides the highest level of funding applies. Test 2 and Test 3 are generally used in times of economic distress although the State also has the ability to suspend the Proposition 98 funding mechanism.

The May Revision projected that the Proposition 98 Guarantee for fiscal year 2023-24 will be $106.8 billion. For further information on the limitations on General Fund revenues imposed by Proposition 98, see "Constitutional Limitations on Taxes, Other Charges, Appropriations and General Fund Revenues — Dedication of General Fund Revenues to Schools" above.

State and Local Pension and Post-Retirement Liabilities

State. The financial condition of the State and its localities is also subject to pension and other post-retirement benefit risks.

Pension. The pension funds managed by the State's retirement systems, the California Public Employees' Retirement System ("CalPERS") and the California State Teachers' Retirement System ("CalSTRS"), each have unfunded liabilities in the tens of billions of dollars. These unfunded liabilities will require increased contributions from the General Fund in future years. The 2023-24 Governor's Budget estimated a $4.7 billion General Fund contribution for the statutorily required annual State contribution to CalPERS for State pension costs based on the CalPERS actuarial valuation projected contribution rates as of June 30, 2021. This is $151 million higher than the 2022-23 Budget General Fund contribution due to payroll growth and the normal progression of amortization bases, including the 7.4% investment loss in 2021-22. Included in these costs are $747 million General Fund for California State University retirement costs. Additionally, the 2023-24 Governor's Budget includes $1.2 billion one-time Proposition 2 debt repayment funding as a supplemental payment toward the state plans' unfunded liabilities. The May Revision estimates $1.7 billion in one-time Proposition 2 debt repayment funding in 2023-24 and a net total decreased of $1.7 billion in 2023-24 contributions to CalPERS relative to the 2023-24 Governor's Budget.

The 2023-24 Governor's Budget estimates a $3.9 billion General Fund contribution for the statutorily required annual State contribution to CalSTRS. The roughly $218 million increase from the 2022-23 Budget is due to higher-than-anticipated growth in creditable compensation from 2020-21 to 2021-22. In the May Revision, State General Fund contributions to CalSTRS increased by $8.8 million in 2023-24, relative to the 2023-24 Governor's Budget, due to a revision in reported compensation for K-12 and community college teachers. See also "The State Budget — Balanced Budget Amendment (Proposition 58 and Proposition 2)" below.

The Great Recession called into question the reliability of assumed rates of return used to determine actuarial unfunded pension liabilities. Since 2011, CalPERS and CalSTRS have incrementally reduced the assumed rate of return used to calculate their respective unfunded liabilities, from 7.75% (for both funds) to 6.8% for CalPERS and 7.0% for CalSTRS as of November 2021. These assumption changes have resulted in significant increases in unfunded liability and have increased required state and other employer contributions to these pension programs.

CalPERS and CalSTRS generally report their investment returns for the prior fiscal year (ending June 30) in July of each year. The most recent reported investment results for both CalPERS and CalSTRS (based on market value) are set forth below.

CalPERS Return on Investments for Fiscal Years 2018 through 2022

Fiscal Year	Return on Investments
2017-18	8.6%
2018-19	6.7%
2019-20	4.7%
2020-21	21.3%
2021-22	-6.1%

CalSTRS Return on Investments for Fiscal Years 2018 through 2022

Fiscal Year	Return on Investments
2017-18	9.0%
2018-19	6.8%
2019-20	3.9%
2020-21	27.2%
2021-22	-1.3%

Actual investment returns lower than the actuarially assumed level will result in decreased funding status and increased actuarially required contribution. CalPERS estimated 5-year, 10-year and 20-year time weighted average returns of 6.7, 7.7 and 6.9%, respectively as of June 30, 2022. As of June 30, 2022, CalSTRS reported 5-year, 10-year and 20-year time weighted average returns of 8.7, 9.4 and 7.8%, respectively.

The CalPERS Board reported an unfunded accrued liability allocable to State employees (excluding judges and elected officials), as of June 30, 2021, of $43.6 billion on a market value of assets ("MVA") basis. CalPERS no longer measures on an actuarial value of assets basis. As of June 30, 2021, this represented a funded ratio of 80.7%. The CalPERS Annual Comprehensive Financial Report as of June 30, 2022 estimates the funded ratio at 72%. CalSTRS reported the unfunded accrued actuarial liability of its Defined Benefit Plan as of June 30, 2021 at $60.1 billion on an MVA basis. This represents a funded ratio of 81.9%.

OPEB. The State also provides other post-employment health care and dental benefits to its employees and certain of their spouses and dependents (hereinafter referred to as "OPEB"), which benefits utilize a "pay-as-you-go" funding policy. As of April 2023, General Fund contributions to OPEB were estimated to be approximately $3.3 billion (or 1.5% of total General Fund expenditures for fiscal year 2021-22) and estimated at approximately $2.9 billion (or 1.2% of total General Fund expenditures for fiscal year 2022-23). The amount for 2021-22 included a one-time prefunding contribution of $616 million.

Government Accounting Standards Board ("GASB") Statements 74 and 75, each of which affects OPEB financial reporting, were issued in June 2015. As a result, there is an increased focus on OPEB liability as GASB Statement No. 74 became effective for fiscal years beginning after June 15, 2016 and GASB Statement No. 75 became effective for fiscal years beginning after June 15, 2017.

The State's most recent OPEB actuarial accrued liability report estimated approximately $99.5 billion of total OPEB actuarial accrued liability as of June 30, 2021 (compared to $97.9 billion estimated as of June 30, 2020). As reported in April 2023, the State has set aside funds in a prefunding trust fund to pay for future retiree health benefits, and, by the end of fiscal year 2022-23, the trust fund balance is projected to approach $6.5 billion in assets.

Local. Many local governments in the State, many of which are current members of CalPERS, face similar and, in many cases, more severe issues relating to unfunded pension and OPEB liabilities. The credit ratings, and even the solvency, of these local governments may be at risk in the future if these liabilities are not appropriately addressed through wage concessions and restructuring of benefits. Cities are particularly at risk because one of their primary missions is safety, and safety personnel labor and retirement benefit costs are significantly greater than labor and retirement costs of general municipal employees. Three cities – Vallejo, Stockton and San Bernardino – entered bankruptcy under Chapter 9 of the Federal bankruptcy code, largely as a result of escalating labor costs and unfunded pension and other post-retirement liabilities. All three of these cities have agreements with CalPERS to administer their pension obligations, and their respective obligations to CalPERS were a significant reason for their insolvency. Other cities (including some that contract with CalPERS) and counties have expressed public concerns about their ability to meet their unfunded pension and other post-retirement liabilities, and a willingness to entertain bankruptcy as an option to resolve their fiscal problems. One federal bankruptcy judge stated that obligations to CalPERS could be adjusted in federal bankruptcy proceedings; however, the plan of adjustment in those proceedings was confirmed without reducing such obligations to CalPERS. Any definitive ruling that allowed obligations to CalPERS to be adjusted downward might encourage other financially stressed municipalities to explore a Chapter 9 bankruptcy. The fiscal stress and cash pressures facing the State's localities prior to the COVID-19 pandemic may be exacerbated as a result of the pandemic for certain local governments depending on the makeup of their economy or revenue sources as well as the overall makeup of their outstanding debt. See "Obligations of Other Issuers."

School districts in the State are required to make contributions to CalSTRS for their teachers and staff. Changes in State law in 2014 increased statutorily required contributions to CalSTRS from the State, school districts, and teachers in order to eliminate the current CalSTRS unfunded liability by 2045-46.

General. The State and its localities that participate in pension and other post-employment benefit programs could face increasing contribution rates if related pension or OPEB investment funds experience declining rates of return, plan assumptions change or actual experience departs from assumptions. Future increases in pension fund and post-retirement benefit contributions could reduce discretionary funds available for other governmental programs. In addition, the credit ratings of the State or locality may be adversely affected if the State or locality does not reduce or manage its unfunded liabilities. See "Bond Ratings" below.

State Law Regarding Pensions and Pension Reform. California courts have been largely supportive of the vested or earned pension rights of State and local employees. Thus, pension reform efforts have been focused largely on limitations on future benefits for new employees, bringing limited, if any, immediate financial relief. In September 2012, the Governor signed into law a comprehensive pension reform package affecting State and local governments known as the California Public Employees' Pension Reform Act of 2013 ("PEPRA"), which became effective January 1, 2013. PEPRA implements lower defined-benefit formulas with higher retirement ages for new State employees hired on or after January 1, 2013, and includes provisions to increase employee contributions. Both constitutional initiatives and other State legislation have been circulated or proposed attempting to reform the State's pension systems on a State and local basis.

The State Budget

Overview. The State's fiscal year begins on July 1 and ends on June 30 of the following year. The annual budget is proposed by the Governor by January 10 of each year for the next fiscal year. Under State law, the Governor's Budget cannot provide for projected expenditures in excess of projected revenues for the ensuing fiscal year. State law also requires the Governor to update the Governor's Budget projections and budgetary proposals in the May Revision by May 14 of each year. The May Revision is generally the basis for final negotiations between the Governor and the State Legislature to reach agreement on appropriations and other legislation to fund State government and thus finalize the State Budget for the upcoming fiscal year. The budget must be balanced, as required by Proposition 58 (discussed below). The budget must be approved by a majority of each house of the State Legislature. State law requires the Governor to sign the budget by the start of the fiscal year on July 1. See "Status of State General Fund; the 2023-24 Governor's Budget" below.

Constraints on the Budget Process. Recent State constitutional amendments approved by State voters have affected the budget process. Several such amendments are described below.

Balanced Budget Amendment (Proposition 58 and Proposition 2).

Proposition 58. In 2004, voters approved Proposition 58, a constitutional amendment called the "Balanced Budget Amendment," which requires the State to enact a balanced budget and establish a special reserve and restricts future borrowing to cover fiscal year-end deficits. As a result of the provisions requiring the enactment of a balanced budget and restricting borrowing, the State would in some cases have to take more immediate actions to correct budgetary shortfalls. Proposition 58 requires the State Legislature to pass a balanced budget and provides for mid-year adjustments in the event that the budget falls out of balance and the Governor calls a special legislative session to address the shortfall. The balanced budget determination is made by subtracting expenditures from all available resources, including prior-year balances.

Under Proposition 58, if the Governor determines that the State is facing substantial revenue shortfalls or spending increases, the Governor is authorized to declare a fiscal emergency. The Governor would then be required to propose legislation to address the emergency and call the State Legislature into special session for that purpose. If the State Legislature fails to pass and send to the Governor legislation to address the fiscal emergency within 45 days, the State Legislature would be prohibited from acting on any other bills or adjourning in joint recess until such legislation is passed. No fiscal emergency has been declared as a result of the COVID-19 pandemic.

The BSA is a special reserve account funded by annual transfers of specified amounts from the General Fund, unless suspended or reduced by the Governor or until a specified maximum amount has been deposited. Until the 2014-15 Budget, the Governor had suspended the annual transfer of money from the General Fund to the BSA every year since 2007. Proposition 2 intended to strengthen the BSA by, among other things, basing deposits on when capital gains revenues rise above 8%, creating a Proposition 98 reserve and doubling the maximum size of the BSA from 5% to 10% of General Fund revenues. Funding for the BSA is estimated by May Revision to be approximately $22.3 billion as of June 30, 2023 and approximately $22.3 billion as of June 30, 2024. Certain other provisions of Proposition 58 relating to the BSA were replaced by the provisions of Proposition 2. See "—Proposition 2" below.

Proposition 58 also prohibits certain future borrowing to cover fiscal year-end deficits. This restriction applies to general obligation bonds, revenue bonds, and certain other forms of long-term borrowing. The restriction does not apply to certain other types of borrowing, such as short-term borrowing to cover cash shortfalls in the General Fund (including revenue anticipation notes or revenue anticipation warrants currently used by the State), or inter-fund borrowings. See "Cash Management" above.

Proposition 2. In addition to the provisions described above, other provisions of Proposition 58 relating to the BSA were replaced by the provisions of Proposition 2 ("Proposition 2"). Proposition 2 requires that 1.5% of annual General Fund revenues be deposited each year into the BSA until the BSA balance reaches an amount equal to 10% of General Fund revenues. Proposition 2 also requires that half of the revenues that otherwise would have been deposited into the BSA through fiscal year 2030-31 be used for supplemental payments to pay down long-term liabilities. After fiscal year 2030-31, the revenues that otherwise would have been deposited into the BSA may be used for either supplemental debt payments or savings. Proposition 2 further requires that withdrawal of funds from the BSA be only for a disaster or if spending remains at or below the highest level of spending from the prior three years. Proposition 2 limits the maximum amount that could be withdrawn in the first year of a recession to half of the BSA's balance. It also requires the State to provide a multiyear budget forecast to help better manage the State's longer-term finances and to create a Proposition 98 reserve, whereby spikes in funding are to be saved for future years to smooth school spending and minimize future cuts.

State-Local Fiscal Relations. The enactment of Proposition 1A in November 2004 ("Proposition 1A of 2004") and Proposition 22, or the "Local Taxpayer, Public Safety, and Transportation Protection Act of 2010", in November 2010 ("Proposition 22"), significantly changed the fiscal relationship between the State and local governments by severely limiting the State's access to local funding sources.

Specifically, Proposition 1A of 2004 amended the State Constitution to, among other things, reduce the State's access to property tax, sales tax and vehicle license fee revenues raised by local governments. Proposition 1A of 2004 also prohibits the State from mandating activities on cities, counties or special districts without providing funding to comply with the mandates. If the State does not provide funding for the mandated activity, the requirement to abide by the mandate is suspended.

In addition, Proposition 22 prohibits the State Legislature from, among other things, (i) taking or reallocating money raised by local governments for local purposes, (ii) making changes in the allocation of property taxes among local governments designed to aid State finances, (iii) using State fuel tax revenues to pay debt service on State transportation bonds, (iv) borrowing or changing the distribution of State fuel tax revenues, and (v) using vehicle licensing fee revenues to reimburse local governments for State-mandated costs. The inability of the State to borrow or redirect funds from these sources, as it did during the Great Recession in fiscal years 2008-09 and 2009-10, will reduce the State's flexibility in reaching budget solutions in the future. On the other hand, both Proposition 1A of 2004 and Proposition 22 made the allocation of revenues to local jurisdictions more predictable.

Proposition 30 and Proposition 55. In 2012, voters approved "The Schools and Local Public Safety Protection Act of 2012" ("Proposition 30"), which provided temporary increases in personal income tax rates for high-income taxpayers and a temporary increase in the State's sales tax rate. The sales tax portion of Proposition 30 expired on December 31, 2016. In

November 2016, voters approved Proposition 55 ("Proposition 55"), which extended the personal income tax portion of Proposition 30 until December 31, 2030. The 2022-23 Budget projected the revenue from these additional tax brackets to be $13.8 billion in fiscal year 2020-21, $14.9 billion in fiscal year 2021-22, and $14.3 billion in fiscal year 2022-23.

Health Care Services. Medi-Cal, California's Medicaid program, is a health care entitlement program for qualified low-income individuals and families who receive public assistance or otherwise lack health care coverage and is one of the State's largest expenditures. Medi-Cal is projected to cover approximately 15.2 million Californians in 2022-23 and 14.4 million in 2023-24—more than one-third of the state's population.

The 2022-23 Budget proposed to expand Medi-Cal coverage to income eligible adults aged 26 through 49, regardless of immigration status, no sooner than January 1, 2024. Medi-Cal currently covers undocumented persons under the age of 26.

In the May Revision, the Medi-Cal budget includes $135.4 billion ($30.9 billion General Fund) in 2022-23 and $151.2 billion ($37.6 billion General Fund) in 2023-24. The General Fund components represent, respectively, approximately 13.1% of estimated total 2022-23 General Fund expenditures and 16.8% of estimated total 2023-24 General Fund expenditures.

The overall Medi-Cal budget may significantly change over time, including within a single fiscal year, due to its size, financial complexity, federal requirements, and the fact that Medi-Cal operates on a cash, rather than an accrual, basis of accounting, which means that the timing of transactions can significantly disrupt fiscal year budgetary estimates. In addition, the federal administration and leaders in Congress continue to consider and propose numerous changes to health and human services programs. Many of the proposals could have far-reaching impacts on health care in California and significant impacts to Medicaid (Medi-Cal in California).

The net impact of health care costs on the General Fund continues to depend on a variety of factors, including federal legislation or interpretations of existing federal law or regulations, levels of individual and employer participation, changes in insurance premiums, and the approval or enactment of solutions by the State to address health care costs.

Status of State General Fund; the May Revision of the 2023-24 Governor's Budget

The May Revision projected total general fund beginning balance, revenues and transfers of $233.2 billion for fiscal year 2023-24, authorized expenditures of $224.1 billion for fiscal year 2023-24, and projected that the State will end the 2023-24 fiscal year with total available general fund reserves of $37.2 billion, including $3.8 billion in the SFEU, $22.3 billion in the BSA, $450 million in the Safety Net Reserve Fund and $10.7 billion in the Public School System Stabilization Account. As noted below, he LAO estimates there is roughly two-thirds chance revenues will come in below May Revision estimates.

A summary of the condition of the State's General Fund, as revised by the May Revision, is set forth below.

General Fund Condition
(Dollars in Millions)[1]

		May Revision	
	Revised 2022-23[2]	Revised 2023-24[2]	Percent Change
Prior-year General Fund balance	$ 55,462	$ 24,119	(56.6)%
Revenues and transfers	205,129	209,054	1.9%
Expenditures	(236,472)	(224,101))	(5.2)%
Ending General Fund Balance	$ 24,119	$ 9,072	
Encumbrances	(5,272)	(5,272)	
SFEU balance	$ 18,847	$ 3,800	
BSA balance	$ 22,252	$ 22,252	
Safety Net Reserve	$ 900	$ 450	
Public School System Stabilization Account	$ 9,936	$ 10,684	

[1] Totals may not add-up due to rounding.

[2] From the May Revision.

LAO Overview of the May Revision.

The LAO estimates there is roughly two-thirds chance revenues will come in below May Revision estimates. The LAO recommends adopting a lower revenue estimate, to avoid the need for more budget solutions next year. The LAO also recommends eliminating new, discretionary spending proposals in the May Revision and reducing more one-time spending instead of using reserves and special fund loans, as contemplated by the May Revision.

Pending Litigation

There are currently numerous legal proceedings pending against the State that, if determined adversely against the State, could affect the State's expenditures and, in some cases, its revenues and cash flow. Information regarding some of the more significant litigation pending against the State would ordinarily be included in various public documents issued by the State, such as the official statements prepared in connection with the issuance of general obligation bonds of California. See "Additional Information" below for information on how to obtain such official statements.

Bond Ratings

As of April 5, 2023, the following ratings for the State's general obligation bonds have been received from Moody's Investors Service, Inc. ("Moody's"), S&P Global Ratings, a Standard & Poor's Financial Services LLC business ("S&P"), and Fitch, Inc. ("Fitch"):

Moody's	S&P	Fitch
Aa2	AA-	AA

These ratings apply only to the State's general obligation bonds and are not indicative of the ratings assigned to bonds issued by local governments, such as counties, cities, school districts and other local governments of the State.

Any explanation of the significance of such ratings may be obtained only from the rating agency furnishing such ratings. There is no assurance that such ratings will continue for any given period of time or that they will not be revised downward or withdrawn entirely if, in the judgment of the particular rating agency, circumstances so warrant.

Additional Information

Information regarding the State's financial condition is included in various public documents issued by the State, such as the official statements prepared in connection with the issuance of general obligation bonds of California. Such official statements may be obtained by contacting the State Treasurer's Office at (800) 900-3873 or at **www.buycaliforniabonds.com**.

Periodic reports on revenues and/or expenditures during the fiscal year are issued by the Administration, the State Controller's Office and the LAO. The Department of Finance issues a monthly bulletin, which reports the most recent revenue receipts as reported by State departments, comparing those receipts to budget projections. The State Controller issues a monthly report on General Fund cash receipts and disbursements. These reports are normally released on the 10th day of every calendar month for the period ended on the last day of the prior month. The Administration also formally updates its budget projections three times during each fiscal year — in January, May and at the time of budget enactment. Currently, many of these bulletins and reports are available on the State's investor relations website (**www.buycaliforniabonds.com**) or on websites maintained by the applicable agencies and by contacting the agencies at their offices in Sacramento, California. Investors are cautioned that interim financial information is not necessarily indicative of results for a fiscal year.

Publications from the LAO can be read in full by accessing the LAO's website (**www.lao.ca.gov**) or by contacting the LAO at (916) 445-4656.

Complete text of the State Budget for each fiscal year beginning 2007-08 through the current fiscal year may be found at the electronic budget website of the Department of Finance (**www.ebudget.ca.gov**).

Complete text of the State Controller's monthly Summary Analysis may be accessed at the State Controller's website (**www.sco.ca.gov**).

None of the information on the above websites is incorporated herein by reference.

Local Governments

General. The primary units of local government in California are the 58 counties, which range in population from less than 1,200 in Alpine County to over 10 million in Los Angeles County.

Counties are responsible for the provision of many basic services, including indigent health care, welfare, jails, and public safety in unincorporated areas. As of April 2023, there were 482 incorporated cities in California and thousands of special districts formed to provide various services. Commencing with the 2011-12 Budget, the State implemented a realignment plan to shift certain State program costs to counties and provided a comparable amount of funds to support these new county commitments. Under the realignment plan, ongoing funds for such programs are required to be provided to counties for court security, corrections and public safety, mental health services, substance abuse treatment, child welfare programs, adult protective services, and CalWORKs. However, State transfers (approximately $10 billion in fiscal year 2022-23) do not cover all the costs of such programs. Consequently, local governments, particularly counties, have borne an increased part of the financial burden of providing program services, including the risks of cost overruns, revenue declines and insufficient revenue growth.

To the extent the State is constrained by its obligation to schools under Proposition 98 or other fiscal considerations, the absolute level (or the rate of growth) of State assistance to local governments may be affected. Any such reductions in State aid could compound the serious fiscal constraints already experienced by many local governments, particularly counties and schools. As a result of the COVID-19 pandemic, the level of funding that the State is required to provide to schools under Proposition 98 was temporarily reduced but now exceeds pre-COVID-19 funding levels. See "Proposition 98 and K-14 Funding." Schools have also faced increased costs related to physical plant and staffing costs associated with social distancing protocols. School districts generally maintain some level of operating reserves; however, for certain school districts this may not be sufficient to address any drop in revenue available to schools due to reductions in the Proposition 98 Guarantee, other revenue losses and increased costs associated with responses to the COVID-19 pandemic. See "Proposition 98 and K-14 Funding" above.

While it is impossible to describe in detail the impact on specific local bond issuances, the economic effects of the COVID-19 pandemic will continue to affect or impair the credit quality of a variety of local California issuances. Many of the largest cities in the State, including notably San Francisco, Los Angeles and Oakland, have experienced some of the highest office vacancy rates in the Country. While the long term consequences of the pandemic are yet to be known, and will vary among jurisdictions, these cities (among others) are projecting reduced local government property and other business related tax revenue due to the reduced value of office properties, resulting in projected budget shortfalls.

However, local governments that are experiencing declining revenues and increased expenses due to the COVID-19 pandemic or other local factors are limited in their ability to levy and raise property taxes and other forms of taxes, fees or assessments, due to State constitutional as well as (in some cases) local initiatives. Local governments are also constrained by balanced budget requirements and prohibitions on long-term borrowing for operating costs. As a consequence of these factors, local governments may increasingly be forced to cut local services to address budget shortfalls or to take even more drastic actions, such as a bankruptcy filing.

Many local governments are also facing substantial increases in pension liabilities and health care costs for retirees. Any declines in the U.S. and global stock markets could have a material impact on the investments in the State pension trusts, which could materially increase the unfunded actuarial accrued liability for CalPERS and CalSTRS, which, in turn, could result in material changes to required contribution rates for local governments in future fiscal years. In the case of school districts, contributions to CalSTRS are determined by the State Legislature, and the State had previously enacted legislation to increase required contributions to pay rising pension costs. However, to the extent such required contributions exceed available funding, local government finances will continue to be adversely affected. For more information regarding pension liabilities, see "State and Local Pension and Post-Retirement Liabilities" above.

Constitutional and Statutory Limitations on Local Government. The fiscal condition of local governments was changed when Proposition 13, which added Article XIIIA to the State Constitution, was approved by California voters in 1978. Proposition 13 reduced and limited the future growth of property taxes and limited the ability of local governments to impose "special taxes" (i.e., those devoted to a specific purpose) without two-thirds voter approval. Although Proposition 13 limited property tax growth rates, it also has had a smoothing effect on property tax revenues, ensuring greater stability in annual revenues than existed before Proposition 13 passed. For further information on Proposition 13, see "Constitutional Limitations on Taxes, Other Charges, Appropriations and General Fund Revenues — Limitation on Property Taxes" above.

Proposition 218, a constitutional amendment enacted by initiative in 1996, further limited the ability of local governments to raise taxes, fees, and other exactions. See "Constitutional Limitations on Taxes, Other Charges, Appropriations and General Fund Revenues — Limitations on Other Taxes, Fees and Charges" above. Proposition 62, a statutory initiative adopted by the voters in 1986, includes limitations on the ability of local governments to raise taxes that are similar to those included in the later constitutional amendments of Proposition 218.

In the aftermath of Proposition 13, the State provided aid to local governments from the General Fund to make up some of the loss of property tax moneys, including assuming principal responsibility for funding K-12 schools and community colleges. During the recession of the early 1990s, the State Legislature reduced the post-Proposition 13 aid to local government entities other than K-12 schools and community colleges by requiring cities and counties to transfer some of their property tax revenues to school districts. However, the State Legislature also provided additional funding sources, such as sales taxes, and reduced certain mandates for local services funded by cities and counties.

Beginning in 2000, and in part caused by the "internet bubble," the State was faced with increasing financial stress and began to divert local revenue resources, including sales tax, vehicle license fees and redevelopment moneys, to the State coffers. The 2004-05 Budget, related legislation and the enactment of Proposition 1A of 2004 and Proposition 22 dramatically changed the State-local fiscal relationship. Proposition 1A of 2004 amended the State Constitution to, among other things, reduce the State Legislature's authority over local government revenue sources by placing restrictions on the State's access to local governments' property, sales, and vehicle license fee revenues as of November 3, 2004. Proposition 22, which supersedes Proposition 1A of 2004, completely prohibits any future borrowing by the State from local government funds and generally prohibits the State Legislature from making changes in local government funding sources. For further discussion regarding Proposition 22 and Proposition 1A of 2004, see "The State Budget — Balanced Budget Amendment (Proposition 58 and Proposition 2) — State-Local Fiscal Relations" above.

Obligations of Other Issuers

Other Issuers of California Debt Obligations. There are a number of State agencies, instrumentalities and political subdivisions of the State that issue municipal obligations, some of which may be conduit revenue obligations payable from payments from private borrowers. These entities are subject to various economic risks and uncertainties, and the credit quality of the securities issued by them may vary considerably from the credit quality of obligations backed by the full faith and credit of the State. See "Local Governments — General" above. For example, assessment bonds may be adversely affected by a general decline in real estate values or a slowdown in real estate sales activity.

California Long-Term Lease Obligations. Based on a series of court decisions, certain long-term lease obligations, though typically payable from the General Fund or a municipality, are not considered "indebtedness" requiring voter approval. Such leases, however, are subject to "abatement" in the event the facility being leased is unavailable for beneficial use and occupancy by the municipality during the term of the lease. Abatement is not a default, and there may be no remedies available to the holders of the certificates evidencing the lease obligation in the event abatement occurs. The most common cases of abatement are failure to complete construction of the facility before the end of the period during which lease payments have been capitalized and uninsured casualty losses to the facility (e.g., due to earthquake). In the event abatement occurs with respect to a lease obligation, lease payments may be interrupted (if all available insurance proceeds and reserves are exhausted) and the certificates may not be paid when due. Further, lease obligations may represent executory contracts that could be rejected in a bankruptcy proceeding under Chapter 9 of the United States Bankruptcy Code. In recent bankruptcy proceedings involving the City of Stockton, the confirmed plan of adjustment included the discharge of lease obligations at significant discounts from their face value.

Statutory Lien Securing General Obligation Bonds. Certain local governments, particularly school districts, issue general obligation bonds secured by ad valorem property taxes. Effective January 1, 2016, provisions were added to the California Education Code and the California Government Code to provide that general obligation bonds issued and sold by local governments in California are secured by a statutory lien on the ad valorem property taxes levied and collected to pay the principal and interest on such general obligation bonds. A statutory lien provides bondholders with a security interest in ad valorem property taxes intended to survive a bankruptcy of the local government. It is unclear whether these provisions apply to bonds issued prior to the effective date.

Other Factors

Inflation and Recession. Inflation in the State is historically above the nation's inflation levels due to the State's faster increases in energy prices and continued housing pressures. After slowing from 3% in 2019 to 1.7% in 2020, California inflation accelerated to 4.2% in 2021, and averaged around 7.5% in 2022. Elevated inflation in 2021 was driven by pent-up demand after suppression of economic activity at the onset of the COVID-19 pandemic; for example prices of gasoline, air travel, and hotels skyrocketed and supply chain disruptions and various shortages have driven up the prices of durable goods. In 2022, inflation became more broad-based, spreading to food, shelter and other components, and the year over year California consumer price index peaked at 8.3% in June before slowing to 7.3% by October. Sustained high inflation can lead to price instability if businesses and consumers expect price increases to continue.

Current global instabilities including within the U.S.'s largest trading partner, China, may disrupt the global economy already impacted by high inflation rates. In addition, recent instability within the banking sector, which has affected some California-based banks, may also negatively impact the state, national and global economies and increase the risk of a recession. The May Revision revenue forecast is based on a scenario that assumes continued but slowing economic growth and does not assume a recession. Several risk factors could negatively impact the economy and lead to a recession, which could either be mild or more severe. A significant financial shock from tightening financial conditions, worsening of the recent banking crisis, persistent supply chain issues, continued elevated inflation, further stock market and asset price declines, and geopolitical turmoil are all issues that pose a risk to ongoing economic and revenue growth. The magnitude of the revenue loss from a recession would depend upon the depth and duration of a recession, as well as its relative impact on higher-income individuals. A mild recession could lead to General Fund revenue losses of over $20 billion relative to the May Revision forecast in 2023-24.

COVID-19 Pandemic and Social and Economic Impacts. The COVID-19 pandemic continues to affect global health and may continue to lead to governmental responses which negatively impact the economy. There can be no assurances that there will not be a resurgence of COVID-19 cases and deaths, that existing or new COVID-19 variants will not increase the public health crisis or that unavailability and/or lack of public acceptance of vaccines will not exacerbate or prolong the adverse impacts of the COVID-19 pandemic. There is also no assurance that any additional federal aid will be forthcoming for the State or its local governments.

The long term consequences of the pandemic are yet to be known. For instance, if there are broad, long standing changes to where people chose to live and work, the pandemic could, over time, change the key economic drivers of a community. As an example, some employers may continue to provide additional flexibility for their employees remote work policies instituted during the COVID 19 emergency. These unknowns create an unprecedented degree of uncertainty about the economic outlook of local governments. These changes also could affect the value of commercial property and over time lead to deceleration in local government property tax revenue growth. Many of the largest cities in the State, including notably San Francisco, Los Angeles and Oakland, have experienced some of the highest office vacancy rates in the Country.

Among other reasons, these vacancy rates reflect a reliance upon jobs in the technology industry (which are the most vulnerable to remote working), as well as the impact of homelessness and crime upon the attractiveness of certain commercial areas. Higher vacancy rates are resulting in dramatically lower commercial property values, which in turn are projected to result in lower property taxes and other business tax revenue. These tax reductions, as well as increased costs to address homelessness and crime could strain municipal budgets, potentially putting pressure on their credit quality.

Global Relations and Trade. Given globalization and the interconnectedness of physical and financial world markets, disruptions in large markets due to economic slowdowns in other countries or regions, geopolitical tensions and deteriorating international trade relations, or the global impacts of the COVID-19 pandemic (such as travel restrictions), may have significant negative impacts on the nation's economy, including on the State. There is significant uncertainty around how the Russian invasion of Ukraine will evolve, as well as the conflict's potential economic impacts to the U.S. and to California.

The COVID-19 pandemic created global supply chain disruptions that negatively impacted domestic markets and reduced trade volumes for the nation and the State. However, more recent information shows increased exports. The State's exports of goods totaled $174.9 billion in 2021, or 12.2% higher than in 2020 and totaled $185.6 billion in 2022, or 12.2% higher than in 2021. This follows a decline of 10.3% in 2020 and a decline of 2.5% in 2019. Continued uncertainty surrounding the stability of global supply chains and the unknown duration of the COVID-19 pandemic present ongoing risks to the U.S. and California trade levels and economies.

Material changes in federal trade policy, including new or revised tariffs on the State's trading partners, could directly and indirectly impact the State's economy. The 2019 U.S. tariffs of up to 25% on $250 billion worth of Chinese products, equivalent to half of the nation's imports from China, remain in place as of April 2023. These tariffs triggered Chinese retaliatory tariffs of 25% on over $50 billion worth of U.S. exports. Because the State is a transport hub, and China is the State's largest trading partner by total trade value of goods (based on 2021 annual average data), an ongoing trade war could have negative effects on the State's economy.

Potential trade barriers exacerbate the supply chain issues triggered by large-scale worldwide shutdowns during the COVID-19 pandemic. For example, potential trade disruptions associated with uncertainty surrounding China's zero-tolerance COVID-19 policy, which was in effect until December 2022, and threatened invasion of Taiwan, the world's largest supplier of semiconductors, could increase the costs of imports purchased from abroad leading to higher consumer prices and to decreased business revenues. These effects could potentially impact wages and employment in the short run and could trigger a change in the business model of companies that until now have made significant investment decisions based on a system of free global trade.

Health Care Costs. Medi-Cal is one of the State's largest expenditures. The State also provides health benefits to its own employees and retirees. General Fund spending on health care costs is thus heavily dependent upon the rate of health care cost inflation. If this inflation rises faster than expected, annual General Fund spending could quickly rise by hundreds of millions of dollars. See "The State Budget – Health Care Services."

Housing Constraints. The State continues to face a critical housing shortage despite California residential housing units authorized by building permits (seasonally adjusted) averaging approximately 120,000 units through the first ten months of 2022, the highest levels since 2006. However, as of April 2023, the State projected that residential permit growth will slow in 2023 and 2024. Exceptionally strong housing demand driven by high-income earners in 2021 through early 2022 contributed to record high home prices. The California median sales price of existing single-family homes exceeded $900,000 for the first time in May 2022 and reached a record high of $900,170, just over a year after exceeding $800,000 for the first time. However, as interest rate hikes pushed up mortgage rates, the demand for housing in the second half of 2022 began to fall and the median sale price for housing also fell, reaching $751,330 in December 2022, a 16.5% decline from May. Low-income Californians may face increasing affordability issues which may affect their decisions about where to live and work. Given the State's structural housing supply constraints and shortage, low-income populations will be especially vulnerable to housing cost increases both in the rental and ownership markets. Furthermore, certain businesses may determine to leave California to the extent location decisions are significantly influenced by the ability of their employees and customers to live nearby. In addition, in certain urban areas in particular, the homeless population has grown in recent years, in some part due to a significant lack of affordable housing. Homeless services programs may become a larger draw on local government funds and may otherwise impact economic activity.

Climate Change. The State historically has been susceptible to wildfires and hydrologic variability. In April 2023, the State disclosed that as greenhouse gas emissions continue to accumulate, climate change will intensify and increase the frequency of extreme weather events, such as coastal storm surges, drought, wildfires, floods and heat waves, and raise sea levels along the coast of the State. Over the past several years, the State has already experienced the impacts of climate change through multiple drought periods, flooding and unprecedented wildfires. As a result of drought conditions, water deliveries to the agricultural sector declined in 2021 and 2022, with direct economic impacts from crop revenue losses. The State is once again facing drought conditions as all of the State's 58 counties entered a drought state of emergency in October 2021. In early 2023, the State experienced significant precipitation events leading to severe flooding in various locations through the State. While significant, the increased precipitation does not necessarily indicate the State is out of a period of drought. In 2020, over 4 million acres burned in California, more than twice the previous record of approximately 2 million acres in 2018. Destruction of housing increases the demand for construction resources from rebuilding, and worsens the State's housing imbalances. The future fiscal impact of climate change on the State budget is difficult to predict, but it could be significant. However, the State is in the process of implementing various resilience measures to reduce the impacts of climate change, including significant investments in wildfire prevention and water infrastructure projects and workforce development. The ability of the State to take actions to mitigate any future fiscal impact of climate change on the State budget is limited and there can be no assurances that the current or any future resilience measures will be effective in materially mitigating the impact of climate change on the State.

Energy Risks. The State disclosed in April 2023 that another result of unprecedented climate-induced weather events, including drought, extreme heat events and wildfires, is stress on the State's electrical system. The future fiscal impact of stresses to the energy grid caused by climate is difficult for the State to predict, but could be significant. In recent years, California has taken numerous steps to increase resiliency to be better prepared to meet the State's electricity demands. The State is now taking additional immediate actions by expanding demand response programs and creating additional incentives to move large energy users to back-up power generation to address reliability concerns and implementing longer-term actions, such as suspending certain permitting requirements to allow greater energy production.

Cybersecurity Risks. The State, like many other large public and private entities, relies on a large and complex technology environment to conduct its operations. The State's reliance on this environment has increased due to higher rates of telework as mandated by public health measures. As a recipient and provider of personal, private or sensitive information, the State is subject to multiple cyber threats including, but not limited to, hacking, viruses, malware and other attacks on computer and other sensitive digital networks and systems.

Entities or individuals may attempt to gain unauthorized access to the State's digital systems for the purposes of misappropriating assets or information or causing operational disruption and damage. In 2017 the State established a statewide security operations center to protect against malicious activity targeting critical technology infrastructure. Local governments in the State have experienced similar threats and taken similar measures; however, no assurances can be given that the efforts to manage cyber threats and attacks will be successful or that any such attack will not materially impact the operations or finances of the State or its local governments.

Earthquake Risk. Substantially all of California is within an active geologic region subject to major seismic activity. Northern California in 1989 and Southern California in 1994 experienced major earthquakes causing billions of dollars in damages. The federal government provided more than $13 billion in aid for both earthquakes, and neither event has had any long-term negative economic impact. Any obligation of a local government in the State could be affected by an interruption of revenues because of damaged facilities or, consequently, income tax deductions for casualty losses or property tax assessment reductions. Compensatory financial assistance could be constrained by the inability of (i) an issuer to have obtained earthquake insurance coverage; (ii) an insurer to perform on its contracts of insurance in the event of widespread losses; or (iii) the federal or State government to appropriate sufficient funds within their respective budget limitations.

Special Considerations Regarding Investments in New York Municipal Securities

The following information is a brief summary of factors affecting the economy of New York City (the "City" or "New York City") or New York State (the "State", "New York" or "NYS") and does not purport to be a complete description of such factors. Other factors will affect issuers.

The summary is based primarily upon the most recent publicly available offering statements relating to debt offerings of state and local issuers and other financial and demographic information, as of April 10, 2023 with respect to the City and March 8, 2023 with respect to the State, and it does not reflect recent developments since the dates of such offering statements and other information. Neither the Fund nor its legal counsel has independently verified this information.

The State, some of its agencies, instrumentalities and public authorities and certain of its municipalities have sometimes faced serious financial difficulties that could have an adverse effect on the sources of payment for, or the market value of, the New York municipal bonds in which the Fund invests.

NEW YORK CITY

General. The City, with an estimated population of approximately 8.5 million as of July 2021, is an international center of business and culture. Its non-manufacturing economy is broadly based, with the banking, securities, insurance, technology, information, publishing, fashion, design, retailing, education and health care industries accounting for a significant portion of the City's total employment earnings. Additionally, the City is a leading tourist destination. Manufacturing activity in the City is conducted primarily in apparel and printing.

For each of the 1981 through 2022 fiscal years, the City's General Fund had an operating surplus, before discretionary and other transfers, and achieved balanced operating results as reported in accordance with then-applicable generally accepted accounting principles ("GAAP"), after discretionary and other transfers and except for the application of Governmental Accounting Standards Board ("GASB") Statement No. 49 ("GASB 49") and without regard to changes in certain fund balances which may be carried forward as described below. City fiscal years end on June 30 and are referred to by the calendar year in which they end. The City has been required to close substantial gaps between forecast revenues and forecast expenditures in order to maintain balanced operating results. There can be no assurance that the City will continue to maintain balanced operating results as required by State law without proposed tax or other revenue increases or reductions in City services or entitlement programs, which could adversely affect the City's economic base.

As required by the New York State Financial Emergency Act For The City of New York (the "Financial Emergency Act") and the New York City Charter (the "City Charter"), the City prepares a four-year annual financial plan, which is reviewed and revised on a quarterly basis and which includes the City's capital, revenue and expense projections and outlines proposed gap-closing programs for years with projected budget gaps. The City's current financial plan projects budget balance in the 2023 and 2024 fiscal years in accordance with GAAP, except for the application of GASB 49 and without regard to certain fund balances, which may be carried forward as described below). In 2010, the Financial Emergency Act was amended to waive the budgetary impact of GASB 49 by enabling the City to continue to finance with bond proceeds certain pollution remediation costs. In addition, the City may, without violating its budget balance requirements, carry forward to a subsequent fiscal year or fiscal years unspent balances from certain funds restricted as to their use, as well as balances in the Health Insurance Stabilization Fund, School Crossing Guards Health Insurance Fund, Management Benefits Fund and Revenue Stabilization Fund. The City's current financial plan projects budget gaps for the 2025 through 2027 fiscal years. A pattern of current year balance and projected future year budget gaps has been consistent through the entire period since 1982, during which the City has achieved an excess of revenues over expenditures, before discretionary transfers, for each fiscal year. The City is required to submit its financial plans to the New York State Financial Control Board (the "Control Board").

For its normal operations, the City depends on aid from the State both to enable the City to balance its budget and to meet its cash requirements. There can be no assurance that there will not be delays or reductions in State aid to the City from amounts currently projected; that State budgets for future State fiscal years will be adopted by the April 1 statutory deadline, or interim appropriations will be enacted; or that any such reductions or delays will not have adverse effects on the City's cash flow or expenditures. In addition, the City has made various assumptions with respect to federal aid. Future federal actions or inactions could have adverse effects on the City, both directly and indirectly through reductions in State aid to localities that will need to be taken in the absence of additional federal aid to the State.

The Mayor is responsible under the City Charter for preparing the City's annual expense and capital budgets (as adopted, the "Expense Budget" and the "Capital Budget," respectively, and collectively, the "Budgets") and for submitting the Budgets to the City Council for its review and adoption. The Expense Budget covers the City's annual operating expenditures for municipal services, while the Capital Budget covers expenditures for capital projects, as defined in the City Charter. Operations under the Expense Budget must reflect the aggregate expenditure limitations contained in financial plans.

The Mayor is also responsible for preparing the City's financial plan, which relates to the City and certain entities that receive funds from the City. The financial plan is modified quarterly. The projections set forth in the financial plan are based on various assumptions and contingencies which are uncertain and which may not materialize. Such assumptions and contingencies include the condition of the international, national, regional and local economies, the provision of State and federal aid and other State and federal actions and inactions, such as the potential consequences of not resolving the federal debt ceiling negotiations, the impact on City revenues and expenditures of any future federal or State legislation and policies affecting the City and the cost of pension structures and healthcare.

Implementation of the financial plan is dependent on the City's ability to market successfully its bonds and notes. Implementation of the financial plan is also dependent upon the ability to market the securities of other financing entities including the New York City Municipal Water Finance Authority (the "Water Authority") and the New York City Transitional Finance Authority ("TFA"). The success of projected public sales of City, Water Authority, TFA and other bonds and notes is subject to prevailing market conditions. Future developments in the financial markets generally, as well as future developments concerning the City, and public discussion of such developments, may affect the market for outstanding City general obligation bonds and notes.

The City Comptroller and other agencies and public officials, from time to time, issue reports and make public statements that, among other things, state that projected revenues and expenditures may be different from those forecast in the City's financial plans.

City Financial Plan. For the 2022 fiscal year, the City's General Fund had a total surplus of $7.6 billion, before discretionary and other transfers, and achieved balanced operating results in accordance with GAAP, except for the application of GASB 49 and without regard to certain fund balances permitted to be carried forward as described in "INTRODUCTORY STATEMENT," after discretionary and other transfers. The 2022 fiscal year was the forty-second consecutive year that the City achieved balanced operating results when reported in accordance with GAAP, except for the application of GASB 49 and without regard to certain fund balances permitted to be carried forward.

2023-2027 Financial Plan

On June 13, 2022, the City submitted to the Control Board the financial plan for the 2023 through 2026 fiscal years (the "June Financial Plan"), which was consistent with the City's capital and expense budgets as adopted for the 2023 fiscal year. On November 15, 2022, the City submitted to the Control Board a modification to the June Financial Plan (as so modified, the "November Financial Plan"). On January 12, 2023, the Mayor released the preliminary budget for the 2024 fiscal year and the City submitted to the Control Board a modification to the financial plan for the 2023 through 2027 fiscal years (as so modified, the "Financial Plan").

The Financial Plan projects revenues and expenses for the 2023 and 2024 fiscal years balanced in accordance with GAAP, except as described above, and projects gaps of approximately $3.17 billion, $5.01 billion and $6.47 billion in each of fiscal years 2025, 2026 and 2027. The June Financial Plan had projected revenues and expenses for the 2023 fiscal year balanced in accordance with GAAP, except as described above, and had projected gaps of approximately $4.21 billion, $3.71 billion and $3.98 billion in fiscal years 2024 through 2026, respectively.

The Financial Plan reflects, since the June Financial Plan, increases in projected net revenues of $1.69 billion, $799 million, $693 million and $583 million in fiscal years 2023 through 2026, respectively. Changes in projected revenues include: (i) increases in business tax revenues of $775 million, $579 million, $522 million and $287 million in fiscal years 2023 through 2026, respectively; (ii) increases in sales tax revenues of $530 million, $295 million, $445 million and $595 million in fiscal years 2023 through 2026, respectively; (iii) decreases in real estate transaction tax revenues of $173 million, $397 million, $438 million and $375 million in fiscal years 2023 through 2026, respectively; and (iv) increases in hotel tax revenues of $121 million, $24 million, $16 million and $14 million in fiscal years 2023 through 2026, respectively.

Changes in projected revenues also include (i) net increases in non-tax revenues of $368 million, $235 million, $100 million and $17 million in fiscal years 2023 through 2026, respectively; and (ii) increases in revenues included in the Program to Eliminate the Gap (the "PEG") of $66 million, $63 million, $48 million and $45 million in fiscal years 2023 through 2026, respectively.

The Financial Plan also reflects, since the June Financial Plan, net decreases in projected net expenditures of $480 million and $1.24 billion in fiscal years 2023 and 2024, respectively, and net increases in projected net expenditures of $145 million and $1.61 billion in fiscal years 2025 and 2026, respectively. Changes in projected expenditures include: (i) increases in agency expenses of $656 million, $177 million, $443 million and $446 million in fiscal years 2023 through 2026, respectively; (ii) decreases in agency expenses included in the PEG of $977 million, $1.72 billion, $1.62 billion and $1.59 billion in fiscal years 2023 through 2026, respectively; (iii) decreases of $75 million, $390 million and $425 million in fiscal years 2023 through 2025, respectively, reflecting reimbursements of expenditures with federal aid; (iv) decreases in debt service included in the PEG of $84 million, $170 million, $227 million and $257 million in fiscal years 2023 through 2026, respectively; and (v) increases in pension contributions, as described below.

The PEG savings described above are based on four categories of initiatives designed to close the gap between expenses and revenues: (i) efficiency initiatives designed to improve the City's finances without reducing services; (ii) expense re-estimates due to a delay in spending or lower than expected costs; (iii) grant revenue re-estimates and increases in City revenues; and (iv) reductions in debt service costs, primarily as a result of debt refinancing.

The Financial Plan reflects, since the June Financial Plan, provision of $2.17 billion for the prepayment in fiscal year 2023 of fiscal year 2024 expenses, resulting in an equivalent expenditure reduction in fiscal year 2024.

The Financial Plan also reflects the estimated impact of fiscal year 2022 investment returns of negative 8.65% (net of investment fees). The investment returns – lower than the assumed actuarial rate of 7.00% – increased the City's required pension contributions in the amounts of $861 million, $1.97 billion, and $3.02 billion in fiscal years 2024 through 2026, respectively. Future earnings below the assumed rate will result in contributions in excess of those assumed in the Financial Plan.

The Financial Plan assumes total federal categorical grants of $12.42 billion, $9.49 billion, $8.15 billion, $7.02 billion and $7.0 billion in fiscal years 2023 through 2027, respectively.

The local law authorizing the City to sell real property tax liens expired on March 1, 2022. However, the City continues to seek reauthorization of such authority. The Financial Plan assumes the re-authorization of such authority in fiscal year 2023 and assumes direct revenues to the City from such lien sales of $80 million in each of fiscal years 2023 through 2027. The Financial Plan further assumes that real property tax delinquencies as a percentage of the total property tax levy will equal approximately 1.7% in fiscal years 2023 through 2027. There can be no assurance that the authorization to sell real property tax liens will be reinstated or that, as a result, amounts projected in the Financial Plan to be received from such sales will be realized. In the event that the lien sale program is not re-authorized, real property tax delinquencies are expected to increase beyond the rates assumed in the Financial Plan. Each 1% increase in delinquencies would reduce property tax revenues by approximately $339 million, $344 million, $347 million, $348 million and $348 million in fiscal years 2023 through 2027, respectively.

The City has reached a tentative labor contract settlement with District Council 37 of AFSME (“DC 37”) for the 2021-2026 round of collective bargaining. The tentative settlement provides for annual wage increases of 3% in each of the first four years of the settlement, commencing retroactively on May 26, 2021, followed by a 3.25% wage increase commencing on May 26, 2025. The settlement also includes a $3,000 bonus to be paid at the time of ratification of the agreement. If the DC 37 settlement is ratified by the union and the pattern of such settlement is applied to all City employees, the cost to the City would be approximately $2.5 billion, $1.8 billion, $3.4 billion, $3.9 billion, and $4.7 billion in fiscal years 2023 through 2027, respectively. Such costs are in excess of amounts currently included in the Financial Plan, which reflects funding for annual 1.25% wage increases following the expiration of the labor contracts covering the 2017-2021 round of collective bargaining.

On April 4, 2023, the Director of Management and Budget of the City issued a Program to Eliminate the Gap (“PEG”) letter to City agencies. Citing developments that are placing a severe strain on the City’s budget, including the costs of caring for asylum seekers, the need to fully fund labor reserves for collective bargaining settlements and cuts and cost shifts in the Governor’s Executive Budget, the letter established a 4% savings target in fiscal years 2024-2027 that applies to all City agencies except the Department of Education and the City University of New York, which will be subject to a 3% savings target. The PEG letter states that savings initiatives may not include layoffs and should avoid meaningfully impacting services where possible.

The City has reached a tentative labor contract settlement with the Police Benevolent Association for the period 2017-2025. The first three years of the tentative settlement are consistent with raises other uniformed unions received in the last round of collective bargaining. The subsequent five years of the tentative settlement establish the framework for other uniformed unions. If the Police Benevolent Association settlement is ratified by the union and assuming all other uniformed unions settle on similar terms, the aggregate cost to the City would be approximately $230 million in excess of the cost the City would incur if the pattern established by the DC 37 settlement, which has now been ratified, were applied to all City employees. All such costs are in excess of amounts currently reflected in the Financial Plan.

The City and the Municipal Labor Committee are proceeding with implementation of a Medicare Advantage (“MA”) plan for City retirees by September 1, 2023. Implementation of the plan is expected to generate an estimated $600 million in annual savings in retiree health benefit costs. Contemporaneously with implementation of the MA plan, the City will revoke the current Senior Care plan.

The Financial Plan does not reflect the potential costs to the City of proposals contained in the Governor’s Executive Budget for State fiscal year 2023-2024, which was released on February 1, 2023 (the “Governor’s Executive Budget”). The City projects that the Governor’s Executive Budget proposals, if enacted, would be a net positive impact on the City of $168 million in fiscal year 2023, followed by a net negative impact on the City of $461 million and $1.34 billion in fiscal years 2024 and 2025 respectively, the primary components of which are described below.

The Governor’s Executive Budget includes a proposal for increased City funding to the MTA of approximately $530 million in fiscal year 2024, with expected increases in subsequent fiscal years. The increased funding requirements include (i) increasing the City’s share of funding of the MTA’s net paratransit operating deficit from 50% to 100% which is estimated to cost the City $266 million in fiscal year 2024 and increasing thereafter (as discussed below, the Financial Plan does not reflect previously enacted legislation increasing the City’s share of such deficit from 33% to 50%), (ii) requiring that the City increase its annual payments to the MTA for reduced-fare MetroCards for City students in grades kindergarten through twelve (which is estimated to cost the City $105 million per fiscal year) and (iii) requiring that the City pay an amount equal to 47% of the State's payment for entities exempt from the payroll mobility tax (which is estimated to cost the City $115 million per fiscal year). As an employer, the City will incur additional costs as a result of the proposed increase in the payroll mobility tax, which is expected to cost $40 million per fiscal year, starting in fiscal year 2024.

The Governor's Executive Budget also includes two proposals relating to the number of charter schools in the City, each of which includes no additional State funding. The first such proposal would eliminate the regional cap on the number of charter schools in the City, allowing up to 85 additional charter schools to open. The costs to the City of this proposal are expected to increase over time, depending on the total number of schools which open and the timing of their openings. It is estimated that this proposal could cost the City $1 billion annually when fully phased in. The second proposal would allow for the re-issuance of charters for charter schools in the City that have closed since July 2015 or will close in the future. Like the regional cap changes, the impact on the City would depend on the total number of schools that open and the timing of those openings. It is estimated that the proposal, if enacted, could cost the City up to $300 million per fiscal year when fully phased in.

The Governor's Executive Budget also proposes instituting automatic minimum wage increases based on inflation, which would cost the City approximately $15 million, $35 million, $55 million, and $75 million in fiscal years 2024, 2025, 2026 and 2027, respectively. The cost to the City could be much higher depending on inflation rates and other factors. Additionally, the Governor has proposed ceasing to pass along federal eFMAP funding to localities, including the City. Such funding is typically used to help localities cover the costs of Medicaid. The cost to the City of such proposal is at a minimum of $125 million in fiscal year 2023 and $343 million in each fiscal year thereafter. The eFMAP proposal is an administrative action which can be implemented at the Governor's discretion, without State legislation.

The Governor's Executive Budget also proposes changes to certain payment and review procedures which will inhibit the ability of health plans, including those paid for by the City, to control costs. The cost to the City is expected to be $111 million in fiscal year 2024 and $265 million in fiscal year 2025, rising each year thereafter to result in costs of about $380 million annually by fiscal year 2030.

The State Budget for the State 2023 fiscal year also mandates that adoption, foster care, and related service providers be compensated at 100% of maximum State aid rates. Such mandate reflects the requirements of a recent lawsuit. The legislation requires increased City funding for such services of up to $47 million in fiscal year 2023 and $118 million per fiscal year starting in fiscal year 2024, which is not reflected in the Financial Plan.

The Financial Plan does not reflect future increases in the charter school per-pupil tuition rate, which, if not offset by changes to State education aid to the City that occur each year during the State budget process, are preliminarily estimated to cost the City $81 million in fiscal year 2024, $133 million in fiscal year 2025, $313 million in fiscal year 2026 and $514 million in fiscal year 2027. Final figures that would determine the actual costs to the City for each fiscal year will not be finalized until the time of the State budget process applicable for such fiscal year.

The Financial Plan does not reflect the potential costs from a New York State Court decision issued in July 2022 which increased the statutory rate per hour for court appointed counsel from of $75 per hour to $158 per hour. The City has appealed the court's decision. If the $158 per hour rate remains, such rate would result in increased costs to the City of approximately $84 million per year, unless offset by funding from the State. The Governor's Executive Budget described above proposes to statutorily mandate the increased $158 per hour rate, which would mandate the increased pay regardless of the outcome of the litigation. The Governor's Executive Budget does not include State funding for such increased pay. The City continues to seek a change in State law to have such cost increase funded by the State.

On October 7, 2022, the Mayor declared a State of Emergency as a result of the recent increase in arrival of asylum seekers from Central and South America. The arrival of the asylum seekers is placing a strain on the City's resources. The City expects that the crisis will cost $1.4 billion in fiscal year 2023 and $2.8 billion in fiscal year 2024. The full costs to the City of providing services to asylum seekers during Financial Plan period is not known at this time. The Financial Plan assumes $1 billion in federal funds for costs related to asylum seekers in fiscal year 2023, which is subject to appropriation by the federal government, with no funding reflected in fiscal years 2024 and beyond. The Governor's Executive Budget proposed reimbursing the City for 29% of the City's costs related to asylum seekers up to $1 billion in costs over the next two State fiscal years. In addition, the federal government has allocated approximately $800 million for costs related to caring for asylum seekers to be allocated nationwide. The City is working to secure as large a portion of such funding as possible.

The Financial Plan also does not reflect the impact of a State requirement that the City increase its share of funding of the MTA's net paratransit operating deficit from 33% to 50%. The Financial Plan reflects $175 million in each of fiscal years 2023 through 2027 to cover the City's contributions for paratransit services compared to MTA's estimates of such costs of $223 million, $250 million, $264 million and $278 million in fiscal years 2023, 2024, 2025 and 2026, respectively. The MTA has not yet released an estimate for fiscal year 2027. As described above, the Governor's Executive Budget proposes to increase the City's share of funding of the MTA's net paratransit operating deficit from 50% to 100% starting in fiscal year 2024. Such increased costs are not reflected in the Financial Plan. The Financial Plan further does not reflect full funding to cover projected increases in the annual operating deficit of the MTA Bus Company, which the City is obligated to fund. The Financial Plan reflects $487 million in fiscal year 2023 and $478 million in each of fiscal years 2024 through 2027, compared to MTA's estimate of such costs of $514 million, $792 million, $805 million and $819 million in fiscal years 2023 through 2026, respectively. The MTA has not released an estimate for fiscal year 2027.

The Financial Plan does not fully reflect likely future costs for pupil transportation and legally mandated tuition for special education students unilaterally placed by their families in private school settings. The City is closely monitoring these costs and while a number is not currently known, they are likely to be significant.

The Financial Plan does not reflect the impact of a recently enacted State law which mandates certain maximum class sizes in public school kindergarten through twelfth grades, to be phased in over five years. It is estimated compliance will cost approximately $1.3 billion per fiscal year when the requirement is fully phased in. The City is seeking a change to the State law to have it apply only to kindergarten through third grade and is also seeking State funding to cover the cost of compliance.

On January 31, 2019, NYCHA, the City and the U.S. Department of Housing and Urban Development ("HUD") entered into an agreement (the "HUD Agreement") relating to lead-based paint and other health and safety concerns in NYCHA's properties. The HUD Agreement established a framework by which NYCHA will continue to evaluate and progress towards compliance with federal requirements. Pursuant to the HUD Agreement, a federal monitor, with access to NYCHA information and personnel, has been appointed to oversee NYCHA's compliance with the terms of the agreement and federal regulations. The federal monitor has issued and will continue to issue quarterly reports on NYCHA's compliance with the HUD Agreement. Also pursuant to the HUD Agreement, the City allocated $1.9 billion in capital funding in the Capital Commitment Plan for fiscal years 2023-2027, with an additional $1.3 billion in City capital funds reflected in the remaining years of the Ten-Year Capital Strategy for fiscal years 2028 through 2033. NYCHA subsequently announced that it may be out of compliance with a number of federal regulations beyond the regulations concerning lead-based paint and other health and safety concerns that were the subject of the HUD Agreement and is working to assess the extent of any such noncompliance. NYCHA's 2017 Physical Needs Assessment estimated its projected capital costs at approximately $32 billion over the next five years. In January 2020, NYCHA's Chairman and Chief Executive Officer stated that such costs were $40 billion. Through the Permanent Affordability Commitment Together program, which leverages project-based Section 8 subsidy and partnerships with private and non-profit development partners to make repairs, NYCHA plans to recapitalize approximately 62,000 of its units. As of January 30, 2023, NYCHA and development partners completed renovations on 5,830 apartments, are actively repairing another 10,153 apartments, and are in predevelopment for an additional 20,120 apartments. In June 2022, the State enacted legislation creating the New York City Housing Preservation Trust, which will leverage federal funding to borrow money for the improvement of an additional approximately 25,000 public housing units. The New York City Housing Preservation Trust is not funded by the City and is not reflected in the Financial Plan.

NYCHA's rent collection rate, which has historically been approximately 90%, is currently approximately 65%. As a result, NYCHA is projecting a substantial reduction in rent revenues in calendar year 2023. This reduction in NYCHA's revenues has required that NYCHA rely on its reserves to cover expenses, eliminate budgeted vacancies, and reduce nonessential contracting. While this projected shortfall does not directly impact the City's budget, if NYCHA's revenues do not recover, the City could be asked to increase its funding to NYCHA.

In fiscal years 2022 and 2023, the City appropriated a total of $69 million for a program to support the restructuring of loans to the owners of up to 4,000 taxi medallions to terms that are more affordable to the medallion owners. The $69 million appropriation supplemented a previously paid grant from the City of $65 million for the same purpose. The funds will be used by the program administrator to cover shortfalls in amounts owed by taxi medallion owners on defaulted restructured loans to the extent such shortfall is not covered by the proceeds from the sale of the related medallions. In addition, the City has undertaken, subject to appropriation, to make available additional funding in the future if necessary to cover defaulted loans. The Financial Plan does not include any additional funding for the program. To date, approximately 1,800 loans have been restructured under the program, reducing the principal on the restructured loans by a total of approximately $350 million. Based on the expected maximum restructured loan amount and current market conditions affecting the sale of medallions, the shortfall of each defaulted loan after the application of the sale proceeds of the associated medallion could be up to $60,000. Such amount is expected to vary based on future market conditions.

State legislation provides for congestion tolling for vehicles entering a designated congestion zone in Manhattan below 60th Street, the revenues from which will be directed to the MTA for transit improvements. Details of the plan, including pricing, have yet to be determined, but it is currently expected that the start date will occur in 2024.

The New York City Advisory Commission on Property Tax Reform was established in 2018 to consider changes to the City's property taxation system, without reducing property tax revenues to the City. The commission released its report in December 2021 with recommendations which, among other things, would align the taxable value of certain properties more closely with market value. The commission's recommendations, which have not yet been acted upon, would require State legislation if they were to be implemented.

The City is experiencing an increased level of employee vacancies across its agencies, reflecting a nationwide trend impacting both the private and public sectors. As part of its spending-reduction initiatives, on November 21, 2022, the City announced a vacancy reduction target of reducing agency vacancies by fifty percent of the number of unfilled vacancies as of October 31, 2022. The vacancy reduction initiative does not apply to health and safety positions, uniform employees, teachers, and certain other employees. The implementation of the vacancy reduction initiative has reduced the number of vacancies Citywide by approximately 4,300 employees.

From time to time, the City Comptroller, the Control Board staff, the Office of the State Deputy Comptroller for the City of New York ("OSDC"), the Independent Budget Office ("IBO") and others issue reports and make public statements regarding the City's financial condition, commenting on, among other matters, the City's financial plans, projected revenues and expenditures and actions by the City to eliminate projected operating deficits. It is reasonable to expect that reports and statements will continue to be issued and may contain different perspectives on the City's budget and economy and may engender public comment.

COVID-19

The City has been severely affected by the coronavirus disease, referred to herein as "COVID-19." A state of emergency remained in effect for the City through May 31, 2023, and may be extended. A state of emergency declared by the State expired on September 13, 2022. During periods of the COVID-19 pandemic, many businesses in the City were ordered to close, public schools moved to remote learning, limitations were imposed on large gatherings, and certain vaccination requirements and mask mandates were put in place.

The reduction in business activity, travel and tourism resulting from the pandemic had a severe impact on the City's retail, cultural, hospitality and entertainment sectors. Hotel occupancy declined drastically, as did arrivals to City airports. As a result of the COVID-19 pandemic, unemployment rates throughout the City increased substantially and currently remain above pre-pandemic levels. To date, the City has recovered approximately 90% of jobs lost during the pandemic. Certain real estate sectors have sustained losses as a result of the business distress caused by COVID-19. Higher unemployment as well as increased numbers of employees working from home due to the pandemic have stressed the City's office market. The pandemic has also reduced income for retail stores and hotels. Property tax revenues declined in fiscal year 2022 from the pandemic impact but rebounded in fiscal year 2023. Growth is projected to average 0.6 percent from fiscal years 2024 through 2027. The pandemic has also resulted in a decline in the City's estimated population. The United States Census Bureau estimates the City's population to be 8,467,513 as of July 2021, which shows a decline of 336,677 City residents as compared to the 2020 Census.

Uncertainties remain for commercial office markets as future demand may depend on decisions of major office tenants regarding density, remote work and relocation of operations out of the City. Personal income tax revenue projections could be negatively affected by changes in employment and earnings including, but not limited to, (i) changes in residency status resulting from remote work, (ii) permanent relocation outside the City of individuals with high incomes (the highest 1% of earners accounted for approximately 43% of total personal income tax revenues in calendar year 2020), or (iii) other employment-related changes. In addition, sales tax revenue projections could be negatively impacted by future reductions in economic activity.

The future course of the pandemic is uncertain and will be determined by many factors, including vaccination rates, the effectiveness of vaccines in preventing infections, hospitalizations and deaths, adherence to public health mitigation measures (including masks and social distancing) and the emergence of new virus variants. There can be no assurance that the City will not experience future surges or that rates of cases, hospitalizations and deaths will not increase significantly in the future. There can be no assurances as to what further impacts the pandemic may have on the City's population and economy or that new pandemic-related restrictions will not be imposed in the future. An outbreak of disease or public health emergency, including a resurgence of COVID-19, could have an adverse impact on the City's population and economy and may result in revenues to the City that are lower than projected herein.

Assumptions. The Financial Plan is based on numerous assumptions, including the condition of the City's and the region's economies and the concomitant receipt of economically sensitive tax revenues in the amounts projected. The Financial Plan assumes no economic recession during the years of the Financial Plan. The Financial Plan is subject to various other uncertainties and contingencies relating to, among other factors, the extent, if any, to which wage increases for City employees exceed the annual wage costs assumed; realization of projected earnings for pension fund assets and current assumptions with respect to wages for City employees affecting the City's required pension fund contributions; the willingness and ability of the State to provide the aid contemplated by the Financial Plan and to take various other actions to assist the City; the ability of New York City Health and Hospitals ("NYCHH") and other such entities to maintain balanced budgets; the willingness of the federal government to provide the amount of federal aid contemplated in the Financial Plan; the impact on City revenues and expenditures of federal and State legislation affecting Medicare or other entitlement programs; adoption of the City's budgets by the City Council in substantially the forms submitted by the Mayor; the ability of the City to implement cost reduction initiatives, and the success with which the City controls expenditures; the impact of conditions in the real estate market on real estate tax revenues; the ability of the City and other financing entities to market their securities successfully in the public credit markets; the impact of the outbreak of COVID-19; and the extension of the authorization to sell real property tax liens. See "Certain Reports" herein.

The projections and assumptions contained in the Financial Plan are subject to revision, which may be substantial. No assurance can be given that these estimates and projections, which include actions the City expects will be taken but are not within the City's control, will be realized.

Revenue Assumptions

General Economic Conditions. The Financial Plan assumes an increase in economic activity in calendar year 2022 compared to calendar year 2021.

Real Estate Tax. Projections of real estate tax revenues are based on a number of assumptions, including, among others, assumptions relating to the tax rate, the assessed valuation of the City's taxable real estate, the delinquency rate, debt service needs, a reserve for uncollectible taxes, the operating limit and the impact of the outbreak of COVID-19. Real Estate Tax revenue projections for fiscal years 2023 through 2026 reflect certain City tax programs proposed by the Mayor and adopted by the New York State legislature. The adoption of such proposals is estimated to reduce real estate tax revenues by $25 million per fiscal year, starting in fiscal year 2023.

Projections of real estate tax revenues include net revenues from the sale of real property tax liens of $80 million in fiscal years 2023 through 2027. Projections of real estate tax revenues include the effects of the STAR Program which will reduce the real estate tax revenues by an estimated $144 million, $142 million, $140 million, $138 million and $138 million in fiscal years 2023 through 2027, respectively. Projections of real estate tax revenues reflect the estimated cost of extending the current tax reduction for owners of cooperative and condominium apartments amounting to $668 million, $671 million, $677 million, $684 million and $684 million in fiscal years 2023 through 2027, respectively.

The delinquency rate was 1.2% in fiscal year 2018, 1.2% in fiscal year 2019, 1.8% in fiscal year 2020, 2.0% in fiscal year 2021 and 1.8% in fiscal year 2022. The Financial Plan projects delinquency rates of 1.8% in fiscal year 2023, 1.6% in fiscal year 2024 and 1.7% in each of fiscal years 2025 through 2027.

On April 24, 2017, a lawsuit was filed challenging the City's real property tax system and valuation methodology. The action alleges that the City's real property tax system violates the State and federal constitutions as well as the Fair Housing Act. The action further alleges the valuation methodology as mandated by certain provisions of the State Real Property Tax Law results in a disparity and inequality in the amount of taxes paid by Black and Hispanic Class 1 property owners and renters. The Appellate Division, First Department granted the City's motion to dismiss and dismissed all claims against the City. In September 2020, the New York Court of Appeals dismissed the plaintiff's purported appeal as of right of the First Department rulings. On August 9, 2021, the plaintiff filed, in the Appellate Division, a motion for leave to appeal and on August 20, 2021, the City filed a response in opposition thereto. The Appellate Division denied the plaintiff's motion for leave to appeal to the Court of Appeals. On December 1, 2021 the plaintiff served and filed a motion seeking leave to appeal directly from the Court of Appeals. The City and State submitted their respective opposition papers. On April 28, 2022, the Court of Appeals granted the plaintiff's motion for leave to appeal. Plaintiff filed an appeal brief on July 27, 2022. Response briefs from the City and State were filed on December 12, 2022. The plaintiff's reply brief was filed on March 3, 2023.

Other Taxes. The Financial Plan reflects the following assumptions regarding projected baseline revenues from Other Taxes: (i) with respect to the personal income tax, declines in fiscal year 2023 and fiscal year 2024 revenues reflecting a drop in Wall Street profits from the high levels seen in the prior years, moderate growth from fiscal years 2025 through 2027 as Wall Street profits revert back to historical averages; (ii) with respect to the business corporation tax, decline in revenues in fiscal years 2023 and fiscal year 2024 reflecting economic headwinds from a weakened outlook for Wall Street profits followed by moderate growth in fiscal years 2025 through 2027; (iii) with respect to the unincorporated business income tax, a decline in fiscal year 2023 reflecting a weaker Wall Street performance, a weaker growth in fiscal year 2024 reflecting slower economic growth and a return to moderate growth in fiscal years 2025 through 2027; (iv) with respect to the sales tax, strong growth in fiscal year 2023 from strong consumer spending along with robust growth in the tourism, hospitality and entertainment industries, growth moderates in fiscal years 2024 through 2027; (v) with respect to the real property transfer tax, a decline in fiscal year 2023 from a slow-down in residential activity reflecting the impact of rising interest rates and stalled commercial transactions, growth returns from fiscal years 2024 to 2027 reflecting steady economic growth; (vi) with respect to the mortgage recording tax, declines in fiscal year 2023 and 2024 as the impact from the higher interest rates reverberates through the residential and commercial markets before growth returns to the long-term trend in fiscal years 2025 through 2027 reflecting steady economic growth; and (vii) with respect to the commercial rent tax, a decline in fiscal year 2023 reflecting high vacancy rates for commercial office space in Manhattan and flat growth from fiscal years 2024 through 2027, as uncertainties remain about office space use.

Miscellaneous Revenues. The Financial Plan reflects collections from Miscellaneous Revenues in the amounts of approximately $8.0 billion in fiscal year 2023, $7.5 billion in fiscal year 2024, $7.4 billion in fiscal year 2025 and $7.3 billion in each of fiscal years 2026 and 2027.

Intergovernmental Aid. The Financial Plan assumes that all existing federal and State categorical grant programs will continue, unless specific legislation provides for their termination or adjustment, and assumes increases in aid where increased costs are projected for existing grant programs.

As of January 31, 2023, approximately 17.4% of the City's full-time and full-time equivalent employees (consisting of employees of the mayoral agencies and the DOE) were paid by Community Development funds, water and sewer funds and from other sources not funded by unrestricted revenues of the City.

A major component of federal categorical aid to the City is the Community Development program. Pursuant to federal legislation, Community Development grants are provided to cities primarily to aid low and moderate income persons by improving housing facilities, parks and other improvements, by providing certain social programs and by promoting economic development. These grants are based on a formula that takes into consideration such factors as population, age of housing and poverty.

The City's receipt of categorical aid is contingent upon the satisfaction of certain statutory conditions and is subject to subsequent audits, possible disallowances and possible prior claims by the State or federal governments. The general practice of the State and federal governments has been to deduct the amount of any disallowances against the current year's payment, although in some cases the City remits payment for disallowed amounts to the grantor. Substantial disallowances of aid claims may be asserted during the course of the Financial Plan. The City estimates probable amounts of disallowances of recognized grant revenues and makes the appropriate adjustments to recognized grant revenue for each fiscal year. The amounts of such downward adjustments to revenue for disallowances attributable to prior years increased from $124 million in the 1977 fiscal year to $542 million in the 2006 fiscal year. The amounts of such disallowances were $103 million and $114 million in fiscal years 2007 and 2008, respectively. There were no adjustments for estimated disallowances in fiscal years 2009 and 2010. In fiscal year 2011, the downward adjustment for disallowances was $113 million and in fiscal year 2012 an upward adjustment of $166 million was made, reflecting a reduced estimate of disallowances attributable to prior years as of June 30, 2012. In fiscal years 2013, 2014, 2015, 2016, 2020 and 2021, downward adjustments of $59 million, $19 million, $110 million, $1 million, $5 million and $24 million, respectively, were made. In fiscal years 2017, 2018 and 2019, upward adjustments of $558 million, $139 million and $113 million, respectively, were made. In fiscal year 2022 a downward adjustment of $35 million was made. As of June 30, 2022, the City had an accumulated reserve of $318 million for all disallowances of categorical aid.

Expenditure Assumptions

Personal Service Costs. The Financial Plan projects that the authorized number of City-funded full-time and full-time equivalent employees will decrease from an estimated level of 268,268 as of June 30, 2023 to an estimated level of 267,409 by June 30, 2027.

The Financial Plan does not reflect the full costs of the recent tentative labor settlement with DC 37. If the DC 37 settlement is ratified by the union and the pattern of such settlement is applied to all City employees, the cost to the City would be approximately $2.5 billion, $1.8 billion, $3.4 billion, $3.9 billion, and $4.7 billion in fiscal years 2023 through 2027, respectively. Such costs are in excess of amounts currently included in the Financial Plan, which reflects funding for annual 1.25% wage increases following the expiration of the labor contracts covering the previous 2017-2021 round of collective bargaining.

Other Than Personal Services ("OTPS").

Administrative OTPS and Energy. The Financial Plan contains estimates of the City's administrative OTPS expenditures for general supplies and materials, equipment and selected contractual services, and the impact of agency gap-closing actions relating to such expenditures in the 2023 fiscal year. Thereafter, OTPS administrative expenditures are projected to remain the same in fiscal years 2024 through 2027. Energy costs for each of the 2023 through 2027 fiscal years are assumed to vary annually, with total energy expenditures projected at $1.18 billion in fiscal year 2023 and increasing to $1.21 billion by fiscal year 2027.

Public Assistance. Of total cash assistance expenditures in the City, the City-funded portion is projected to be $819 million in fiscal year 2023, $891 million in each of fiscal years 2024 through 2026, and $1.2 billion in fiscal year 2027.

Medical Assistance. Medical assistance payments projected in the Financial Plan consist of payments to voluntary hospitals, skilled nursing facilities, intermediate care facilities, home care providers, pharmacies, managed care organizations, physicians and other medical practitioners. The City-funded portion of medical assistance payments is expected to be $6.45 billion in fiscal year 2023, $6.3 billion in each of fiscal years 2024 through 2026 and $6.4 billion in fiscal year 2027. Such payments include the City's capped share of local Medicaid expenditures as well as Supplemental Medicaid payments to NYCHH.

New York City Health and Hospitals. NYCHH, which provides essential services to over 1.1 million New Yorkers annually, faces near- and long-term financial challenges resulting from, among other things, changes in hospital reimbursement under the Affordable Care Act and the statewide transition to managed care. On April 26, 2016, the City released "One New York: Health Care for Our Neighborhoods," a report outlining the City's plan to address NYCHH's financial shortfall.

In February 2023, NYCHH released a cash-based financial plan, which projected City-funded expenditures of $1.6 billion in fiscal year 2023, $913 million in fiscal year 2024, $910 million in fiscal year 2025 and $874 million in each of fiscal years 2026 and 2027, in addition to the forgiveness of debt service for fiscal years 2023 through 2027 and the City's contribution to supplemental Medicaid payments which is consistent with the City's Financial Plan. NYCHH's financial plan projected total receipts of $10.5 billion, $9.3 billion, $9.4 billion, $9.2 billion and $9.3 billion, and total disbursements of $10.7 billion, $9.84 billion, $9.3 billion, $9.5 billion and $9.6 billion in fiscal years 2023 through 2027, respectively.

NYCHH relies on significant projected revenue from Medicaid, Medicare and other third-party payor programs. Future changes to such programs could have adverse impacts on NYCHH's financial condition.

Other. The projections set forth in the Financial Plan for OTPS-Other include the City's contributions to New York City Transit ("NYCT"), NYCHA, City University of New York ("CUNY") and subsidies to libraries and various cultural institutions. They also include projections for the cost of future judgments and claims, which are discussed below under "Judgments and Claims." In the past, the City has provided additional assistance to certain State governmental agencies, public authorities or public benefit corporations which receive or may receive monies from the City directly, indirectly or contingently ("Covered Organizations") that had exhausted their financial resources prior to the end of the fiscal year No assurance can be given that similar additional assistance will not be required in the future.

New York City Transit. NYCT operates under its own section of the Financial Plan as a Covered Organization. An accrual-based financial plan for NYCT covering its 2023 through 2026 fiscal years was published in February 2023 (the "2023 NYCT Financial Plan"). The NYCT fiscal year coincides with the calendar year. The 2023 NYCT Financial Plan reflects the negative impacts of the COVID-19 pandemic on MTA costs, ridership, and farebox revenue. The 2023 NYCT Financial

Plan reflects City assistance to the NYCT operating budget of $464.7 million in 2023, increasing to $508.2 million in 2026. In addition, the 2023 NYCT Financial Plan projects real estate transfer tax revenue dedicated for NYCT use of $533.1 million in 2023, which is lower than the $777.3 million of such revenue that was received in 2022; that amount increases each year to reach $631.7 million by 2026. The 2023 NYCT Financial Plan includes decreased expected farebox revenue based on projected lower ridership. The 2023 NYCT Financial Plan reflects $11.6 billion in revenues and $15.4 billion in expenses for 2023, leaving a budget gap of $3.8 billion. After accounting for accrual adjustments and cash carried over from 2022, there are projected operating budget gaps of $0.4 billion in 2023, $2.5 billion in 2024, $4.8 billion in 2025 and $7.2 billion in 2026. These figures reflect the receipt of $7 billion in federal aid from the American Rescue Plan Act (ARPA), which is being used to partially offset the outyear deficits.

In 2009, a Payroll Mobility Tax ("PMT") was enacted into State law to provide $0.34 for every $100 of payroll in the MTA's twelve-county service area. The PMT is currently expected to generate revenues for NYCT in the amount of $947 million in 2023, decreasing to $622 million in 2026.

The MTA faces serious budget shortfalls from historic declines in fare and tax revenues due to the COVID-19 pandemic and its effects on the region. Federal aid, fare increases and operational efficiencies will allow the MTA to substantially reduce over $3 billion in annual out-year deficits to roughly $0.6 billion in 2023, $1.2 billion in 2024, $1.2 billion in 2025, and $1.6 billion in 2026. The City's payments to the MTA remain dependent on future uncertainties such as additional federal funding, ridership trends, and service adjustments.

The 2015-2019 Capital Program currently includes $33.9 billion for all MTA agencies, including $16.7 billion to be invested in the NYCT core system and $1.7 billion for NYCT network expansion.

The State has agreed to contribute $9.1 billion towards the 2015-2019 Capital Program. The City has agreed to contribute $2.656 billion. Of the City's contribution, $2.056 billion has been reflected in the City's Capital Commitment Plan, including $164.0 million for the Subway Action Plan. The remaining $600.0 million will come from joint ventures, such as development deals, which will not flow through the City budget.

On September 19, 2019, the MTA released its 2020-2024 Capital Program, which took effect by default in January 2020. After amendment, the program includes $55.4 billion for all MTA agencies, including $34.6 billion to be invested in the NYCT core system and $4.6 billion in NYCT network expansion. The entire 2020-2024 Capital Program was placed on hold in 2020 but resumed upon the announcement of $6.5 billion in federal aid in the ARPA in March of 2021. The program was amended twice from its original $54.8 billion total, once in December 2021 and once in July 2022.

Legislation adopted in 2019 includes the enactment of congestion tolling for vehicles entering a designated congestion zone in Manhattan below 60th Street, the revenues from which will be directed to the MTA for transit improvements. In August 2022 the MTA convened the Traffic Mobility Review Board, which will oversee congestion pricing and determine exact toll rates. The 2023 NYCT Financial Plan anticipates that the MTA will begin receiving revenue from congestion tolling in the second quarter of 2024. MTA expects to receive $750 million of revenue in 2024 and $1 billion per year thereafter.

In addition, the State 2020 Budget included legislation authorizing the imposition of sales tax on certain additional internet sales and providing that City sales tax revenues in the amount of $127.5 million in State fiscal year 2020 (reflecting the portion of the year in which it is effective) and $170 million in State fiscal year 2021 and thereafter increasing by one percent per year, will be directed to the MTA for transit improvements. Revenues from such additional sales tax are currently estimated to be approximately $170 million per year and are in addition to existing sales taxes attributable to certain other internet transactions. Additionally, such legislation provided that State sales tax revenues in the amount of $112.5 million in State fiscal year 2020 and $150 million in State fiscal year 2021 and thereafter increasing by one percent per year, will be directed to the MTA for transit improvements. The State 2020 Budget also included legislation increasing real estate transfer taxes on properties valued at more than $2 million, which will also be directed to the MTA for transit improvements.

The State 2021 Budget requires the City to contribute $3 billion towards the 2020-2024 Capital Program concurrent with the State's $3 billion contribution. Neither the City nor the State can use operating funds dedicated to the MTA to supplant their capital commitment and must pay on a schedule determined by the State Budget Director. The City has appropriated this $3 billion and this is anticipated to be spent within the Preliminary Ten-Year Capital Strategy.

The State 2021 Budget included a requirement that the City increase its funding of the MTA's net paratransit operating deficit from 33% to 50%. The City's Financial Plan reflects $175 million in each of fiscal years 2023 through 2027 to cover the City's contributions for paratransit services, compared to MTA's estimates of $223 million, $250 million, $264 million and $278 million in fiscal years 2023, 2024, 2025 and 2026, respectively. The MTA has not released an estimate for fiscal year 2027. Spending on paratransit is significantly impacted by ridership levels, and it is unknown what the long-term impacts of COVID-19 will be on usage. The City will continue to monitor the anticipated paratransit costs for future years.

Department of Education. State law requires the City to provide City funds for the Department of Education ("DOE") each year in an amount not less than the amount appropriated for the preceding fiscal year, excluding amounts for debt service and pensions for the DOE. Such City funding must be maintained, unless total City funds for the fiscal year are estimated to be lower than in the preceding fiscal year, in which case the mandated City funding for the DOE may be reduced by an amount up to the percentage reduction in total City funds.

Judgments and Claims. In the fiscal year ended on June 30, 2022, the City expended $1.2 billion for judgments and claims, compared to $617.9 million in the fiscal year ended June 30, 2021. The increase in judgments and claims paid in fiscal year 2022 compared to fiscal year 2021 reflect, in part, payments made relating to a class action lawsuit against the Board of Education. The Financial Plan includes provisions for judgments and claims of $1.2 billion, $1.2 billion, $877.2 million, $823.2 million and $840.2 million for the 2023 through 2027 fiscal years, respectively. These projections incorporate a substantial amount of claims costs attributed to NYCHH, estimated to be $140 million in each year of the Financial Plan, for which NYCHH reimburses the City unless otherwise forgiven by the City, which was the case in fiscal years 2013 and 2016. The City is a party to numerous lawsuits and is the subject of numerous claims and investigations. The City has estimated that its potential future liability on account of outstanding claims against it as of June 30, 2022 amounted to approximately $7.2 billion. This estimate was made by categorizing the various claims and applying a statistical model, based primarily on actual settlements by type of claim during the preceding ten fiscal years, and by supplementing the estimated liability with information supplied by the City's Corporation Counsel.

In addition to the above claims, numerous real estate tax certiorari proceedings involving allegations of inequality of assessment, illegality and overvaluation are currently pending against the City. The City's Financial Statements for the fiscal year ended June 30, 2022 include an estimate that the City's liability in the certiorari proceedings, as of June 30, 2022, could amount to approximately $1.34 billion. Provision has been made in the Financial Plan for estimated refunds of $500 million in fiscal year 2023 and $400 million in each of fiscal years 2024 through 2027.

General Obligation, Lease and TFA Debt Service. Debt service estimates for fiscal years 2023 through 2027 include debt service on outstanding general obligation bonds and conduit debt, and the funding requirements associated with outstanding TFA Future Tax Secured Bonds, and estimates of debt service costs of, or funding requirements associated with, future general obligation, conduit and TFA Future Tax Secured debt issuances based on projected future market conditions. Such debt service estimates also include estimated payments pursuant to interest rate exchange agreements but do not reflect receipts pursuant to such agreements.

In July 2009, the State amended the New York City Transitional Finance Authority Act to expand the borrowing capacity of the TFA by providing that it may have outstanding $13.5 billion of Future Tax Secured Bonds (excluding Recovery Bonds) and may issue additional Future Tax Secured Bonds provided that the amount of such additional bonds, together with the amount of indebtedness contracted by the City, does not exceed the debt limit of the City. The City currently expects to continue to finance approximately half of its capital program through the TFA, exclusive of Department of Environmental Protection ("DEP") capital budget items financed by the Water Authority.

The Financial Plan reflects general obligation debt service of $4.21 billion, $4.43 billion, $4.60 billion, $4.85 billion and $5.04 billion in fiscal years 2023 through 2027, respectively, conduit debt service of $147 million, $118 million, $117 million, $116 million and $115 million in fiscal years 2023 through 2027, respectively, and TFA debt service of $3.30 billion, $3.35 billion, $3.63 billion, $4.14 billion and $4.61 billion in fiscal years 2023 through 2027, respectively, in each case prior to giving effect to prepayments. Such debt service requirements are projected to be below 15% of projected City tax revenues for each year of the Financial Plan.

Environmental Matters

The City has more than 500 miles of coastline, bordering the Atlantic Ocean as well as rivers, bays, and inlets. Two of its five Boroughs, Manhattan and Staten Island, are islands and water forms the principal boundary of the remaining three. As a result, the City is directly affected by rising sea levels and exposed to intensifying coastal storms.

Storms

On Monday, October 29, 2012, Sandy hit the Mid-Atlantic East Coast. The storm caused widespread damage to the coastal and other low lying areas of the City and power failures in various parts of the City, including most of downtown Manhattan.

On January 29, 2013, President Obama signed legislation providing for approximately $50.5 billion in storm-related aid for the region affected by the storm. Although it is not possible for the City to quantify the full, long-term impact of the storm on the City and its economy, the current estimate of the direct costs to the City, NYCHH and NYCHA is approximately $10.7 billion (comprised of approximately $1.8 billion of expense costs and approximately $8.9 billion of capital project costs). Such direct costs represent funding for emergency response, debris removal, emergency protective measures, repair of damaged infrastructure and long-term hazard mitigation investments. In addition to such direct costs, the City is delivering Sandy-related disaster recovery assistance services, benefiting impacted communities, businesses, homeowners and renters ("Community Costs"). The City anticipates that funding for Community Costs will be primarily reimbursed with federal funds. However, the City is responsible for $134 million of such Community Costs, which are reflected in the Financial Plan. In addition, the City may be responsible for up to approximately $150 million of additional Community Costs, which are not reflected in the Financial Plan.

The Financial Plan assumes that the direct costs described above will largely be paid from non-City sources, primarily the federal government, and that the Community Costs described above will be primarily reimbursed by federal funds. The City expects reimbursements to come from two separate federal sources of funding, FEMA and HUD. The City has secured approximately $10.7 billion in FEMA assistance and other federal emergency response grants ("FEMA Funding"). The maximum reimbursement rate from FEMA is 90% of total costs. Other federal emergency response grants may have larger local share percentages. The City expects to use $720 million of Community Development Block Grant Disaster Recovery funding allocated by HUD to meet the local share requirements of the FEMA funding, as well as recovery work not funded by FEMA or other federal sources. This allocation would be available to fill gaps in such FEMA funding. As of June 30, 2022, the City, NYCHH and NYCHA have received $4.5 billion in reimbursements from FEMA for the direct costs described above. In addition to the FEMA Funding described above, HUD has made available over $4.4 billion for Community Costs, of which approximately $3.8 billion has been received through June 30, 2022. No assurance can be given that the City will be reimbursed for all of its costs or that such reimbursements will be received within the time periods assumed in the Financial Plan. There is no assurance, if the City were to experience a similar storm in the future, that non-City sources, including the federal government, would pay the costs.

On September 1, 2021, Hurricane Ida hit the Mid-Atlantic East Coast as a post-tropical cyclone ("Ida"), bringing significant rainfall and resulting in severe flooding in parts of the City, including inland areas. Rainfall from Ida exceeded the previous record for the most single-hour rainfall in the City and for the first time the National Weather Service declared a flash flood emergency in the City. Ida resulted in the deaths of 13 people in the City, 11 of which occurred in basement housing units. On September 3, 2021, former Mayor de Blasio announced a climate-driven rain response plan, which includes developing improved storm warning systems and the creation of the Extreme Weather Response Taskforce composed of representatives from several different City agencies, including DEP, the Department of Transportation, Emergency Management and the Department of Sanitation. On September 27, 2021, the taskforce released its report, The New Normal: Combating Storm-Related Extreme Weather in New York City. The report's recommendations, among others, include (i) improvements to emergency preparedness and response, (ii) protecting occupants of basement apartments and (iii) expediting both short-term and long-term investments in infrastructure, including sewers and prevention of flooding in inland communities. The total costs of implementing all of the report's recommendations would be substantial and in some cases would require State and federal funding. In response to the report, in October 2021, the City added approximately $2 billion to its capital plan to support the report's recommendations, most of which is in DEP's capital budget to be funded by the City's water and sewer system through bonds issued by the City's Water Authority. Such additional funding continues to be reflected in the Preliminary Ten-Year Capital Strategy. The City continues to review the effects of climate change, including increased climate drive rain. The extent to which funding to cover recommendations put forth by the report will be available from State or federal sources is not known at this time.

Climate Change

Since 2007, the City has been engaged in strategic planning for climate change, recognizing the challenges it presents for City operations and infrastructure. Among other things, the City created the New York City Panel on Climate Change (the "NPCC"), a body of more than a dozen leading independent climate and social scientists. Since 2008, NPCC has analyzed climate trends, developed projections, explored key impacts, issued reports (the "NPCC Reports") and advised on response strategies for the City. The NPCC has determined that the City is already experiencing the impacts of climate change and projects dramatic impacts on the City in the future. Climate change is causing more extreme heat, extreme rainfall, coastal storm surge, and chronic tidal flooding. NPCC projections form the basis for the City's climate resiliency planning, which involves coordination and cooperation among multiple public and private stakeholders, and expansion of ongoing maintenance and development of municipal infrastructure as well as specific initiatives such as those described below.

Building on NPCC's recommendations and the City's strategic planning, the City is in the process of implementing infrastructure projects to protect the City from the effects of extreme rainfall, addressing some of the risks identified in the NPCC Reports. In addition, the City is pursuing heat mitigation strategies. These projects and initiatives are in various stages of feasibility review, design and construction and implementation. Funding for these projects is expected to come from City, State and federal sources. Some projects are expected to require additional funding to the extent that they are in the planning stages or current funding does not provide for the costs of construction.

Several major coastal resiliency projects are currently underway throughout the City, including the East Side Coastal Resiliency Project ("ESCR"). ESCR, which broke ground in 2021, is an integrated coastal flood protection system which will create resilient open spaces and improve waterfront access on Manhattan's east side, from East 25th Street at the north to Montgomery Street at the south. The City anticipates the entire flood protection system will be in place and operational by the end of 2026. The total expected cost of ESCR is $1.97 billion, with remaining costs fully funded through a combination of City, federal and other funding.

The U.S. Army Corps of Engineers ("USACE") is pursuing the South Shore of Staten Island Coastal Storm Risk Management Project (the "Staten Island Project") and the Rockaways Shorefront and Back Bay Projects (the "Rockaways Project"). The Staten Island Project will create a 5.5-mile line of coastal protection on Staten Island between Fort Wadsworth and Oakwood Beach. USACE currently estimates that the project will cost $1.7 billion. The City is responsible for 10.5% of the project costs, and the remaining project costs are to be paid for with federal and State funds. Approximately half of the City's share of such project costs is currently reflected in the Preliminary Ten Year Capital Strategy. The Rockaways Project consists of coastal protection elements on the Atlantic shorefront and on the Jamaica Bay side of the Rockaways. Construction has begun on the project, which will be fully funded by the federal government, with an expected cost of approximately $590 million.

Other projects in Lower Manhattan include constructing flood walls and deployable flip-up barriers to protect the Two Bridges neighborhood, which lies south of Montgomery Street at the north to the Brooklyn Bridge at the south, developing a plan that contemplates extending the Manhattan shoreline from the Brooklyn Bridge to the Battery into the East River to protect the Seaport and Financial District area, and constructing an elevated waterfront esplanade in the Battery and flood barriers in Battery Park City. Coastal resilience projects are also underway in the Tottenville, Red Hook, and Hunts Point neighborhoods, with shoreline reinforcement projects happening in other identified areas of the City. These projects are in various stages of feasibility review, design and construction and implementation. Funding for these projects is coming from City and federal sources. While the full cost of these projects is not yet known, $522 million is included in the Preliminary Ten-Year Capital Strategy.

In addition to site-specific resiliency projects, the City is taking steps to integrate climate resiliency into capital planning through the NYC Climate Resiliency Design Guidelines, which translate future-looking climate change projections into technical guidance to inform the design of roads, buildings, sewer systems, hospitals, public housing, and other pieces of critical public infrastructure. In 2021, the City began a five-year pilot program through which dozens of new projects will be designed and constructed using the standards in the NYC Climate Resiliency Design Guidelines. By 2026, all City projects will be required to meet a stringent set of requirements that will certify their preparedness for extreme weather threats.

Reducing risk from extreme rainfall requires a multi-layered strategy with investments in infrastructure adaptation, building level protection, data collection, and community engagement. In July 2022, the City released the Rainfall Ready NYC action plan, a plan to prepare the City for more extreme rainfall in the future. The City continues to install grey infrastructure, such as building out a comprehensive storm sewer system in Southeast Queens, and green infrastructure, such as rain gardens and bluebelt wetlands, to manage stormwater and protect water quality. This work is being carried out by DEP and funding is included in the City's capital budget. The City is also working to develop Cloudburst management projects that will use grey and green infrastructure to absorb, store and transfer rainwater.

In 2015, FEMA issued preliminary updated flood insurance rate maps, which would have expanded the 100-year floodplain beyond the areas designated in the flood maps issued in 2007. The City appealed the 2015 preliminary flood maps challenging the modeling FEMA used to develop them. The 2015 preliminary flood maps were adopted into the building code, but the prior 2007 flood maps remain in effect for flood insurance purposes. In 2016, FEMA agreed with the City's appeal, and the City is currently working with FEMA to update the maps. FEMA's new maps are expected to generally expand the 100-year floodplain from the 2007 flood maps and may cover different areas than the 2015 preliminary flood maps. Such expansion could negatively impact property values in those newly designated areas. In addition, an increase in areas of the City susceptible to flooding resulting from climate change could result in greater recovery costs to the City if flooding were to occur within such larger areas.

The City is also committed to minimizing its own greenhouse gas emissions by reaching carbon neutrality by 2050. The City's efforts to reach such goal include promoting and investing in electrification, clean energy, energy efficiency, and sustainable transportation, and reducing energy use. Since 2014, the City has invested over $700 million in more than 10,300 energy conservation measures across almost 2,000 buildings, comprising more than 70 percent of City government's building square footage. The investments have decreased energy use and reduced emissions by nearly 266,000 metric tons. The Preliminary Ten-Year Capital Strategy includes $4.4 billion to continue this work to reduce energy use and greenhouse gas emissions.

Despite the efforts described above, the magnitude of the impact on the City's operations, economy, or financial condition from climate change is indeterminate and unpredictable. No assurance can be given that the City will not encounter natural disaster risks, such as hurricanes, tropical storms, heatwaves or catastrophic sea level rise in the future, or that such risks will not have an adverse effect on the operations, economy or financial condition of the City.

Cybersecurity

The City relies on a large and complex technology environment to conduct its operations. As a recipient and provider of personal, private or sensitive information, the City and its agencies and offices face multiple cyber threats including, but not limited to, hacking, viruses, malware and other attacks on computers and other sensitive digital networks and systems. The City's Office of Cyber Command ("Cyber Command"), which was created in 2017, is charged with setting information security policies and standards for the City, directing the City's citywide cyber defense and incident response, deploying defensive technical and administrative controls and providing guidance to the Mayor and City agencies on cyber defense. In January 2022, Cyber Command became part of the City's Office of Technology and Innovation ("OTI") (formerly the Department of Information Technology and telecommunications).

Cyber Command has over 100 full-time employees and works with designated cybersecurity contacts at each City agency as part of the Citywide Cybersecurity Program. The Financial Plan reflects funding for Cyber Command of $122 million in fiscal year 2023, $121 million in fiscal year 2024 and $122 million in each of fiscal years 2025 through 2027. Such funding does not account for cybersecurity funding at other City agencies. Cyber Command is built around two core cybersecurity functions: (1) threat management, which manages incident response and cyber threat intelligence and vulnerability management, which helps agencies prioritize remediation efforts on identified unpatched systems in the City's networks; and (2) security sciences, which manages strategic and tactical cyber defense technologies and initiatives.

In carrying out its functions, Cyber Command works with a range of City, State, and federal law enforcement agencies, including the New York City Police Department and the Federal Bureau of Investigation's Joint Terrorism Task Force. In February 2022, the City and the State, along with the mayors of Albany, Buffalo, Rochester, Syracuse, and Yonkers, unveiled the Joint Security Operations Center. The center should enhance coordination of cybersecurity efforts across the State, helping to foster collaboration among city, State, and federal entities. Cyber Command also regularly works with other states and municipalities throughout the country to share cybersecurity threat intelligence and best practices, as well as with non-governmental entities such as utilities, telecommunications providers and financial services companies for the purpose of enhancing collective cyber defenses. The City has developed standard cybersecurity policies and standards for third party vendors of the City to follow, and security provisions for contracts with vendors, which help ensure that the City is notified of cyber breaches and suspected cyber breaches of a vendor's network environment. The City has also developed a Citywide Incident Response Policy, which requires City agencies to develop incident response plans in accordance with Cyber Command policies and standards.

While the City conducts periodic tests and reviews of its networks, no assurances can be given that such security and operational control measures will be successful in guarding against all cyber threats and attacks. New technical cyber vulnerabilities are discovered in the United States daily. In addition, cyber attacks have become more sophisticated and increasingly are capable of impacting municipal control systems and components. The techniques used to obtain unauthorized access to, or to disable or degrade, electronic networks, computers, systems and solutions are rapidly evolving and have become increasingly complex and sophisticated. In addition, there is heightened risk due to an increase in remote access to City systems by City employees as a result of the outbreak of COVID-19. As cybersecurity threats continue to evolve, the City may be required to expend significant additional resources to continue to modify and strengthen security measures, investigate and remediate any vulnerabilities, or invest in new technology designed to mitigate security risks. The results of any successful attack on the City's computer and information technology systems could impact its operations and damage the City's digital networks and systems, and the costs of remedying any such damage could be substantial. Consistent with the City's general policy to self-insure, the City does not carry insurance against cyber attacks.

On Saturday, June 5, 2021, Cyber Command detected unusual activity on one server located within the City Law Department's information technology systems and promptly determined, with the assistance of the Law Department, a third-party had accessed the server in an unauthorized manner. Consistent with the City's Cybersecurity Incident Response protocols, Cyber Command, OTI, and the Law Department took immediate action to contain the server, identify any additional impacted systems and contain such systems, and engaged in various defensive measures to address the unauthorized activity, including, without limitation, temporarily disabling remote access capability to the Law Department's network and blocking incoming connections from the remote access systems. The disabling and blocking resulted in the inability of Law Department employees to remotely access the Law Department network, although such employees could continue to access the network while present at the Law Department's offices. Such disabling and blocking remained in effect as the City implemented certain security measures which led to continued business interruption. Due to certain COVID restrictions and the remote nature of certain Law Department work, the inability to access the network remotely led to temporary, significant business interruption. Beginning on September 13, 2021, all mayoral agency employees, including Law Department employees, have returned to full in-person work. With the replacement of components and system upgrades, full functionality of the Law Department's computer network is substantially complete. Cyber Command's investigation has found no evidence of data exfiltration or unauthorized encryption of City information technology systems or the presence of ransomware.

The DOE investigated a cybersecurity incident at Illuminate Education ("Illuminate"), a third-party vendor that provided cloud-based services to some DOE schools. Illuminate advised DOE that between December 28, 2021 and January 8, 2022, certain of Illuminate's databases that contained confidential student information were subject to unauthorized access. Illuminate has stated that no financial account information or social security numbers were affected in this incident, and no DOE computer systems were affected. DOE directed all schools to cease using any Illuminate products and services after June 30, 2022.

Certain Reports. Set forth below are summaries of the most recent reports of the City Comptroller, OSDC and the staff of the Control Board. These summaries do not purport to be comprehensive or definitive.

On March 6, 2023, the City Comptroller released a report entitled "Comments on New York City's Preliminary Budget for Fiscal Year 2024 and the Financial Plan for Fiscal Years 2023-2027". The report states that the City's fiscal outlook differs significantly from that depicted in the Financial Plan, for three main reasons. First, a tentative contract agreement was announced between DC 37 and the City with annual raises of 3 percent for the first four years and 3.25 percent for the fifth year – higher than the 1.25 percent annual raises funded in the Financial Plan. If this were to be the pattern for all other unions, it would add costs to the Financial Plan of $2.5 billion in fiscal year 2023, $1.8 billion in fiscal year 2024, $3.4 billion in fiscal year 2025, $3.9 billion in fiscal year 2026, and $4.7 billion in fiscal year 2027 for a total of $16.3 billion. Second, the cost for shelter and services provided to asylum seekers is escalating. The Financial Plan assumed the annual cost to be $1 billion in fiscal year 2023 and zero in fiscal year 2024 and beyond, and also assumed these costs would be covered in full by federal aid. By February 7, 2023, City Hall had projected the cumulative cost for fiscal year 2023 and fiscal year 2024 would be $4.2 billion. State and federal aid are currently projected to cover only one-quarter of that amount. Third, the Governor's Executive Budget includes $1 billion in cost shifts, unfunded mandates, and revenue cuts just in fiscal year 2024. Additional, significant costs could derive from the Governor's proposals regarding charter schools. The cost of implementing the State's class size mandate legislation enacted in 2022, which requires the City to reduce class size in its schools over the next five years, also remains unfunded.

The report incorporates an updated forecast of economic conditions and City revenues. This forecast reflects the economic resiliency in response to tighter monetary policy shown so far, and an outlook predicated on an economic "soft-landing". The analysis also incorporates up-to-date information on the City's property tax, not included in the Financial Plan. The City Comptroller's net revenue projections are higher than the Financial Plan projections by $1.38 billion, $2.32 billion, $1.90 billion, $2.19 billion, and $3.61 billion in fiscal years 2023 through 2027, respectively. The report projects that: (i) property tax revenues will be higher by $177 million, $577 million, $730 million, $1.21 billion and $2.54 billion in fiscal years 2023 through 2027, respectively; (ii) personal income tax revenues will be higher by $193 million, $632 million, $509 million, $654 million and $973 million in fiscal years 2023 through 2027, respectively; (iii) business tax revenues will be higher by $180 million and

$27 million in fiscal years 2023 and 2024, respectively, but lower by $152 million, $21 million and $59 million in fiscal years 2025 through 2027, respectively; (iv) sales tax revenues will be higher by $202 million, $525 million, $390 million, $133 million and $26 million in fiscal years 2023 through 2027, respectively; (v) real estate transaction-related tax revenues will be higher by $60 million, $305 million and $126 million in fiscal years 2023 through 2025, respectively, and lower by $105 million and $195 million in fiscal years 2026 and 2027, respectively; (vi) other tax revenue will be higher by $47 million, $14 million, $54 million, $88 million and $94 million in fiscal years 2023 through 2027, respectively; and (vii) revenues from audit collections will be higher by $579 million in fiscal year 2023 and $179 million in each of fiscal years 2024 through 2027.

Despite the revised revenue projection, the City Comptroller projects additional net risks of $1.3 billion, $1.51 billion, $3.90 billion, $5.21 billion and $5.20 billion in fiscal years 2023 through 2027, respectively, which, when added to the results projected in the Financial Plan would result in gaps of $1.30 billion, $1.51 billion, $7.07 billion, $10.22 billion and $11.66 billion in fiscal years 2023 through 2027, respectively. Such gaps do not include risks associated with costs of providing services to asylum seekers: $823 million and $2.18 billion in fiscal years 2023 and 2024, respectively, and potentially $2.8 billion in each fiscal year thereafter. The differences from the Financial Plan projections result in part from the City Comptroller's net expenditure projections, which are higher than the Financial Plan projections by $2.68 billion, $3.83 billion, $5.81 billion, $7.40 billion and $8.81 billion in fiscal years 2023 through 2027, respectively, as a result of: (i) additional overtime expenditures of $651 million and $563 million in fiscal years 2023 and 2024, respectively, and $440 million in each of fiscal years 2025 through 2027; (ii) increased expenditures related to education related risks of $255 million, $856 million, $1.07 billion, $1.95 billion and $2.63 billion in fiscal years 2023 through 2027, respectively; (iii) increased expenditures to fund the Fire Department's mental health response program of $37 million in each of fiscal years 2024 through 2027; (iv) increased public assistance costs of $125 million in each of fiscal years 2023 through 2026; (v) increased expenditures associated with rental assistance of $237 million in each of fiscal years 2024 through 2027; (vi) increased costs of contributions to MTA of $74 million, $125 million, $271 million, $445 million and $492 million in fiscal years 2023 through 2027, respectively; (vii) increased expenditures associated with paying prevailing wage rates for homeless shelter security guards of $64 million in each of fiscal years 2024 through 2027; (viii) increased expenditures associated with the State's foster care reimbursement rate of $47 million in fiscal year 2023 and $118 million in each of fiscal years 2024 through 2027; (ix) an increased expenditure of $82 million in fiscal year 2024 relating to a class action settlement on behalf of former detainees whose releases had been delayed after posting bail; (x) increased expenditures of $84 million in each of fiscal years 2023 through 2027 for court-appointed counsel; (xi) increased expenditures of $194 million in fiscal year 2024 for temporary and professional services; (xii) increased expenditures for Public Health Corps of $13 million in fiscal year 2025 and $49 million in each of fiscal years 2026 and 2027; and (xiii) increased expenditures for collective bargaining agreements of $2.50 billion, $1.80 billion, $3.40 billion, $3.90 billion and $4.70 billion in fiscal years 2023 through 2027, respectively, if other unions follow the DC 37 tentative contract settlement. The report also projects: (i) anticipated debt service savings from lower interest rates on variable rate bonds of $60 million in fiscal year 2023 and $50 million in each of fiscal years 2024 through 2027; (ii) decreased expenditures of $285 million and $48 million in fiscal years 2023 and 2024, respectively, relating to enhanced federal Medicaid assistance; and (iii) anticipated personal services accrual savings due to vacancies of $714 million and $357 million in fiscal years 2023 and 2024, respectively.

On March 6, 2023, the City Comptroller released a report relating to vacancies in City government agencies, as a follow-up to the City Comptroller's report relating to vacancies released on December 6, 2022. The report compares staff vacancies as of October 2022 to the Preliminary Mayor's Management Report ("MMR") released in January 2023, which provides a snapshot of the City's performance on metrics related to its agencies' core missions in the first four months of the fiscal year. The report identifies MMR outcomes for City agencies with the highest vacancy rates identified in the December 2022 report, and also identifies Units of Appropriation with low MMR indicator performance and high vacancy rates. The report found that, among the fifteen agencies with the highest vacancy rates highlighted in the prior report, the Department of Small Business Services stands out as an agency that is particularly struggling to meet performance metrics. The Department of Health and Mental Hygiene, the Department of Housing Preservation and Development, and the Department of City Planning are also, the report found, consistently failing to meet or improve on the goals self-identified as critical. The City Comptroller's office recommends in the report that the City should modernize hiring and retention practices, including by expediting hiring, allowing hybrid work for appropriate positions, reconsidering compensation levels for key hard-to-recruit slots, and designating a Chief Talent/Recruitment/Retention Officer to drive this work.

On February 23, 2023, the OSDC released a report entitled "Review of the Financial Plan of the City of New York." The report states that the City's preliminary fiscal year 2024 budget, adjusted for prepayments for future expenses, reflects better-than-projected revenue collections, the allocation of federal pandemic relief funds and the accumulated impact of savings initiatives. The report identifies fiscal risks stemming from uncertainty over the national economy and financial markets, the

City's own lagging economic recovery, unreimbursed costs of sheltering asylum seekers, state budget actions, and the operating performance of the MTA and NYCHA, which could increase the potential magnitude of volatility in the City's budget and create additional fiscal pressures.

The report identifies net risks to the Financial Plan of $3.30 billion, $3.72 billion, $5.77 billion, $6.78 billion and $7.40 billion in fiscal years 2023 through 2027, respectively. When combined with the results projected in the Financial Plan, the report estimates potential budget gaps of $3.30 billion, $3.72 billion, $8.93 billion, $11.79 billion and $13.87 billion in fiscal years 2023 through 2027, respectively.

The specific risks to the Financial Plan noted in the OSDC report include: (i) increased costs of operating subsidies to the MTA of $80 million, $113 million, $259 million, $424 million and $478 million in fiscal years 2023 through 2027, respectively; (ii) increased expenditures for various social services (including those associated with programs providing prevailing wages for Department of Homeless Services security guards, foster care, emergency family and rental assistance and access to legal counsel in housing court) of $132 million, $760 million, $760 million, $776 million and $691 million in fiscal years 2023 through 2027, respectively; (iii) increased uniform services overtime costs of $507 million, $456 million, $457 million, $460 million and $460 million in fiscal years 2023 through 2027, respectively; (iv) increased expenditures for programs associated with the DOE (such as providing services to students with disabilities, increases in charter school tuition rates, universal early childhood education for three-year-olds and certain other education initiatives) of $783 million, $903 million, $1.28 billion, $2.12 billion and $2.76 billion in fiscal years 2023 through 2027, respectively; (v) increased expenditures related to the early childhood intervention program of $45 million in each of fiscal years 2024 through 2027; (vi) increased expenditures to fund school health programs of $39 million in each of fiscal years 2024 through 2027; (vii) increased expenditures to fund the Public Health Corps of $13 million, $25 million, $61 million and $61 million in fiscal years 2024 through 2027, respectively; (viii) increased expenditures for residual services for asylum seekers of $400 million, $2.8 billion, $2.1 billion, $1.05 billion and $525 million in fiscal years 2023 through 2027, respectively; (ix) lower than anticipated federal or State reimbursement for costs of services for asylum seekers of $231 million in fiscal year 2023; and (x) increased expenditures for collective bargaining agreements of $2.5 billion, $1.8 billion, $3.4 billion, $3.9 billion and $4.7 billion in fiscal years 2023 through 2027, respectively. The report also identifies: (i) payroll savings of $750 million in fiscal year 2023; (ii) variable rate debt service savings of $50 million in fiscal year 2023; and (iii) debt service savings from refundings of $46 million in each of fiscal years 2024 through 2027.

The report also projects (i) increased federal and State reimbursement for costs of services for asylum seekers of $1.87 billion, $1.4 billion, $700 million and $350 million in fiscal years 2024 through 2027, respectively; (ii) increased tax revenues of $530 million, $1.2 billion, $1.05 billion, $1.25 billion and $1.86 billion in fiscal years 2023 through 2027, respectively; and (iii) increased miscellaneous revenue of $100 million in each of fiscal years 2024 through 2027.

On March 24, 2023, the Control Board released a report on the Financial Plan titled "Staff Report January Modification FYs 2023-2027". The report notes that the City's economic forecast, as reflected in the Financial Plan, shows a slowdown in the City's economy in 2023 commensurate with consensus expectation of a slowing national economy as Federal Reserve interest rate hikes course through the economy. The Control Board projects larger budget gaps than those in the Financial Plan. Such projected gaps are driven by the Control Board's estimates of higher expenditures, chief of which is the additional cost of collective bargaining above the amount budgeted in the labor reserve. The report notes that the City's capital program will require an increasing portion of the City's tax revenues to pay debt service expenses, which is projected to reach 14.9 percent and 14.8 percent in fiscal years 2032 and 2033, respectively, closely approaching the 15 percent affordability level determined by the City.

The Control Board report identified estimated net risks to the Financial Plan of $1.02 billion, $4.24 billion, $4.84 billion, $5.61 billion and $6.68 billion in fiscal years 2023 through 2027, respectively, resulting in budget gaps of $1.02 billion, $4.24 billion, $8.01 billion, $10.63 billion and $13.15 billion in fiscal years 2023 through 2027, respectively. Such net risks result from: (i) increases in property tax revenues of $206 million, $291 million, $433 million, $562 million and $562 million in fiscal years 2023 through 2027, respectively; (ii) increases in non property tax revenues of $1.24 billion, $1.24 billion, $1.26 billion, $1.29 billion and $1.32 billion in fiscal years 2023 through 2027, respectively; (iii) increases in non-tax revenues of $65 million in fiscal year 2023 and $150 million in each of fiscal years 2024 through 2027; (iv) increased expenditures relating to collective bargaining agreements of $2.5 billion, $1.8 billion, $3.4 billion, $3.9 billion and $4.7 billion in fiscal years 2023 through 2027, respectively; (v) increases in uniformed services overtime expenses of $461 million, $697 million, $699 million, $702 million and $702 million in fiscal years 2023 through 2027, respectively; (vi) increased expenditures associated with increases in charter school tuition rates of $81 million, $133 million, $313 million and $514 million in fiscal years 2024 through 2027, respectively; (vii) increased expenditures associated with providing services to students with disabilities of $252 million in fiscal year 2023 and $472 million in each of fiscal years 2024 through 2027; (viii) increased expenditures associated with student transportation of $75 million, $100 million, $150 million and $225 million in fiscal years 2024 through 2027, respectively; (ix) increased expenditures associated with the expansion of pre-kindergarten and kindergarten for three year old children of $109 million in each of fiscal years 2026 and 2027; (x) increased expenditures related to provision of mental health services of $37 million, $86 million and $86 million in fiscal years 2025 through 2027, respectively; (xi) increased expenditures relating to the expansion of community schools of $27 million, $54 million and $54 million in fiscal years 2025 through 2027, respectively; (xii) increased costs associated with the expansion of the DOE summer academic and enrichment program of $176 million in each of fiscal years 2024 through 2027; (xiii) increased contracted school nursing expenditures of $49 million in each of fiscal years 2024 through 2027; (xiv) increased homeless shelter operation expenditures of $68 million in each of fiscal years 2024 through 2027; (xv) increased expenditures associated with rental assistance of $237 million in each of fiscal years 2024 and 2025 and $229 million in each of fiscal years 2026 and 2027; (xvi) increased expenditures associated with paying prevailing wage rates for homeless shelter security guards of $66 million in each of fiscal years 2024 through 2027; (xvii) increased expenditures associated with the State's foster care reimbursement rate of $47 million in fiscal year 2023 and $118 million in each of fiscal years 2024 through 2027; (xviii) increased expenditures resulting from lower reimbursements for paratransit of $75 million, $89 million, $104 million, $120 million and $138 million in fiscal years 2023 through 2027, respectively; (xix) increased expenditures for support for asylum seekers of $1 billion in fiscal year 2023, $2 billion in fiscal year 2024 and $1 billion in each of fiscal years 2025 through 2027; and (xx) utilization of general and capital stabilization reserves of $1.56 billion and $250 million, respectively, in fiscal year 2023.

Outstanding General Obligation Indebtedness. As of December 31, 2022, approximately $39.32 billion of City general obligation bonds were outstanding.

Currently, the Hudson Yards Infrastructure Corporation ("HYIC") has outstanding approximately $2.55 billion aggregate principal amount of bonds. In addition, HYIC has entered into a term loan facility with Bank of America, N.A. pursuant to which HYIC may draw up to an aggregate amount of $380 million, approximately $9.9 million of which has been drawn. The term loan facility has a scheduled maturity of June 30, 2027. HYIC expects to issue bonds to repay such term loan facility or further extend the maturity date prior to the scheduled maturity. The bonds financed the extension of the Number 7 subway line and other public improvements in the Hudson Yards area, and the term loan will be used to finance any remaining costs of completion of the original project and the expansion of the park in the Hudson Yards area. HYIC's bonds and, on a subordinate basis, draws under the term loan facility are secured by and payable from payments in lieu of taxes and other revenues generated by development in the Hudson Yards area. To the extent payments in lieu of taxes and other HYIC revenues are insufficient to pay interest on the HYIC bonds or the term loan, the City has agreed to pay the amount of any shortfall in interest, subject to appropriation. The Financial Plan does not reflect the need for such interest support payments. The City has no obligation to pay the principal of such bonds or of such term loan.

Water and Sewer. The City's financing program includes the issuance of water and sewer revenue bonds by the Water Authority which is authorized to issue bonds to finance capital investment in the City's water and sewer system. Pursuant to State law, debt service on Water Authority indebtedness is secured by water and sewer fees paid by users of the water and sewer system. Such fees are revenues of the Water Board, which holds a lease interest in the City's water and sewer system. After providing for debt service on obligations of the Water Authority and certain incidental costs, the revenues of the Water Board are paid to the City to cover the City's costs of operating the water and sewer system and as rental for the system. In fiscal years 2017, 2018 and 2019, the City did not request the rental payment due to the City from the Water Board. In fiscal years 2020 and 2021, on account of the outbreak of COVID-19, the City requested rental payments of $128 million and $137 million, respectively. The Financial Plan reflects no additional rental payment requests for fiscal years 2022 through 2026. The City's Preliminary Ten-Year Capital Strategy applicable to the City's water and sewer system covering fiscal years 2024 through 2033, projects City-funded water and sewer investment (which is expected to be financed with proceeds of Water Authority debt) at approximately $29.0 billion. The 2023 2027 Capital Commitment Plan reflects total anticipated City-funded water and sewer commitments of $15.5 billion which are expected to be financed with the proceeds of Water Authority debt.

New York City Transitional Finance Authority. The TFA is authorized to have outstanding $13.5 billion of Future Tax Secured Bonds (excluding Recovery Bonds). The TFA may have outstanding Future Tax Secured Bonds in excess of $13.5 billion provided that the amount of the Future Tax Secured Bonds, together with the amount of indebtedness contracted by the City, do not exceed the debt limit of the City. Future Tax Secured Bonds are issued for general City capital purposes and are secured by the City's personal income tax revenues and, to the extent such revenues do not satisfy specified debt ratios, sales tax revenues. In addition, the TFA is authorized to have outstanding $9.4 billion of Building Aid Revenue Bonds to pay for a portion of the City's five-year educational facilities capital plan. Building Aid Revenue Bonds are secured by State building aid, which the Mayor has assigned to the TFA.

Implementation of the financing program is dependent upon the ability of the City and other financing entities to market their securities successfully in the public credit markets which will be subject to prevailing market conditions at the times of sale. No assurance can be given that the credit markets will absorb the projected amounts of public bond sales. A significant portion of bond financing is used to reimburse the City's General Fund for capital expenditures already incurred. If the City and such other entities are unable to sell such amounts of bonds, it would have an adverse effect on the City's cash position. In addition, the need of the City to fund future debt service costs from current operations may also limit the City's capital program. The Preliminary Ten-Year Capital Strategy for fiscal years 2024 through 2033 totals $159.3 billion, of which approximately 97.5% is to be financed with funds borrowed by the City and such other entities. Congressional developments affecting federal taxation generally could reduce the market value of tax-favored investments and increase the debt-service costs of carrying out the major portion of the City's capital plan which is currently eligible for tax-exempt financing.

NEW YORK STATE

New York is the fourth most populous state in the nation, after California, Texas, and Florida, and has a relatively high level of personal wealth. The State's economy is diverse, with a comparatively large share of the nation's financial activities, information, education, and health services employment, and a small share of the nation's farming and mining activity. The State's location, air transport facilities and natural harbors have made it an important hub for international commerce. Travel and tourism constitute an important part of the economy. Like the rest of the nation, New York has a declining proportion of its workforce engaged in manufacturing and an increasing proportion engaged in service industries.

Manufacturing employment continues to stagnate as a share of total State nonfarm employment, as in most other states, and as a result New York's economy is less reliant on this sector than in the past. However, it remains an important sector of the State economy, particularly for the upstate region, which hosts higher concentrations of manufacturers. As defined under the North American Industry Classification System (NAICS), the trade, transportation, and utilities supersector accounts for the third largest component of State nonfarm employment, but only the fifth largest when measured by wage share. This sector accounts for proportionally less employment and wages for the State than for the nation. New York City is the nation's leading center of banking and finance. For this reason, this is far more important for the State than for the nation. Although this sector accounts for less than one-tenth of all nonfarm jobs in the State, it contributes more than one-fifth of total wages. The remaining service-producing sectors include information, professional and business services, private education and healthcare, leisure and hospitality services, and other services. When combined, these industries account for over half of all nonfarm jobs in New York. Information, education and health, and other services account for a higher proportion of total State employment than for the nation. Farming is an important part of the State's rural economy, although it constitutes less than 0.2 percent of total State GDP. According to the New York State Department of Agriculture and Markets, New York ranked in the top ten in the production of 30 commodities in 2020. Notably, the State was the second-largest producer of apples, snap beans, and maple syrup. The State was also the third-largest producer of cabbage, grapes, and dairy, which represented the largest segment of the State's agricultural sector that year.

Federal, State, and local governments together comprise the second largest sector in terms of nonfarm jobs. Public education is the source of over 40 percent of total State and local government employment.

Annual Information Statement. The Annual Information Statement, dated June 29, 2022 (the "AIS"), reflects the State's Enacted Budget Financial Plan (the "Enacted Budget Financial Plan") for Fiscal Year (FY) 2023 and sets forth the State's official Financial Plan projections for Fiscal Year 2023 through Fiscal Year 2027 (the "Financial Plan period"). The State updates the Annual Information Statement quarterly and released its first quarterly update on September 20, 2022 , its second quarterly update on December 21, 2022 and its third quarterly update on March 8, 2023 (the "AIS Update"). The AIS Update includes information on the State's current financial projections, including summaries and extracts from the Governor's Executive Budget Financial Plan for FY 2024, as amended (the "Updated Financial Plan" or "Updated Executive Budget Financial Plan") issued by the Division of the Budget (DOB) in March 2023. The Updated Financial Plan (which is available on the DOB website, www.budget.ny.gov) includes a summary of third quarter operating results for FY 2023 (quarter ended December 31, 2022) and updates to the State's official financial projections for FY 2023 through FY 2027 (the "Financial Plan period").[1] . Except for the specific revisions described in these extracts, the projections (and the assumptions upon which they are based) in the Updated Financial Plan are consistent with the projections set forth in the FY 2023 Enacted

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Budget Financial Plan (the "Enacted Budget Financial Plan") reflected in the AIS. DOB next expects to update the State's multi-year financial projections with the FY 2024 Executive Budget Financial Plan. The State updates the Annual Information Statement on a quarterly basis and may be supplemented from time to time as developments warrant.

[1] The State fiscal year is identified by the calendar year in which it ends. For example, fiscal year 2023 ("FY 2023") is the fiscal year that began on April 1, 2022 and will end on March 31, 2023.

FINANCIAL PLAN OVERVIEW

Summary of Revisions to the Executive Budget Financial Plan

On March 1, 2023, as required by law, the Executive and Legislature issued a joint report containing a consensus forecast for the economy and estimate of receipts for the current and upcoming fiscal years. The parties agreed that tax receipts in FY 2023 and FY 2024 are likely to exceed the Executive Budget forecast, as amended, by $800 million. As such, DOB has created an $800 million reserve for this purpose that will be taken into consideration in negotiations to adopt a budget for FY 2024.

On March 3, 2023, Governor Kathy Hochul submitted amendments to the Executive Budget proposal for FY 2024 to the Legislature. The Governor's amendments are not expected to have a material Financial Plan impact.

Based on updated economic data and information, as well as operating results to date, DOB has revised the Executive Budget Financial Plan multi-year receipts forecast. The General Fund receipts forecast, excluding PTET related revisions, is reduced by almost $1.3 billion in the current year, followed by upward revisions to projections of $1.2 billion in FY 2024, $609 million in FY 2025, $411 million in FY 2026, and $317 million in FY 2027 compared to the Executive Budget Financial Plan. The FY 2023 and FY 2024 revisions are offset by the Transaction Risk Reserve and the set aside of $800 million consistent with the consensus revenue forecast agreement.

PIT receipts have been revised to reflect higher projected withholding ($550 million in both FY 2023 and FY 2024; $170 million in later years). In FY 2023, the higher withholding is offset by a downward adjustment to estimated extensions ($2.45 billion) for a net reduction totaling $1.9 billion.

Other revisions include higher bank tax collections associated with the resolution of a large audit and growth in investment income consistent with rising interest rates. In addition, the estimate for mobile sports wagering receipts has been increased in all years based on updated collections experience. The additional mobile sports wagering receipts collected in FY 2023 will be transferred to the General Fund beginning in FY 2024 to support education.

The Updated Financial Plan maintains a Transaction Risk Reserve to guard against unexpected declines in receipts or costs related to transaction risk execution. Accordingly, the Transaction Risk Reserve is used to offset the $1.3 billion downward revision to the receipts forecast in the current year. In FY 2024, the Transaction Risk Reserve will be increased by $436 million.

PTET Related Receipts Revisions

In the Executive Budget Financial Plan, the State recognized higher personal income tax collections. However, based on updated information from the Department of Taxation and Finance (DTF), a portion ($2.45 billion) of the higher collections are projected to be due to delayed claims of PTET credits and has been set aside for PTET. Other PTET related revisions include an upward revision to PIT refunds ($1 billion in FY 2023 and $2 billion in FY 2024) to reflect the delayed credits that are expected to be paid at the end of the year and through FY 2024, which is partly offset by revisions to estimated payments and other adjustments totaling $400 million. In FY 2023, the PTET reserve is increased by $1.85 billion and will be mostly used in FY 2024 to support expected refund payments.

Executive Summary

The State's Financial Rebound from COVID-19

In the decade between the Great Recession and the onset of COVID, the New York economy steadily expanded. The State's gross product grew at 4.4 percent annually and total employment increased by nearly 1.4 million. State finances were stable, with State Operating Funds spending increasing at an average annual rate of 2.4 percent. Tax collections, which fund roughly three- quarters of State Operating Funds spending, grew at a yearly average of just under 3.8 percent, reaching a "pre-COVID" peak in FY 2020, rising by nearly 10 percent over FY 2019.

The onset of the COVID pandemic in New York, which coincided with the start of the State's 2021 fiscal year, triggered sweeping public health measures at the State and local levels to slow the spread of the virus. Economic activity slowed dramatically, unemployment spiked, and the State prepared for a prolonged economic downturn. State spending, adjusted for the timing of payments, flattened.

State finances, however, have fared better than expected. In FY 2021, during the acute phase of the pandemic, tax collections declined by just 0.6 percent from FY 2020, bolstered by Federal economic stimulus — and have subsequently soared. In FY 2022, tax collections grew by 27 percent, which is equal to about seven years of typical tax receipts growth compressed into a single year. In FY 2023, collections are expected to increase by nearly 10 percent to total almost $115 billion, or over $32 billion higher than FY 2021 results.

In October 2021, Governor Hochul committed to building the State's reserves to ensure that it could honor its current commitments through good and bad times. The extraordinary gains in tax receipts have been directed to accomplish that purpose. By the end of FY 2023, the State will have boosted its reserves by over $20 billion since FY 2020. It will have also prepaid over $10 billion in future debt service costs that were due in FY 2024 through FY 2027.

The Post-COVID-19 Expansion is Ending

Yet even as tax receipts continue to show strength in the current year, DOB has downgraded its expectations for the economic outlook twice since the FY 2023 Enacted Budget Financial Plan was published in May 2022, first in the First Quarterly Update to the Financial Plan and again in the Updated Financial Plan. It is now forecasting a mild national recession in calendar year 2023.

At the State level, key economic drivers of tax receipts have been revised sharply downward. Total wage growth is now expected to slow to 2.8 percent in FY 2023 and 2.3 percent in FY 2024, compared to 3.3 percent and 4.3 percent in the May 2022 forecast. Bonus income is expected to decline by 27 percent in FY 2024 from the FY 2022 peak. In comparison, the Enacted Budget forecast called for a 15.5 percent decline in bonus income in FY 2023 followed by growth of 3.5 percent in FY 2024.

Beginning in FY 2024, the weakening economic activity is expected to start becoming apparent in tax collections (which are a lagging indicator of changing economic activity). This is expected to carry through the following years of the Financial Plan, with the most pronounced impact on FY 2025 and FY 2026 operations. General Fund tax receipts, before proposed actions in the FY 2024 Executive Budget, have been reduced by $2.1 billion in FY 2024, $7.4 billion in FY 2025, $7.8 billion in FY 2026, and $5.2 billion in FY 2027 in comparison to the Enacted Budget Financial Plan.

FY 2024 Updated Executive Budget Financial Plan

The Governor introduced the FY 2024 Executive Budget on February 1, 2023 and submitted amendments on March 3, 2023. DOB estimates that the General Fund will be balanced on a cash basis in FY 2024, if the Legislature adopts the Governor's proposal without modification. The FY 2024 Executive Budget fully funds existing commitments, including the third and final year of the Foundation Aid phase-in. By the end of School Year (SY) 2024, Foundation Aid will have increased by $5.7 billion since SY 2021. DOB expects the General Fund to end FY 2024 with a balance of $35.7 billion, with principal reserves intact.

Three of the most pressing issues facing the State at the start of 2023 are addressed in the FY 2024 Executive Budget: the solvency of the Metropolitan Transportation Authority (MTA), the stability of the State's health care system, and the provision of care for thousands of new asylum seekers coming to the State. In response to these challenges, the FY 2024 Executive Budget advances a comprehensive funding plan to put the MTA on stable financial footing. It adds substantial new operating and capital aid for health care and establishes a new commission to examine and recommend reforms to improve quality and reduce costs. It also provides extraordinary funding to local governments that are providing services and assisting with the resettlement process for asylum seekers.

The proposed FY 2024 Executive Budget also funds the initiatives outlined in the Governor's State of the State address. These include expanding mental health inpatient, outpatient, and supportive services (FY 2024: $134 million; FY 2025: $276 million); providing matching funds to increase the State University centers endowments (maximum of $500 million total); giving a monthly discount on electric utility bills for moderate-income customers (FY 2024: $200 million; FY 2025: $50 million); and indexing the minimum wage to inflation and funding the cost for State service providers (FY 2024: $19 million; FY 2025: $63 million).

The Updated Financial Plan projects that State Operating Funds spending will total $125.2 billion in FY 2024, an increase of $2.5 billion, or 2 percent, from the current fiscal year.

The Updated Executive Budget Financial Plan projects out-year budget gaps of $5.1 billion in FY 2025, $8.6 billion in FY 2026, and $7.2 billion in FY 2027, a total of roughly $21 billion over three years. The budget gaps that have opened in each year are due principally to the downward revisions in projected tax receipts, which have been lowered by $20 billion (FY 2025 to FY 2027) in comparison to the Enacted Budget Financial Plan. If the FY 2025 Budget is balanced with recurring savings, the projected budget gap for FY 2026 would be $3.5 billion. The projected budget gaps do not reflect the use of any reserves to balance operations.

Economic turning points create heightened risks to the Financial Plan. In the two recessions prior to COVID, tax receipts fell more steeply and for a longer period than originally expected. While the DOB forecast is based on reasonable assumptions, the impact of an economic slowdown is highly unpredictable. A second, new risk has been created by the PTET program, which has introduced a high degree of uncertainty in the level and timing of expected PIT tax collections. Lastly, the State is dependent on a range of Federal approvals to implement savings measures and receive reimbursement for costs it has incurred in the first instance. The Updated Financial Plan maintains a reserve for such transaction risks, in addition to the principal reserves and other reserves for specific purposes (e.g., future labor agreements).

The updated "base" forecast provides the basis for the development of the Governor's FY 2024 Executive Budget proposal. DOB has made several forecast ("base") revisions to the Financial Plan estimates in the Mid-Year Update. The most significant change has been to base tax receipts, which have been reduced in each year of the Financial Plan, starting in FY 2024. The downward revisions are consistent with DOB's updated economic forecast, which calls for a mild recession in calendar year 2023. Disbursements have been revised for updated operating results and program information. Other changes include revisions to the Reserve for the Timing of PTET/PIT Credits and the addition of an $800 million reserve consistent with the consensus revenue forecast agreement.

The Governor's Executive Budget Proposal

The Governor's Updated Executive Budget Financial Plan for FY 2024 is balanced in the General Fund, and State Operating Funds spending grows by 2 percent. The FY 2024 Executive Budget funds initiatives and investments for a range of essential services including the health care system, MTA and local governments. It also funds the initiatives outlined in the Governor's State of the State address, including investments in mental health, housing, public safety, and additional funding for SUNY. In addition, State operations funding is increased for essential services. Lastly, new capital commitments proposed in the budget are funded not only with bonds but also with cash resources, to ensure that the State's debt burden remains affordable.

Receipts

The FY 2024 Executive Budget proposes the following tax law changes with significant Financial Plan impacts:

- Corporate Franchise Tax Rates. The FY 2024 Executive Budget extends through Tax Year 2026 the tax rates on the business income base for Article 9-A filers with business income tax bases over $5 million, as well as reinstates the capital base tax rate for certain taxpayers.
- Tobacco Tax Increase/Flavor Ban. To reduce tobacco use, especially among young people, the FY 2024 Executive Budget proposes expanding the State's ban on the sale of flavored vaping products by prohibiting the sale of all flavored tobacco products and increasing the cigarette tax from $4.35 to $5.35 per pack. These actions are expected to reduce cigarette tax receipts that flow to both the General Fund and the Health Care Reform Act (HCRA).
- Other Tax Revenue Actions. The FY 2024 Executive Budget proposes various extensions, enforcement initiatives and reforms including the proposed extension of credits for historic property rehabilitation, NYC musical arts, and farmers, as well as a new credit for child care expansion.

Debt Service. Costs reflect the financing of new capital initiatives included in the FY 2024 Executive Budget. The Updated Financial Plan also includes $900 million of additional debt service prepayments in FY 2023 that reduce debt service costs in FY 2024.

Other Receipts/Transfers. The Updated Financial Plan also includes reductions to certain planned transfers due to the availability of revenues in other funds that are earmarked to support new investments.

Disbursements

Local Assistance

School Aid. The Updated Executive Budget Financial Plan recommends $34.4 billion in State aid to schools for school year (SY) 2024, an increase of $3.1 billion (10.0 percent). Including Federal prekindergarten expansion grants, schools will receive $34.5 billion. This growth primarily reflects a $2.7 billion (12.8 percent) Foundation Aid increase, including a minimum 3 percent annual increase to fully funded districts that would otherwise not receive a Foundation Aid increase under current law. The growth in Foundation Aid largely reflects the full funding of the current formula for the first time in its 17-year history, marking the final year of the three-year phase-in. Additionally, a High-Impact Tutoring Set-Aside of $250 million within Foundation Aid directs support to students struggling to recover from pandemic-related learning loss. In addition to the Foundation Aid increase, School Aid growth includes a $232 million increase in expense-based aids and a $125 million increase in State-funded full-day prekindergarten programming for four-year-old children.

Medicaid Global Cap. Global Cap spending growth in FY 2024 is estimated at $1.4 billion. The Global Cap index has been revised based on updated Centers for Medicare & Medicaid Services (CMS) annual projections of health care spending. The revised rates allow additional Medicaid spending growth above the Mid-Year Financial Plan forecast of $224 million in FY 2023 and $475 million in FY 2024, growing to $754 million in FY 2027.

Medicaid spending is currently projected to exceed the cap by $454 million in FY 2026 and $526 million in FY 2027. The higher cost is mainly attributable to higher-than-expected enrollment, utilization and spending trends.

The FY 2024 Executive Budget proposes several investments in health care, including increasing and/or adding Medicaid reimbursement for hospitals, nursing homes and assisted living providers, primary care, school-based health centers, transportation services, and additional types of mental health providers in community health centers. In addition, the Updated Financial Plan includes savings beginning April 1, 2023 due to the transition of the prescription drug program for all Medicaid members enrolled in Mainstream Managed Care to the State run Medicaid Pharmacy Program. With this transition, New York State will pay pharmacies directly for drugs and supplies on behalf of Medicaid members. Transitioning the pharmacy benefit from Managed Care to Medicaid Fee-for-Service will result in significant savings to the State, most of which will be reinvested back into healthcare. Other proposals include expanding the Medicaid Buy-in program so more disabled persons can continue to work without the risk of losing health benefits and supporting critical primary and preventative care for Medicaid enrollees that will help improve population health and reduce preventable hospitalizations and emergency room visits.

To maintain spending within the Global Cap, several proposals to reduce or offset costs are advanced in the FY 2024 Executive Budget. Most notably, the State expects to utilize the entirety of Affordable Care Act (ACA) Enhanced Federal Medical Assistance Percentage (eFMAP) savings to offset growth in Medicaid costs borne by the State rather than counties ($624 million). Other savings proposals include shifting pregnancy coverage to the Essential Plan (EP) ($53 million in FY 2024 and $210 million annually thereafter); and aligning the timing of expanded coverage for certain groups with the Federal waiver submission ($172 million).

eFMAP Extension. The Federal FY 2023 Omnibus Appropriations bill included an extension of eFMAP through the end of the 2023 calendar year. Beginning April 1, 2023, eFMAP will be reduced over the next three quarters: 5 percent through June 30, 2.5 percent through September 30, and 1.5 percent through December 31. The Financial Plan previously reflected eFMAP through March 31, 2023.

Asylum Seekers Services and Assistance. The FY 2024 Executive Budget provides support to asylum seekers in New York City, including shelter cost reimbursement.

Minimum Wage Indexing. The FY 2024 Executive Budget proposes indexing New York's minimum wage to inflation to benefit hundreds of thousands of minimum wage workers across New York State and assist them to meet the rising cost of living, which results in increased State assistance to mental hygiene, health care and social services providers supported by the State.

Mental Health. Proposed actions for the Office of Mental Health (OMH) include investments across the continuum of care for mental health and continued support for community-based services, including residential programs. Specifically, this includes establishing and operating 3,500 new residential units for people with mental illness, including 1,500 Supportive

Housing beds, 900 transitional step-down beds, 600 licensed apartment treatment beds and 500 community residence-single room occupancy (CR-SRO) beds. Outpatient mental health services throughout the State will be significantly expanded by funding twelve new Comprehensive Psychiatric Emergency Programs; 42 new Assertive Community Treatment teams; 26 new Certified Community Behavioral Health Clinics, including an Indigent Care Program to ensure providers are reimbursed for care; eight new Safe Options Support teams; the expansion of the Critical Time Intervention (CTI) initiative started in 2022; 42 new Health Home Plus Care Managers; and start-up funding and operating costs for expanded clinic capacity at 20 sites. The FY 2024 Executive Budget also expands mental health services for children and families, enhances suicide prevention programs, strengthens supportive housing programs, and supports the 2.5 percent Cost of Living Adjustment (COLA) for voluntary operated providers.

Public Health/Aging. The FY 2024 Executive Budget adds funding for respite care for high-need family caregivers and expands access to home care aides for lower income older adults.

Social Services/Housing. The FY 2024 Executive Budget provides funding to ensure continuity in the level of childcare subsidies, expands eligibility for child care subsidies to more families, and creates an Employer-Supported Child Care Pilot Program to provide new financial support for child care. Other significant increases include investments in permanency resource centers and kinship services, consolidating afterschool program funding in the Office of Children and Family Services (OCFS), assisting foster care agencies with Federal provisions as they relate to Institutions for Mental Disease (IMD), and establishing the Planning Assistance Fund to support local governments in achieving new home targets pursuant to the New York Housing Compact. These investments are offset by making permanent the restructured financing approach for residential school placements of children with special needs outside New York City and utilization of Mortgage Insurance Fund (MIF) resources to fund housing and homelessness programs.

Environment/Energy. The FY 2024 Executive Budget includes funding to expand the Energy Affordability Program to consumers who have not been previously eligible. The program will provide income-eligible customers with a discount on their monthly electric and/or gas bills ($200 million in FY 2024 and $50 million thereafter).

Higher Education. The FY 2024 Executive Budget adds $40 million in recurring annual operating support for City University of New York (CUNY) campuses starting in Academic Year 2024 and provides additional funding in FY 2024 to help cover student tuition costs.

Public Safety. The FY 2024 Executive Budget includes increased support for Prosecutors, Alternatives to Incarceration (ATI), the Gun Involved Violence Elimination (GIVE) program, re-entry services, and pretrial services. The Budget also includes funding to combat the flow of fentanyl, including the establishment of an Anti-Fentanyl Innovation Grant, as well as support to hire additional crime and data analysts focused on fentanyl distribution and deaths.

Transportation. The FY 2024 Executive Budget proposes one-time State assistance to the MTA to address extraordinary revenue impacts caused by the pandemic ($300 million) and increases to upstate transit operating aid to match the year to year increase in on-budget, traditional MTA aid. Other initiatives include $24 million annually for operating costs of the Gateway Development Commission and $2 million to begin funding an Innovative Mobility Initiative for non-MTA systems.

All Other Local Assistance. The FY 2024 Executive Budget includes increased funding for various other programs and initiatives including recurring assistance to the City of Albany ($15 million), the Liberty Defense Project and the Office of New Americans, and various programs administered by the Empire State Development Corporation.

Agency Operations

Agency Operations. The growth in executive agency budgets reflects funding to meet critical service needs, as well as efforts to assess lead risks and support lead abatement in housing across the State and modernize health reporting systems. In addition, funding is included to support consulting costs associated with development of Section 1115 Medicaid demonstration waivers that have allowed the State to implement a managed care program that provides comprehensive and coordinated health care to Medicaid patients. Increased funding for agency operations also supports inpatient beds in State-operated Psychiatric Centers, expanded State Police community stabilization units, enhanced parole supervisions programs, investments in information technology including the Joint Security Operations Center, and geographical wage adjustments.

Asylum Seekers Services and Assistance. The Division of Military and Naval Affairs (DMNA) has deployed national guard servicemembers to various hotels, homeless shelters, and emergency sites throughout New York City to implement, administer, and effectuate the provision of services.

State Police Recruiting Class. Increased funding will support two additional State Police recruiting classes in FY 2024, for a total of four planned classes.

SUNY Endowment Funding. The State will provide $1 in State funds (up to $500 million) for every $2 in private contributions to endowments for SUNY's four university centers: Buffalo, Binghamton, Albany, and Stony Brook. The endowment funds are expected to be used to provide long-term support for campus operations, student scholarships, research, endowed professorships, and the development of new academic fields.

Legislature/Judiciary. The FY 2024 Executive Budget reflects budget requests submitted by the Legislature and Judiciary. The Judiciary requested increases in annual operating spending to fund expected hiring, three planned Court Officer Academy classes, the addition of 34 new Judgeships, and collective bargaining increases expected to be implemented by March 2023. Spending increases for the Legislature are mainly driven by personnel costs for legislative staff, as well as anticipated increases for the recently approved increase in member salaries.

Accelerate Deposits to the Retiree Health Benefit Trust Fund (RHBTF) . In FY 2022, the State made its first deposit to the RHBTF, which was created in FY 2018 to reserve money for the payment of health benefits of retired employees and their dependents. The reserves establish an asset against the State's post-employment health insurance liability. The Updated Financial Plan reflects making deposits that were planned in later years of the Financial Plan in FY 2023.

Fringe Benefits/Fixed Costs. The Judiciary Budget includes lower pension estimates offset by increased health insurance costs.

The FY 2024 Executive Budget also includes proposed legislation again this year that would align interest rates paid on court judgements by public and private entities to the rate permitted for civil money judgments recovered in Federal district court. Since the early 1980's, the interest rate on judgments and accrued claims has been set at 9 percent. Payment of a prevailing market rate is expected to help ensure that neither party in a lawsuit is disadvantaged by an interest rate that is above or below what otherwise could be earned while cases are being adjudicated. This proposal will provide relief for local governments and lower State taxpayer costs by millions of dollars.

Transfer to Other Funds

Capital Projects. The FY 2024 Executive Budget proposes investments to expand housing capacity, outpatient mental health services, facilitate digital transformation across the SUNY system, invest in new and renovated research buildings, laboratories, and state-of-the art instrumentation at SUNY Flagship institutions, improve capital facilities through the SUNY and CUNY systems and various economic development projects. The FY 2024 Executive Budget also funds the DMV transformation initiative and geographic pay increases for DOT maintenance staff.

SUNY Operations. The FY 2024 Executive Budget includes $75 million in State aid to SUNY in Academic Year 2024 ($56 million in FY 2024) for transformational initiatives at campuses that support innovation, help meet workforce needs, and provide student support. This funding commitment will disburse over a two-year period. In addition, the Updated Financial Plan provides $60 million ($45 million in FY 2024) in new recurring general operating support for SUNY campuses and provides additional funding in FY 2024 to help cover student tuition costs.

Reserve Changes

The previously planned deposits to principal reserves in FY 2024 ($2.4 billion) and FY 2025 ($2.9 billion) will be accelerated and completed in the current year (FY 2023). In addition, the projected available surpluses in FY 2023 ($782 million) and FY 2024 ($851 million) will be carried forward and used to lower the projected outyear budget gaps.

Other Financial Plan Highlights

Reserve Increases

Principal Reserves[2]. The Updated Financial Plan reflects completing the remaining $10.6 billion of planned deposits and set asides to principal reserves two years ahead of schedule. By the end of FY 2023, the balance in principal reserves is expected to be just over $19.5 billion, an amount that maintains 15 percent of projected FY 2025 State Operating Funds disbursements as proposed in the FY 2023 Executive Budget.

[2] DOB defines principal reserves as the two "rainy day" reserves (consisting of the Tax Stabilization Reserve and the Rainy Day Reserve) and the portion of the General Fund balance informally designated for economic uncertainties.

The FY 2024 Executive Budget includes legislation to increase the amount the State is permitted to set aside in statutory reserves by increasing the maximum allowable balance for the Rainy Day Reserve from 15 percent to 20 percent, and the maximum annual deposit from 3 percent to 10 percent, of State Operating Funds spending. In addition, the calculation would be based on the spending projection included in the Enacted Budget Financial Plan. The allocation of principal reserves may be adjusted in future updates consistent with the allowable balance and deposit authorization for the Rainy Day Reserve.

Debt Reduction Reserve Fund. To ensure the State can abide by the limits imposed by the Debt Reform Act, $1 billion will be used to recapitalize the debt reduction reserve.

RHBTF. The Updated Financial Plan reflects accelerating a $600 million deposit in FY 2023, from FY 2026 and FY 2027, increasing the reserve to $1.2 billion by the end of FY 2023. The deposit is consistent with the statutory limit of 1.5 percent of the actuarial accrued liability.

Cash Position

DOB expects that the General Fund will have sufficient liquidity in FY 2024 to make all planned payments as they become due. DOB continues to reserve money on a quarterly basis for debt service payments that are financed with General Fund resources. Money to pay debt service on bonds secured by dedicated receipts, including PIT bonds and Sales Tax bonds, continues to be set aside as required by law and bond covenants.

Debt Service

Debt service spending consists of the payment of principal, interest, and related expenses on State-supported debt. Prepayments executed in prior years, as well as planned prepayments in FY 2023, have a substantial impact on total debt service spending. Excluding the impact of the prepayments, debt service expenses are projected to remain flat in FY 2024 over the prior year. The table below provides a summary of the impact of actual and planned prepayments.

General Fund Financial Plan

General Fund receipts are affected by the deposit of dedicated taxes in other funds for debt service and other purposes, the transfer of balances between funds of the State, and other factors. Three significant factors affect reported General Fund tax receipts, as described below.

First, changes in debt service on State-supported revenue bonds affect General Fund tax receipts. The State utilizes bonding programs where tax receipts are deposited into dedicated debt service funds (outside the General Fund) and used to make debt service payments. After satisfying debt service requirements for these bonding programs, the balance is transferred to the General Fund.

Second, the STAR program is funded from PIT receipts, with changes in the State-supported cost of the program affecting reported PIT receipts.

Lastly, beginning in FY 2022, the PTET program began affecting reported General Fund tax collections. In FY 2022, the State collected $16.4 billion in PTET payments through business tax receipts. In FY 2023, it expects to continue to collect PTET and pay PIT credits connected with the program for tax years 2021 and 2022. The General Fund reserved the entire amount of PTET collections received in FY 2022 and will use a portion of that balance to cover the difference between PTET collections and related PIT refunds in FY 2023 and beyond. The timing between the initial PTET collections and subsequent refunds will be managed in a similar manner in each year of the Financial Plan. The PTET program is expected to have no net impact on operations over its life but will distort the annual change for business and PIT receipts.

General Fund disbursements are affected by the level of financing sources available in other funds, transfers of balances between funds of the State, and other factors that may change annually. For example, education and health care programs are affected by the level of financing sources (i.e., HCRA and lottery/gaming receipts) available in other funds. Projected spending also reflects DOB's cautious estimates of disbursements, a practice that provides a cushion for potential receipts shortfalls and unanticipated costs.

Updated FY 2023 Financial Plan

Receipts

General Fund receipts, including transfers but excluding PTET, are expected to total $106.2 billion in FY 2023, an increase of $9.9 billion (10.2 percent) over FY 2022.

Tax receipts, excluding the impact of PTET, but including transfers after payment of debt service, are estimated to total $99.0 billion in FY 2023, an increase of $13.7 billion (16.1 percent) from FY 2022. The increase reflects projected growth in tax receipts and the impact of prepayments of future debt service costs. Excluding the prepayments, tax receipts are estimated to increase by 9.8 percent from FY 2022.

PIT receipts, excluding PTET and debt prepayments, are estimated to total $70.1 billion in FY 2023, an increase of $6.3 billion (9.9 percent) from FY 2022 reflecting underlying growth in collections. The actual and planned prepayments of debt service due in future years reduce reported PIT receipts in the fiscal year in which the payments are made and increase PIT receipts in the fiscal years in which the debt service was originally scheduled to be paid. Debt prepayments reduce General Fund PIT receipts by $4.3 billion and $1.8 billion in FY 2022 and FY 2023, respectively and increase PIT receipts in FY 2024 by $3.2 billion.

Consumption/use tax receipts, including transfers after payment of debt service on Sales Tax Revenue Bonds, are estimated to total $17.2 billion in FY 2023, an increase of $569 million (3.4 percent) from FY 2022. This includes the impact of the prepayment of debt service in FY 2022, which reduces receipts by $2.25 billion. Base sales tax growth is estimated at 10.6 percent in FY 2023 and is offset by the drop in tax revenue attributable to the temporary suspension of the State sales tax on gasoline and diesel motor fuel from June 1, 2022 to December 31, 2022 and estimated declines in cigarette and tobacco tax collections.

Business tax receipts, excluding PTET, are estimated at $10.2 billion in FY 2023, an increase of $1.8 billion (20.8 percent) from FY 2022. The increase is primarily attributable to an increase in Corporate Franchise Tax (CFT) gross receipts and audit receipts. FY 2023 includes the first prepayment affected by the temporary increase in the business income and capital base rates enacted in FY 2022.

Other tax receipts, including transfers after payment of debt service on Clean Water/Clean Air (CW/CA) Bonds, are expected to total $3.2 billion in FY 2023, an increase of $357 million from FY 2022. This is primarily due to the receipt of multiple super-large estate tax payments of more than $100 million.

Miscellaneous receipts are projected to increase by $707 million from FY 2022 primarily driven by higher investment income receipts. The State used $4.5 billion from ARP recovery aid in FY 2022 and plans to use another $2.4 billion from American Rescue Plan Act of 2021 (ARP) recovery aid in FY 2023 to fund eligible expenditures, including essential governmental services.

Non-tax transfers in FY 2023 includes a Transaction Risk Reserve that offsets total projected transfers from other funds and provides a hedge against risks to receipts that may materialize later in the fiscal year or in FY 2024. The Transaction Risk Reserve totals $1.8 billion in FY 2023, after adjustments made herein and the movement of $1 billion to the reserve for Debt Management. Excluding the risk reserve, total non-tax transfers are estimated at $3.6 billion in FY 2023, a decrease of $623 million from FY 2022 due to the transfer of a large Tribal State Compact Fund receipt in FY 2022.

Disbursements

General Fund disbursements, including transfers to other funds, are expected to total $94.5 billion in FY 2023, an increase of $5.6 billion (6.3 percent) from FY 2022. The growth in spending is attributable to initiatives and investments in nearly all major programs, including health care, School Aid, mental hygiene, social services, one-time bonus payments to health care/direct care workers, and recovery assistance to individuals and small businesses.

Local assistance spending is estimated at $64.5 billion in FY 2023, an increase of $6.1 billion from FY 2022. In FY 2023, healthcare and direct care workers earning less than $125,000 will receive a State-funded bonus payment of up to $3,000 at an estimated cost of $1.3 billion. School Aid and Medicaid, the largest local programs, are projected to increase spending by a combined $4.0 billion in FY 2023. School Aid is estimated to increase by nearly $1 billion on a State fiscal year basis, primarily driven by the continuing phase-in of the Foundation Aid formula. Medicaid spending is projected to grow by $3.1 billion, reflecting the updated method for calculating allowable spending growth under the Global Cap, increased costs related to minimum wage and funding of the local share of program growth.

Other areas with significant growth include the Office of Temporary and Disability Assistance (OTDA) ($1.2 billion) driven by rental assistance and homeless housing services; funding for backlogged Child Welfare Services claims ($796 million), mental hygiene ($196 million) for expanded services, increased capacity, and a 5.4 percent human services COLA; special education and other education programs ($255 million) driven by increased special education provider tuition rates and enrollment growth for such programs, charter school supplemental tuition reimbursement and aid to nonpublic schools; utility arrears assistance ($250 million); public health and aging ($200 million); public protection and safety ($73 million); and other programs including child care, housing, and economic development.

Agency operations costs, including fringe benefits, are expected to total $21.9 billion in FY 2023, an increase of $1.1 billion from FY 2022. The annual change is partly driven by several nonrecurring transactions processed in FY 2022, including the funding of $2.2 billion of eligible payroll costs, including fringe benefits, from the Coronavirus Relief Fund (CRF), which lowered FY 2022 spending. The lower spending in FY 2022 is partly offset by the ongoing purchase of COVID-19 test kits, payment of retroactive salary increases, and the transfer of additional funds to RHBTF, including the acceleration of deposits previously planned in FYs 2025 and 2026 to FY 2023 ($600 million). In addition, FY 2023 spending includes an offset of $800 million for expected Federal Emergency Management Agency (FEMA) reimbursement that lowers spending. Excluding these nonrecurring transactions, operational costs are projected to increase in FY 2023 due to rising energy and commodity prices and negotiated general salary increases.

General Fund transfers to Other Funds are projected to total $8.2 billion in FY 2023, a decrease of $1.6 billion from FY 2022. Transfers for capital projects are expected to decline by $2.4 billion reflecting the timing of bond reimbursements and a $931 million transfer to the MTA accelerated from FY 2023 to March 2022 and are partly offset by higher transfers for SUNY ($122 million) and all other transfers ($656 million) mainly for health care, indigent legal services and transportation and transit support.

FY 2023 Closing Balance

Excluding the PTET reserve for the timing of PTET/PIT credits and the reserve for extraordinary monetary settlements to fund existing commitments and projects, DOB estimates the General Fund will end FY 2023 with a balance of $26.8 billion, an increase of $12.0 billion over FY 2022.

Principal reserves are expected to increase by $10.6 billion — $3.1 billion in statutory Rainy Day Reserves and $7.4 billion set aside for economic uncertainties. This includes the acceleration of planned deposits totaling $5.3 billion from FY 2024 and FY 2025 that will be deposited in FY 2023. The reserves for debt management and labor settlements increase by $2.3 billion. The balance available for all other purposes is expected to decline due to funding of new commitments, including pandemic relief and recovery assistance, offset by resources available for FY 2024 operations.

FY 2024 Executive Budget Financial Plan

Receipts

General Fund receipts, including transfers from other funds, are estimated to total $103.7 billion in FY 2024, an increase of $3.4 billion (3.3 percent) from FY 2023. Excluding the impact of the PTET program, total receipts are projected to decrease by $232 million (0.2 percent) from FY 2023.

Tax receipts, excluding the impact of PTET and debt prepayments, but including transfers after payment of debt service, are estimated to total $96.3 billion in FY 2024, a decrease of $4.6 billion (4.5 percent) from FY 2023. The decrease reflects the effects of a mild recession on PIT revenues, in addition to declines in CFT receipts and estate tax receipts. Including the prepayments described above, tax receipts are estimated to increase by $400 million from FY 2023.

PIT receipts, excluding PTET and debt prepayments, but including transfers after payment of debt service, are estimated to total $66.7 billion in FY 2024, a decrease of $3.4 billion (4.9 percent) from FY 2023. The decrease reflects reduced extension payments for tax year 2022 driven by a strong decline in nonwage income, coupled with declines in final returns and delinquencies, offset by a decrease in total refunds primarily attributable to the expiration of the 2022 homeowner tax rebate credit.

Consumption/use tax receipts, including transfers after payment of debt service on Sales Tax Revenue Bonds, are estimated to total $18.4 billion in FY 2024, an increase of $1.2 billion (6.8 percent) from FY 2023. This increase reflects moderate growth in the sales tax base (2.9 percent), including the expiration of the temporary suspension of the State sales tax on gasoline and diesel motor fuel on December 31, 2022.

Business tax receipts, excluding PTET, are estimated at $8.8 billion in FY 2024, a decrease of $1.4 billion (14.0 percent) from FY 2023. The decrease primarily reflects a decrease in CFT gross receipts, reflecting a projected decline in corporate profits, and a decrease in audit receipts to recent trend levels.

Other tax receipts, including transfers after payment of debt service on CW/CA Bonds, are expected to total $2.4 billion in FY 2024, a decrease of $889 million from FY 2023. This is primarily due to a decline in the real estate transfer tax and the estate tax returning to typical trends following record receipt collections in FY 2023.

Miscellaneous receipts are projected to decline by over $600 million from FY 2023 due to high investment income receipts in FY 2023.

Non-tax transfers are estimated to total $1.9 billion in FY 2024, an increase of $99 million from FY 2023. The modest change is mainly attributable to increases in transfers from the Health Care Transformation and Mental Health Services funds and is almost fully offset by an increase in the Transaction Risk Reserve compared to FY 2023.

Disbursements

General Fund disbursements, including transfers to other funds, are expected to total $106.9 billion in FY 2024, an increase of $12.4 billion (13.2 percent) from FY 2023. The annual change in spending is affected by the expected expiration of the eFMAP at the end of the third quarter of FY 2024. The higher Federal matching rate has temporarily lowered State-share spending and increased the Federal share of Medicaid costs.

Local assistance spending is estimated to total $73.3 billion in FY 2024, an increase of $8.8 billion from FY 2023. General Fund spending for education and health care represents most of the local assistance spending. General Fund support for these programs is affected by the level of financing sources (i.e., HCRA and lottery/gaming receipts) available in other funds, as well as the impact of eFMAP. School Aid is estimated to increase by $3.2 billion (12.6 percent) on a State fiscal year basis, primarily reflecting the final year of the phase-in of full funding of the current Foundation Aid formula, a $125 million investment in State-funded full day prekindergarten programming for four- year old children and assumed growth in expense-based aids.

Medicaid spending is projected to grow by $2.3 billion due to investments in health care, offset by savings resulting from the transition of the pharmacy benefit from Managed Care to Medicaid Fee- for-Service, the phase down of the eFMAP extension through December 31, 2023, and actions to maintain spending within the Global Cap. Additional local assistance growth is primarily a result of additional assistance to the MTA to address operating shortfalls, initiatives and investments to improve mental health care services, access to affordable housing, additional support for public safety initiatives, wage increases, and one-time funding to support asylum seekers services and assistance in New York City. Partially offsetting these increases are one-time funding for Child welfare services and pandemic recovery initiatives. Lastly, General Fund local assistance has been reduced in the current year based on operating results to date and other information.

General Fund agency operations costs, including fringe benefits, are expected to total $23.3 billion in FY 2024, an increase of $1.5 billion from FY 2023. The growth in executive agency budgets reflects efforts to assess lead risks and support lead abatement for housing across the State, modernize health reporting systems, conduct additional State Police recruiting classes, provide State matching funds for contributions to the endowments for SUNY's four university centers, and increase inpatient beds in State-operated Psychiatric Centers. Additionally, the cost of deploying the National Guard to assist New York City, providing care for asylum seekers, and consulting costs associated with development of Section 1115 Medicaid demonstration waivers increase spending in FY 2024. Fringe benefit costs are expected to increase in FY 2024 primarily due to the increased costs of providing health insurance and pension benefits to current and retired employees.

General Fund transfers to Other Funds are projected to total $10.4 billion in FY 2024, an increase of $2.2 billion from FY 2023, mainly attributable to transfers for capital projects reflecting an increase in planned PAYGO capital spending and increased transfers to SUNY for transformational initiatives at campuses that support innovation, help meet workforce needs, and provide student support.

FY 2024 Closing Balance

Excluding the PTET reserve for the timing of PTET/PIT credits and the reserve for extraordinary monetary settlements to fund existing commitments and projects, DOB projects the State will end FY 2024 with a General Fund cash balance of $26.7 billion, a decrease of $95 million from FY 2023. The reserves for debt management and labor settlements are projected to increase by just over $1 billion. The balance available for all other purposes is expected to decline due to the use of prior year resources to fund certain commitments and operations in FY 2024, partially offset by the addition of an $800 million reserve consistent with the consensus revenue agreement.

Cash Flow

State Finance Law authorizes the General Fund to borrow money temporarily from available funds held in the Short-Term Investment Pool (STIP). Loans to the General Fund are limited to a term not to exceed four months or the end of the fiscal year, whichever is shorter. The resources that can be borrowed by the General Fund are limited to available balances in STIP, as determined by the State Comptroller. Available balances include money in the State's governmental funds and a relatively small amount of other money belonging to the State, held in internal service and enterprise funds, as well as certain agency funds. Several accounts in Debt Service Funds and Capital Projects Funds that are part of All Governmental Funds are excluded from the balances deemed available in STIP. These excluded funds consist of bond proceeds and money obligated for debt service payments.

The FY 2024 Executive Budget continues to authorize short-term financing for liquidity purposes during the fiscal year. In doing so, it provides a tool to help the State manage cashflow, if needed, and more effectively deploy resources as the State continues to respond to the pandemic. Specifically, the authorization allows for the issuance of up to $3 billion of PIT revenue anticipation notes which mature no later than March 31, 2024. It also allows up to $2 billion in line of credit facilities, to be drawn through March 31, 2024, subject to available appropriation. Neither authorization allows borrowed amounts to be extended or refinanced beyond their initial maturity. The Updated Financial Plan does not assume the use of short-term financing for liquidity purposes during FY 2024. DOB evaluates cash results regularly and may adjust the use of notes and/or the line of credit based on liquidity needs, market considerations, and other factors.

The State continues to reserve money on a quarterly basis for debt service payments financed with General Fund resources. Money to pay debt service on bonds secured by dedicated receipts, including PIT bonds and Sales Tax Revenue bonds, continues to be set aside as required by law and bond covenants.

PTET Financial Plan Impact

The U.S. Department of the Treasury (Treasury) and the Internal Revenue Service (IRS) have determined that State and local income taxes imposed on and paid by a partnership or an S corporation on its income, such as the PTET, are allowable as a Federal deduction to taxable income. In November 2020, the IRS released Notice 2020-75, which announced that the Treasury and IRS intend to issue clarifying regulations with respect to such pass-through taxes.

As part of the State's continuing response to Federal tax law changes, legislation was enacted in FY 2022 to allow an optional PTET on the New York-sourced income of partnerships and S corporations. Qualifying entities that elect to pay PTET will pay a tax of up to 10.9 percent on their taxable income at the partnership or corporation level, and their individual partners, members and shareholders will receive a refundable PIT credit equal to the proportionate or pro rata share of axes paid by the electing entity. Additionally, the program includes a resident tax credit that allows for reciprocity with other states that have implemented substantially similar taxes, which currently include Connecticut and New Jersey.

In December 2021, electing entities began making estimated PTET payments that were classified as business taxes and totaled $16.4 billion in FY 2022. The accompanying tax credits result in decreased PIT collections beginning in April 2022. DOB expects that the PTET will, on a multi-year basis, be revenue neutral for the State. However, because the PTET credits are not necessarily realized by taxpayers within the same fiscal year that PTET revenue is received by the State, the PTET will not be revenue-neutral to the State within each fiscal year. The Updated Financial Plan includes an estimate for PTET within business taxes and the corresponding decrease in PIT receipts. Additionally, it has reserved PTET collected in FY 2022 for purposes of offsetting the decrease in PIT receipts expected in FY 2023 and beyond. It is expected that the tax benefit accompanying the PTET program will end in 2025 due to the scheduled expiration of the State and Local Tax (SALT) cap under current Federal law. Therefore, the estimates in the Updated Financial Plan reflect the likelihood that entities cease to participate in the later years of the Financial Plan period.

PTET is expected to reduce FY 2023 PIT collections by $18.8 billion and reduce all funds receipts by a net amount of $5.9 billion, due to timing. PIT credits may be claimed on the April tax return in the following fiscal year, or they can be reflected sooner through reductions in current estimated payments. In 2021, taxpayers could not reduce their current estimated PIT payments for PTET, because enrollment in the PTET was not completed until late 2021 and affected taxpayers were not statutorily authorized to do so. Going forward, some taxpayers are expected to choose this option. FY 2023 PIT collections are expected to be reduced by credits for both the full amount of tax year 2021 PTET collections (through extensions and refunds) and a portion of tax year 2022 PTET collections (through reductions in current estimated PIT payments).

The net impact of PTET declines in FY 2024 but is expected to reduce FY 2024 PIT collections by $13.8 billion and reduce all funds receipts by a net amount of $2.3 billion.

FY 2023 State Operating Funds Spending

State Operating Funds encompass the General Fund and a wide range of State activities funded from revenue sources outside the General Fund, including dedicated tax revenues, tuition, income, fees, and assessments. Activities funded with these dedicated revenue sources often have no direct bearing on the State's ability to maintain a balanced budget in the General Fund but are captured in State Operating Funds.

Local Assistance

Approximately two-thirds of State spending is for local assistance that includes payments to local governments, school districts, health care providers, managed care organizations, and other entities, as well as financial assistance to, or on behalf of, individuals, families, and not-for-profit organizations. School Aid and Medicaid account for more than half of local assistance spending. Over the past two years, local assistance funding includes spending for pandemic recovery initiatives, which support time-limited programs including the Emergency Rental Assistance Program (ERAP), Landlord Rental Assistance Program, assistance to excluded workers, small business assistance, funding for hospitals that are experiencing financial distress from the COVID- 19 pandemic, public utility arrears assistance, Healthcare/Direct Care Worker Bonuses, and other targeted initiatives. Most of the one-time assistance is expected to be exhausted in FY 2023.

School Aid spending for School Year (SY) 2024 is estimated at $34.4 billion, excluding Federal prekindergarten grants, representing an annual increase of $3.1 billion (10.0 percent). This annual growth is primarily driven by increased funding for Foundation Aid ($2.7 billion), expense-based reimbursement programs ($232 million), and the expansion of State-funded full-day prekindergarten programming for four-year-old children ($125 million). The growth in Foundation Aid reflects the full funding of the current formula for the first time in its history, marking the final year of the three-year phase-in, and a minimum 3 percent annual increase to fully funded districts that would otherwise not receive a Foundation Aid increase under current law.

Department of Health (DOH) Medicaid local assistance spending, excluding eFMAP, is estimated at $27.3 billion in FY 2024, an annual increase of 7.4 percent. Medicaid costs reported under the Global Cap are projected to increase by $475 million, consistent with the updated growth index. The increased funding will support growth in enrollment and medical cost inflation, increased rates to nursing homes, increased homecare wages, expanded access to health coverage, and higher provider reimbursements. The remaining growth is attributable to costs reported outside the Global Cap and is mainly driven by minimum wage for health care providers ($188 million) and financial relief to counties and New York City associated with full coverage of the local share of spending growth ($183 million). A portion of Medicaid-related expenses of Office for People with Developmental Disabilities (OPWDD) will be funded outside of the DOH Global Cap with additional Financial Plan resources to accommodate DOH Medicaid spending growth.

State Medicaid spending is also affected by the Federal government's increased share of Medicaid funding through eFMAP. Beginning January 1, 2020, the Federal government increased its share by 6.2 percent, which will be phased out by the end of the 2023 calendar year. Beginning April 1, 2023, eFMAP will be reduced for each of the three quarters to 5 percent through June 30, 2.5 percent through September 30, and 1.5 percent through December 31. The estimated State benefit of the eFMAP in FY 2023 and FY 2024 is $3.7 billion and $1.5 billion, respectively. State share savings from eFMAP have and continue to be used to offset increased costs associated with persistently elevated COVID related enrollment, asylum seekers services and assistance, and lost Medicaid Redesign Team II (MRT II) savings due to Federal restrictions regarding program restructuring while the eFMAP remained in place. These costs and most of the eFMAP are outside of the Global Cap and are funded through the Mental Hygiene Stabilization Fund.

Mental Hygiene spending growth provides increased support for targeted investments in services to ensure individuals with developmental disabilities, mental illness, substance use disorders and problem gambling have appropriate access to care. The increases include continued support for prior year initiatives, such as implementation of the nationwide 988 Suicide and Crisis Lifeline, OPWDD housing subsidy enhancements, and Office of Mental Health (OMH) residential investments. Additional funding is included for a 2.5 percent human services COLA, new costs associated with indexing the minimum wage to inflation, establishing and operating 3,500 new OMH residential units, increased support for youth suicide prevention programs and other evidence-based programs serving children, and enhanced mental health services in schools.

Spending for transportation is projected to increase significantly due to one-time funding to the MTA to address extraordinary financial impacts resulting from the pandemic ($300 million), increases to upstate transit operating aid and forecasted increases in dedicated receipts that are collected by the State and remitted to the various transit systems. Including one-time aid, total year to year increases are expected to provide an additional $560 million to the MTA, $40 million for non-MTA downstate transit systems, and $18 million for upstate transit systems. The remaining increases reflect a new Innovative Mobility Initiative for non-MTA transit systems and funding for the State share of operating costs for the Gateway Development Commission.

Social Services increases include funding for services and assistance to New York City for asylum seekers in FY 2024 and increases in child care assistance due to an expanded subsidy eligibility, increased reimbursement for child care providers and their workforce, and the creation of an Employer-Supported Child Care Pilot Program. Other Social Services actions include investments in permanency resource centers and kinship services, the consolidation of the Empire State and Advantage Afterschool programs under OCFS, assistance for foster care agencies transitioning under Federal requirements, and the indexing of the minimum wage. There is also increased funding for Code Blue, New York's emergency weather safety plan, and increases in the Empire State Supportive Housing Initiative (ESSHI). Payments for the child welfare program will continue to support local districts' services and the year-to-year decline in such spending is attributable to the timing of such payments.

Higher education spending is projected to grow by 4.9 percent in FY 2024, primarily reflecting estimated increases in spending for student financial aid programs, including the continued expansion of TAP for part-time students, and increased operating support for CUNY senior colleges.

Increased funding for other education programs largely reflects the continuation of increased State support for special education programs related to approval of an 11 percent COLA for provider tuition rates for SY 2023 and enrollment growth for such programs, as well as increased costs to reimburse school districts for charter school supplemental tuition and increased payments to New York City for charter school facilities aid. These increases are partially offset by the discontinuation of one-time additions to the FY 2023 Enacted Budget.

Other local assistance spending growth includes additional funding for energy affordability; criminal justice programs including Aid to Prosecution, Alternatives to Incarceration (ATI) and Gun Involved Violence Elimination (GIVE) programs; pretrial services; and Fentanyl abuse prevention. This increased spending is more than offset by time-limited pandemic recovery initiatives including small business assistance, public utility arrears assistance, and one time funding for the Office of Cannabis Management Social Equity Fund and world university games.

State Operations/General State Charges (GSCs)

Operating costs for State agencies include salaries, wages, fringe benefits, and Non-Personal Service (NPS) costs (e.g., supplies, utilities) and comprise about a quarter of State Operating Funds spending.

Operational spending for executive agencies is affected by the timing of Federal reimbursement for State incurred pandemic response and recovery efforts; and the payment of salary increases pursuant to existing contracts, including retroactive salary increases. FY 2024 spending includes increased spending to support asylum seekers services and assistance efforts, four State Police recruiting classes, lead abatement, and the opening of new inpatient beds in State-operated Psychiatric Centers.

University systems spending growth in FY 2024 reflects expected State payments related to the establishment of a $500 million SUNY Endowment Fund to match new philanthropic contributions to the endowments of SUNY's university centers. Among other purposes, the earnings on these funds will provide long-term support for campus operations, student scholarships, endowed professorships, innovative research, and the development of new academic fields. It also includes a one-time investment of $75 million for transformational initiatives at SUNY campuses that support innovation, help meet the workforce needs of the future, and provide needed supports to students. In addition, the Updated Financial Plan includes $60 million in new recurring operating aid support for SUNY State-operated campuses and $21 million in additional funding to help cover student tuition costs in response to proposed tuition changes at SUNY campuses.

The operating costs for the offices of independently elected officials (Attorney General, Comptroller, Judiciary, and Legislature) are projected to increase by a combined $100 million (3.6 percent). The increase is primarily due to planned increases for personnel and contract costs.

Growth in GSCs spending is primarily attributable to cost increases for health insurance, driven by medical cost inflation and projected utilization growth following delayed medical visits and procedures during the pandemic, and pension benefits for current and retired employees. This annual growth is entirely offset by the advance payment to the State's Retiree Health Insurance Trust Fund of $600 million in FY 2023. The State's annual pension payment is projected to grow by $200 million.

Other Matters Affecting the Financial Plan

The Updated Financial Plan is subject to economic, social, financial, political, public health, and environmental risks and uncertainties, many of which are outside the ability of the State to predict or control. The projections of receipts and disbursements in the Updated Financial Plan are based on reasonable assumptions at the time they were prepared, but DOB is unable to provide any assurance that actual results will not differ materially and adversely from these projections.

The Updated Financial Plan is based on numerous assumptions including the condition of the State and national economies, and the collection of economically sensitive tax receipts in the amounts projected. Uncertainties and risks that may affect economic and receipts forecasts include, but are not limited to, national and international events; inflation; consumer confidence; commodity prices; supply chain disruptions; major terrorist events; hostilities or war; climate change and extreme weather events; severe epidemic or pandemic events; cybersecurity threats; Federal funding laws and regulations; financial sector compensation; monetary policy affecting interest rates and the financial markets; credit rating agency actions; financial and real estate market developments which may adversely affect bonus income and capital gains realizations; technology industry developments and employment; effect of household debt on consumer spending and State tax collections; and outcomes of litigation and other claims affecting the State.

Litigation against the State may include, among other things, potential challenges to the constitutionality of various actions. The State may also be affected by adverse decisions that are he result of various lawsuits. Such adverse decisions may not meet the materiality threshold to warrant a description herein but, in the aggregate, could still adversely affect the Updated Financial Plan

The Updated Financial Plan is subject to various uncertainties and contingencies including, but not limited to, wage and benefit increases for State employees that exceed projected annual costs; changes in the size of the State's workforce; realization of the projected rate of return for pension fund asset assumptions with respect to wages for State employees affecting the State's required pension fund contributions; the willingness and ability of the Federal government to provide the aid projected in the Updated Financial Plan, including the Federal matching grant for the healthcare/direct care worker bonus program; the ability of the State to implement cost reduction initiatives, including reductions in State agency operations, and the success with which the State controls expenditures; unanticipated growth in Medicaid program costs; and the ability of the State and its public authorities to issue securities successfully in public credit markets. Some of these issues are described in more detail herein. The projections and assumptions contained in the Updated Financial Plan are subject to revisions which may result in substantial changes. No assurance can be given that these estimates and projections, which depend in part upon actions the State expects to be taken but which are not within the State's control, will be realized.

DOB routinely executes cash management actions to manage the State's large and complex budget. These actions are intended to improve the State's cash flow, manage resources within and across State fiscal years, adhere to spending targets, and better position the State to address unanticipated costs, including economic downturns, revenue deterioration, and unplanned expenditures. In recent years, the State has prepaid certain payments, subject to available resources, to maintain budget flexibility.

Climate Change

Climate change poses significant long-term threats to physical, biological, and economic systems in New York and around the world. Potential hazards and risks related to climate change for the State include, among other things, rising sea levels, increased coastal flooding and related erosion hazards, intensifying storms, and more extreme heat. The potential effects of climate change could adversely impact the Updated Financial Plan in current or future years. To mitigate and manage these impacts, significant long-term planning and investments by the Federal government, the State, municipalities, and public utilities are expected to be needed to adapt existing infrastructure.

In August 2021, the Intergovernmental Panel on Climate Change of the United Nations (IPCC) reported that 1.5°C of warming is likely to occur by 2040 under all emissions scenarios considered and that the 1.5°C benchmark will be exceeded by 2100 unless deep reductions in greenhouse gas emissions occur in the coming decades. Human-induced climate change is already affecting many weather extremes in every region across the globe. Further warming is expected to increase the risk of adverse outcomes, including extreme weather events and coastal flooding.

Storms affecting the State, including Hurricane Ida (September 2021), Superstorm Sandy (October 2012), Tropical Storm Lee (September 2011), and Hurricane Irene (August 2011), have demonstrated vulnerabilities in the State's infrastructure (including mass transit systems, power transmission and distribution systems, and other critical lifelines) to extreme weather driven events, including coastal flooding caused by storm surges and flash floods from rainfall.

The State continues to recover from damage sustained during these powerful storms. Hurricane Irene disrupted power and caused extensive flooding in various counties. Tropical Storm Lee caused flooding in additional counties, and, in some cases, exacerbated damage caused by Hurricane Irene two weeks earlier. Superstorm Sandy struck the East Coast, causing widespread infrastructure damage and economic losses to the greater New York region. Hurricane Ida caused severe flooding in the New York metropolitan area. The frequency and intensity of these storms present economic and financial risks to the State. Reimbursement claims for costs of the immediate response, recovery, and future mitigation efforts continue, largely supported by Federal funds.

Rating agencies are incorporating Environmental, Social, and Governance (ESG) factors into their credit analysis for the State and other issuers. Rising sea levels and their effect on coastal infrastructure have been identified as the primary climate risks for the northeastern United States, including New York State. These risks are heightened by population and critical infrastructure concentration in coastal counties. In June 2021, Moody's first assigned New York State an environmental issuer profile score of E-3 (moderately negative), below the nationwide median score of E-2 (neutral to low). The E-3 score reflected Moody's assessment that the State faces moderately negative exposure to physical climate risks, especially hurricanes and sea level rise, which could cause significant economic disruption and pose risks to the State's economy and tax base. In March 2022, S&P assigned New York State an environmental issuer profile score of E-3 (moderately negative) due to the risk of coastal flooding in New York City and Long Island, which S&P equates to risk exposure affecting about 40 percent of the State's population and roughly half of its jobs. The S&P report cited the risk that a climate-related natural disaster could disrupt the State's economy and budgetary balance. The release of issuer ESG scores by the rating agencies does not cause a change in the State's overall credit ratings, which are based on financial information in addition to the ESG component. Climate change risks increasingly fall within the maximum maturity term of current outstanding bonds of the State, its public authorities, and municipalities. State bonds may generally be issued with a term of up to 30 years under State statute.

The State is participating in efforts to reduce greenhouse gas emissions to mitigate the risk of severe impacts from climate change. In 2019, the Climate Leadership and Community Protection Act (CLCPA) was signed into law. The CLCPA set the State on a path toward developing regulations to reduce statewide greenhouse gas emissions by 40 percent below the 1990 level by 2030, and 85 percent below the 1990 level by 2050. Additionally, in accordance with the CLCPA, the State plans to generate a minimum of 70 percent of electricity from renewable sources by 2030 and to fully transition its electricity sector away from carbon emissions by 2040. There can be no assurances that such goals will ultimately be achieved.

The CLCPA created the Climate Action Council (CAC), which was tasked with developing a Scoping Plan with recommendations to reduce greenhouse gas emissions, increase renewable energy usage, and promote climate justice. The CAC approved and adopted the final Scoping Plan on December 19, 2022. Pursuant to the CLCPA, by January 1, 2024 the

Department of Environmental Conservation is required to draft and circulate enforceable rules and regulations that are consistent with meeting the CLCPA's statewide greenhouse gas emission limits.

Concurrently, the State has been taking regulatory and legislative actions that are intended to limit greenhouse gas emissions, electrify transportation, and generate more electricity from renewable sources. There can be no assurances that such actions, or their intended outcomes, will be realized as planned. Major regulatory and legislative actions include:

- Requiring new off-road vehicles and equipment sold in New York to be zero-emissions by 2035 and new medium-duty and heavy-duty vehicles to be zero-emissions by 2045;
- Requiring the New York State Energy Research and Development Authority to formulate the creation of a zero-emissions vehicle development strategy in 2023;
- Mandating that by no later than July 1, 2027, school districts and private transportation contractors purchase or lease only zero-emission school buses when purchasing or leasing new school buses, with full fleet conversion and operation of zero-emission school buses required by July 1, 2035;
- Enacting the "Advanced Building Codes, Appliance and Equipment Efficiency Standards Act of 2022" to align the State's energy code with its climate policies and strengthen efficiency standards for appliances;
- Appropriating $500 million to advance the offshore wind industry; and
- Amending the Clean Energy Standard to reflect CLCPA targets.

In addition, New York State has been a member of the Regional Greenhouse Gas Initiative, which utilizes a cap-and-trade mechanism to regulate carbon dioxide emissions from electric power plants operating within each participating state since 2008.

During the November 2022 general election, New York State voters approved the Clean Water, Clean Air, and Green Jobs Bond Act. The $4.2 billion bond act will support capital improvements and enhancements in the following areas: flood risk reduction/restorations; open space, working lands conservation, and recreation; climate change mitigation; and water quality improvement and resilient infrastructure.

COVID-19 Pandemic

Important State revenue sources, including personal income, consumption, and business tax collections, may be adversely affected by the long-term impact of COVID-19 on a range of activities and behaviors, including commuting patterns, remote working and education, business activity, social gatherings, tourism, public transportation, and aviation. It is not possible to assess or forecast the effects of such changes at this time.

For example, the COVID-19 pandemic has led to changes in the behavior of resident and nonresident taxpayers. Consistent with the growth in remote work arrangements, many residents and non-residents are no longer commuting into New York City and instead are working remotely from home offices. However, under long-standing State policy, a non-resident working from home pays New York income taxes on wages from a New York employer unless that employer has established the non-resident's home office as a bona fide office of the employer.

The COVID-19 pandemic also led some New York residents to shelter in locations outside of the State. In addition, some taxpayers who previously resided in New York have permanently relocated outside of the State during the pandemic. The State continues to monitor the data to understand whether these trends are transitory.

There can be no assurance that existing and future COVID-19 variants will not adversely impact the State's financial condition. State officials continue to closely monitor global COVID-19 impacts and emerging Federal guidance.

Federal Policy and Funding

The Federal government influences the economy and budget of New York State through grants, direct spending on its own programs such as Medicare and Social Security, and through Federal tax policy. Federal policymakers may place conditions on grants, mandate certain state actions, preempt state laws, change SALT bases and taxpayer behavior through tax policies, and influence industries through regulatory action. Federal resources support vital services such as health care, education, and transportation, as well as severe weather and emergency response and recovery. Any changes to Federal policy or funding levels could have a materially adverse impact on the Updated Financial Plan.

Federal funding is a significant component of New York's budget representing more than one-third of All Funds spending. Routine Federal aid supports programs for vulnerable populations and those living at or near the poverty level. Such programs include Medicaid, Temporary Assistance for Needy Families (TANF), Elementary and Secondary Education Act (ESEA) Title I grants, and Individuals with Disabilities Education Act (IDEA) grants. Other Federal resources are directed at infrastructure and public protection.

In response to the COVID-19 PHE, the Federal government has taken legislative, administrative, and Federal Reserve actions intended to stabilize financial markets, extend aid to large and small businesses, health care providers, and individuals, and reimburse governments for the direct costs of pandemic response. The Federal government enacted several laws between March 2020 and March 2021 to provide financial assistance to state and local governments, schools, hospitals, transit systems, businesses, families and individuals for COVID-19 pandemic response and recovery. The State also received additional Federal aid in the form of enhanced Unemployment Insurance funding, which is reported under Proprietary and Fiduciary Funds and is excluded from All Governmental Funds.

Total Federal Funds spending for all purposes, inclusive of both capital and operating spending, is expected to total $83.9 billion in FY 2024 and includes $11 billion in spending identified as pandemic assistance. The reporting of certain program spending related to the pandemic is included in the agency disbursements, the largest of which include Disproportionate Share Hospital (DSH), CHP, eFMAP, IDEA, and the TANF Pandemic Emergency Fund. Federal Funds spending estimated in FY 2024 continues to include significant pandemic assistance funds for education, eFMAP related to the extension of the COVID eFMAP phase down, and Home and Community Based Services (HCBS) eFMAP, as well as Federal reimbursement of pandemic related spending incurred in prior fiscal years. Federal Funds spending programs are summarized below.

- Medicaid/Health. Funding shared by the Federal government helps support health care costs for over nine million New Yorkers, including more than two million children. Medicaid is the single largest category of Federal funding. The Federal government also provides support for several health programs administered by DOH, including the EP, which provides health care coverage for low-income individuals who do not qualify for Medicaid or CHP.
- Social Services. Federal funding helps with several programs managed by OTDA, including TANF-funded public assistance benefits and the Flexible Fund for Family Services, Home Energy Assistance Program (HEAP), Supplemental Nutrition Assistance Program (SNAP), and Child Support. Funding from the Federal government also supports programs managed by OCFS, including Child Care, Child Welfare Services, Adult Protective & Domestic Violence Services, Foster Care, and Adoption Subsidies.
- Education. Federal funding supports K-12 education, special education and Higher Education. Like Medicaid and the social services programs, significant portions of Federal education funding are directed toward vulnerable New Yorkers, such as students in schools with high poverty levels, students with disabilities, and higher education students who qualify for programs such as Pell grants and Work-Study.
- Public Protection. Federal funding supports various programs and operations of the State Police, the Department of Corrections and Community Supervision (DOCCS), the Office of Victim Services, the Division of Homeland Security and Emergency Services (DHSES), and DMNA. Federal funds are also passed on to municipalities to support a variety of public safety programs.
- Transportation. Federal resources support infrastructure investments in highway and transit systems throughout the State, including funding participation in ongoing transportation capital plans. The recently enacted Infrastructure Investment and Jobs Act (P.L. 117-58) increases the amount of Federal resources available to the State to fund capital costs associated with transportation projects.
- All Other. Other programs supported by Federal resources include housing, economic development, mental hygiene, parks and environmental conservation, and general government uses.

Pandemic Assistance

- Child Care Funds. The CARES, Coronavirus Response and Relief Supplemental Appropriations (CRRSA), and ARP Acts granted additional funding to aid in stabilizing the childcare sector.
- Education ARP Funds. The ARP granted additional education funding for Elementary and Secondary School Emergency Relief (ESSER) and Emergency Assistance for Nonpublic Schools (EANS) programs, as well as funding for homeless education, IDEA, library services and the arts.
- Families First Coronavirus Response Act (FFCRA)/COVID eFMAP. In response to the COVID-19 pandemic, the Federal government increased its share of Medicaid funding (eFMAP) by 6.2 percent for each calendar quarter occurring during

the PHE. The enhanced funding began on January 1, 2020, and pursuant to the 2023 Consolidated Appropriations Act signed into law on December 29, 2022, will be phased out by the end of December 2023: eFMAP will be reduced to 5 percent from April 1, 2023 through June 30, 2023, to 2.5 percent from July 1, 2023 through September 30, 2023, and to 1.5 percent from October 1, 2023 through December 31, 2023. The Updated Executive Budget Financial Plan projects a benefit to the State of $3.7 billion in FY 2023 and $1.5 billion in FY 2024 through this enhanced Federal funding.

- ARP HCBS eFMAP. The ARP also provided a temporary 10 percentage point increase to the FMAP for certain Medicaid HCBS through March 31, 2022. In accordance with Maintenance of Effort requirements on ARP HCBS eFMAP eligibility, the State has delayed the implementation of certain MRT II savings actions so that the State can receive an estimated $2.4 billion in eFMAP for HCBS expenditures across health and mental hygiene programs ($975 million in FY 2023 and $1.5 billion in FY 2024). CMS guidelines require the use of additional funding to supplement existing State funding, not supplant existing resources, and the State has until March 31, 2024 to expend its earned eFMAP in accordance with the submitted spending plan.

  The State, as required by CMS, submitted an initial spending plan and narrative detailing the use of the temporary eFMAP on July 8, 2021. Following, the initial submission, CMS requires states to submit quarterly spending plan updates and semi-annual spending plan narratives. Accordingly, the State submitted spending plans on October 18, 2021, February 15, 2022, May 6, 2022, July 28, 2022, October 31, 2022, and February 7, 2023. Updates to the spending plan will continue to be submitted in accordance with the reporting requirements. To date, CMS provided a partial spending plan approval of 40 out of 42 proposals, and the State will continue working with CMS to receive full approval.

- Education Supplemental Appropriations Act. As part of CRRSA, additional funding for education was provided through the ESSER Fund and the Governor’s Emergency Education Relief (GEER) Fund, including dedicated GEER funds to support pandemic-related services and assistance to nonpublic schools through the EANS program.
- ERAP. The CRRSA Act established the ERAP to assist households that are unable to pay rent and utilities due to the COVID-19 pandemic. The ARP provided additional funding for the program.
- Education CARES Act Funds. Additional education support provided through the CARES Act included funding to school districts and charter schools.
- SUNY State-Operated Campuses Federal Stimulus Spending. Funding provided through various Federal stimulus bills resulted in greater Federal spending projections for SUNY State-operated campuses.
- FEMA Reimbursement of Eligible Pandemic Expenses. The State has applied for FEMA reimbursement for expenses incurred to date related to emergency protective measures due to the COVID-19 pandemic, including home test kits for schools. The Updated Financial Plan assumes reimbursement of $800 million in FY 2023, $425 million in FY 2024, and $225 million in FY 2025. However, there is no assurance that FEMA will approve claims for the State to receive reimbursement in the amounts or State fiscal years as projected in the Updated Financial Plan.
- FEMA Local Pass-Through Funding. Funding from this program is assumed to flow through the Updated Financial Plan to reimburse local entities for their Federal share of COVID-19 claims submitted to FEMA.
- Coronavirus Local Fiscal Recovery Fund Non-Entitlement Pass-Through. The ARP requires states to pass-through the allocations to non-entitlement cities, towns, and villages. The State distributed $387 million to local governments in FY 2022 and distributed an additional $387 million to local governments in FY 2023, for a total of $774 million overall.
- Homeowner Assistance Fund. This program provides services to ensure that homeowners experiencing economic hardships associated with the pandemic can stay in their homes.
- HEAP. The ARP provided supplemental funding to the existing HEAP that helps low-income households pay the cost of heating, cooling, and weatherizing their homes.
- Coronavirus Capital Projects Fund. The ARP created the Coronavirus Capital Projects Fund to provide funding to carry out critical capital projects that directly enable work, education, and health monitoring, including remote options, in response to the COVID-19 PHE. The State has been allocated $345 million for the program.
- State Small Business Credit Initiative. This program provides funding to empower small businesses to access capital needed to invest in job-creating opportunities.
- Federal Highway Administration (FHWA) Surface Transportation Block Grant. This emergency funding was provided under the CRRSA Act to address COVID-19 impacts related to Highway Infrastructure Programs.

Federal Coronavirus Response Legislation and Action

The Federal government enacted the following legislation in response to the ongoing COVID-19 pandemic. The table below summarizes the total amount of Federal pandemic assistance available to New York State, including direct recipients of Federal aid such as individuals, hospitals, businesses, transit authorities including the MTA, and school districts, along with the funds expected to flow through the Updated Financial Plan.

A large portion of the Federal pandemic assistance flows directly to various recipients (e.g., tax rebates to individuals, and loans or grants to large and small businesses) and is thus excluded from the Updated Financial Plan. In addition, on May 18, 2021, the State received $12.75 billion in Federal aid authorized in the ARP to offset revenue loss, ensure the continuation of essential services and assistance provided by government, and assist in the PHE response and recovery efforts. These funds are expected to be transferred to State Funds over multiple years to support eligible uses and spending. Thus, the spending of the ARP aid to the State does not appear in Federal funds.

- CARES Act provides aid for Federal agencies, individuals, businesses, states, and localities, as well as $100 billion for hospitals and health care providers, to respond to the COVID-19 pandemic.

  Assistance to states through the CARES Act is generally restricted to specific purposes and includes the CRF ($5.1 billion State allocation) and the Education Stabilization Fund ($1.2 billion State allocation). Pursuant to U.S. Treasury eligibility guidelines, CRF funds allocated to the State were used for eligible expenses incurred, including payroll expenses for public health and safety employees, through December 31, 2021.
- FFCRA provides aid through paid sick leave, free testing, expanded food assistance and unemployment benefits, protections for health care workers, and increased Medicaid funding through the emergency 6.2 percent increase to the Medicaid eFMAP during the PHE. Beginning January 1, 2023, the Consolidated Appropriations Act delinks the eFMAP from the PHE and provides for a phase-out of enhanced funding over nine months.
- ARP Act of 2021 provides aid for Federal agencies, individuals, businesses, states and localities, and others, to respond to the COVID-19 pandemic. The ARP has provided the State with $12.75 billion in general aid ("recovery aid") and $19.2 billion in categorical aid for schools, universities, childcare, housing, and other purposes. The ARP also provides $10 billion in recovery aid to localities in New York State and $7 billion directly to the MTA. The State aid provided through the ARP is included in the Updated Financial Plan as a deposit of Federal aid to the General Fund to offset revenue loss, ensure the continuation of essential services and assistance provided by government, and assist with the PHE response and recovery efforts. These funds are expected to be transferred to State Funds over multiple years to support eligible uses and spending.

  Finally, the ARP established a Capital Projects Fund to provide funding to states, territories, and Tribal governments to carry out critical capital projects directly enabling work, education, and health monitoring, including remote options, in response to the PHE. The State has also been allocated $345 million from the Coronavirus Capital Projects Fund.
- The CRRSA Act of 2021 provided funding for education, testing, tracing, vaccine distribution, unemployment assistance, small business programs, and housing.
- FEMA Lost Wages Assistance (LWA) provided grants to eligible claimants that were unemployed or partially unemployed due to the pandemic.
- The Paycheck Protection Program and Health Care Enhancement Act provides funding for small business programs and healthcare programs, including $75 billion for hospitals, health care providers, and testing and tracing activities.
- Coronavirus Preparedness and Response Supplemental Appropriations Act (CPRSA) of 2020 provides emergency funding to respond to the COVID-19 pandemic, including support for vaccine development, the PHE Preparedness program, and small businesses.

In addition, the pandemic has resulted in a significant increase in individuals filing for unemployment benefits. Such benefits are paid from the Unemployment Insurance (UI) Trust Fund, which is supported by employer contributions. If there are insufficient resources in the UI Trust Fund to pay benefits, as became the case starting in May 2020, the UI Trust Fund may borrow from the Federal government for this purpose. As of December 31, 2022, the UI Trust Fund's Federal loan balance was approximately $7.97 billion. The balance in the UI Trust Fund is expected to be repaid by employers through UI contribution rates.

Federal Infrastructure Investment and Jobs Act (IIJA)

In November 2021, Congress passed, and the President signed, the $1.2 trillion IIJA, including approximately $550 billion in new authorized spending nationally on transportation, water, energy, broadband and natural resources.

The IIJA is expected to provide the State with an additional $4.6 billion in highway and bridge program aid over the life of the Federal Aid Highway program reauthorization, as well as significant off-budget funds available across the State for transit, rail, airport, water, and energy grid infrastructure. The annual levels of funds to the State from the IIJA are subject to Federal budget and appropriation action in each year.

Federal Inflation Reduction Act (IRA) of 2022

In August 2022, Congress passed, and the President signed, the $437 billion IRA (H.R. 5376), including approximately $374 billion in energy and climate provisions, tax credits for electric vehicles and incentives for clean-energy projects. It also contains health subsidies and drought relief while raising about $740 billion in revenue over ten years, funded through new taxes on corporations as well as stepped-up enforcement by the Internal Revenue Service.

Most spending in the IRA is likely to flow directly to individuals and businesses. The legislation also directs money to support states' climate plans and energy efficiency initiatives. The level of funds the State will receive from the IRA may be subject to eligibility criteria of competitive grant processes.

Federal Risks

The amount and composition of Federal funds received by the State have changed over time because of legislative and regulatory actions at the Federal level and will likely continue to change over the Financial Plan period. The Updated Financial Plan may also be adversely affected by other Federal government actions including audits, disallowances, and changes to Federal participation rates or other Medicaid rules. Any reductions in Federal aid could have a materially adverse impact on the Updated Financial Plan. Notable areas with potential for changes in Federal funding include health care and human services.

CMS 1115 Waiver Extension. The State submitted an 1115 waiver extension request to CMS that preserves current Medicaid Managed Care Programs, Children's HCBS, and self-direction of personal care services. This waiver was approved on March 31, 2022 and is effective for five years.

Separately, DOH has developed a new programmatic amendment to the now-renewed 1115 waiver, titled New York Health Equity Reform (NYHER): Making Targeted, Evidence-Based Investments to Address the Health Disparities Exacerbated by the COVID-19 Pandemic. This request seeks approximately $13.5 billion in Federal funding over five years to invest in an array of initiatives that would change the way the Medicaid program integrates and pays for social, physical, and behavioral health care in New York State.

After working directly with CMS and stakeholders on concepts contained in this new programmatic waiver amendment, in accordance with Federal transparency requirements, DOH submitted a Federal public notice to the New York State Registry on April 13, 2022 and held two public hearings on May 3, 2022 and May 10, 2022. The presentation slides, recordings, and transcripts from both webinars are available on the DOH website. The 30-day public comment period closed on May 20, 2022 and another public hearing was held on September 28, 2022.

During the public comment period, DOH received 358 written comment submissions and heard from 75 speakers at the three public hearings. DOH has worked with partner agencies to review and evaluate the approximately 1,800 comments received and incorporated feedback from stakeholders where possible and appropriate. DOH formally submitted the final waiver amendment application on September 2, 2022. CMS deemed the application submission complete on September 15, 2022, and the Federal public comment period ended on October 19, 2022, during which 298 unique comments were submitted via the Medicaid.gov portal.

After submission to CMS, the review and approval process can take several months or longer. However, DOH is actively working with CMS to achieve an approval as expeditiously as possible. DOH plans to begin the five-year waiver demonstration period upon approval from CMS. Program implementation will begin once the amendment, or components of the amendment, is approved and special terms and conditions are received from CMS.

Healthcare/Direct Care Worker Bonus. The Updated Financial Plan assumes that the State will receive Federal approval for Federal matching funds for the State program to provide bonus payments to eligible healthcare and direct care workers earning less than $125,000. However, there is considerable risk that CMS may not approve all the Federal matching funds for the bonus payments. In the event the Federal matching funds are not approved as assumed, the General Fund would incur unbudgeted costs of up to $1.3 billion over FY 2024 and FY 2025.

The State has submitted the application for reimbursement to CMS, and CMS responded on December 6, 2022 seeking additional information. The State responded on February 15, 2023, after which CMS has an additional 90 days (May 15, 2023) to respond.

In the interim, the State advanced the anticipated Federal share of the bonus payments for claims received to date (approximately $680 million). DOB estimates the Federal share for the entire bonus program to be approximately $1.3 billion.

Federal Debt Limit

On January 19, 2023 the U.S. reached its debt limit, and the Treasury Secretary subsequently announced that the Treasury would begin extraordinary cash management measures. The Treasury Secretary further indicated that "it is unlikely that cash and extraordinary measures will be exhausted before early June." Congress would need to act to increase or suspend the debt limit before then to avoid delaying payments and/or defaulting on debt obligations. Congress last acted on debt limit legislation in December 2021.

A Federal government default on payments, particularly for a prolonged period, could have a materially adverse effect on national and state economies, financial markets, and intergovernmental aid payments. Specific effects on the Updated Financial Plan resulting from a future Federal government default are unknown and impossible to predict. However, data from past economic downturns suggests that the State's revenue loss could be substantial if there was an economic downturn due to a Federal default.

A payment default by the Federal government may also adversely affect the municipal bond market. Municipal issuers, including the State and its public authorities and localities, could face higher borrowing costs and impaired access to capital markets. This would jeopardize planned capital investments in transportation infrastructure, higher education facilities, hazardous waste remediation, environmental projects, and economic development projects. Additionally, the market for and market value of outstanding municipal obligations, including municipal obligations of the State and its public authorities, could be adversely affected.

Federal Tax Law Changes

The Tax Cuts and Jobs Act of 2017 (TCJA) made major changes to the Federal Internal Revenue Code, most of which were effective in tax year 2018. The TCJA made extensive changes to Federal PIT, corporate income taxes, and estate taxes.

The State's income tax system interacts with the Federal system. Changes to the Federal tax code have significant flow-through effects on State tax burdens and concomitantly on State tax receipts. One key impact of the TCJA on New York State taxpayers is the $10,000 limit on the deductibility of SALT payments, which, until its scheduled expiration after 2025, represents a large increase in the State's effective tax rate relative to historical experience and may adversely affect New York State's economic competitiveness.

Moreover, the TCJA contains numerous provisions that may adversely affect residential real estate prices in New York State and elsewhere, of which the SALT deduction limit is the most significant. A loss of wealth associated with a decline in home prices could have a significant impact on household spending in the State through the wealth effect, whereby consumers perceive the rise and fall of the value of an asset, such as a home, as a corresponding increase or decline in income, causing them to alter their spending practices. Reductions in household spending by New York residents, if they were to occur, would be expected to result in lower sales for the State's businesses which, in turn, would cause further reductions in economic activity and employment. Lastly, falling home prices could result in homeowners delaying the sale of their homes. The combined impact of lower home prices and fewer sales transactions could result in lower real estate transfer tax collections. The TCJA changes may intensify migration pressures and decrease the value of home prices, thereby posing risks to the State's tax base and current Financial Plan projections.

State Response to Federal Tax Law Changes

PTET. As part of the State's continuing response to Federal tax law changes and in connection with the FY 2022 Enacted Budget, the State Legislature enacted an optional PTET on the New York- sourced income of partnerships and S corporations. Qualifying entities that elect to pay PTET pay a tax of up to 10.9 percent on their taxable income at the partnership or corporation level, and their individual partners, members and shareholders receive a refundable tax credit equal to the proportionate or pro rata share of taxes paid by the electing entity. Additionally, the program includes a resident tax credit that allows for reciprocity with other states that have implemented substantially similar taxes, which currently include Connecticut and New Jersey.

DOB expects that, on a multi-year basis, the PTET will be revenue neutral for the State as individual taxpayers claim credits against their PIT liabilities that reflect PTET payments made at the entity level. However, because the PTET credits are not necessarily realized by taxpayers within the same fiscal year that PTET revenue is received by the State, the PTET is not revenue-neutral to the State within each fiscal year.

The Updated Financial Plan includes estimates for PTET receipts and the corresponding decrease in PIT receipts. The overall effect on projected receipts to the Revenue Bond Tax Fund (RBTF), to which 50 percent of both PIT and PTET receipts are deposited, is that PTET increased FY 2022 receipts and is projected to decrease FY 2023 receipts by a significant amount. See the "PTET – Financial Plan Impact" herein for a table summarizing projected PTET receipts and the associated change in projected PIT collections. Projections are based on limited experience of taxpayer behavior to date, and there can be no assurance that such projections will be realized.

The U.S. Treasury Department and the IRS have determined that State and local income taxes imposed on and paid by a partnership or an S corporation on its income, such as the PTET, are allowable as a Federal deduction to taxable income. In November 2020, the IRS released Notice 2020-75, which announced that the Treasury and IRS intend to issue clarifying regulations with respect to such pass-through taxes. The IRS has not yet issued such proposed regulations.

Charitable Gifts Trust Fund. Other State tax reforms enacted in tax year 2018 to mitigate issues arising from the TCJA included decoupling many State tax provisions from the Federal changes, creation of an optional payroll tax program, the Employer Compensation Expense Program (ECEP), and establishment of a new State Charitable Gifts Trust Fund.

The Charitable Gifts Trust Fund was established in tax year 2018 to accept gifts for the purposes of funding health care and education in New York State. Taxpayers who itemize deductions were able to claim these charitable contributions as deductions on their Federal and State income tax returns. Any taxpayer who donates may also claim a State tax credit equal to 85 percent of the donation amount for the tax year after the donation is made. However, after enactment of this program, the IRS issued regulations that impaired the ability of taxpayers to deduct donations to the Charitable Gifts Trust Fund from Federal taxable income while receiving State tax credits for such donations.

Through FY 2022, the State received $93 million in charitable gifts deposited to the Charitable Gifts Trust Fund for healthcare and education ($58 million and $35 million, respectively). Charitable Gifts to date have been appropriated and used for the authorized purposes.

As part of State tax reforms enacted in 2018, taxpayers may claim reimbursement from the State for interest on underpayments of Federal tax liability for the 2019, 2020 and 2021 tax years if the underpayments arise from reliance on the 2018 amendments to State Tax Law. To receive reimbursement, taxpayers are required to submit their reimbursement claims to DTF within 60 days of making an interest payment to the IRS. To date, the State has not received any claims for reimbursement of interest on underpayments of Federal tax liability.

The Updated Financial Plan does not include any estimate of the magnitude of the possible interest expense to the State. Any such interest expense would depend on several factors including the rate of participation in the ECEP; magnitude of donations to the Charitable Gifts Trust Fund; amount of time between the due date of the Federal return and the date any IRS underpayment determination is issued; Federal interest rate applied; aggregate amount of Federal tax underpayments attributable to reliance on the 2018 amendments to State Tax Law; and frequency at which taxpayers submit timely reimbursement claims to the State.

Litigation Challenging Limitation of Charitable Contributions Deductibility. On June 13, 2019, the IRS issued final regulations (Treasury Decision 9864) that provided final rules and additional guidance with respect to the availability of Federal income tax deductions for charitable contributions when a taxpayer receives or expects to receive a State or local tax credit for such charitable contributions. These regulations require a taxpayer to reduce the Federal charitable contribution deduction by the amount of any State tax credit received due to such charitable contribution. This rule does not apply if the value of the State tax credit does not exceed 15 percent of the charitable contribution. Regulations were made retroactive to August 27, 2018 (the date on which the U.S. Treasury Department and IRS first published proposed regulatory changes).

On July 17, 2019, the State, joined by Connecticut and New Jersey, filed a Federal lawsuit in the United States District Court for the Southern District of New York challenging these charitable contribution regulations. Among other things, the lawsuit seeks to restore the full Federal income tax deduction for charitable contributions, regardless of the amount of any State tax credit provided to taxpayers as a result of contributions made to the Charitable Gifts Trust Fund, in accordance with precedent since 1917. The Federal defendants moved to dismiss the complaint or, alternatively, for summary judgment on December 23, 2019. The states responded and filed their own motion for summary judgment on February 28, 2020. Briefing on the motions was completed in July 2020. The district court denied the states' request for oral argument on March 16, 2021, but a decision on the outstanding motions to dismiss, and cross-motions for summary judgment, remains pending.

Major Operating Programs

Beginning in FY 2012, the State enacted legislation intended to limit the year-to-year growth in the State's two largest local assistance programs, School Aid and Medicaid.

School Aid. In FY 2012, the State enacted a School Aid growth cap that was intended to limit the growth in School Aid to the annual growth in State Personal Income, as calculated in the Personal Income Growth Index (PIGI). Beginning in FY 2021, the statutory PIGI for School Aid was amended to limit School Aid increases to no more than the average annual income growth over a ten-year period. This change reduces volatility in allowable growth and aligns the School Aid cap with the statutory Medicaid cap utilized prior to FY 2023. Prior to FY 2021, the PIGI generally relied on a one-year change in personal income.

The authorized School Aid increases exceeded the indexed levels in FYs 2014 through 2019, were within the indexed levels in FYs 2020 and 2021, and again exceeded the indexed level in FY 2022 and 2023. The proposed increase in School Aid for SY 2024 of $3.1 billion (10.0 percent) is above the indexed PIGI rate of 4.2 percent. This $3.1 billion increase includes a $2.7 billion increase in Foundation Aid[3] as part of the final year of the three-year phase-in of the formula and a 3 percent "due minimum" increase for districts whose annual Foundation Aid levels exceed their full funding level targets. The increase also includes a $125 million investment in State-funded full- day prekindergarten programming for four-year-old children, including a $100 million formula- based allocation and a $25 million grant to be competitively awarded. In SY 2025 and beyond, School Aid is projected to increase in line with the rate allowed under the School Aid growth cap.

[3] Foundation Aid is formula-based, unrestricted aid provided to school districts. It is the largest aid category within School Aid and is projected to total $24.1 billion in SY 2024. The Foundation Aid formula consists of four components: a State-specified expected expenditure per pupil to which the State and districts will contribute, a State- specified expected minimum local contribution per pupil, the number of aid-eligible pupil units in the district, and additional adjustments based on phase-in factors and minimum or maximum increases.

Medicaid. Approximately 85 percent of DOH State Funds Medicaid spending growth is subject to the Global Cap. Prior to FY 2023, the Global Cap was previously calculated using the ten-year rolling average of the medical component of the CPI for all urban consumers and thus allowed for growth attributable to increasing costs, though not increasing utilization. To accommodate growth in factors not currently indexed under the Global Cap and reflect recent trends, beginning in FY 2023, the allowable spending growth for activities under the Global Cap is set at the five-year rolling average of health care spending, using projections from the CMS Actuary. The FY 2023 Executive Budget and Enacted Budget utilized the CMS Actuary projections issued on March 24, 2020, which were the most recent published data available in developing the Executive Budget proposal and during the legislative budget negotiation period. The FY 2024 Executive Budget incorporates multi-year revisions to the index consistent with updated CMS Actuary projections issued on March 28, 2022.

The statutory provisions of the Global Cap grant the Commissioner of Health (the "Commissioner") certain powers to limit Medicaid disbursements to the level authorized by the Global Cap and allow for flexibility in adjusting Medicaid projections to meet unanticipated costs resulting from a disaster. The Commissioner's powers are intended to limit the annual growth rate to the levels set by the Global Cap for the then-current fiscal year, through actions which may include reducing reimbursement rates to providers. These actions may be dependent upon timely Federal approvals and other elements of the program that govern implementation. Additional State share Medicaid spending, outside of the Global Cap, includes State costs for the takeover of Medicaid growth from local governments and reimbursement to providers for increased minimum wage costs. It should be further noted that General Fund Medicaid spending remains sensitive to revenue performance in the State's HCRA fund that finances approximately one-quarter of DOH State-share Medicaid costs.

Since the enactment of the Global Cap, the portion of State Funds Medicaid spending subject to the Global Cap has remained at or below indexed levels. However, in certain fiscal years, DOH has taken management actions, including adjustments to the timing of Medicaid payments consistent with contractual terms, to ensure compliance with the Global Cap.

Public Health Insurance Programs/Public Assistance. Historically, the State has experienced growth in Medicaid enrollment and public assistance caseloads during economic downturns due mainly to increases in unemployment. Many people who were laid off or otherwise experienced a decrease in family income in 2020 and 2021 due to the COVID-19 pandemic became qualifying enrollees and began to participate in public health insurance programs such as Medicaid, EP, and Child Health Plus (CHP). Participants in these programs remain eligible for coverage for 12 continuous months regardless of changes in employment or income levels that may otherwise make them ineligible. Estimated costs for increased enrollment are budgeted in the Updated Financial Plan through FY 2025. Beginning in June of 2023, the State will begin reprocessing eligibility determinations for approximately 9 million public health insurance enrollees to be completed over a fourteen month period, consistent with CMS requirements. Compared to the Mid-Year Financial Plan, Medicaid enrollment is expected to be significantly higher than previously forecasted, adding approximately $1.6 billion in new Medicaid costs over the multi-year Financial Plan, which is a significant contribution to the reported Medicaid deficits in FY 2026 and FY 2027.

Likewise, the rise in unemployment and decrease in family income during the pandemic have resulted in increased public assistance caseloads, particularly in New York City. In addition to existing family and safety net assistance programs, the FY 2023 Enacted Budget included a recurring State-funded rent supplement program to assist individuals and families.

Extraordinary Aid to Hospitals. The pandemic further stressed the financial stability of hospitals responsible for supporting medical needs in underserved communities across the State, including those with higher rates of uninsured and government payor mix. Accordingly, the FY 2023 Enacted Budget committed an additional $800 million in one-time resources in FY 2023, in addition to $984 million in ongoing annual base support, to strengthen the financial position of certain financially distressed providers. The importance of the hospital industry to local communities for purposes of accessing critical health care services, as well as other social and economic benefits, creates the potential for increased cost pressure within the Financial Plan should the State continue to assist hospitals.

Opioid Settlement Fund

The Attorney General (AG) and the Department of Financial Services (DFS) have reached significant opioid related settlements with several corporations for their roles in helping fuel the opioid epidemic.

- Johnson & Johnson, the parent company of Janssen Pharmaceuticals, Inc., is expected to pay the State and its subdivisions up to $230 million. The settlement established a multi-year payout structure of up to ten years commencing in April 2022. The first settlement payment of $92.4 million was deposited in the Opioid Settlement Fund (Opioid Settlement Fund) in August 2022.
- On September 17, 2021, a Bankruptcy Court in the Southern District of New York entered an Order confirming a plan, including provisions releasing and barring further litigation against Purdue Pharma's executives and directors. Pursuant to that plan, the owners of Purdue Pharma, the Sackler family, were to pay the State and its subdivisions at least $200 million as part of a $4.5 billion bankruptcy plan over a nine-year period commencing in 2022. The settlement between the State and Purdue Pharma would shut down Purdue Pharma, prevent the Sackler family from participating in the opioids business prospectively, and establish a substantial document repository of 30 million plus documents. Following an appeal, on December 16, 2021, a U.S. District Court for the Southern District of New York vacated the confirmation of Purdue Pharma's plan. In re: Purdue Pharma L.P., Case No. 21-cv-07532-CM (S.D.N.Y. Dec. 16, 2021). The District Court held that the law does not allow a bankruptcy plan to give releases to individuals who are not bankrupt. Subsequently, Purdue Pharma appealed to the Second Circuit, which held oral argument on April 29, 2022.
- Drug distributors McKesson Corporation, Cardinal Health Inc., and Amerisource Bergen Drug Corporation will pay the State and its subdivisions up to $1.0 billion over 18 years and develop a monitoring mechanism to collect and analyze opioid drug distribution. The first settlement payment of $36.3 million was deposited in the New York State Opioid Settlement Fund in March 2022, and payments will continue over the next 17 years.
- Drug manufacturer Endo Health Solutions (Endo) settled for $50 million with New York State (AG only) and the counties of Nassau and Suffolk, divided $22.3 million to the State and $27.7 million split evenly between Nassau and Suffolk Counties. Of the State portion, $11.96 million will be distributed to subdivisions (excluding Nassau and Suffolk) and $10.34 million was deposited in the Opioid Settlement Fund in March 2022.
- Allergan Finance, LLC and its affiliates will pay the State and its subdivisions up to $200 million. Over $150 million of these funds will be dedicated to opioid abatement. The State's share, $67 million, was received in October 2022. The settlement between the AG and Allergan Finance, LLC and its affiliates also prevents them from participating in the opioid business.

- Mallinckrodt PLC emerged from bankruptcy on June 16, 2022. As a part of its resolution with the State, Mallinckrodt will pay up to $58.5 million over eight years for opioid abatement. An initial payment of $8.25 million is expected to be made in February 2023. The bankruptcy plan then allows Mallinckrodt 18 months to determine whether it will prepay claims. Should Mallinckrodt elect to prepay, then the State is expected to receive approximately $41.1 million in total, inclusive of the initial payment.
- Teva Pharmaceuticals Ltd., its American subsidiary Teva Pharmaceuticals USA, and its affiliates reached resolution with New York and its subdivisions for up to $523.89 million. This resolution consists of two settlement agreements, including New York's share of the national settlement which constitutes $210.55 million to be paid over 13 years. In addition, in recognition of New York's liability verdict against Teva, the company will pay $313.34 million over 18 years to resolve the remedies litigation. The payments for this trial premium are expected by the second quarter of 2023 and the payments for New York's share of the national settlement will begin in the third quarter of 2023.
- Walmart Inc. for its role as a prescription drug dispenser will pay New York and its subdivisions up to $139 million over 3 years. There will be two payments in 2023 and the remaining payments are expected to be made in the fourth quarter of 2024 and 2025.
- The pharmacy chains CVS and Walgreens collectively will pay New York and its subdivisions up to $458.2 million as part of a national settlement. CVS Health Corporation, CVS Pharmacy, Inc., and its affiliates will pay up to $220.9 million. Walgreens will pay up to $237.3 million. Payments from CVS will be spread out over a period of 10 years, and payments from Walgreens will be spread out over a period of 15 years. Payments from both CVS and Walgreens are expected to commence in the second half of 2023.

The Financial Plan will be updated pending confirmation of the timing and value of the settlements the State will receive. The State's share of the resources will be deposited into the Opioid Settlement Fund. Pursuant to Chapter 190 of the Laws of 2021, as amended by Chapter 171 of the Laws of 2022, the Opioid Settlement Fund will consist of funds received by the State as the result of a settlement or judgment against opioid manufacturers, distributors, dispensers, consultants, or resellers. Money within the Opioid Settlement Fund will be used to supplement funding for substance use disorder prevention, treatment, recovery, and harm reduction services or programs and/or for payment to local governments as a result of their participation in such settlements or judgments. Money in the Opioid Settlement Fund must be kept separate and not commingled with any other funds and may only be expended following an appropriation consistent with State statute and the terms of any applicable statewide opioid settlement agreement.

State Labor Force

As of March 31, 2022, the State had approximately 169,200 FTE annual salaried employees funded from All Funds, including some part-time and temporary employees, independently-elected agencies and university systems, but excluding seasonal, legislative and judicial employees. The State workforce is projected to total 184,000 positions at the end of FY 2023. The State workforce subject to direct Executive control is expected to total 118,802 full time equivalent positions at the end of FY 2023. The State workforce peaked in 1990, at approximately 230,000 positions.

Labor Negotiations and Agreements

The State negotiates multi-year collective bargaining agreements with its unionized workforce that impact personal service and fringe benefit costs. The State recently negotiated a new agreement with the Civil Service Employees Association (CSEA) through FY 2026, but all other contracts have expired or will expire by the end of FY 2023.

The State's agreement with CSEA is for the five-year period from FY 2022 through FY 2026. The agreement maintains general salary increases at 2 percent annually for the two-year period through FY 2023, and provides general salary increases of 3 percent annually for the three-year period through FY 2026. Additionally, the agreement provides a one-time bonus of $3,000, and changes in longevity resulting from changes in the health insurance program that are expected to encourage in-network employee utilization to help control health insurance costs.

The State has commenced labor negotiations with several unions for successor contracts; however, there can be no assurance that amounts informally reserved in the Updated Financial Plan for labor settlements and agency operations will be sufficient to fund the cost of future labor contracts.

The Judiciary has contracts in place with all 12 unions represented within its workforce, which include CSEA; the New York State Supreme Court Officers Association, the New York State Court Officers Association and the Court Clerks Association;

and eight other unions. These contracts cover a five-year period from FY 2022 through FY 2026 with terms consistent with the CSEA agreement.

Pension Contributions

State Retirement System (System)

The System provides pension benefits to public employees of the State and its localities (except employees of New York City, and public school teachers and administrators, who are covered by separate public retirement systems). State employees made up about 31 percent of the System's membership as of March 31, 2022. There were 2,972 public employers participating in the System, including the State, all cities and counties (except New York City), most towns, villages and school districts (with respect to non-teaching employees), and many public authorities.

As of March 31, 2022, 685,450 persons were members of the System, and 507,923 pensioners or beneficiaries were receiving pension benefits. Article 5, section 7 of the State Constitution considers membership in any State pension or retirement system to be "a contractual relationship, the benefits of which shall not be diminished or impaired."

Overview

The State makes annual contributions to the New York State and Local Retirement System (NYSLRS) for employees in the New York State and Local Employees Retirement System (ERS) and the New York State and Local Police and Fire Retirement System (PFRS). This section discusses contributions from the State, including the Judiciary, to the NYSLRS, which account for the majority of the State's pension costs.[4] All projections are based on estimated market returns and numerous actuarial assumptions which, if unrealized, could adversely and materially affect these projections.

[4] The State's aggregate pension costs also include State employees in the Teachers' Retirement System (TRS) for both the SUNY and the State Education Department (SED), the Optional Retirement Program (OR) for both SUNY and SED, and the New York State Voluntary Defined Contribution Plan (VDC).

New York State Retirement and Social Security Law (RSSL) Section 11 directs the actuary for NYSLRS to provide regular reports on the Systems' experience and to propose assumptions and methods for the actuarial valuations. Employer contribution rates for NYSLRS are determined based on investment performance in the Common Retirement Fund and actuarial assumptions recommended by the Retirement System's Actuary and approved by the State Comptroller. Pension estimates are based on the actuarial report issued in August 2021.

On August 25, 2021, the Comptroller announced reductions in employer contribution rates for both ERS and PFRS which will impact payments in FY 2023. This reduction was primarily accomplished by realizing the entire benefit of the FY 2021 investment return of 33.55 percent in the valuation of assets available to pay retirement benefits, rather than the standard approach of "asset smoothing" the return over a five-year period to guard against volatility in investment returns. This action — termed "the market-restart" — offset the Comptroller's simultaneous action of lowering the long-term assumed rate of return on investments from 6.8 percent to 5.9 percent, which, in and of itself, would have resulted in a substantial increase in the FY 2023 employer contribution rates.

As a result of the Comptroller's actions, the estimated average employer contribution rate for ERS will be lowered from 16.2 percent to 11.6 percent of payroll, and the estimated average employer contribution rate for PFRS will be reduced from 28.3 percent to 27 percent of payroll. Employers who have previously participated in the Contribution Stabilization Program, including the State, are required to contribute at the higher graded (amortization) rate of 14.1 percent for ERS.

On September 1, 2022, the Comptroller announced an increase in employer contribution rates for both ERS and PFRS which will impact payments in FY 2024. The average employer contribution rate for ERS increased from 11.6 percent to 13.1 percent of payroll, and the average employer contribution rate for PFRS increased from 27 percent to 27.8 percent of payroll. The increase in rates was primarily attributed to salary increases for active members and a 3 percent COLA increase to most retirees' pension benefits. State law requires that COLA payments be calculated based on 50 percent of the annual rate of inflation, as measured at the end of the State fiscal year (March 31). The annual COLA increase is required to be at least 1 percent, but no more than 3 percent, and is typically applied on up to the first $18,000 of a retiree's pension.

In addition to the change in contribution rates, the Comptroller authorized a change in the asset smoothing methodology from five to eight years. Asset smoothing is used to mitigate the impact to employer contribution rates as a result of any unexpected gains or losses in annual investment returns. This is achieved by recognizing any deviation from the assumed rate of return, currently at 5.9 percent, in equal proportions. Increasing the asset smoothing methodology from five to eight years will dampen the effects of year-to-year volatility in the Common Retirement Fund's returns and the impact on employer rates.

The Updated Financial Plan reflects the actuarial changes approved by the Comptroller, including revised ERS/PFRS pension estimates of $1.8 billion for FY 2023 and $2 billion for FY 2024 based on the December 2022 estimate provided by the Actuary. Approximately $67 million in pension interest savings was achieved from the payment of the State's FY 2023 ERS/PFRS bill in May 2022.

This estimate also reflects the payoff of all prior year amortization balances. The ERS (non-Judiciary) and PFRS portion was fully repaid in March 2021, and the Judiciary portion was fully repaid in October 2021. Collectively, this reduced the FY 2023 cost by $331 million from prior estimates. The total payoff of outstanding prior-year amortization balances was $1 billion, resulting in interest savings of roughly $76 million over the Financial Plan period.

The Comptroller does not forecast pension liability estimates for the later years of the Updated Financial Plan. Thus, estimates for FY 2025 and beyond are developed by DOB. DOB's forecast assumes growth in the salary base consistent with collective bargaining agreements and a lower rate of return compared to the current assumed rate of return by NYSLRS.

Social Security

The CARES Act allowed employers, including the State, to defer the deposit and payment of the employer's share of Social Security taxes through December 2020, and for the deferral to be repaid, interest free, in two equal installments no later than December 31, 2022. The Executive and the Judiciary have repaid the interest-free loan in full. SUNY is expected to remit its final repayment of $24 million by December 2022.

Other Post-Employment Benefits (OPEB)

State employees become eligible for post-employment benefits (e.g., health insurance) if they reach retirement while working for the State; are enrolled in either the New York State Health Insurance Program (NYSHIP) or the NYSHIP opt-out program at the time they reach retirement; and have the required years of eligible service. The cost of providing post-retirement health insurance is shared between the State and the retired employee. Contributions are established by law and may be amended by the Legislature. The State pays its share of costs on a PAYGO basis as required by law.

The State Comptroller adopted Governmental Accounting Standards Board Statement (GASBS) 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, for the State's Basic Financial Statements for FY 2019. GASBS 75, which replaces GASBS 45 and GASBS 57, addresses accounting and financial reporting for OPEB that is provided to the employees of state and local governmental employers. GASBS 75 establishes standards for recognizing and measuring liabilities and expenses/expenditures, as well as identifying the methods and assumptions required to be used to project benefit payments, discount projected benefit payments to their actuarial determined present value, and attribute that present value to periods of employee service. Specifically, GASBS 75 now requires that the full liability be recognized.

The State's total OPEB liability equals the employer's share of the actuarial determined present value of projected benefit payments attributed to past periods of employee service. The total OPEB obligation less any OPEB assets set aside in an OPEB trust or similar arrangement represents the net OPEB obligation.

As reported in the State's Basic Financial Statements for FY 2022, the total ending OPEB liability for FY 2022 was $65.7 billion ($52.1 billion for the State and $13.6 billion for SUNY). The total OPEB liability as of March 31, 2022, was measured as of March 31, 2021, and was determined using an actuarial valuation as of April 1, 2020, with updated procedures used to roll forward the total OPEB liability to March 2021. The total beginning OPEB liability for FY 2022 was $75.8 billion ($60.3 billion for the State and $15.5 billion for SUNY). The total OPEB liability was calculated using the Entry Age Normal cost method. The discount rate is based on the Bond Buyer 20-year general obligation municipal bond index rate on March 31 (2.84 percent in FY 2021 and 2.34 percent in FY 2022). The total OPEB liability decreased by $10.1 billion (13.3 percent) during FY 2022 primarily due to updated medical trend assumptions based on current anticipation of future costs, and projected claim costs were updated based on the recent claims experience for the Preferred Provider Organization (PPO) plan and premium rates for the Health Maintenance Organization (HMO) plan.

The contribution requirements of NYSHIP members and the State are established by, and may be amended by, the Legislature. The State is not required to provide funding above the PAYGO amount necessary to provide current benefits to retirees. The State continues to fund these costs, along with all other employee health care expenses, on a PAYGO basis, meaning the State pays these costs as they become due.

The RHBTF was created in FY 2018 as a qualified trust under GASBS 74 and is authorized to reserve money for the payment of health benefits of retired employees and their dependents. Unlike State pensions, which are pre-funded, future retiree health care costs are unfunded, meaning no money is set aside to pay these future expenses. The State pays these expenses each year as they come due. Under current law, the State may deposit into the RHBTF, in any given fiscal year, up to 1.5 percent of total then-current unfunded actuarial accrued OPEB liability ($65.7 billion on March 31, 2022). The FY 2023 Enacted Budget increased the maximum allowable deposit from 0.5 percent of the OPEB liability to 1.5 percent of the outstanding OPEB liability. The Updated Financial Plan reflects a deposit of $320 million in FY 2022 and planned deposits of $920 million in FY 2023 and $375 million annually thereafter, fiscal conditions permitting. These deposits, which were allocated in prior Financial Plan updates, are the first deposits to the RHBTF.

GASBS 74 and 75 are not expected to alter the Updated Financial Plan PAYGO projections for health insurance costs. DOB's methodology for forecasting these costs over a multi-year period already incorporates factors and considerations consistent with the new actuarial methods and calculations required by the GASBS.

State Debt

Bond Market and Credit Ratings. Successful execution of the Updated Financial Plan is dependent on the State's ability to market bonds. The State finances much of its capital spending, in the first instance, from the General Fund or STIP, which it then reimburses with proceeds from the sale of bonds. An inability of the State to sell bonds or notes at the level or on the timetable it expects could have a material and adverse impact on the State's financial position and the implementation of its Capital Plan. The success of projected public sales of municipal bonds is subject to prevailing market conditions and related ratings issued by national credit rating agencies, among other factors. The outbreak of COVID-19 in the United States temporarily disrupted the municipal bond market in 2020, and the emergence of future variants could further disrupt the municipal bond market. In addition, future developments in the financial markets, including possible changes in Federal tax law relating to the taxation of interest on municipal bonds, may affect the market for outstanding State-supported and State-related debt.

As of the date of the AIS Update, the major rating agencies — Fitch, Kroll, Moody's, and S&P — have assigned the State general credit ratings of AA+, AA+, Aa1, and AA+, respectively. The State's rating has a stable outlook from all four rating agencies. These ratings reflect the State's economic recovery from the COVID-19 pandemic and commitment to strong reserve levels. The most recent rating action was on April 13, 2022, when Moody's raised the State's credit rating from Aa2 to Aa1, noting "a significant increase in resources combined with agile fiscal management that has resulted in balanced or nearly balanced budgets projected through the State's five-year financial plan."

Debt Reform Act Limit. The Debt Reform Act of 2000 ("Debt Reform Act") restricts the issuance of State-supported debt funding to capital purposes only and limits the maximum term of bonds to 30 years. The Act limits the amount of new State-supported debt to 4 percent of State personal income, and new State-supported debt service costs to 5 percent of All Funds receipts. The restrictions apply to State-supported debt issued after April 1, 2000. DOB, as administrator of the Debt Reform Act, determined that the State complied with the statutory caps in the most recent calculation period (FY 2022).

The State enacted legislation that suspended certain provisions of the Debt Reform Act for FY 2021 and FY 2022 bond issuances as part of the State's response to the COVID-19 pandemic. Accordingly, State-supported debt issued in FY 2021 and FY 2022 was not limited to capital purposes and is not counted towards the statutory caps on debt outstanding and debt service.

Following this temporary two year suspension as a result of the COVID-19 pandemic, the provisions of the Debt Reform Act were reinstated for State-supported debt issued in FY 2023 and beyond. One limited exception to the Debt Reform Act remains for issuances undertaken by the State for MTA capital projects which may be issued with maximum maturities longer than 30 years. This allows bonds to be issued over the full useful life of the assets being financed, subject to Federal tax law limitations, and is consistent with the rules that would have been in effect if the projects had been directly financed by the MTA.

Current projections anticipate that State-supported debt outstanding and State-supported debt service will continue to remain below the limits imposed by the Debt Reform Act, in part reflecting the statutory suspension of the debt caps during FY 2021 and FY 2022.

Based on the most recent personal income and debt outstanding forecasts, the available debt capacity under the debt outstanding cap is expected to decline from $21.6 billion in FY 2023 to a low point of $290 million in FY 2028. This calculation includes the estimated impact of funding capital commitments with State bonds. The debt service on State-supported debt subject to the statutory cap is projected at $2.7 billion in FY 2023, or roughly $8.7 billion below the statutory debt service limit.

The State uses personal income estimates published by the Federal government, specifically the Bureau of Economic Analysis (BEA), to calculate the cap on debt outstanding, as required by statute. The BEA revises these estimates on a quarterly basis and such revisions can be significant. For Federal reporting purposes, BEA reassigns income from the state where it was earned to the state in which a person resides, for situations where a person lives and earns income in different states (the "residency adjustment"). The BEA residency adjustment has the effect of reducing reported New York State personal income because income earned in New York by non-residents regularly exceeds income earned in other states by New York residents. The State taxes all personal income earned in New York, regardless of place of residency.

In the FY 2024 Executive Budget, the State proposes new bond-financed capital commitments that would add $4 billion in new debt over the five-year Capital Plan period. The new capital commitments and FY 2024 Executive Budget personal income forecast decrease debt capacity, which is offset by the assumption that the State will issue bonds on a slower schedule and higher underspending on capital projects than previously assumed. Debt capacity also reflects the suspension of the Debt Reform Act for FY 2021 and FY 2022 issuances in response to the COVID- 19 pandemic, as discussed previously. The State may adjust capital spending priorities and debt financing practices from time to time to preserve available debt capacity and stay within the statutory limits, as events warrant. As part of the FY 2024 Executive Budget, the State has set aside $1 billion in a debt reduction reserve that can be used, as needed, for debt management actions in the future.

Financial Condition of New York State Localities

The State's localities rely in part on State aid to balance their budgets and meet their cash requirements. As such, unanticipated financial needs among localities can adversely affect the State's Updated Financial Plan projections. The wide-ranging economic, health, and social disruptions caused by COVID-19 have adversely affected the City of New York and surrounding localities. Localities outside New York City, including cities and counties, have also experienced financial problems, and have been allocated additional State assistance during the last several State fiscal years. In 2013, the Financial Restructuring Board for Local Governments was created to aid distressed local governments. The Restructuring Board performs comprehensive reviews and provides grants and loans on the condition of implementing recommended efficiency initiatives.

MTA

The MTA operates public transportation in the New York City metropolitan area, including subways, buses, commuter rail, and tolled vehicle crossings. The services provided by MTA and its operating agencies are integral to the economy of New York City and the surrounding metropolitan region, as well as to the economy of the State. MTA operations are funded mainly from fare and toll revenue, dedicated taxes, and subsidies from the State and New York City.

MTA Capital Plans also rely on significant direct contributions from the State and New York City. The State is directly contributing $9.1 billion to the MTA's 2015-19 Capital Plan and $3.1 billion to the MTA's 2020-24 Capital Plan. These State commitment levels represent substantial increases from the funding levels for prior MTA Capital Plans (2010-2014: $770 million; 2005-2009: $1.45 billion). In addition, a substantial amount of new funding to the MTA was authorized in the FY 2020 Enacted Budget as part of a comprehensive reform plan expected to generate an estimated $25 billion in financing for the MTA's 2020-2024 Capital Plan.

The COVID-19 pandemic caused severe declines in MTA ridership and traffic in 2020, and ridership remains significantly below pre-pandemic levels. To offset operating losses to MTA's Financial Plan from the estimated fare, toll, and dedicated revenue loss attributable to the COVID-19 pandemic, significant Federal operating aid is provided to the MTA from the CARES Act ($4 billion), CRRSA Act ($4.1 billion), and the ARP ($7 billion). The MTA also borrowed $2.9 billion through the Federal Reserve's Municipal Liquidity Facility (MLF).

If the financial impacts of the COVID-19 pandemic on the MTA's operating budget extend after the Federal funds are fully spent, and without additional Federal aid, the MTA will need to consider additional actions to balance its future budgets. Risks to MTA's current financial projections include, but are not limited to, the level and pace at which ridership will return, the economic conditions of the MTA region, the ability to implement cost controls and savings actions, and the ability to implement biennial fare and toll increases. If additional resources are provided by the State, either through additional subsidies or new revenues, it could have a material and adverse impact on the State's Updated Financial Plan.

The State has taken action to address MTA financing issues that arose during the pandemic. Specifically, the pandemic adversely affected credit ratings on MTA Transportation Revenue Bonds, which increased the cost of borrowing for the MTA. As a result, the State has issued PIT revenue bonds since the start of FY 2021 to fund $5.5 billion of the State's portion of the MTA's 2015-19 Capital Plan. Previously, the Financial Plan assumed that the projects would be bonded by the MTA but funded by the State through additional operating aid to the MTA. The Updated Financial Plan now assumes the State will fund its direct contributions to the MTA 2015-19 and 2020-24 Capital Plans through PIT and Sales Tax revenue bonds.

Other Risks And Ongoing Concerns

<u>Cybersecurity</u>

New York State government, like many other large public and private entities, relies on a large and complex technology environment to conduct its operations. As a recipient and provider of personal, private, or sensitive information, the State and its authorities, agencies and public benefit corporations, as well as its political subdivisions (including counties, cities, towns, villages and school districts) face multiple cyber threats involving, among others, hacking, viruses, malware and other electronic attacks on computer and other sensitive digital networks and systems. Entities or individuals may attempt to gain unauthorized access to the State's digital systems for the purposes of misappropriating assets or information or causing operational disruption and damage. In addition, the tactics used in malicious attacks to obtain unauthorized access to digital networks and systems change frequently and are often not recognized until launched against a target. Accordingly, the State may be unable to fully anticipate these techniques or implement adequate preventative measures.

To mitigate the risk of business operations impact and/or damage from cyber incidents or cyber- attacks, the State invests in multiple forms of cybersecurity and operational controls. The State's Chief Information Security Office (CISO) within the State's Office of Information Technology Services (ITS) maintains policies and standards, programs, and services relating to the security of State government networks, and annually assesses the maturity of State agencies' cyber posture through the Nationwide Cyber Security Review. In addition, the CISO maintains the New York State Cyber Command Center team, which provides a security operations center, digital forensics capabilities, and cyber incident reporting and response. The CISO also distributes real-time advisories and alerts, provides managed security services, and implements statewide information, security awareness and training.

In February 2022, the Governor announced the creation of a Joint Security Operations Center (JSOC) that will serve as the center for joint local, state, and Federal cybersecurity efforts, including data collection, response efforts and information sharing. A partnership launched with New York City and other major cities and cybersecurity leaders across the State, the JSOC is intended to provide a statewide view of the cyber-threat landscape. The initiative is designed to increase collaboration on threat intelligence, reduce response times, and yield faster and more effective remediation in the event of a major cyber incident. The FY 2024 Executive Budget provides funding to expand the shared services program to help local governments and other regional partners acquire and deploy high quality cybersecurity services to bolster their cyber defenses.

Occasionally, intrusions into State digital systems have been detected but they have generally been contained. While cybersecurity procedures and controls are routinely reviewed and tested, there can be no assurance that such security and operational control measures will be completely successful at guarding against future cyber threats and attacks. The results of any successful attacks could adversely impact business operations and/or damage State digital networks and systems, or State and local infrastructure, and the costs of remediation could be substantial.

The State has also adopted regulations designed to protect the financial services industry from cyberattacks. Banks, insurance companies and other covered entities regulated by DFS are, unless eligible for limited exemptions, required to: (a) maintain a cybersecurity program, (b) create written cybersecurity policies and perform risk assessments, (c) designate someone with responsibility to oversee the cybersecurity program, (d) annually certify compliance with the cybersecurity regulations, and (e) report to DFS cybersecurity events that have a reasonable likelihood of materially harming any substantial part of the entity's normal operation(s) or for which notice is required to any government body, self-regulatory agency, or supervisory body.

Supranational Entities Risk. Certain of the Funds may invest in obligations issued or guaranteed by supranational entities (*e.g.*, the World Bank, European Investment Bank, Inter-American Development Bank, and Asia Development Bank), which are often chartered to promote economic development. The government members, or "stockholders," usually make initial capital contributions to the supranational entity and, in many cases, are committed to make additional capital contributions if such entity is unable to repay its borrowings. There is no guarantee that one or more stockholders of the supranational entity will continue to make any necessary additional capital contributions. If such contributions are not made, the entity may be unable to pay interest or repay principal on its debt securities, certain of the Funds may have limited legal recourse in the event of default, and certain of the Funds may lose money on such investments.

Tax Risks Associated with Municipal Securities. As with any investment, you should consider how your investment in shares of each Municipal Bond Fund will be taxed. The tax information in the relevant Prospectus and this SAI is provided as general information. You should consult your own tax professional about the tax consequences of an investment in shares of each Municipal Bond Fund.

Unless your investment in shares is made through a tax-exempt entity or tax-deferred retirement account, such as an individual retirement account, you need to be aware of the possible tax consequences when each Municipal Bond Fund makes distributions or you sell Municipal Bond Fund shares. In general, each Municipal Bond Fund seeks to produce income that is generally exempt from federal income tax and will not benefit investors in tax deferred retirement accounts such as IRAs or investors not subject to federal income tax. Further, the iShares California Muni Bond ETF generally invests in securities that produce income that is generally exempt from California's income tax, which will not provide any state tax benefit to investors who are not subject to California's state income tax and the iShares New York Muni Bond ETF generally invests in securities that produce income that is generally exempt from New York's income tax, which will not provide any state tax benefit to investors who are not subject to New York's state income tax.

In response to the national economic downturn in recent years, governmental cost burdens may be reallocated among federal, state and local governments. Also, as a result of the downturn, many state and local governments are experiencing significant reductions in revenues and are consequently experiencing difficulties meeting ongoing expenses. Certain of these state or local governments may have difficulty paying principal or interest on their outstanding debt and may experience ratings downgrades of their debt.

U.S. Economic Trading Partners Risk. The U.S. is a significant, and in some cases the most significant, trading partner of, or foreign investor in, certain countries in which a Fund invests. As a result, economic conditions of such countries may be particularly affected by changes in the U.S. economy. A decrease in U.S. imports or exports, new trade and financial regulations or tariffs, changes in the U.S. dollar exchange rate or an economic slowdown in the U.S. may have a material adverse effect on a country's economic conditions and, as a result, securities to which a Fund has exposure. Circumstances could arise that could prevent the timely payment of interest or principal on U.S. government debt, such as reaching the legislative "debt ceiling." Such non-payment would result in substantial negative consequences for the U.S. economy and the global financial system.

There are strained relations between the U.S. and a number of foreign countries, including traditional allies, such as certain European countries, and historical adversaries, such as North Korea, Iran, China and Russia. If these relations were to worsen, it could adversely affect U.S. issuers as well as non-U.S. issuers that rely on the U.S. for trade. The U.S. has also experienced increased internal unrest and discord. If these trends were to continue, it may have an adverse impact on the U.S. economy and many of the issuers in which a Fund invests.

U.S. Treasury Obligations Risk. U.S. Treasury obligations may differ from other securities in their interest rates, maturities, times of issuance and other characteristics. Similar to other issuers, changes to the financial condition or credit rating of the U.S. government may cause the value of a Fund's U.S. Treasury obligations to decline. U.S. Treasury securities are rated AA+ by S&P Global Ratings. A downgrade of the rating of U.S. Treasury securities may cause the value of a Fund's U.S. Treasury obligations to decline. Because U.S. government debt obligations are often used as a benchmark for other borrowing arrangements, a downgrade could also result in higher interest rates for a range of borrowers, cause disruptions in the international bond markets and have a substantial adverse effect on the U.S. and global economy.

A high national debt level may increase market pressures to meet government funding needs, which may drive debt cost higher and lead the government to issue additional debt, thereby increasing refinancing risk. A high national debt also raises concerns that the U.S. government will not be able to make principal or interest payments when they are due. If market participants determine that U.S. sovereign debt levels have become unsustainable, the value of the U.S. dollar could decline, thus increasing inflationary pressures, particularly with respect to services outsourced to non-U.S. providers and imported goods and constrain or prevent the U.S. government from implementing effective countercyclical fiscal policy in economic downturns. Direct obligations of the U.S. Treasury have historically involved little risk of loss of principal if held to maturity. However, due to fluctuations in interest rates, the market value of such securities may vary during the period that shareholders own shares of a Fund. Notwithstanding that U.S. Treasury obligations are backed by the full faith and credit of the U.S., circumstances could arise that could prevent the timely payment of interest or principal, such as reaching the legislative “debt ceiling.” Such non-payment would result in losses to a Fund and substantial negative consequences for the U.S. economy and the global financial system.

Valuation Risk. In certain circumstances, a Fund’s securities may be valued using techniques other than market quotations. The value established for a security may be different from what would be produced through the use of another methodology or if the value had been priced using market quotations. Securities that are valued using methods other than market quotations, including “fair valued” securities, may be subject to greater fluctuation in their value from one day to the next than would be the case if market quotations were used. In addition, there is no assurance that a Fund could sell a security for the value established for it at any time, and it is possible that a Fund could incur a loss if a security is sold for less than its established value.

Risk of Investing in Africa. Investments in securities of issuers in certain African countries involve heightened risks including, among others, expropriation and/or nationalization of assets, confiscatory taxation, political instability, including authoritarian and/or military involvement in governmental decision-making, armed conflict, civil war, and social instability as a result of religious, ethnic and/or socio-economic unrest or widespread outbreaks of disease and, in certain countries, genocidal warfare.

Certain countries in Africa generally have less developed capital markets than traditional emerging market countries, and, consequently, the risks of investing in foreign securities are magnified in such countries. Because securities markets of countries in Africa are generally underdeveloped and are generally less correlated to global economic cycles than those markets located in more developed countries, securities markets in African countries are subject to greater risks associated with market volatility, lower market capitalization, lower trading volume, illiquidity, inflation, greater price fluctuations and uncertainty regarding the existence of trading markets. Moreover, trading on African securities markets may be suspended altogether.

Market volatility may also be heightened by the actions of a small number of investors. Brokerage firms in certain countries in Africa may be fewer in number and less established than brokerage firms in more developed markets. Since a Fund may need to effect securities transactions through these brokerage firms, the Fund is subject to the risk that these brokerage firms will not be able to fulfill their obligations to the Fund (*i.e.,* counterparty risk). This risk is magnified to the extent that a Fund effects securities transactions through a single brokerage firm or a small number of brokerage firms.

Certain governments in African countries restrict or control to varying degrees the ability of foreign investors to invest in securities of issuers located or operating in those countries. Moreover, certain countries in Africa require governmental approval or special licenses prior to investment by foreign investors and may limit the amount of investment by foreign investors in a particular industry and/or issuer, and may limit such foreign investment to a certain class of securities of an issuer that may have less advantageous rights than the classes available for purchase by domestic investors of the countries and/or impose additional taxes on foreign investors. A delay in obtaining a government approval or a license would delay investments in a particular country, and, as a result, a Fund may not be able to invest in certain securities while approval is pending. The government of a particular country may also withdraw or decline to renew a license that enables a Fund to invest in such country. These factors make investing in issuers located or operating in countries in Africa significantly riskier than investing in issuers located or operating in more developed countries, and any one of these factors could cause a decline in the value of a Fund’s investments. Issuers located or operating in countries in Africa are generally not subject to the same rules and regulations as issuers located or operating in more developed countries. Therefore, there may be less financial and other information publicly available with regard to issuers located or operating in countries in Africa and such issuers are generally not subject to the uniform accounting, auditing and financial reporting standards applicable to issuers located or operating in more developed countries.

In addition, governments of certain countries in Africa in which a Fund may invest may levy withholding or other taxes on income such as dividends, interest and realized capital gains. Although in certain countries in Africa a portion of these taxes are recoverable, the non-recovered portion of foreign withholding taxes will reduce the income received from investments in such countries.

Investment in countries in Africa may be subject to a greater degree of risk associated with governmental approval in connection with the repatriation of investment income, capital or the proceeds of sales of securities by foreign investors. In addition, there is the risk that if an African country's balance of payments declines, such African country may impose temporary restrictions on foreign capital remittances. Consequently, a Fund could be adversely affected by delays in, or a refusal to grant, required governmental approval for repatriation of capital, as well as by the application to the Fund of any restrictions on investments. Additionally, investments in countries in Africa may require a Fund to adopt special procedures, seek local government approvals or take other actions, each of which may involve additional costs to a Fund.

Securities laws in many countries in Africa are relatively new and unsettled and, consequently, there is a risk of rapid and unpredictable change in laws regarding foreign investment, securities regulation, title to securities and shareholder rights. Accordingly, foreign investors may be adversely affected by new or amended laws and regulations. In addition, there may be no single centralized securities exchange on which securities are traded in certain countries in Africa and the systems of corporate governance to which issuers located in countries in Africa are subject may be less advanced than those systems to which issuers located in more developed countries are subject, and, therefore, shareholders of issuers located in such countries may not receive many of the protections available to shareholders of issuers located in more developed countries. Even in circumstances where adequate laws and shareholder rights exist, it may not be possible to obtain swift and equitable enforcement of the law. In addition, the enforcement of systems of taxation at federal, regional and local levels in countries in Africa may be inconsistent and subject to sudden change.

Certain countries in Africa may be heavily dependent upon international trade and, consequently, have been and may continue to be negatively affected by trade barriers, exchange controls, managed adjustments in relative currency values and other protectionist measures imposed or negotiated by the countries with which they trade. These countries also have been and may continue to be adversely affected by economic conditions in the countries with which they trade. Certain countries in Africa depend to a significant extent upon exports of primary commodities such as gold, silver, copper and diamonds. These countries therefore are vulnerable to changes in commodity prices, which may be affected by a variety of factors. In addition, certain issuers located in countries in Africa in which a Fund invests may operate in, or have dealings with, countries subject to sanctions and/or embargoes imposed by the U.S. government and the United Nations, and/or countries identified by the U.S. government as state sponsors of terrorism. As a result, an issuer may sustain damage to its reputation if it is identified as an issuer which operates in, or has dealings with, such countries. A Fund, as an investor in such issuers, will be indirectly subject to those risks.

The governments of certain countries in Africa may exercise substantial influence over many aspects of the private sector and may own or control many companies. Future government actions could have a significant effect on the economic conditions in such countries, which could have a negative impact on private sector companies. There is also the possibility of diplomatic developments that could adversely affect investments in certain countries in Africa. Some countries in Africa may be affected by a greater degree of public corruption and crime, including organized crime.

Political instability and protests in North Africa and the Middle East have caused and may in the future cause significant disruptions to many industries. In addition, the outbreak of Ebola in Western Africa severely challenged health care industries in those countries and adversely impacted the region's economy due to quarantines and disruptions of trade, which has further increased instability in the region. This instability has demonstrated that political and social unrest can spread quickly through the region, and that developments in one country can influence the political events in neighboring countries. Some protests have turned violent, and civil war and political reconstruction in certain countries such as Libya, Iraq and Syria pose a risk to investments in the region. Continued political and social unrest in these regions, including the ongoing warfare and terrorist activities in the Middle East and Africa, may negatively affect the value of an investment in a Fund.

Risk of Investing in Asia. Investments in securities of issuers in certain Asian countries involve risks not typically associated with investments in securities of issuers in other regions. Such heightened risks include, among others, expropriation and/or nationalization of assets, confiscatory taxation, piracy of intellectual property, data and other security breaches (especially of data stored electronically), political instability, including authoritarian and/or military involvement in governmental decision-making, armed conflict and social instability as a result of religious, ethnic and/or socio-economic unrest. Certain Asian economies have experienced rapid rates of economic growth and industrialization in recent years, and there is no assurance that these rates of economic growth and industrialization will be maintained.

Certain Asian countries have democracies with relatively short histories, which may increase the risk of political instability. These countries have faced political and military unrest, and further unrest could present a risk to their local economies and securities markets. Indonesia and the Philippines have each experienced violence and terrorism, which has negatively impacted their economies. North Korea and South Korea each have substantial military capabilities, and historical tensions between the two countries present the risk of war. Escalated tensions involving the two countries and any outbreak of hostilities between the two countries, or even the threat of an outbreak of hostilities, could have a severe adverse effect on the entire Asian region. Certain Asian countries have also developed increasingly strained relationships with the U.S., and if these relations were to worsen, they could adversely affect Asian issuers that rely on the U.S. for trade. Political, religious, and border disputes persist in India. India has recently experienced and may continue to experience civil unrest and hostilities with certain of its neighboring countries. Increased political and social unrest in these geographic areas could adversely affect the performance of investments in this region.

Certain governments in this region administer prices on several basic goods, including fuel and electricity, within their respective countries. Certain governments may exercise substantial influence over many aspects of the private sector in their respective countries and may own or control many companies. Future government actions could have a significant effect on the economic conditions in this region, which in turn could have a negative impact on private sector companies. There is also the possibility of diplomatic developments adversely affecting investments in the region.

Corruption and the perceived lack of a rule of law in dealings with international companies in certain Asian countries may discourage foreign investment and could negatively impact the long-term growth of certain economies in this region. In addition, certain countries in the region are experiencing high unemployment and corruption, and have fragile banking sectors.

Some economies in this region are dependent on a range of commodities, including oil, natural gas and coal. Accordingly, they are strongly affected by international commodity prices and particularly vulnerable to any weakening in global demand for these products. The market for securities in this region may also be directly influenced by the flow of international capital, and by the economic and market conditions of neighboring countries. China is a key trading partner of many Asian countries and any changes in trading relationships between China and other Asian countries may affect the region as a whole. Adverse economic conditions or developments in neighboring countries may increase investors' perception of the risk of investing in the region as a whole, which may adversely impact the market value of the securities issued by companies in the region.

Risk of Investing in Australasia. The economies of Australasia, which include Australia and New Zealand, are dependent on exports from the agricultural and mining sectors. This makes Australasian economies susceptible to fluctuations in the commodity markets. Australasian economies are also increasingly dependent on their growing service industries. Australia and New Zealand are located in a part of the world that has historically been prone to natural disasters, such as drought and flooding. Any such event in the future could have a significant adverse impact on the economies of Australia and New Zealand and affect the value of securities held by a relevant Fund. The economies of Australia and New Zealand are dependent on trading with certain key trading partners, including Asia and the U.S. Economic events in the U.S., Asia, or in other key trading countries can have a significant economic effect on the Australasian economies. The economies of Australia and New Zealand are heavily dependent on the mining sector. Passage of new regulations limiting foreign ownership of companies in the mining sector or imposition of new taxes on profits of mining companies may dissuade foreign investment, and as a result, have a negative impact on companies to which a Fund has exposure.

Risk of Investing in Central and South America. The economies of certain Central and South American countries have experienced high interest rates, economic volatility, inflation, currency devaluations, government defaults, high unemployment rates and political instability which can adversely affect issuers in these countries. In addition, commodities (such as oil, gas and minerals) represent a significant percentage of the region's exports and many economies in this region are particularly sensitive to fluctuations in commodity prices. Adverse economic events in one country may have a significant adverse effect on other countries of this region.

The governments of certain countries in Central and South America may exercise substantial influence over many aspects of the private sector and may own or control many companies. Future government actions could have a significant effect on the economic conditions in such countries, which could have a negative impact on the securities in which the Fund invests. Diplomatic developments may also adversely affect investments in certain countries in Central and South America. Some countries in Central and South America may be affected by public corruption and crime, including organized crime.

Certain countries in Central and South America may be heavily dependent upon international trade and, consequently, have been and may continue to be negatively affected by trade barriers, exchange controls, managed adjustments in relative currency values and other protectionist measures imposed or negotiated by the countries with which they trade. These countries also have been and may continue to be adversely affected by economic conditions in the countries with which they trade. In addition, certain issuers located in countries in Central and South America in which the Fund invests may be the subject of sanctions (for example, the U.S. has imposed sanctions on certain Venezuelan individuals, corporate entities and the Venezuelan government) or have dealings with countries subject to sanctions and/or embargoes imposed by the U.S. government and the United Nations and/or countries identified by the U.S. government as state sponsors of terrorism. An issuer may sustain damage to its reputation if it is identified as an issuer that has dealings with such countries. The Fund may be adversely affected if it invests in such issuers.

Risk of Investing in Developed Countries. 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. 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. 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 such debt. Spending on health care and retirement pensions in most developed countries has risen dramatically. 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 a Fund's investments.

Risk of Investing in Emerging Markets. Certain of the Funds may invest in securities of issuers domiciled in emerging market countries. Investments in emerging market countries may be subject to greater risks than investments in developed countries. These risks include: (i) less social, political, and economic stability; (ii) greater illiquidity and price volatility due to smaller or limited local capital markets for such securities, or low or non-existent trading volumes; (iii) companies, custodians, clearinghouses, foreign exchanges and broker-dealers may be subject to less scrutiny and regulation by local authorities; (iv) local governments may decide to seize or confiscate securities held by foreign investors and/or local governments may decide to suspend or limit an issuer's ability to make dividend or interest payments; (v) local governments may limit or entirely restrict repatriation of invested capital, profits, and dividends; (vi) capital gains may be subject to local taxation, including on a retroactive basis; (vii) issuers facing restrictions on standard payments imposed by local governments may attempt to make dividend or interest payments to foreign investors in the local currency; (viii) there may be significant obstacles to obtaining information necessary for investigations into or litigation against companies and investors may experience difficulty in enforcing legal claims related to the securities and/or local judges may favor the interests of the issuer over those of foreign parties; (ix) bankruptcy judgments may only be permitted to be paid in the local currency; (x) limited public information regarding the issuer may result in greater difficulty in determining market valuations of the securities; and (xi) lack of financial reporting on a regular basis, substandard disclosure and differences in accounting standards may make it difficult to ascertain the financial health of an issuer. The Funds are not actively managed and do not select investments based on investor protection considerations.

Emerging market securities markets are typically marked by a high concentration of market capitalization and trading volume in a small number of issuers representing a limited number of industries, as well as a high concentration of ownership of such securities by a limited number of investors. In addition, brokerage and other costs associated with transactions in emerging market securities can be higher, sometimes significantly, than similar costs incurred in securities markets in developed countries. Although some emerging markets have become more established and tend to issue securities of higher credit quality, the markets for securities in other emerging market countries are in the earliest stages of their development, and these countries issue securities across the credit spectrum. Even the markets for relatively widely traded securities in emerging market countries may not be able to absorb, without price disruptions, a significant increase in trading volume or trades of a size customarily undertaken by institutional investors in the securities markets of developed countries. The limited size of many of these securities markets can cause prices to be erratic for reasons apart from factors that affect the soundness and competitiveness of the securities issuers. For example, prices may be unduly influenced by traders who control large positions in these markets. Additionally, market making and arbitrage activities are generally less extensive in such markets, which may contribute to increased volatility and reduced liquidity of such markets. The limited liquidity of emerging market country securities may also affect a Fund's ability to accurately value its portfolio securities or to acquire or dispose of securities at the price and time it wishes to do so or in order to meet redemption requests.

Many emerging market countries suffer from uncertainty and corruption in their legal frameworks. Legislation may be difficult to interpret and laws may be too new to provide any precedential value. Laws regarding foreign investment and private property may be weak or non-existent. Sudden changes in governments may result in policies which are less favorable to investors such as policies designed to expropriate or nationalize "sovereign" assets. Certain emerging market countries in the past have expropriated large amounts of private property, in many cases with little or no compensation, and there can be no assurance that such expropriation will not occur in the future.

Investment in the securities markets of certain emerging market countries is restricted or controlled to varying degrees. These restrictions may limit a Fund's investment in certain emerging market countries and may increase the expenses of the Fund. Certain emerging market countries require governmental approval prior to investments by foreign persons or limit investment by foreign persons to only a specified percentage of an issuer's outstanding securities or a specific class of securities which may have less advantageous terms (including price) than securities of the company available for purchase by nationals.

Many emerging market countries lack the social, political, and economic stability characteristic of the U.S. Political instability among emerging market countries can be common and may be caused by an uneven distribution of wealth, social unrest, labor strikes, civil wars, and religious oppression. Economic instability in emerging market countries may take the form of: (i) high interest rates; (ii) high levels of inflation, including hyperinflation; (iii) high levels of unemployment or underemployment; (iv) changes in government economic and tax policies, including confiscatory taxation; and (v) imposition of trade barriers.

A Fund's income and, in some cases, capital gains from foreign securities will be subject to applicable taxation in certain of the emerging market countries in which it invests, and treaties between the U.S. and such countries may not be available in some cases to reduce the otherwise applicable tax rates.

Emerging markets also have different clearance and settlement procedures, and in certain of these emerging markets there have been times when settlements have been unable to keep pace with the volume of securities transactions, making it difficult to conduct such transactions.

In the past, certain governments in emerging market countries have become overly reliant on the international capital markets and other forms of foreign credit to finance large public spending programs, which in the past have caused huge budget deficits. Often, interest payments have become too overwhelming for a government to meet, representing a large percentage of total GDP. These foreign obligations have become the subject of political debate and served as fuel for political parties of the opposition, which pressure the government not to make payments to foreign creditors, but instead to use these funds for, among other things, social programs. Either due to an inability to pay or submission to political pressure, foreign governments have been forced to seek a restructuring of their loan and/or bond obligations, have declared a temporary suspension of interest payments or have defaulted. These events have adversely affected the values of securities issued by foreign governments and corporations domiciled in those countries and have negatively affected not only their cost of borrowing, but their ability to borrow in the future as well.

Risk of Investing in Europe. Investing in European countries may expose a Fund to the economic and political risks associated with Europe in general and the specific European countries in which it invests. The economies and markets of European countries are often closely connected and interdependent, and events in one European country can have an adverse impact on other European countries. A Fund makes investments in securities of issuers that are domiciled in, have significant operations in, or that are listed on at least one securities exchange within member states of the EU. A number of countries within the EU are also members of the EMU (the "eurozone") and have adopted the euro as their currency. Eurozone membership requires member states to comply with restrictions on inflation rates, deficits, interest rates, debt levels and fiscal and monetary controls, each of which may significantly affect every country in Europe. Changes in import or export tariffs, changes in governmental or EU regulations on trade, changes in the exchange rate of the euro and other currencies of certain EU countries which are not in the eurozone, the default or threat of default by an EU member state on its sovereign debt, and/or an economic recession in an EU member state may have a significant adverse effect on the economies of other EU member states and their trading partners. Although certain European countries are not in the eurozone, many of these countries are obliged to meet the criteria for joining the eurozone.

Consequently, these countries must comply with many of the restrictions noted above. The European financial markets have experienced volatility and adverse trends due to concerns about economic downturns, government debt levels and the possible default of government debt in several European countries, including, but not limited to, Austria, Belgium, Cyprus, France, Greece, Ireland, Italy, Portugal, Spain and Ukraine. In order to prevent further economic deterioration, certain countries, without prior warning, can institute "capital controls." Countries may use these controls to restrict volatile movements of capital entering and exiting their country. Such controls may negatively affect a Fund's investments. A default or debt restructuring by any European country would 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. In addition, the credit ratings of certain European countries were downgraded in the past. These events have adversely affected the value and exchange rate of the euro and may continue to significantly affect the economies of every country in Europe, including countries that do not use the euro and non-EU member states. Responses to the financial problems by European governments, central banks and others, including austerity measures and reforms, may not produce the desired results, may result in social unrest and may limit future growth and economic recovery or have other unintended consequences. Further defaults or restructurings by governments and other entities of their debt could have additional adverse effects on economies, financial markets and asset valuations around the world. In addition, one or more countries may abandon the euro and/or withdraw from the EU. The impact of these actions, especially if they occur in a disorderly fashion, is not clear but could be significant and far-reaching and could adversely impact the value of a Fund's investments in the region.

The United Kingdom (the "U.K.") left the EU ("Brexit") on January 31, 2020. Brexit could adversely affect European or worldwide political, regulatory, economic or market conditions and could contribute to instability in global political institutions, regulatory agencies and financial markets.

Certain European countries have also developed increasingly strained relationships with the U.S., and if these relations were to worsen, they could adversely affect European issuers that rely on the U.S. for trade. The national politics of countries in Europe have been unpredictable and subject to influence by disruptive political groups and ideologies, including for example, secessionist movements. The governments of European countries may be subject to change and such countries may experience social and political unrest. Unanticipated or sudden political or social developments may result in sudden and significant investment losses. The occurrence of terrorist incidents throughout Europe or war in the region also could impact financial markets. The impact of these events is not clear but could be significant and far-reaching and could adversely affect the value and liquidity of a Fund's investments.

Russian Invasion of Ukraine. Russia launched a large-scale invasion of Ukraine on February 24, 2022. The extent and duration of the military action, resulting sanctions and resulting future market disruptions, including declines in its stock markets and the value of the ruble against the U.S. dollar, are impossible to predict, but could be significant. Disruptions caused by Russian military action or other actions (including cyberattacks and espionage) or resulting actual and threatened responses to such activity, including purchasing and financing restrictions, boycotts or changes in consumer or purchaser preferences, sanctions, import and export restrictions, tariffs or cyberattacks on the Russian government, Russian companies or Russian individuals, including politicians, may impact Russia's economy, Russian issuers of securities in which a Fund invests, or the economies of Europe as a whole. Actual and threatened responses to Russian military action may also impact the markets for certain Russian commodities, such as oil and natural gas, as well as other sectors of the Russian economy, and are likely to have collateral impacts on such sectors across Europe and globally.

Risk of Investing in the Middle East. Many Middle Eastern countries have little or no democratic tradition, and the political and legal systems in such countries may have an adverse impact on a Fund. Many economies in the Middle East are highly reliant on income from the sale of oil and natural gas or trade with countries involved in the sale of oil and natural gas, and their economies are therefore vulnerable to changes in the market for oil and natural gas and foreign currency values. As global demand for oil and natural gas fluctuates, many Middle Eastern economies may be significantly impacted.

In addition, many Middle Eastern governments have exercised and continue to exercise substantial influence over many aspects of the private sector. In certain cases, a Middle Eastern country's government may own or control many companies, including some of the largest companies in the country. Accordingly, governmental actions in the future could have a significant effect on economic conditions in Middle Eastern countries. This could affect private sector companies and a Fund, as well as the value of securities in a Fund's portfolio.

Certain Middle Eastern markets are in the earliest stages of development. As a result, there may be a high concentration of market capitalization and trading volume in a small number of issuers representing a limited number of industries, as well as a high concentration of investors and financial intermediaries. Brokers in Middle Eastern countries typically are fewer in number and less capitalized than brokers in the U.S.

The legal systems in certain Middle Eastern countries also may have an adverse impact on a Fund. For example, the potential liability of a shareholder in a U.S. corporation with respect to acts of the corporation generally is limited to the amount of the shareholder's investment. However, the notion of limited liability is less clear in certain Middle Eastern countries. A Fund therefore may be liable in certain Middle Eastern countries for the acts of a corporation in which it invests for an amount greater than its actual investment in that corporation. Similarly, the rights of investors in Middle Eastern issuers may be more limited than those of shareholders of a U.S. corporation. It may be difficult or impossible to obtain or enforce a legal judgment in a Middle Eastern country. Some Middle Eastern countries prohibit or impose substantial restrictions on investments in their capital markets, particularly their equity markets, by foreign entities such as a Fund. For example, certain countries may require governmental approval prior to investment by foreign persons or limit the amount of investment by foreign persons in a particular issuer. Certain Middle Eastern countries may also limit investment by foreign persons to only a specific class of securities of an issuer that may have less advantageous terms (including price) than securities of the issuer available for purchase by nationals of the relevant Middle Eastern country.

The manner in which foreign investors may invest in companies in certain Middle Eastern countries, as well as limitations on those investments, may have an adverse impact on the operations of a Fund. For example, in certain of these countries, a Fund may be required to invest initially through a local broker or other entity and then have the shares that were purchased re-registered in the name of a Fund. Re-registration in some instances may not be possible on a timely basis. This may result in a delay during which a Fund may be denied certain of its rights as an investor, including rights as to dividends or to be made aware of certain corporate actions. There also may be instances where a Fund places a purchase order but is subsequently informed, at the time of re-registration, that the permissible allocation of the investment to foreign investors has already been filled and, consequently, a Fund may not be able to invest in the relevant company.

Substantial limitations may exist in certain Middle Eastern countries with respect to a Fund's ability to repatriate investment income or capital gains. A Fund could be adversely affected by delays in, or a refusal to grant, any required governmental approval for repatriation of capital, as well as by the application to a Fund of any restrictions on investment.

Certain Middle Eastern countries may be heavily dependent upon international trade and, consequently, have been and may continue to be negatively affected by trade barriers, exchange controls, managed adjustments in relative currency values and other protectionist measures imposed or negotiated by the countries with which they trade. These countries also have been and may continue to be adversely impacted by economic conditions in the countries with which they trade. In addition, certain issuers located in Middle Eastern countries in which a Fund invests may operate in, or have dealings with, countries subject to sanctions and/or embargoes imposed by the U.S. government and the United Nations, and/or countries identified by the U.S. government as state sponsors of terrorism. As a result, an issuer may sustain damage to its reputation if it is identified as an issuer which operates in, or has dealings with, such countries. A Fund, as an investor in such issuers, will be indirectly subject to those risks.

Certain Middle Eastern countries have strained relations with other Middle Eastern countries due to territorial disputes, historical animosities, international alliances, defense concerns or other reasons, which may adversely affect the economies of these Middle Eastern countries. Certain Middle Eastern countries experience significant unemployment, as well as widespread underemployment. There has also been a recent increase in recruitment efforts and an aggressive push for territorial control by terrorist groups in the region, which has led to an outbreak of warfare and hostilities. Warfare in Syria has spread to surrounding areas, including many portions of Iraq and Turkey. Such hostilities may continue into the future or may escalate at any time due to ethnic, racial, political, religious or ideological tensions between groups in the region or foreign intervention or lack of intervention, among other factors.

Risk of Investing in North America. A decrease in imports or exports, changes in trade regulations or an economic recession in any North American country can have a significant economic effect on the entire North American region and on some or all of the North American countries in which a Fund invests.

The U.S. is Canada's and Mexico's largest trading and investment partner. The Canadian and Mexican economies are significantly affected by developments in the U.S. economy. Since the implementation of the North American Free Trade Agreement ("NAFTA") in 1994 among Canada, the U.S. and Mexico, total merchandise trade among the three countries has increased. However, political developments including the implementation of tariffs by the U.S., and the renegotiation of NAFTA in the form of the United States-Mexico-Canada Agreement ("USMCA"), which replaced NAFTA on July 1, 2020, could negatively affect North America's economic outlook and, as a result, the value of securities held by a Fund. Policy and legislative changes in one country may have a significant effect on North American markets generally, as well as on the value of certain securities held by a Fund.

Risk of Investing in Russia. Investing in the Russian securities market involves a high degree of risk and special considerations not typically associated with investing in the U.S. securities market, and should be considered highly speculative. Risks include: the absence of developed legal structures governing private and foreign investments and private property; the possibility of the loss of all or a substantial portion of a Fund's assets invested in Russia as a result of expropriation; certain national policies which may restrict the Fund's investment opportunities, including, without limitation, restrictions on investing in issuers or industries deemed sensitive to relevant national interests; and potentially greater price volatility in, significantly smaller capitalization of, and relative illiquidity of, the Russian market. There can also be no assurance that a Fund's investments in the Russian securities market would not be expropriated, nationalized or otherwise confiscated. In the event of the settlement of any such claims or such expropriation, nationalization or other confiscation, a Fund could lose its entire investment. In addition, it may be difficult and more costly to obtain and enforce a judgment in the Russian court system.

Russia may also be subject to a greater degree of economic, political and social instability than is the case in other developed countries. Such instability may result from, among other things, the following: (i) an authoritarian government or military involvement in political and economic decision-making, including changes in government through extra-constitutional means; (ii) popular unrest associated with demands for improved political, economic and social conditions; (iii) internal insurgencies; (iv) hostile relations, including armed conflict, with neighboring countries; and (v) ethnic, religious and racial disaffection.

The Russian economy is heavily dependent upon the export of a range of commodities including most industrial metals, forestry products and oil and gas. Accordingly, it is strongly affected by international commodity prices and is particularly vulnerable to any weakening in global demand for these products. Any acts of terrorism or armed conflicts in Russia or internationally could have an adverse effect on the financial and commodities markets and the global economy. As Russia produces and exports large amounts of crude oil and gas, any acts of terrorism or armed conflict causing disruptions of Russian oil and gas exports could negatively affect the Russian economy and, thus, adversely affect the financial condition, results of operations or prospects of related companies. Current and future economic sanctions may also adversely affect the Russian oil, banking, mining, metals, rail, pipeline and gas sectors, among other sectors.

The Russian government may exercise substantial influence over many aspects of the private sector and may own or control many companies. Future government actions could have a significant effect on the economic conditions in Russia, which could have a negative impact on private sector companies. There is also the possibility of diplomatic developments that could adversely affect investments in Russia. In recent years, the Russian government has begun to take bolder steps to re-assert its regional geopolitical influence (including military steps) and launched a large-scale invasion of Ukraine on February 24, 2022. Additionally, Russia is alleged to have participated in state-sponsored cyberattacks against foreign companies and foreign governments. Such steps have increased tensions between Russia and its neighbors and Western countries and may negatively affect economic growth. Actual and threatened responses by other nation-states to Russia's alleged cyber activity may have an adverse impact on the Russian economy and the Russian issuers of securities in which a Fund invests. For example, the U.S. has added certain foreign technology companies to the U.S. Department of Commerce's Bureau of Industry and Security's "Entity List," which is a list of companies believed to pose a national security risk to the U.S. Actions like these may have unanticipated and disruptive effects on the Russian economy.

Russian invasion of Ukraine. Russia launched a large-scale invasion of Ukraine on February 24, 2022. The extent and duration of the military action, resulting sanctions and resulting future market disruptions, including declines in its stock markets and the value of the ruble against the U.S. dollar, are impossible to predict, but could be significant. Disruptions caused by Russian military action or other actions (including cyberattacks and espionage) or resulting actual and threatened responses to such activity, including purchasing and financing restrictions, boycotts or changes in consumer or purchaser preferences, sanctions, import and export restrictions, tariffs or cyberattacks on the Russian government, Russian companies or Russian individuals, including politicians, may impact Russia's economy, Russian issuers of securities in which a Fund invests, or the economies of Europe as a whole. Actual and threatened responses to Russian military action may also impact the markets for certain Russian commodities, such as oil and natural gas, as well as other sectors of the Russian economy, and are likely to have collateral impacts on such sectors across Europe and globally.

Russia Sanctions. Governments in the U.S. and many other countries (collectively, the "Sanctioning Bodies") have imposed economic sanctions on certain Russian individuals, including politicians, and Russian corporate and banking entities, including banning Russia from global payments systems that facilitate cross-border payments. The Sanctioning Bodies, or others, could also institute broader sanctions on Russia. These sanctions, or even the threat of further sanctions, may result in the decline of the value and liquidity of Russian securities, a weakening of the ruble or other adverse consequences to the Russian economy. 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. Recently, Russia has issued a number of countersanctions, some of which restrict the distribution of profits by limited liability companies (*e.g.*, dividends), and prohibits Russian persons from entering into transactions with designated persons from "unfriendly states" as well as the export of raw materials or other products from Russia to certain sanctioned persons.

The sanctions against certain Russian issuers include prohibitions on transacting in or dealing in issuances of debt or equity of such issuers. Compliance with each of these sanctions has and may continue to impair the ability of a Fund to buy, sell, hold, receive or deliver the affected securities or other securities of such issuers. If it becomes impracticable or unlawful for a Fund to hold securities subject to, or otherwise affected by, sanctions (collectively, "affected securities"), or if deemed appropriate by BFA, a Fund may prohibit in-kind deposits of the affected securities in connection with creation transactions and instead require a cash deposit, which may also increase a Fund's transaction costs. A Fund may also be legally required to freeze assets in a blocked account.

Sanctions have resulted in Russia taking counter measures or retaliatory actions, which has impaired the value and liquidity of Russian securities. These retaliatory measures include the immediate freeze of Russian assets held by a Fund. Due to such a freeze of these assets, including depositary receipts, a Fund may need to liquidate non-restricted assets in order to satisfy any Fund redemption orders. The liquidation of Fund assets during this time may also result in a Fund receiving substantially lower prices for its securities. Russia may implement additional retaliatory measures, which may further impair the value and liquidity of Russian securities and the ability of the Fund to receive dividend payments. Recently, Russia has issued a number of countersanctions, some of which restrict the distribution of profits by limited liability companies (*e.g.*, dividends), and prohibits Russian persons from entering into transactions with designated persons from "unfriendly states" as well as the export of raw materials or other products from Russia to certain sanctioned persons. Russian companies may be unable to pay dividends and, if they pay dividends, the Fund may be unable to receive them.

These sanctions, the decision by Russia to suspend trading on the Moscow Exchange (MOEX) and prohibit non-resident investors from executing security sales, and other events have led to changes in the Fund's Underlying Index. The Fund's Index Provider has removed Russian securities from the Underlying Index. To the extent that the Fund rebalances its portfolio and trades in non-Russian securities to seek to track the investment results of the Underlying Index, this may result in transaction costs and increased tracking error. The Fund is currently restricted from trading in Russian securities, including those in its portfolio, while the Underlying Index has removed Russian securities. This disparity will also lead to increased tracking error. The inability of the Fund to trade in Russian securities may adversely affect the Fund's ability to meet its investment objective. It is unknown when, or if, sanctions may be lifted or the Fund's ability to trade in Russian securities will resume.

Also, if an affected security is included in a Fund's Underlying Index, a Fund may, where practicable, seek to eliminate its holdings of the affected security by employing or augmenting its representative sampling strategy to seek to track the investment results of its Underlying Index. The use of (or increased use of) a representative sampling strategy may increase a Fund's tracking error risk. If the affected securities constitute a significant percentage of the Underlying Index, a Fund may not be able to effectively implement a representative sampling strategy, which may result in significant tracking error between a Fund's performance and the performance of its Underlying Index.

Risk of Investing in Saudi Arabia. The ability of foreign investors (such as the Funds) to invest in the securities of Saudi Arabian issuers is relatively new. Such ability could be restricted by the Saudi Arabian government at any time, and unforeseen risks could materialize with respect to foreign ownership in such securities. In addition, the Capital Market Authority ("CMA") places investment limitations on the ownership of the securities of Saudi Arabian issuers by foreign investors, including a limitation on a Fund's ownership of the securities of any single issuer listed on the Saudi Arabian Stock Exchange, which may prevent a Fund from investing in accordance with its strategy and contribute to tracking error against the Underlying Index. These restrictions may be changed or new restrictions, such as licensing requirements, special approvals or additional foreign taxes, may be instituted at any time. A Fund may not be able to obtain or maintain any such licenses or approvals and may not be able to buy and sell securities at full value. Major disruptions or regulatory changes could occur in the Saudi Arabian market, any of which could negatively impact a Fund. These risks may be exacerbated, compared to more developed markets, given the limited history of foreign investment in the Saudi Arabian market. Investments in Saudi Arabia may also be subject to loss due to expropriation or nationalization of assets and property or the imposition of restrictions on additional foreign investments and repatriation of capital. Such heightened risks may include, among others, restrictions on and government intervention in international trade, confiscatory taxation, political instability, including authoritarian and/or military involvement in governmental decision making, armed conflict, crime and instability as a result of religious, ethnic and/or socioeconomic unrest. Saudi Arabia has privatized, or has begun the process of privatizing, certain entities and industries. Newly privatized companies may face strong competition from government-sponsored competitors that have not been privatized. In some instances, investors in newly privatized entities have suffered losses due to the inability of the newly privatized entities to adjust quickly to a competitive environment or changing regulatory and legal standards or, in some cases, due to re-nationalization of such privatized entities. There is no assurance that similar losses will not recur. Saudi Arabia is highly reliant on income from the sale of petroleum and trade with other countries involved in the sale of petroleum, and its economy is therefore vulnerable to changes in foreign currency values and the market for petroleum, as well as acts targeting petroleum production or processing facilities in Saudi Arabia. As global demand for petroleum fluctuates, Saudi Arabia may be significantly impacted. In the recent past, the Saudi Arabian government has explored privatization and diversification of the economy in the wake of a diminished petroleum market.

Like most Middle Eastern governments, the government of Saudi Arabia exercises substantial influence over many aspects of the private sector. Although liberalization in the wider economy is underway, in many areas it has lagged significantly: restrictions on foreign ownership persist, and the government has an ownership stake in many key industries. The situation is exacerbated by the fact that Saudi Arabia is governed by an absolute monarchy. Saudi Arabia has historically experienced strained relations with economic partners worldwide, including other countries in the Middle East, due to geopolitical events. Incidents involving a Middle Eastern country's or the region's security, including terrorism, may cause uncertainty in their markets and may adversely affect its economy and a Fund's investments.

Governmental actions in the future could have a significant effect on economic conditions in Saudi Arabia, which could affect private sector companies and a Fund, as well as the value of securities in a Fund's portfolio. Any economic sanctions on Saudi Arabian individuals or Saudi Arabian corporate entities, or even the threat of sanctions, may result in the decline of the value and liquidity of Saudi Arabian securities, a weakening of the Saudi riyal or other adverse consequences to the Saudi Arabian economy. Any sanctions could also result in the immediate freeze of Saudi Arabian securities and/or funds investing in prohibited assets, impairing the ability of a Fund to buy, sell, receive or deliver those securities and/or assets. In addition, Saudi Arabia's economy relies heavily on cheap, foreign labor, and changes in the availability of this labor supply could have an adverse effect on the economy.

The securities markets in Saudi Arabia may not be as developed as those in other countries. As a result, securities markets in Saudi Arabia are subject to greater risks associated with market volatility, lower market capitalization, lower trading volume, illiquidity, inflation, greater price fluctuations, uncertainty regarding the existence of trading markets, governmental control and heavy regulation of labor and industry. Shares of certain Saudi Arabian companies tend to trade less frequently than those of companies on exchanges in more developed markets. Such infrequent trading may adversely affect the pricing of these securities and a Fund's ability to sell these securities in the future.

Although the political situation in Saudi Arabia is largely stable, Saudi Arabia has historically experienced political instability, and there remains the possibility that the stability will not hold in the future or that instability in the larger Middle East region could adversely impact the economy of Saudi Arabia. Instability may be caused by military developments, government interventions in the marketplace, terrorism, extremist attitudes, attempted social or political reforms, religious differences, or other factors. Additionally, anti-Western views held by certain groups in the Middle East may influence government policies regarding foreign investment. Further developments in U.S. relations with Saudi Arabia and other Middle-Eastern countries may affect these attitudes and policies. The U.S. is a significant trading partner of, or foreign investor in, Saudi Arabia. As a result, economic conditions of Saudi Arabia may be particularly affected by changes in the U.S. economy. A decrease in U.S. imports or exports, new trade and financial regulations or tariffs, changes in the U.S. dollar exchange rate or an economic slowdown in the U.S. may have a material adverse effect on the economic conditions of Saudi Arabia and, as a result, securities to which a Fund has exposure. Political instability in North Africa and the larger Middle East region has caused significant disruptions to many industries. Continued political and social unrest in these areas may negatively affect the value of securities in a Fund's portfolio.

Certain issuers located in Saudi Arabia may operate in, or have dealings with, countries subject to sanctions and/or embargoes imposed by the U.S. government and the United Nations and/or countries identified by the U.S. government as state sponsors of terrorism. As a result, an issuer may sustain damage to its reputation if it is identified as an issuer which operates in, or has dealings with, such countries. A Fund, as an investor in such issuers, will be indirectly subject to those risks.

Risk of Investing in the Automotive Sub-Industry. The automotive sub-industry can be highly cyclical, and companies in the automotive sub-industry may suffer periodic losses. The automotive sub-industry is also highly competitive and there may be, at times, excess capacity in the global and domestic automotive sub-industry. Over the last several decades, the U.S. automotive sub-industry has experienced periodic downturns; certain automotive companies required stimulus from the U.S. government, while others formed strategic industry alliances in order to weather the substantially difficult market conditions. In general, the automotive sub-industry is susceptible to labor disputes, product defect litigation, patent expiration, increased pension liabilities, rise in material or component prices and changing consumer tastes.

Risk of Investing in the Basic Materials Industry. Issuers in the basic materials industry could be adversely affected by commodity price volatility, exchange rate fluctuations, social and political unrest, import controls and increased competition. Companies in the basic materials industry may be subject to swift fluctuations in supply and demand. Fluctuations may be caused by events relating to political and economic developments, the environmental impact of basic materials operations, and the success of exploration projects. Production of industrial materials often exceeds demand as a result of over-building or economic downturns, leading to poor investment returns. Issuers in the basic materials industry are at risk for environmental damage and product liability claims and may be adversely affected by depletion of resources, delays in technical progress, labor relations, tax and government regulations related to changes to, among other things, energy and environmental policies.

Risk of Investing in the Capital Goods Industry. Companies in the capital goods industry may be affected by fluctuations in the business cycle and by other factors affecting manufacturing demands. Companies in the capital goods industry depend heavily on corporate spending. Companies in the capital goods industry may perform well during times of economic expansion, and as economic conditions worsen, the demand for capital goods may decrease due to weakening demand, worsening business cash flows, tighter credit controls and deteriorating profitability. During times of economic volatility, corporate spending may fall and adversely affect the capital goods industry. This industry may also be affected by changes in interest rates, corporate tax rates and other government policies. Many capital goods are sold internationally and such companies are subject to market conditions in other countries and regions.

Risk of Investing in the Consumer Cyclical Industry. A Fund may invest in consumer cyclical companies, which rely heavily on business cycles and economic conditions. Consumer cyclical companies include automotive manufacturers, retail companies, and housing-related companies. The consumer cyclical industry can be significantly affected by several factors, including, without limitation, the performance of domestic and international economies, exchange rates, changing consumer tastes and trends, marketing campaigns, cyclical revenue generation, consumer confidence, commodity price volatility, labor relations, interest rates, import and export controls, intense competition, technological developments and government regulation.

Risk of Investing in the Consumer Discretionary Sector. Companies engaged in the design, production or distribution of products or services for the consumer discretionary sector (including, without limitation, television and radio broadcasting, manufacturing, publishing, recording and musical instruments, motion pictures, photography, amusement and theme parks, gaming casinos, sporting goods and sports arenas, camping and recreational equipment, toys and games, apparel, travel-related services, automobiles, hotels and motels, and fast food and other restaurants) are subject to the risk that their products or services may become obsolete quickly. The success of these companies can depend heavily on disposable household income and consumer spending. During periods of an expanding economy, the consumer discretionary sector may outperform the consumer staples sector, but may underperform when economic conditions worsen. Moreover, the consumer discretionary sector can be significantly affected by several factors, including, without limitation, the performance of domestic and international economies, exchange rates, changing consumer preferences, demographics, marketing campaigns, cyclical revenue generation, consumer confidence, commodity price volatility, labor relations, interest rates, import and export controls, intense competition, technological developments and government regulation.

Risk of Investing in the Consumer Goods Industry. Companies in the consumer goods industry include companies involved in the design, production or distribution of goods for consumers, including food, household, home, personal and office products, clothing and textiles. The success of the consumer goods industry is tied closely to the performance of the domestic and international economy, interest rates, exchange rates, competition, consumer confidence and consumer disposable income. The consumer goods industry may be affected by trends, marketing campaigns and other factors affecting consumer demand. Governmental regulation affecting the use of various food additives may affect the profitability of certain companies in the consumer goods industry. Moreover, international events may affect food and beverage companies that derive a substantial portion of their net income from foreign countries. In addition, tobacco companies may be adversely affected by new laws, regulations and litigation. Many consumer goods may be marketed globally, and consumer goods companies may be affected by the demand and market conditions in other countries and regions. Companies in the consumer goods industry may be subject to severe competition, which may also have an adverse impact on their profitability. Changes in demographics and consumer preferences may affect the success of consumer products.

Risk of Investing in the Consumer Services Industry. The success of firms in the consumer services industry and certain retailers (including food and beverage, general retailers, media, and travel and leisure) is tied closely to the performance of the domestic and international economy, interest rates, exchange rates, competition and consumer confidence. The consumer services industry depends heavily on disposable household income and consumer spending. Companies in the consumer services industry may be subject to severe competition, which may also have an adverse impact on their profitability. Companies in the consumer services industry are facing increased government and regulatory scrutiny and may be subject to adverse government or regulatory action. Changes in demographics and consumer preferences may affect the success of consumer service providers.

Risk of Investing in the Consumer Staples Sector. Companies in the consumer staples sector may be adversely affected by changes in the global economy, consumer spending, competition, demographics and consumer preferences, and production spending. Companies in the consumer staples sector may also be affected by changes in global economic, environmental and political events, economic conditions, the depletion of resources, and government regulation. For instance, 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. In addition, tobacco companies may be adversely affected by the adoption of proposed legislation and/or by litigation. Companies in the consumer staples sector also may be subject to risks pertaining 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, without limitation, changes in government agricultural support programs, exchange rates, import and export controls, changes in international agricultural and trading policies, and seasonal and weather conditions. Companies in the consumer staples sector may be subject to severe competition, which may also have an adverse impact on their profitability.

Risk of Investing in the Electric Utilities Sector. The electric utility industry consists of companies that are engaged principally in the generation, transmission and sale of electric energy, although many also provide other energy-related services. In the past, electric utility companies, in general, have been favorably affected by lower fuel and financing costs and the full or near completion of major construction programs. In addition, many of these companies have generated cash flows in excess of current operating expenses and construction expenditures, permitting some degree of diversification into unregulated businesses. Some electric utilities have also taken advantage of the right to sell power outside of their traditional geographic areas. Electric utility companies have historically been subject to the risks associated with increases in fuel and other operating costs, high interest costs on borrowings needed for capital construction programs, costs associated with compliance with environmental and safety regulations and changes in the regulatory climate. As interest rates declined, many utilities refinanced high cost debt and in doing so improved their fixed charges coverage. Regulators, however, lowered allowed rates of return as interest rates declined and thereby caused the benefits of the rate declines to be shared wholly or in part with customers. In a period of rising interest rates, the allowed rates of return may not keep pace with the utilities' increased costs. The construction and operation of nuclear power facilities are subject to strict scrutiny by, and evolving regulations of, the Nuclear Regulatory Commission and state agencies which have comparable jurisdiction. Strict scrutiny might result in higher operating costs and higher capital expenditures, with the risk that the regulators may disallow inclusion of these costs in rate authorizations or the risk that a company may not be permitted to operate or complete construction of a facility. In addition, operators of nuclear power plants may be subject to significant costs for disposal of nuclear fuel and for decommissioning such plants.

The rating agencies look closely at the business profile of utility companies. Ratings for companies are expected to be impacted to a greater extent in the future by the division of their asset base. Electric utility companies that focus more on the generation of electricity may be assigned less favorable ratings as this business is expected to be competitive and the least regulated. On the other hand, companies that focus on transmission and distribution, which is expected to be the least competitive and the more regulated part of the business, may see higher ratings given the greater predictability of cash flow.

A number of states are considering or have enacted deregulation proposals. The introduction of competition into the industry as a result of such deregulation has at times resulted in lower revenue, lower credit ratings, increased default risk, and lower electric utility security prices. Such increased competition may also cause long-term contracts, which electric utilities previously entered into to buy power, to become "stranded assets" which have no economic value. Any loss associated with such contracts must be absorbed by ratepayers and investors. In addition, some electric utilities have acquired electric utilities overseas to diversify, enhance earnings and gain experience in operating in a deregulated environment. In some instances, such acquisitions have involved significant borrowings, which have burdened the acquirer's balance sheet. There is no assurance that current deregulation proposals will be adopted. However, deregulation in any form could significantly impact the electric utilities industry.

Risk of Investing in the Energy Sector. Companies in the energy sector are strongly affected by the levels and volatility of global energy prices, energy supply and demand, government regulations and policies, energy production and conservation efforts, technological change, development of alternative energy sources, and other factors that they cannot control. These companies may also lack resources and have limited business lines. Energy companies may have relatively high levels of debt and may be more likely to restructure their businesses if there are downturns in certain energy markets or in the global economy. If an energy company in a Fund's portfolio becomes distressed, a Fund could lose all or a substantial portion of its investment.

The energy sector is cyclical and is highly dependent on commodity prices; prices and supplies of energy may fluctuate significantly over short and long periods of time due to, among other things, national and international political changes, Organization of Petroleum Exporting Countries ("OPEC") policies, changes in relationships among OPEC members and between OPEC and oil-importing nations, the regulatory environment, taxation policies, the enactment or cessation of trade sanctions, war or other geopolitical conflicts, and the economies of the key energy-consuming countries. Commodity prices have recently been subject to increased volatility, which may negatively affect companies in which a Fund invests. For example, in the context of the COVID-19 outbreak and disputes among oil-producing countries regarding potential limits on the production of crude oil, the energy sector has experienced increased volatility. In particular, significant market volatility occurred in the crude oil markets as well as the oil futures markets, which resulted in the market price of certain crude oil futures contracts falling below zero for a period of time.

Companies in the energy sector may be adversely affected by terrorism, war, cyber incidents, natural disasters or other catastrophes. Companies in the energy sector are at risk of civil liability from accidents resulting in injury, loss of life or property, pollution or other environmental damage claims. Disruptions in the oil industry or shifts in fuel consumption may significantly impact companies in this sector. Significant oil and gas deposits are located in emerging markets countries where corruption and security may raise significant risks, in addition to the other risks of investing in emerging markets. Additionally, the Middle East, where many companies in the energy sector may operate, has historically and recently experienced widespread social unrest.

Companies in the energy sector may also be adversely affected by changes in exchange rates, interest rates, economic conditions, tax treatment, government regulation and intervention, negative perception, efforts at energy conservation and world events in the regions in which the companies operate (*e.g.,* expropriation, nationalization, confiscation of assets and property or the imposition of restrictions on foreign investments and repatriation of capital, military coups, social unrest, violence or labor unrest). Because a significant portion of revenues of companies in this sector is derived from a relatively small number of customers that are largely composed of governmental entities and utilities, governmental budget constraints may have a significant impact on the stock prices of companies in this sector. The energy sector is highly regulated. Entities operating in the energy sector are subject to significant regulation of nearly every aspect of their operations by governmental agencies. Such regulation can change rapidly or over time in both scope and intensity. Stricter laws, regulations or enforcement policies could be enacted in the future which would likely increase compliance costs and may materially adversely affect the financial performance of companies in the energy sector. Energy companies may have relatively high levels of debt and may be more likely than companies in other sectors to restructure their businesses during economic downturns or adversity in global energy markets.

Russia's large-scale invasion of Ukraine on February 24, 2022 has led to further disruptions and increased volatility in the energy and commodity futures markets due to actual and potential disruptions in the supply and demand for certain commodities, including oil and natural gas. The U.S. and certain European countries have announced bans or restrictions on imports of hydrocarbon commodities from Russia. The effect of such bans and any similar restrictions by other countries, as well as the extent, scope and duration of the conflict, resulting sanctions and associated market disruptions on the energy sector, are impossible to predict and depend on a number of factors. The effect of these events or any related developments could be significant and may have a severe adverse effect on the performance of a Fund.

Risk of Investing in the Financials Sector. Companies in the financials sector include small, regional and money center banks, securities brokerage firms, asset management companies, savings banks and thrift institutions, specialty finance companies (*e.g.*, credit card, mortgage providers), insurance and insurance brokerage firms, consumer finance firms, financial conglomerates and foreign banking and financial companies.

Most financial companies are subject to extensive governmental regulation, which limits their activities and may affect their ability to earn a profit from a given line of business. Government regulation may change frequently and may have significant adverse consequences for companies in the financials sector, including effects not intended by the regulation. Direct governmental intervention in the operations of financial companies and financial markets may materially and adversely affect the companies in which a Fund invests, including legislation in many countries that may increase government regulation, repatriation and other intervention. The impact of governmental intervention and legislative changes on any individual financial company or on the financials sector as a whole cannot be predicted. The valuation of financial companies has been and continues to be subject to unprecedented volatility and may be influenced by unpredictable factors, including interest rate risk and sovereign debt default. Certain financial businesses are subject to intense competitive pressures, including market share and price competition. Financial companies in foreign countries are subject to market-specific and general regulatory and interest rate concerns. In particular, government regulation in certain foreign countries may include taxes and controls on interest rates, credit availability, minimum capital requirements, bans on short sales, limits on prices and restrictions on currency transfers. In addition, companies in the financials sector may be the targets of hacking and potential theft of proprietary or customer information or disruptions in service, which could have a material adverse effect on their businesses.

The profitability of banks, savings and loan associations and other financial companies is largely dependent on the availability and cost of capital funds and can fluctuate significantly when interest rates change; for instance, when interest rates go up, the value of securities issued by many types of companies in the financials sector generally goes down. In other words, financial companies may be adversely affected in certain market cycles, including, without limitation, during periods of rising interest rates, which may restrict the availability and increase the cost of capital, and during periods of declining economic conditions, which may cause, among other things, credit losses due to financial difficulties of borrowers.

In addition, general economic conditions are important to the operations of these companies, and financial difficulties of borrowers may have an adverse effect on the profitability of financial companies. Companies in the financials sector are exposed directly to the credit risk of their borrowers and counterparties, who may be leveraged to an unknown degree, including through swaps and other derivatives products, and who at times may be unable to meet their obligations to the financial services companies. Financial services companies may have significant exposure to the same borrowers and counterparties, with the result that a borrower's or counterparty's inability to meet its obligations to one company may affect other companies with exposure to the same borrower or counterparty. This interconnectedness of risk, including cross-default risk, may result in significant negative impacts to the financial condition and reputation of companies with direct exposure to the defaulting counterparty as well as adverse cascading effects in the markets and the financials sector generally. Financial companies can be highly dependent upon access to capital markets, and any impediments to such access, such as adverse overall economic conditions or a negative perception in the capital markets of a financial company's financial condition or prospects, could adversely affect its business. Deterioration of credit markets can have an adverse impact on a broad range of financial markets, causing certain financial companies to incur large losses. In these conditions, companies in the financials sector may experience significant declines in the valuation of their assets, take actions to raise capital and even cease operations. Some financial companies may also be required to accept or borrow significant amounts of capital from government sources and may face future government-imposed restrictions on their businesses or increased government intervention. In addition, there is no guarantee that governments will provide any such relief in the future. These actions may cause the securities of many companies in the financials sector to decline in value.

Risk of Investing in the Healthcare Sector. Companies in the healthcare sector are often issuers whose profitability may be affected by extensive government regulation, restrictions on government reimbursement for medical expenses, rising or falling costs of medical products and services, pricing pressure, an increased emphasis on outpatient services, a limited number of products, industry innovation, changes in technologies and other market developments. Many healthcare companies are heavily dependent on patent protection and the actual or perceived safety and efficiency of their products.

Patents have a limited duration, and, upon expiration, other companies may market substantially similar "generic" products that are typically sold at a lower price than the patented product, which can cause the original developer of the product to lose market share and/or reduce the price charged for the product, resulting in lower profits for the original developer. As a result, the expiration of patents may adversely affect the profitability of these companies.

In addition, because the products and services of many companies in the healthcare sector affect the health and well-being of many individuals, these companies are especially susceptible to extensive litigation based on product liability and similar claims. Healthcare companies are subject to competitive forces that may make it difficult to raise prices and, in fact, may result in price discounting. Many new products in the healthcare sector may be subject to regulatory approvals. The process of obtaining such approvals may be long and costly, which can result in increased development costs, delayed cost recovery and loss of competitive advantage to the extent that rival companies have developed competing products or procedures, adversely affecting the company's revenues and profitability. In other words, delays in the regulatory approval process may diminish the opportunity for a company to profit from a new product or to bring a new product to market, which could have a material adverse effect on a company's business. Healthcare companies may also be strongly affected by scientific biotechnology or technological developments, and their products may quickly become obsolete. Also, many healthcare companies offer products and services that are subject to governmental regulation and may be adversely affected by changes in governmental policies or laws. Changes in governmental policies or laws may span a wide range of topics, including cost control, national health insurance, incentives for compensation in the provision of healthcare services, tax incentives and penalties related to healthcare insurance premiums, and promotion of prepaid healthcare plans. In addition, a number of legislative proposals concerning healthcare have been considered by the U.S. Congress in recent years. It is unclear what proposals will ultimately be enacted, if any, and what effect they may have on companies in the healthcare sector.

Additionally, the expansion of facilities by healthcare-related providers may be subject to "determinations of need" by certain government authorities. This process not only generally increases the time and costs involved in these expansions, but also makes expansion plans uncertain, limiting the revenue and profitability growth potential of healthcare-related facilities operators and negatively affecting the prices of their securities. Moreover, in recent years, both local and national governmental budgets have come under pressure to reduce spending and control healthcare costs, which could both adversely affect regulatory processes and public funding available for healthcare products, services and facilities.

Risk of Investing in the Industrials Sector. The value of securities issued by companies in the industrials sector may be adversely affected by supply of and demand for both their specific products or services and for industrials sector products in general. The products of manufacturing companies may face obsolescence due to rapid technological developments and frequent new product introduction. Government regulations, trade disputes, world events and economic conditions may affect the performance of companies in the industrials sector. The industrials sector may also be adversely affected by changes or trends in commodity prices, which may be influenced by unpredictable factors. For example, commodity price declines and unit volume reductions resulting from an over-supply of materials used in the industrials sector can adversely affect the sector. Furthermore, companies in the industrials sector may be subject to liability for environmental damage, product liability claims, depletion of resources, and mandated expenditures for safety and pollution control.

Risk of Investing in the Infrastructure Industry. Companies in the infrastructure industry may be subject to a variety of factors that could adversely affect their business or operations, including high interest costs in connection with capital construction programs, high degrees of leverage, costs associated with governmental, environmental and other regulations, the effects of economic slowdowns, increased competition from other providers of services, uncertainties concerning costs, the level of government spending on infrastructure projects, and other factors. Infrastructure companies may be adversely affected by commodity price volatility, changes in exchange rates, import controls, depletion of resources, technological developments, and labor relations. There is also the risk that corruption may negatively affect publicly funded infrastructure projects, especially in emerging markets, resulting in delays and cost overruns. Infrastructure issuers can be significantly affected by government spending policies because companies involved in this industry rely to a significant extent on U.S. and other government demand for their products.

Infrastructure companies in the oil and gas industry may be adversely affected by government regulation or world events in the regions where the companies operate (*e.g.*, expropriation, nationalization, confiscation of assets and property or the imposition of restrictions on foreign investments and repatriation of capital, military coups, social unrest, violence or labor unrest). Infrastructure companies may have significant capital investments in, or engage in transactions involving, emerging market countries, which may heighten these risks.

Operations Risk. The failure of an infrastructure company to carry adequate insurance or to operate its assets appropriately could lead to significant losses. Infrastructure may be adversely affected by environmental clean-up costs and catastrophic events such as earthquakes, hurricanes and terrorist acts.

Customer Risk. Infrastructure companies can be dependent upon a narrow customer base. Additionally, if these customers fail to pay their obligations, significant revenues could be lost and may not be replaceable.

Regulatory Risk. Infrastructure companies may be subject to significant regulation by various governmental authorities and also may be affected by regulation of rates charged to customers, service interruption due to environmental, operational or other events, the imposition of special tariffs and changes in tax laws, regulatory policies and accounting standards.

Strategic Asset Risk. Infrastructure companies may control significant strategic assets (*e.g.*, major pipelines or highways), which are assets that have a national or regional profile, and may have monopolistic characteristics. Given their national or regional profile or irreplaceable nature, strategic assets could generate additional risk not common in other industry sectors and they may be targeted for terrorist acts or adverse political actions.

Interest Rate Risk. Rising interest rates could result in higher costs of capital for infrastructure companies, which could negatively impact their ability to meet payment obligations.

Leverage Risk. Infrastructure companies can be highly leveraged, which increases investments risk and other risks normally associated with debt financing and could adversely affect an infrastructure company's operations and market value in periods of rising interest rates.

Inflation Risk. Many infrastructure companies may have fixed income streams. Consequently, their market values may decline in times of higher inflation. Additionally, the prices that an infrastructure company is able to charge users of its assets may be linked to inflation, whether by government regulation, contractual arrangement or other factors. In this case, changes in the rate of inflation may affect the company's profitability.

Transportation Risk. The stock prices of companies in the transportation industry group are affected by both supply and demand for their specific product. Government regulation, world events and economic conditions may affect the performance of companies in the transportation industry group.

Oil and Gas Risk. The profitability of oil and gas companies is related to worldwide energy prices, exploration, and production spending.

Utilities Risk. Utilities companies face intense competition, both domestically and internationally, which may have an adverse effect on their profit margins. The rates charged by regulated utility companies are subject to review and limitation by governmental regulatory commissions.

Risk of Investing in the Insurance Industry. The insurance industry is subject to extensive government regulation in some countries and can be significantly affected by changes in interest rates, general economic conditions, price and marketing competition, the imposition of premium rate caps or other changes in government regulation or tax law. Different segments of the insurance industry can be significantly affected by changes in mortality and morbidity rates, environmental clean-up costs and catastrophic events such as earthquakes, hurricanes and terrorist acts.

Risk of Investing in the Media Sub-Industry. Companies in the media sub-industry may encounter distressed cash flows due to the need to commit substantial capital to meet increasing competition, particularly in formulating new products and services using new technology. Media companies are subject to risks that include cyclicality of revenues and earnings, a potential decrease in the discretionary income of targeted individuals, changing consumer tastes and interests, competition in the industry and the potential for increased state and federal regulation. Advertising spending is an important source of revenue for media companies. During economic downturns, advertising spending typically decreases and, as a result, media companies tend to generate less revenue.

Risk of Investing in Municipal Securities in the Utilities Sector. Certain municipal securities are issued by public bodies, including state and municipal utility authorities, to, among other things, finance the operation or expansion of utility entities. Various future economic and other conditions may adversely affect utility entities, including inflation, increases in financing requirements, increases in raw material costs and other operating costs, changes in demand for services and the effects of environmental and other governmental regulations. Municipal securities that are issued to finance a particular utility project often depend on revenues from that project to make principal and interest payments. Adverse conditions and developments affecting a particular utility project can result in lower revenues to the issuer of the municipal securities. Certain utilities are subject to specific risks. Gas utilities are subject to risks of supply conditions and increased competition from other providers of utility services. In addition, gas utilities are affected by gas prices, which may be magnified to the extent that a gas utility enters into long-term contracts for the purchase or sale of gas at a fixed price, since such prices may change significantly and to the disadvantage of the gas utility.

Risk of Investing in the Oil and Gas Industry. Companies in the oil and gas industry are strongly affected by the levels and volatility of global energy prices, oil and gas supply and demand, government regulations and policies, oil and gas production and conservation efforts and technological change. The oil and gas industry is cyclical and from time to time may experience a shortage of drilling rigs, equipment, supplies or qualified personnel, or due to significant demand, such services may not be available on commercially reasonable terms. Prices and supplies of oil and gas may fluctuate significantly over short and long periods of time due to national and international political changes, OPEC policies, changes in relationships among OPEC members and between OPEC and oil-importing nations, the regulatory environment, taxation policies, the enactment or cessation of trade sanctions, war or other geopolitical conflicts, and the economies of key energy-consuming countries. Disruptions in the oil sub-industry or shifts in energy consumption may significantly impact companies in this industry. For instance, significant oil and gas deposits are located in emerging market countries where corruption and security may raise significant risks, in addition to the other risks of investing in emerging markets. In addition, the Middle East, where many companies in the oil and gas industry may operate, has recently experienced widespread social unrest. Oil and gas companies operate in a highly competitive industry, with intense price competition. A significant portion of their revenues may depend on a relatively small number of customers, including governmental entities and utilities.

In the context of the COVID-19 outbreak and disputes among oil-producing countries regarding potential limits on the production of crude oil, the energy sector has experienced increased volatility. In particular, significant market volatility in the crude oil markets as well as the oil futures markets resulted in the market price of the front month WTI crude oil futures contracts falling below zero for a period of time. Russia's large-scale invasion of Ukraine on February 24, 2022 has led to further disruptions and increased volatility in the energy and commodity futures markets due to actual and potential disruptions in the supply and demand for certain commodities, including oil and natural gas. In March 2022, the United States announced that it would ban imports of oil, natural gas and coal from Russia. The effect of the U.S. ban and any similar bans by other countries, as well as the extent and duration of the Russian military action, resulting sanctions and associated market disruptions on the energy sector, are impossible to predict and depend on a number of factors. The effect of these events or any related developments could be significant and may have a severe adverse effect on the performance of a Fund.

Risk of Investing in the Real Estate Industry. Companies in the real estate industry include companies that invest in real estate, such as REITs, real estate holding and operating companies or real estate development companies (collectively, "Real Estate Companies"). Investing in Real Estate Companies exposes investors to the risks of owning real estate directly, as well as to risks that relate specifically to the way in which Real Estate Companies are organized and operated. The real estate industry is highly sensitive to general and local economic conditions and developments, and characterized by intense competition and periodic overbuilding. Investing in Real Estate Companies involves various risks. Some risks that are specific to Real Estate Companies are discussed in greater detail below.

Concentration Risk. Real Estate Companies may own a limited number of properties and concentrate their investments in a particular geographic region or property type. Economic downturns affecting a particular region, industry or property type may lead to a high volume of defaults within a short period.

Distressed Investment Risk. Real Estate Companies may invest in distressed, defaulted or out-of-favor bank loans. Identification and implementation by a Real Estate Company of loan modification and restructure programs involves a high degree of uncertainty. Even successful implementation may still require adverse compromises and may not prevent bankruptcy. Real Estate Companies may also invest in other debt instruments that may become non-performing, including the securities of companies with higher credit and market risk due to financial or operational difficulties. Higher risk securities may be less liquid and more volatile than the securities of companies not in distress.

Illiquidity Risk. Investing in Real Estate Companies may involve risks similar to those associated with investing in small-capitalization companies. Real Estate Company securities, like the securities of small-capitalization companies, may be more volatile than, and perform differently from, shares of large-capitalization companies. There may be less trading in Real Estate Company shares, which means that buy and sell transactions in those shares could have a magnified impact on share price, resulting in abrupt or erratic price fluctuations. In addition, real estate is relatively illiquid, and, therefore, a Real Estate Company may have a limited ability to vary or liquidate properties in response to changes in economic or other conditions.

Interest Rate Risk. Rising interest rates could result in higher costs of capital for Real Estate Companies, which could negatively impact a Real Estate Company's ability to meet its payment obligations. Declining interest rates could result in increased prepayment on loans and require redeployment of capital in less desirable investments.

Leverage Risk. Real Estate Companies may use leverage (and some may be highly leveraged), which increases investment risk and could adversely affect a Real Estate Company's operations and market value in periods of rising interest rates. Real Estate Companies are also exposed to the risks normally associated with debt financing. Financial covenants related to a Real Estate Company's leverage may affect the ability of the Real Estate Company to operate effectively. In addition, real property may be subject to the quality of credit extended and defaults by borrowers and tenants. If the properties do not generate sufficient income to meet operating expenses, including, where applicable, debt service, ground lease payments, tenant improvements, third-party leasing commissions and other capital expenditures, the income and ability of a Real Estate Company to make payments of any interest and principal on its debt securities will be adversely affected.

Loan Foreclosure Risk. Real Estate Companies may foreclose on loans that the Real Estate Company originated and/or acquired. Foreclosure may generate negative publicity for the underlying property that affects its market value. In addition to the length and expense of such proceedings, the validity of the terms of the applicable loan may not be recognized in foreclosure proceedings. Claims and defenses asserted by borrowers or other lenders may interfere with the enforcement of rights by a Real Estate Company. Parallel proceedings, such as bankruptcy, may also delay resolution and limit the amount of recovery on a foreclosed loan by a Real Estate Company even where the property underlying the loan is liquidated.

Management Risk. Real Estate Companies are dependent upon management skills and may have limited financial resources. Real Estate Companies are generally not diversified and may be subject to heavy cash flow dependency, default by borrowers and voluntary liquidation. In addition, transactions between Real Estate Companies and their affiliates may be subject to conflicts of interest, which may adversely affect a Real Estate Company's shareholders. A Real Estate Company may also have joint venture investments in certain of its properties, and, consequently, its ability to control decisions relating to such properties may be limited.

Property Risk. Real Estate Companies may be subject to risks relating to functional obsolescence or reduced desirability of properties; extended vacancies due to economic conditions and tenant bankruptcies; catastrophic events such as earthquakes, hurricanes and terrorist acts; and casualty or condemnation losses. Real estate income and values also may be greatly affected by demographic trends, such as population shifts or changes in consumer preferences and values, or increasing vacancies or declining rents resulting from legal, cultural, technological, global or local economic developments.

Regulatory Risk. Real estate income and values may be adversely affected by such factors as applicable domestic and foreign laws (including tax laws). Government actions, such as tax increases, zoning law changes, mandated closures or other commercial restrictions or environmental regulations, also may have a major impact on real estate income and values. In addition, quarterly compliance with regulations limiting the proportion of asset types held by a U.S. REIT may force certain Real Estate Companies to liquidate or restructure otherwise attractive investments. Some countries may not recognize REITs or comparable structures as a viable form of real estate funds.

Underlying Investment Risk. Real Estate Companies make investments in a variety of debt and equity instruments with varying risk profiles. For instance, Real Estate Companies may invest in debt instruments secured by commercial property that have higher risks of delinquency and foreclosure than loans on single family homes due to a variety of factors associated with commercial property, including the tie between income available to service debt and productive use of the property. Real Estate Companies may also invest in debt instruments and preferred equity that are junior in an issuer's capital structure and that involve privately negotiated structures. Subordinated debt investments, such as B-Notes and mezzanine loans, involve a greater credit risk of default due to the need to service more senior debt of the issuer. Similarly, preferred equity investments involve a greater risk of loss than conventional debt financing due to their non-collateralized nature and subordinated ranking. Investments in CMBS may also be junior in priority in the event of bankruptcy or similar proceedings. Investments in senior loans may be effectively subordinated if the senior loan is pledged as collateral. The ability of a holder of junior claims to proceed against a defaulting issuer is circumscribed by the terms of the particular contractual arrangement, which vary considerably from transaction to transaction.

U.S. Tax Risk. Certain U.S. Real Estate Companies are subject to special U.S. federal tax requirements. A REIT that fails to comply with such tax requirements may be subject to U.S. federal income taxation, which may affect the value of the REIT and the characterization of the REIT's distributions. The U.S. federal tax requirement that a REIT distribute substantially all of its net income to its shareholders may result in a REIT having insufficient capital for future expenditures. A REIT that successfully maintains its qualification may still become subject to U.S. federal, state and local taxes, including excise, penalty, franchise, payroll, mortgage recording, and transfer taxes, both directly and indirectly through its subsidiaries. Because REITs often do not provide complete tax information until after the calendar year-end, a Fund may at times need to request permission to extend the deadline for issuing your tax reporting statement or supplement the information otherwise provided to you.

Risk of Investing in the Retail Industry. The retail industry may be affected by changes in domestic and international economies, consumer confidence, disposable household income and spending, and consumer tastes and preferences. Companies in the retail industry face intense competition, which may have an adverse effect on their profitability. The success of companies in the retail industry may be strongly affected by social trends, marketing campaigns and public perceptions. Companies in the retail industry may be dependent on outside financing, which may be difficult to obtain. Many of these companies are dependent on third party suppliers and distribution systems. Retail companies may be unable to protect their intellectual property rights or may be liable for infringing the intellectual property rights of others.

Risk of Investing in the Technology Sector. Technology companies are characterized by periodic new product introductions, innovations and evolving industry standards, and, as a result, face intense competition, both domestically and internationally, which may have an adverse effect on profit margins. Companies in the technology sector are often smaller and less experienced companies and may be subject to greater risks than larger companies; these risks may be heightened for technology companies in foreign markets. 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, changes in consumer and business purchasing patterns, unpredictable changes in growth rates and competition for the services of qualified personnel. In addition, a rising interest rate environment tends to negatively affect companies in the technology sector because, in such an environment, those companies with high market valuations may appear less attractive to investors, which may cause sharp decreases in the companies' market prices. Companies in the technology sector are heavily dependent on patent and intellectual property rights. The loss or impairment of these rights may adversely affect the profitability of these companies. Companies in the technology sector are facing increased government and regulatory scrutiny and may be subject to adverse government or regulatory action. The technology sector may also be adversely affected by changes or trends in commodity prices, which may be influenced or characterized by unpredictable factors. Finally, while all companies may be susceptible to network security breaches, certain companies in the technology sector may be particular targets of hacking and potential theft of proprietary or consumer information or disruptions in service, which could have a material adverse effect on their businesses.

Risk of Investing in the Telecommunications Sector. The telecommunications sector of a country's economy is often subject to extensive government regulation. The costs of complying with governmental regulations, delays or failure to receive required regulatory approvals, or the enactment of new regulatory requirements may negatively affect the business of telecommunications companies. Government actions around the world, specifically in the area of pre-marketing clearance of products and prices, can be arbitrary and unpredictable. Companies in the telecommunications sector may experience distressed cash flows due to the need to commit substantial capital to meet increasing competition, particularly in developing new products and services using new technology. Technological innovations may make the products and services of certain telecommunications companies obsolete. Finally, while all companies may be susceptible to network security breaches, certain companies in the telecommunications sector may be particular targets of hacking and potential theft of proprietary or consumer information or disruptions in service, which could have a material adverse effect on their businesses.

Risk of Investing in the Transportation Infrastructure Industry. Municipal securities include, among others, bonds payable from fuel taxes and tolls for municipal toll roads, as well as general airport bonds. Issuers in the transportation infrastructure industry can be significantly affected by economic changes, fuel prices, labor relations, technology developments, exchange rates, industry competition, insurance costs and deteriorating public infrastructure, such as bridges, roads, rails, ports and airports. Municipal securities that are issued to finance a particular transportation project often depend on revenues from that project to make principal and interest payments. Adverse conditions and developments affecting a particular project can result in lower revenues to the issuer of the municipal securities. Other risk factors that may affect the transportation infrastructure industry include the risk of increases in fuel and other operating costs and the effects of regulatory changes or other government decisions.

Risk of Investing in the Utilities Sector. The utilities sector may be adversely affected by changing commodity prices, government regulation stipulating rates charged by utilities, increased tariffs, changes in tax laws, interest rate fluctuations and changes in the cost of providing specific utility services. The utilities industry is also subject to potential terrorist attacks, natural disasters and severe weather conditions, as well as regulatory and operational burdens associated with the operation and maintenance of nuclear facilities. Government regulators monitor and control utility revenues and costs, and therefore may limit utility profits. In certain countries, regulatory authorities may also restrict a company's access to new markets, thereby diminishing the company's long-term prospects.

There are substantial differences among the regulatory practices and policies of various jurisdictions, and any regulatory agency may make major shifts in policy from time to time. There is no assurance that regulatory authorities will, in the future, grant rate increases. Additionally, existing and possible future regulatory legislation may make it even more difficult for utilities to obtain adequate relief. Certain of the issuers of securities held in a Fund's portfolio may own or operate nuclear generating facilities. Governmental authorities may from time to time review existing policies and impose additional requirements governing the licensing, construction and operation of nuclear power plants. Prolonged changes in climate conditions can also have a significant impact on both the revenues of an electric and gas utility as well as the expenses of a utility, particularly a hydro-based electric utility.

The rates that traditional regulated utility companies may charge their customers generally are subject to review and limitation by governmental regulatory commissions. Rate changes may occur only after a prolonged approval period or may not occur at all, which could adversely affect utility companies when costs are rising. The value of regulated utility debt securities (and, to a lesser extent, equity securities) tends to have an inverse relationship to the movement of interest rates. Certain utility companies have experienced full or partial deregulation in recent years. These utility companies are frequently more similar to industrial companies in that they are subject to greater competition and have been permitted by regulators to diversify outside of their original geographic regions and their traditional lines of business. As a result, some companies may be forced to defend their core business and may be less profitable. Deregulation may also permit a utility company to expand outside of its traditional lines of business and engage in riskier ventures.

Proxy Voting Policy

For the Funds, the Board has delegated the voting of proxies for each Fund's securities to BFA pursuant to the Funds' Proxy Voting Policy (the "iShares ETFs Proxy Voting Policy"), and BFA has adopted policies and procedures (the "BlackRock Proxy Voting Policies") governing proxy voting by accounts managed by BFA, including the Funds.

Under the BlackRock Proxy Voting Policies, BFA will vote proxies related to Fund securities in the best interests of a Fund and its shareholders. From time to time, a vote may present a conflict between the interests of a Fund's shareholders, on the one hand, and those of BFA, or any affiliated person of a Fund or BFA, on the other. BFA maintains policies and procedures that are designed to prevent undue influence on BFA's proxy voting activity that might stem from any relationship between the issuer of a proxy (or any dissident shareholder) and BFA, BFA's affiliates, a Fund or a Fund's affiliates. Most conflicts are managed through a structural separation of BFA's Corporate Governance Group from BFA's employees with sales and client responsibilities. In addition, BFA maintains procedures to ensure that all engagements with corporate issuers or dissident shareholders are managed consistently and without regard to BFA's relationship with the issuer of the proxy or the dissident shareholder. In certain instances, BFA may determine to engage an independent fiduciary to vote proxies as a further safeguard to avoid potential conflicts of interest or as otherwise required by applicable law.

Information with respect to how proxies relating to the Funds' portfolio securities were voted during the 12-month period ended June 30 is available: (i) without charge, upon request, by calling 1-800-iShares (1-800-474-2737) or through the Funds' website at www.iShares.com; and (ii) on the SEC's website at www.sec.gov.

Portfolio Holdings Information

On each Business Day (as defined in the *Creation and Redemption of Creation Units* section of this SAI), prior to the opening of regular trading on the Fund's primary listing exchange, a Fund discloses on its website (www.iShares.com) certain information relating to the portfolio holdings that will form the basis of a Fund's next net asset value per share calculation or calculations (in the case of each of the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF, the information will relate to each net asset value per share calculation or calculations).

In addition, certain information may also be made available to certain parties:

- **Communications of Data Files:** A Fund may make available through the facilities of the National Securities Clearing Corporation ("NSCC") or through posting on the www.iShares.com, prior to the opening of trading on each business day, a list of a Fund's holdings (generally pro-rata) that Authorized Participants could deliver to a Fund to settle purchases of a Fund (*i.e.* Deposit Securities) or that Authorized Participants would receive from a Fund to settle redemptions of a Fund (*i.e.* Fund Securities). These files are known as the Portfolio Composition File and the Fund Data File (collectively, "Files"). The Files are applicable for the next trading day and are provided to the NSCC and/or posted on www.iShares.com after the close of markets in the U.S.
- **Communications with Authorized Participants and Liquidity Providers:** Certain employees of BFA are responsible for interacting with Authorized Participants and liquidity providers with respect to discussing custom basket proposals as described in the *Custom Baskets* section of this SAI. As part of these discussions, these employees may discuss with an Authorized Participant or liquidity provider the securities a Fund is willing to accept for a creation, and securities that a Fund will provide on a redemption.

  BFA employees may also discuss portfolio holdings-related information with broker/dealers, in connection with settling a Fund's transactions, as may be necessary to conduct business in the ordinary course in a manner consistent with the disclosure in the Funds' current registration statements.
- **Communications with Listing Exchanges:** From time to time, employees of BFA may discuss portfolio holdings information with the applicable primary listing exchange for a Fund as needed to meet the exchange listing standards.
- **Communications with Other Portfolio Managers:** Certain information may be provided to employees of BFA who manage funds that invest a significant percentage of their assets in shares of an underlying fund as necessary to manage the fund's investment objective and strategy.
- **Communication of Other Information:** Certain explanatory information regarding the Files is released to Authorized Participants and liquidity providers on a daily basis, but is only done so after the Files are posted to www.iShares.com.
- **Third-Party Service Providers:** Certain portfolio holdings information may be disclosed to Fund Trustees and their counsel, outside counsel for the Funds, auditors and to certain third-party service providers (*i.e.*, fund administrator, custodian, proxy voting service) for which a non-disclosure, confidentiality agreement or other obligation is in place with such service providers, as may be necessary to conduct business in the ordinary course in a manner consistent with applicable policies, agreements with the Funds, the terms of the current registration statements and federal securities laws and regulations thereunder.

- **Liquidity Metrics:** "Liquidity Metrics," which seek to ascertain a Fund's liquidity profile under BlackRock's global liquidity risk methodology, include but are not limited to: (a) disclosure regarding the number of days needed to liquidate a portfolio or the portfolio's underlying investments; and (b) the percentage of a Fund's NAV invested in a particular liquidity tier under BlackRock's global liquidity risk methodology. The dissemination of position-level liquidity metrics data and any non-public regulatory data pursuant to the Liquidity Rule (including SEC liquidity tiering) is not permitted unless pre-approved. Disclosure of portfolio-level liquidity metrics prior to 60 calendar days after calendar quarter-end requires a non-disclosure or confidentiality agreement and approval of the Trust's Chief Compliance Officer. Portfolio-level liquidity metrics disclosure subsequent to 60 calendar days after calendar quarter-end requires the approval of portfolio management and must be disclosed to all parties requesting the information if disclosed to any party.

The Trust's Chief Compliance Officer or his delegate may authorize disclosure of portfolio holdings information pursuant to the above policy and procedures, subject to restrictions on selective disclosure imposed by applicable law. The Board reviews the policy and procedures for disclosure of portfolio holdings information at least annually.

Construction and Maintenance of the Underlying Indexes

Descriptions of the Underlying Indexes are provided below.

With respect to certain underlying indexes of the iShares funds, BFA or its affiliates have held discussions with the applicable index provider regarding their business interest in licensing an index to track a particular market segment and conveyed investment concepts and strategies that could be considered for the index. The index provider designed and constituted the index using concepts conveyed by BFA or its affiliates. For certain of these indices, the relevant fund may be the first or sole user of the underlying index. In its sole discretion, the index provider determines the composition of the securities and other instruments in such underlying index, the rebalance protocols of the underlying index, the weightings of the securities and other instruments in the underlying index, and any updates to the methodology. From time to time, BFA or its affiliates may also provide input relating to possible methodology changes of such underlying index pursuant to the index provider's consultation process or pursuant to other communications with the index provider.

The BlackRock Indexes

BlackRock High Yield Systematic Bond Index

The Underlying Index is maintained by the Index Provider. The Index Provider will also calculate the Underlying Index. The Fund will use the Underlying Index pursuant to a licensing agreement with the Index Provider. The license states that the Index Provider must provide the use of the Underlying Index and related intellectual property at no cost to the Fund.

<u>Number of Components: approximately 259</u>

Index Description. The BlackRock High Yield Systematic Bond Index measures the performance of U.S. dollar-denominated, high yield corporate bonds for sale in the U.S., as determined by the index provider. Component securities include publicly-issued debt of U.S. corporations, U.S. dollar-denominated, publicly issued debt of non-U.S. corporations or similar entities, and bonds offered pursuant to Rule 144A under the 1933 Act with or without registration rights. Components of the Underlying Index primarily include securities of industrials companies. The bonds in the index are referred to as "defensive" by comparison to other groupings of high yield bonds in market-value-weighted indexes because those included in the Underlying Index possess specific characteristics that the Underlying Index methodology has identified as reducing the risk of default.

The securities in the Underlying Index must meet eligibility criteria described in the "Index Methodology" section below. The Underlying Index determines constituent weights based on a proprietary methodology which first aims to systematically screen out certain bonds with the highest probability of default (a measure of credit quality) and then optimizes to improve risk-adjusted returns by weighting more heavily to bonds with attractive default-adjusted spreads (a measure of value) while mitigating portfolio risks and limiting turnover. Key investment characteristics like duration and yield are constrained to be within a specified range of a broader market-value-weighted high yield corporate bond universe. The Underlying Index is rebalanced on the last business day of each month.

Index Methodology. Bonds in the Underlying Index are selected from the universe of eligible bonds using defined rules. Securities that satisfy all the following defined criteria will be eligible for inclusion in the Underlying Index: (i) must be fixed-rate; (ii) must have a composite rating below investment grade; (iii) must be denominated in U.S. dollars; (iv) must have a current face amount outstanding of at least $350 million; and (v) must have at least one year remaining to final maturity. In determining whether a bond has a composite rating of below-investment grade, ratings from Moody's, S&P Global Ratings, or Fitch are considered. The securities in the Underlying Index must be rated below-investment grade, which is below Baa3 by Moody's or below BBB- by S&P Global Ratings or Fitch. Eligibility in the Underlying Index is determined by the middle of the three available ratings. When a rating from only two agencies is available, the lower rating is used. When a rating from only one agency is available, that rating is used to determine eligibility in the Underlying Index. The Underlying Index determines constituent weights by optimizing to maximize risk-adjusted returns, and the weights must be within a specified range around a broader market-value-weighted universe of high yield corporate bonds.

Component Selection Criteria. Eligible bonds are chosen by applying the eligibility rules and optimization methodology listed above. There is no maximum number of bond issues included per eligible issuer. The Underlying Index is updated monthly on the last business day of each month.

BlackRock Investment Grade Systematic Bond Index

The Underlying Index is maintained by the Index Provider. The Index Provider will also calculate the Underlying Index. The Fund will use the Underlying Index pursuant to a licensing agreement with the Index Provider. The license states that the Index Provider must provide the use of the Underlying Index and related intellectual property at no cost to the Fund.

Number of Components: approximately 422

Index Description. The BlackRock Investment Grade Systematic Bond Index measures the performance of U.S. dollar-denominated, investment-grade corporate bonds for sale in the U.S., as determined by the Index Provider. Component securities include publicly-issued debt of U.S. corporations and U.S. dollar-denominated, publicly issued debt of non-U.S. corporations or similar entities. Components of the Underlying Index primarily include securities of financials and industrials companies. The bonds in the index are referred to as "enhanced" by comparison to other groupings of investment grade bonds in market-value-weighted indexes because those included in the Underlying Index possess specific characteristics that the Underlying Index methodology has identified as providing superior risk-adjusted and total returns over longer periods of time.

The securities in the Underlying Index must meet eligibility criteria described in the "Index Methodology" section below. The Underlying Index determines constituent weights based on a proprietary methodology which first aims to systematically screen out certain bonds with the highest probability of default (a measure of credit quality) and then optimizes to improve risk-adjusted returns by weighting more heavily to bonds with attractive default-adjusted spreads (a measure of value) while mitigating portfolio risks and limiting turnover. This methodology, unlike the methodologies used by traditional capitalization-weighted bond indexes, selects a portion of the component bonds from the broader universe of investment-grade bonds based on the application of analytics measuring the probability of default. The resulting grouping of bonds is referred to as "enhanced," by comparison to other groupings of investment-grade bonds, because the Underlying Index seeks to provide superior risk-adjusted and total returns over longer periods of time than a comparable market capitalization weighted index. Key investment characteristics like duration are constrained to be within a specified range of a broader market-value-weighted investment-grade bond universe. The Underlying Index is rebalanced on the last business day of each month.

Index Methodology. Bonds in the Underlying Index are selected from the universe of eligible bonds using defined rules. Securities that satisfy all the following defined criteria will be eligible for inclusion in the Underlying Index: (i) must be fixed-rate, although they can carry a coupon that steps up (*i.e.*, changes according to a predetermined schedule); (ii) must have a composite rating of investment grade; (iii) must be denominated in U.S. dollars; (iv) must have a current face amount outstanding of at least $500 million or more; and (v) must have at least one year remaining to final maturity. Fixed-to-Float bonds are eligible, provided that there is a minimum of 12 months until the transition date to the floating rate period. In determining whether a bond has an average rating of investment grade, ratings from Moody's, S&P Global Ratings, or Fitch are considered. Securities in the Underlying Index must be rated investment grade or higher using the middle rating of Moody's, S&P Global Ratings, or Fitch. Eligibility in the Underlying Index is determined by the middle of the three available ratings. When a rating from only two agencies is available, the lower ("more conservative") rating is used. When a rating from only one agency is available, that rating is used to determine eligibility in the Underlying Index. The Underlying Index determines constituent weights by optimizing to maximize risk-adjusted returns, and the weights must be within a specified range around a broader market-value-weighted universe of investment grade corporate bonds.

Component Selection Criteria. Eligible bonds are chosen by applying the eligibility rules and optimization methodology listed above. There is no maximum number of bond issues included per eligible issuer. The Underlying Index is updated monthly on the last business day of each month.

BlackRock USD Systematic Bond Index

The Underlying Index is maintained by the Index Provider. The Index Provider will also calculate the Underlying Index. The Fund will use the Underlying Index pursuant to a licensing agreement with the Index Provider. The license states that the Index Provider must provide the use of the Underlying Index and related intellectual property at no cost to the Fund.

Number of Components: approximately 9,755

Index Description. The Underlying Index seeks to enhance the performance and balance return sources of the aggregate U.S. dollar-denominated bond market while retaining similar risk characteristics. Component securities include U.S. Treasury bonds with at least seven years to final maturity; mortgage-backed pass-through securities (MBS) and investment-grade and high yield U.S. and non-U.S. corporate bonds, each with at least one year to final maturity; and commercial mortgage-backed securities (CMBS) and asset-backed securities ("ABS") of any maturity. The Underlying Index includes bonds registered with the SEC or exempt from registration at the time of issuance or offered pursuant to Rule 144A with or without registration rights.

Index Methodology. The Underlying Index determines constituents and their weights based on a proprietary factor model that systematically applies (1) macroeconomic factor timing, (2) macroeconomic factor tilt, and (3) style factors. The first step of the factor model is macroeconomic factor timing, which considers high yield bond prices and the price momentum of high yield securities to determine the status of the economy (as reflected in the bond market) at a given point in time (*i.e.*, whether default risk is low, average and declining, average and increasing, or high). The status of the macroeconomic regime at rebalance is used to determine several features of the Underlying Index composition, including the duration and duration-times-spread ("DxS," which measures credit volatility) targets, as well as determining high yield and MBS sector allocations. The ABS and CMBS weights are then set in line with the weights in the iShares Core U.S. Aggregate Bond ETF.

The second step of the factor model is macroeconomic factor tilt, which assigns the Underlying Index's allocation to predetermined maturity bands of the yield curve, specifically (1) long-maturity U.S. Treasury bonds and (2) short- and intermediate-maturity investment grade corporate bonds in seeking to maximize total return per unit of risk (defined as duration for U.S. Treasuries and DxS for corporate bonds). The Underlying Index constituents are the result of an asset allocation optimization process that seeks maximum carry, the return generated from an investment in a higher yielding security over a lower yielding security, assuming prices remain constant, subject to the Underlying Index's duration and DxS targets.

The last step of the model is to select securities based on style factor attributes: quality and value. The quality factor seeks to reduce relative exposure to securities with the highest default risk, and the value factor seeks to increase the relative weight of bonds with lower market prices compared to other bonds with similar fundamental characteristics. The Underlying Index is rebalanced monthly.

Component Selection Criteria. Eligible bonds are chosen by applying the eligibility rules and optimization methodology listed above. There is no maximum number of bond issues included per eligible issuer. The Underlying Index is updated monthly on the last business day of each month.

The Bloomberg Indexes

The Bloomberg Indexes are maintained by Bloomberg Finance L.P. and its affiliates ("Bloomberg"), which is the index provider and is not affiliated with BFA. BFA will have no role in maintaining the Underlying Indexes.

To use the Bloomberg MSCI US Aggregate ESG Focus Index, Bloomberg MSCI US Corporate 1-5 Year ESG Focus Index, Bloomberg MSCI US Corporate ESG Focus Index and Bloomberg MSCI US Universal Choice ESG Screened Index, BFA or its affiliates have entered into a license agreement with MSCI ESG Research LLC ("MSCI ESG Research"), which may license the

Bloomberg MSCI US Aggregate ESG Focus Index, Bloomberg MSCI US Corporate 1-5 Year ESG Focus Index, Bloomberg MSCI US Corporate ESG Focus Index and Bloomberg MSCI US Universal Choice ESG Screened Index pursuant to its agreement with Bloomberg Index Services Limited (a subsidiary of Bloomberg) or an affiliate.

Bloomberg MSCI US Aggregate ESG Focus Index

Number of Components: approximately 8,031

Index Description. The Bloomberg MSCI US Aggregate ESG Focus Index, the Underlying Index, is designed to maximize exposure to favorable environmental, social and governance ("ESG") practices while seeking to exhibit risk and return characteristics similar to those of the Bloomberg US Aggregate Bond Index, the parent index. The Underlying Index is constructed by selecting constituents from the parent index and applying an optimization process to certain constituents using ESG rating inputs from MSCI ESG Research in an effort to maximize exposure to ESG factors for a target tracking error constraint of 10 basis points relative to the parent index. To construct the Underlying Index, the Fund's index provider begins with the parent index and replicates its U.S. Treasury bond, MBS, CMBS and ABS exposures. These exposures are preserved at the weights of the parent index and are not subject to the index provider's optimization process, which is a quantitative process that seeks to determine optimal weights for securities to maximize exposure to securities of entities with higher MSCI ESG Research ratings subject to seeking to maintain risk and return characteristics similar to the parent index. For the remaining constituents of the parent index, the index provider excludes securities of entities without an MSCI ESG Research rating and:

- tobacco producers or companies with 15% or more of their revenue derived from tobacco products;
- civilian firearms producers or retailers that derive 5% or more of their revenue, or more than $20 million in revenue, from civilian firearms-related products;
- cluster bomb, landmine, depleted uranium, or chemical/biological weapon systems or components manufacturers; and
- any issuer with 5% or more revenue derived from thermal coal (power and heat) or oil sands.

The index provider also excludes securities of entities involved in very severe business controversies (as determined by MSCI ESG Research), and then follows the index provider's optimization process. MSCI ESG Research identifies key ESG controversies, including, among other things, issues involving: (i) the environment (*e.g.*, biodiversity and land use, toxic emissions and waste, energy and climate change, water stress, non-hazardous operational waste, and supply chain management); (ii) human rights and communities (*e.g.*, impact on local communities, human rights concerns, and civil liberties); (iii) labor rights and supply chains (*e.g.*, child labor, collective bargaining and union, health and safety, discrimination and workforce diversity, and labor management relations); (iv) customers (*e.g.*, anti-competitive practices, customer relations, privacy and data security, product safety and quality, and marketing and advertising); and (v) governance (*e.g.*, bribery and fraud, governance structures, and controversial investments). MSCI ESG Research then rates each entity's exposure to these ESG issues and evaluates the extent to which the entity has created strategies and programs to manage ESG risks and opportunities. Entities are scored by MSCI ESG Research based on both their risk exposure and risk management, and then ranked in comparison to their industry peers. Using MSCI ESG Research's ESG ratings, the index provider then follows its optimization process.

Index Methodology. The Underlying Index consists of U.S. dollar-denominated, investment-grade bonds from issuers generally evaluated for favorable ESG practices (as determined by MSCI ESG Research) while seeking to exhibit risk and return characteristics similar to those of the parent index. The securities in the Underlying Index must have remaining maturities of greater than or equal to one year (except for ABS and CMBS, which must have a remaining average life of at least one year, and for MBS, which must have a weighted average maturity of at least one year). In addition, the securities included in the Underlying Index must be fixed-rate, taxable securities. The securities in the Underlying Index are updated on the last business day of each month.

Bloomberg MSCI US Corporate 1-5 Year ESG Focus Index

Number of Components: approximately 1,416

Index Description. The Bloomberg MSCI US Corporate 1-5 Year ESG Focus Index, the Underlying Index, is designed to maximize exposure to positive ESG characteristics while seeking to exhibit risk and return characteristics similar to those of the Bloomberg US Corporate 1-5 Years Index, the parent index. The Underlying Index is constructed by selecting constituents from the parent index through an optimization process using ESG rating inputs from MSCI ESG Research in an effort to maximize exposure to ESG factors for a target tracking error constraint of 10 basis points relative to the parent index. The Fund's index provider begins with the parent index, excludes securities of companies without an MSCI ESG Research rating and:

- tobacco producers or companies with 15% or more of their revenue derived from tobacco products;
- civilian firearms producers or retailers that derive 5% or more of their revenue, or more than $20 million in revenue, from civilian firearms-related products;
- cluster bomb, landmine, depleted uranium, or chemical/biological weapon systems or components manufacturers; and
- any issuer with 5% or more revenue derived from thermal coal (power and heat) or oil sands.

The index provider also excludes securities of companies involved in very severe business controversies (as determined by MSCI ESG Research), and then follows the index provider's optimization process. MSCI ESG Research identifies key ESG controversies, including, among other things, issues involving: (i) the environment (*e.g.,* biodiversity and land use, toxic emissions and waste, energy and climate change, water stress, non-hazardous operational waste, and supply chain management); (ii) human rights and communities (*e.g.,* impact on local communities, human rights concerns, and civil liberties); (iii) labor rights and supply chains (*e.g.,* child labor, collective bargaining and union, health and safety, discrimination and workforce diversity, and labor management relations); (iv) customers (*e.g.,* anti-competitive practices, customer relations, privacy and data security, product safety and quality, and marketing and advertising); and (v) governance (*e.g.,* bribery and fraud, governance structures, and controversial investments). MSCI ESG Research then rates each company's exposure to these ESG issues and evaluates the extent to which the company has created strategies and programs to manage ESG risks and opportunities. Companies are scored by MSCI ESG Research based on both their risk exposure and risk management, and then ranked in comparison to their industry peers. Using MSCI ESG Research's ESG ratings, the index provider then follows a quantitative process in an effort to determine optimal weights for securities to maximize exposure to securities of companies with higher ESG ratings subject to seeking to maintain risk and return characteristics similar to those of the parent index.

Index Methodology. The Underlying Index consists of U.S. dollar-denominated, investment-grade corporate bonds having remaining maturities between one and five years and issued by companies that have positive ESG characteristics (as determined by MSCI ESG Research ratings). In addition, the securities included in the Underlying Index must be fixed-rate, taxable corporate securities. Excluded from the Underlying Index include, but are not limited to, structured notes, private placements and floating rate securities. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last business day of each month.

Bloomberg MSCI US Corporate ESG Focus Index

Number of Components: approximately 3,738

Index Description. The Bloomberg MSCI US Corporate ESG Focus Index, the Underlying Index, is designed to maximize exposure to positive ESG characteristics while seeking to exhibit risk and return characteristics similar to those of the Bloomberg US Corporate Index, the parent index. The Underlying Index is constructed by selecting constituents from the parent index through an optimization process using ESG rating inputs from MSCI ESG Research in an effort to maximize exposure to ESG factors for a target tracking error constraint of 10 basis points relative to the parent index. The Fund's index provider begins with the parent index, excludes companies without an MSCI ESG Research rating and:

- tobacco producers or companies with 15% or more of their revenue derived from tobacco products;
- civilian firearms producers or retailers that derive 5% or more of their revenue, or more than $20 million in revenue, from civilian firearms-related products;
- cluster bomb, landmine, depleted uranium, or chemical/biological weapon systems or components manufacturers; and
- any issuer with 5% or more revenue derived from thermal coal (power and heat) or oil sands.

The index provider also excludes companies involved in very severe business controversies (as determined by MSCI ESG Research), and then follows the index provider's optimization process. MSCI ESG Research identifies key ESG controversies, including, among other things, issues involving: (i) the environment (*e.g.,* biodiversity and land use, toxic emissions and waste, energy and climate change, water stress, non-hazardous operational waste, and supply chain management); (ii) human rights and communities (*e.g.,* impact on local communities, human rights concerns, and civil liberties); (iii) labor rights and supply chains (*e.g.,* child labor, collective bargaining and union, health and safety, discrimination and workforce diversity, and labor management relations); (iv) customers (*e.g.,* anti-competitive practices, customer relations, privacy and data security, product safety and quality, and marketing and advertising); and (v) governance (*e.g.,* bribery and fraud, governance structures, and controversial investments). MSCI ESG Research then rates each company's exposure to these ESG issues and evaluates the extent to which the company has created strategies and programs to manage ESG risks and opportunities. Companies are scored by MSCI ESG Research based on both their risk exposure and risk management, and then ranked in comparison to their industry peers. Using MSCI ESG Research's ESG ratings, the index provider then follows a quantitative process in an effort to determine optimal weights for securities to maximize exposure to securities of companies with higher ESG ratings subject to seeking to maintain risk and return characteristics similar to those of the parent index.

Index Methodology. The Underlying Index consists of U.S. dollar-denominated, investment-grade corporate bonds issued by companies that have positive ESG characteristics (as determined by MSCI ESG Research ratings) and have remaining maturities of greater than or equal to one year. In addition, the securities included in the Underlying Index must be fixed-rate, taxable corporate securities. Excluded from the Underlying Index include, but are not limited to, structured notes, private placements and floating rate securities. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last business day of each month.

Bloomberg U.S. Agency Bond Index

Number of Components: approximately 447

Index Description. The Bloomberg U.S. Agency Bond Index measures the performance of the agency sector of the U.S. government bond market and is composed of investment-grade U.S. dollar-denominated publicly-issued government agency bonds or debentures. The Underlying Index includes callable and non-callable securities issued by U.S. government agencies, quasi-federal corporations (as described under *Index Methodology* below), and corporate or non-U.S. debt guaranteed by the U.S. government. In addition, the securities in the Underlying Index must be fixed-rate and non-convertible and have $300 million or more of outstanding face value. As of February 28, 2023, approximately 100% of the composite market value of the bonds represented in the Underlying Index was in the form of U.S. agency debentures. The largest issues within the Underlying Index were FHLB, Fannie Mae and Freddie Mac, with a composite market value weight in the Underlying Index of approximately 33.67%, 23.52%, and 18.34%, respectively.

Index Methodology. The Underlying Index measures the performance of both callable and non-callable U.S. dollar-denominated government agency debentures, including securities of the following categories:

- *U.S. government guaranteed securities:* corporate and non-U.S. issuances that carry direct guarantees from the U.S. government;
- *U.S. government owned, not guaranteed, securities:* issuances of quasi-federal corporations (*i.e.*, entities that are partially or wholly-owned by the U.S. government); such issuances generally carry no explicit guarantee of repayment from the U.S. government; and
- *U.S. government sponsored securities:* issuances of U.S. government sponsored entities (including Fannie Mae and Freddie Mac), which are not 100% government owned, but carry out government policies and benefit from implied involvement of central governments, such as by benefiting from certain government subsidies, credit provisions, or other government support; such issuances generally have no guarantees from the U.S. government.

The Underlying Index is market value weighted and the securities in the Underlying Index are updated on the last business day of each month.

The Underlying Index represents the U.S. Agency portion of the Bloomberg U.S. Aggregate Bond Index, whose eligible universe is defined by total market issuance, meeting the selection criteria mentioned above.

Index Maintenance. The Underlying Index constituents are reset on the last business day of each month and remain static throughout the month. The universe of Underlying Index constituents adjust for securities that become ineligible for inclusion in an Underlying Index during the month (*e.g.*, because of downgrades or called bonds) or for issues that are newly eligible (*e.g.*, up-grades or newly issued bonds) on the last business day of each month. The Bloomberg Indexes are valued using end of day bid side prices, as marked by Bloomberg. Intra-month cash flows contribute to monthly returns, but they are not reinvested during the month and do not earn a reinvestment return. Total returns are calculated based on the sum of price changes, gain/loss on repayments of principal, and coupon received or accrued, expressed as a percentage of beginning market value. The Bloomberg Indexes are calculated once a day and are available from major data vendors.

Bloomberg U.S. Aggregate Bond Index

Number of Components: approximately 13,263

Index Description. The Bloomberg U.S. Aggregate Bond Index represents the securities of the total U.S. investment-grade bond market.

Index Methodology. The Underlying Index provides a measure of the performance of the U.S. investment-grade bond market, which includes investment-grade (must be Baa3/BBB- or higher using the middle rating of Moody's, S&P Global Ratings, and Fitch) U.S. Treasury bonds, government-related bonds, investment-grade corporate bonds, MBS, CMBS and ABS that are publicly offered for sale in the U.S. The securities in the Underlying Index must have $300 million or more of outstanding face value and must have at least one year remaining to maturity, with the exception of amortizing securities such as ABS and MBS, which have lower minimum thresholds as defined by the index provider. In addition, the securities must be denominated in U.S. dollars and must be fixed-rate, non-convertible, and taxable. Certain types of securities, such as SLGs, are excluded from the Underlying Index. Also excluded from the Underlying Index are structured notes with embedded swaps or other special features, private placements, floating rate securities and Eurobonds. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last business day of each month. As of February 28, 2023, approximately 27.4% of the bonds represented in the Underlying Index were U.S. fixed-rate agency MBS. U.S. fixed-rate agency MBS are securities issued by entities such as Ginnie Mae, Freddie Mac and Fannie Mae that are backed by pools of mortgages. Most transactions in fixed-rate MBS occur through standardized contracts for future delivery in which the exact mortgage pools to be delivered are not specified until a few days prior to settlement (TBA transactions). The Fund may enter into such contracts on a regular basis. The Fund, pending settlement of such contracts, will invest its assets in high-quality, liquid short-term instruments, including shares of BlackRock Cash Funds. The Fund will assume its pro rata share of the fees and expenses of any money market fund that it may invest in, in addition to the Fund's own fees and expenses. The Fund may also acquire interests in mortgage pools through means other than such standardized contracts for future delivery.

Bloomberg U.S. Government/Credit Bond Index

Number of Components: approximately 9,060

Index Description. The Bloomberg U.S. Government/Credit Bond Index measures the performance of U.S. dollar-denominated U.S. Treasury bonds, government-related bonds (*i.e.*, U.S. and foreign agencies, sovereign, supranational and local authority debt), and investment-grade U.S. corporate bonds that have a remaining maturity of greater than or equal to one year.

Index Methodology. The Underlying Index consists of U.S. government, government-related and investment-grade U.S. credit securities that have greater than or equal to one year remaining to maturity and have more than $300 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed-rate and non-convertible. Excluded from the Underlying Index are certain special issues, such as TINs, SLGs, and coupon issues that have been stripped from assets that are already included in the Underlying Index. Also excluded from the Underlying Index are structured notes with embedded swaps or other special features, private placements, floating rate securities and Eurobonds. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last business day of each month.

Bloomberg U.S. Intermediate Government/Credit Bond Index

Number of Components: approximately 5,744

Index Description. The Bloomberg U.S. Intermediate Government/Credit Bond Index measures the performance of U.S. dollar-denominated U.S. Treasury bonds, government-related bonds (*i.e.*, U.S. and foreign agencies, sovereign, supranational and local authority debt), and investment-grade U.S. corporate bonds that have a remaining maturity of greater than one year and less than ten years.

Index Methodology. The Underlying Index consists of U.S. government, government-related and investment-grade U.S. credit securities that have greater than one year and less than ten years remaining to maturity and have more than $300 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed-rate and non-convertible. Excluded from the Underlying Index are certain special issues, such as TINs, SLGs, and coupon issues that have been stripped from assets that are already included in the Underlying Index. Also excluded from the Underlying Index are structured notes with embedded swaps or other special features, private placements, floating rate securities and Eurobonds. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last business day of each month.

Bloomberg U.S. MBS Index

Number of Components: approximately 921

Index Description. The Bloomberg U.S. MBS Index measures the performance of investment-grade MBS issued or guaranteed by U.S. government agencies. As of February 28, 2023, there were 921 issues in the Underlying Index.

Index Methodology. The Underlying Index includes fixed-rate MBS issued by Ginnie Mae, Freddie Mac, and Fannie Mae that have 30-, 15-, 20-year maturities. All securities in the Underlying Index must have a remaining weighted average maturity of at least one year. In addition, the securities in the Underlying Index must be denominated in U.S. dollars and must be non-convertible. The Underlying Index is market capitalization weighted, and the securities in the Underlying Index are updated on the last business day of each month. As of February 28, 2023, approximately 100% of the bonds represented in the Underlying Index were U.S. agency MBS. Most transactions in MBS occur through standardized contracts for future delivery in which the exact mortgage pools to be delivered are not specified until a few days prior to settlement (TBA transactions). The Fund may enter into such contracts for fixed-rate pass-through securities on a regular basis. The Fund, pending settlement of such contracts, will invest its assets in liquid, short-term instruments, including shares of BlackRock Cash Funds. The Fund will assume its pro rata share of the fees and expenses of any money market fund that it may invest in, in addition to the Fund's own fees and expenses. The Fund may also acquire interests in mortgage pools through means other than such standardized contracts for future delivery.

Bloomberg U.S. Universal 5-10 Year Index

Number of Components: approximately 6,678

Index Description. The Bloomberg U.S. Universal 5-10 Year Index measures the performance of U.S. dollar-denominated taxable bonds that are rated either investment-grade or high yield with remaining effective maturities between five and ten years.

Index Methodology. The Underlying Index includes U.S. Treasury bonds, government-related bonds (*i.e.*, U.S. and non-U.S. agencies, sovereign, quasi-sovereign, supranational and local authority debt), investment-grade and high yield U.S. corporate bonds, MBS, CMBS, ABS, Eurodollar bonds (*i.e.*, U.S. dollar-denominated bonds issued by foreign issuers outside the U.S.), bonds registered with the SEC or exempt from registration at the time of issuance, or offered pursuant to Rule 144A under the 1933 Act with or without registration rights ("Rule 144A Bonds") and emerging market bonds. The securities in the Underlying Index must be denominated in U.S. dollars and non-convertible. Excluded from the Underlying Index are tax-exempt municipal securities, coupon issues that have been stripped from bonds, structured notes, private placements (excluding Rule 144A Bonds) and inflation-linked bonds. A significant portion of the Underlying Index is comprised of MBS that include 20-year and 30-year mortgages. These MBS are included in the Underlying Index because their effective duration has historically been more consistent with the duration of non-callable 5-10 year bonds due to prepayments.

Bloomberg U.S. Universal 10+ Year Index

Number of Components: approximately 4,184

Index Description. The Bloomberg U.S. Universal 10+ Year Index measures the performance of U.S. dollar-denominated bonds that are rated either investment grade or high-yield with remaining maturities greater than ten years.

Index Methodology. The Underlying Index includes U.S. Treasury bonds, government-related bonds (*i.e.*, U.S. and non-U.S. agencies, sovereign, quasi-sovereign, supranational and local authority debt), investment-grade and high yield U.S. corporate bonds, Eurodollar bonds (*i.e.*, U.S. dollar-denominated bonds issued by foreign issuers outside the U.S.), bonds registered with the SEC or exempt from registration at the time of issuance, or offered pursuant to Rule 144A under the 1933 Act with or without registration rights ("Rule 144A Bonds") and emerging market bonds. The Underlying Index is a subset of the Bloomberg U.S. Universal Index. The securities in the Underlying Index must have at least 10 years remaining to maturity, or at least 10 years remaining to the first call date in the case of callable perpetual securities. In addition, the securities in the

Underlying Index must be denominated in U.S. dollars and be non-convertible. Excluded from the Underlying Index are tax-exempt municipal securities, coupon issues that have been stripped from bonds, structured notes and private placements (excluding Rule 144A Bonds). The Underlying Index is market-capitalization weighted and is rebalanced on the last day of the month.

The investment-grade securities in the Underlying Index have $300 million or more par amount outstanding and the high yield securities have $150 million or more par amount outstanding. The U.S. dollar-denominated emerging market bonds in the Underlying Index have $500 million or more at the security level and corporate issuers have $1 billion or more in outstanding debt. The SEC Rule 144A issues in the Underlying Index have $250 million or more par amount outstanding.

Bloomberg MSCI US Universal Choice ESG Screened Index

Number of Components: approximately 10,965

Index Description. The Bloomberg MSCI US Universal Choice ESG Screened Index is a modified market value-weighted index designed to reflect the performance of U.S. dollar-denominated taxable bonds with favorable ESG ratings (as determined by MSCI ESG Research) while applying extensive screens, including, for example, a screen which focuses on removing fossil fuel exposure. Bloomberg begins with the Bloomberg U.S. Universal Index (the “parent index”) and selects companies with favorable ESG ratings while excluding:

- All companies that derive 5% or more aggregate revenue from the production, distribution and retail, and all companies that produce, direct, or publish adult entertainment materials that fall into the following categories: producer of NC-17-rated films, pay-per-view programming or channels, sexually explicit video games, books or magazines with adult content, live entertainment of an adult nature, adults-only material on the internet;
- All companies classified as a “producer” that derive $500 million or 5% or more in revenue from manufacturing, distributing, retailing, licensing, and supplying alcoholic products, and all companies deriving 15% or more aggregate revenue from the manufacture, distribution, retailing, licensing, and supply of alcoholic products;
- All companies classified as involved in “operations” that derive $500 million or 5% or more in revenue from ownership or operation of gambling facilities, provision of key products or services fundamental to gambling operations, and licensing of gambling products, and all companies deriving 15% or more aggregate revenue from ownership or operation of gambling facilities, provision of key products or services fundamental to gambling operations, and licensing of gambling products;
- All companies that manufacture tobacco products, such as cigars, blunts, cigarettes, e-cigarettes, inhalers, beedis, kreteks, smokeless tobacco, snuff, snus, dissolvable and chewing tobacco (including companies that grow or process raw tobacco leaves), and all companies deriving 5% or more aggregate revenue from the manufacture, distribution, retailing, licensing, and supply of tobacco products;
- All companies deriving revenue from genetically modifying plants, such as seeds and crops, and other organisms intended for agricultural use or human consumption;
- All companies that manufacture cluster munitions whole weapons systems, components, or delivery platforms, all companies involved in the production of depleted uranium (DU) weapons, ammunition, and armor, including companies that manufacture armor piercing, fin stabilized, discarding sabot tracing rounds (APFSDS-T), kinetic Energy Missiles made with DU penetrators, and DU-enhanced armor, including composite tank armor, and all companies that manufacture landmines whole systems or components;
- All companies that manufacture nuclear warheads and/or whole nuclear missiles (including assembly and integration of warhead and missile body, as well as companies with contracts to operate/manage government-owned facilities that manufacture nuclear warheads and missiles), all companies that manufacture components that were developed or are significantly modified for exclusive use in nuclear weapons (warheads and missiles) (including companies with contracts to operate/manage government-owned facilities that manufacture components for nuclear warheads and missiles), all companies that manufacture or assemble delivery platforms that were developed or significantly modified for the exclusive delivery of nuclear weapons, all companies that manufacture components that were not developed or not significantly modified for exclusive use in nuclear weapons (warheads and missiles) but can be used in nuclear weapons, all companies that manufacture or assemble delivery platforms that were not developed or not significantly modified for the exclusive delivery of nuclear weapons but have the capability to deliver nuclear weapons, all companies that manufacture components for nuclear-exclusive delivery platforms, and all companies that manufacture components for dual-use delivery platforms;

- All companies that manufacture firearms and small arms ammunitions for civilian markets (but not including companies that cater to the military, government, and law enforcement markets), all companies deriving 5% or more aggregate revenue from the production and distribution (wholesale or retail) of firearms or small arms ammunition intended for civilian use, and all companies deriving $20 million or more revenue from the production and distribution (wholesale or retail) of firearms or small arms ammunition intended for civilian use;
- All companies deriving 5% or more revenue from the production of conventional weapons and components, all companies deriving 10% or more aggregate revenue from weapons systems, components, and support systems and services for conventional weapons;
- All companies deriving 50% or more revenue from involvement in the operation of “for profit prisons” (also known as “private prisons”) or the provision of integral services to these types of facilities;
- All companies deriving 5% or more revenue from products and services associated with certain controversial lending practices;
- All companies deriving revenue from cultivating oil palm trees and harvesting fresh fruit bunches (FFBs) used to produce palm oil products;
- All companies that own or operate nuclear power plants, own or operate active uranium mines, are involved in uranium enrichment and processing, are involved in the design and engineering of nuclear power reactors, or derive 15% or more aggregate revenue from ownership or operation of nuclear power plants and supply of key nuclear-specific products or services; and
- All companies that belong to the Bloomberg Energy Fixed Income Sector and all companies with an industry tie to fossil fuels (thermal coal, oil and gas) - in particular, reserve ownership, related revenues and power generation, but not including companies providing evidence of owning metallurgical coal reserves.

Additionally, Bloomberg excludes companies involved in very serious business controversies.

Index Methodology. The Underlying Index measures the performance of U.S. dollar-denominated taxable bonds that are rated either investment-grade or high yield and are from issuers generally evaluated for favorable ESG practices (as determined by MSCI ESG Research) while exhibiting risk and return characteristics similar to those of the parent index, which includes securities with at least one year until final maturity, without regard to optionality features such as call provisions or conversion provisions. The Underlying Index includes U.S. Treasury bonds, government-related bonds (*i.e.*, U.S. and non-U.S. agencies, sovereign, quasi-sovereign, supranational and local authority debt), investment-grade and high yield (as well as unrated) corporate bonds, mortgage-backed pass-through securities, CMBS, ABS, Eurodollar bonds, bonds registered with the SEC or exempt from registration at the time of issuance or offered pursuant to Rule 144A with or without registration rights and U.S. dollar-denominated emerging market bonds. The securities in the Underlying Index are updated on the last business day of each month.

The ICE® Securities Indexes

ICE 0-3 Month US Treasury Securities Index

<u>**Number of Components: approximately 39**</u>

Index Description. The ICE 0-3 Month US Treasury Securities Index measures the performance of public obligations of the U.S. Treasury that have a remaining maturity of less than or equal to three months.

Index Methodology. The Underlying Index is market value weighted based on amounts outstanding of issuances consisting of publicly issued U.S. Treasury securities with a remaining term to final maturity of less than or equal to three months as of the rebalance date and have $1 billion or more of outstanding face value, excluding amounts held by the Federal Reserve System Open Market Account. In addition, the securities in the Underlying Index must have a fixed coupon schedule and be denominated in U.S. dollars. Excluded from the Underlying Index are inflation-linked securities, cash management bills and zero-coupon bonds that have been stripped from coupon-paying bonds (*e.g.*, Separate Trading of Registered Interest and Principal of Securities). However, the amounts outstanding of qualifying coupon securities in the Underlying Index are not reduced by any individual components of such securities (*i.e.*, coupon or principal) that have been stripped after inclusion in the Underlying Index. Accrued interest is calculated assuming next day settlement. The Underlying Index is rebalanced on the last calendar day of each month. Cash flows from bond payments and redemptions are retained in the Underlying Index until end of the month and then removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the Underlying Index. New issues must be auctioned on or before the rebalancing date in order to qualify for the coming month.

ICE Short US Treasury Securities Index

Number of Components: approximately 104

Index Description. The ICE Short US Treasury Securities Index measures the performance of public obligations of the U.S. Treasury that have a remaining maturity of less than or equal to one year.

Index Methodology. The Underlying Index is market value weighted based on amounts outstanding of issuances consisting of publicly issued U.S. Treasury securities with at least 50 days to final maturity at the time of issuance, a remaining term to final maturity of less than or equal to one year as of the rebalance date and have $1 billion or more of outstanding face value, excluding amounts held by the Federal Reserve System Open Market Account. In addition, the securities in the Underlying Index must have a fixed coupon schedule and be denominated in U.S. dollars. Excluded from the Underlying Index are inflation-linked securities, cash management bills, and zero-coupon bonds that have been stripped from coupon-paying bonds (*e.g.*, Separate Trading of Registered Interest and Principal of Securities ("STRIPS")). However, the amounts outstanding of qualifying coupon securities in the Underlying Index are not reduced by any individual components of such securities *(i.e.*, coupon or principal) that have been stripped after inclusion in the Underlying Index. Accrued interest is calculated assuming next day settlement. The Underlying Index is rebalanced on the last calendar day of each month. Cash flows from bond payments and redemptions are retained in the Underlying Index until end of the month and then removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the Underlying Index. New issues must be auctioned on or before the rebalancing date in order to qualify for the coming month.

The ICE® BofA® Bond Indexes

ICE BofA 1-5 Year US Corporate Index

Number of Components: approximately 3,667

Index Description. The ICE BofA 1-5 Year US Corporate Index measures the performance of investment-grade corporate bonds of both U.S. and non-U.S. issuers that are U.S. dollar-denominated and publicly issued in the U.S. domestic market and have a remaining maturity of greater than or equal to one year and less than five years.

Index Methodology. The Underlying Index consists of investment-grade U.S. corporate bonds of both U.S. and non-U.S. issuers that have a remaining maturity of greater than or equal to one year and less than five years, have been publicly issued in the U.S. domestic market, and have more than $250 million or more of outstanding face value. The Index Provider deems securities as "investment grade" based on the average rating of Fitch (BBB or better), Moody's (Baa or better) and/or S&P Global Ratings are considered (BBB or better). In addition, the securities must be denominated in U.S. dollars and must be fixed-rate. Original issue zero coupon bonds, 144a securities (with and without registration rights), and pay-in-kind securities are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Excluded from the Underlying Index are equity-linked securities, securities in legal default, hybrid securitized corporate bonds, Eurodollar bonds (U.S. dollar-denominated securities not issued in the U.S. domestic market), taxable and tax-exempt U.S. municipal securities and dividends-received-deduction-eligible securities. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last calendar day of each month.

ICE BofA 5-10 Year US Corporate Index

Number of Components: approximately 2,634

Index Description. The ICE BofA 5-10 Year US Corporate Index measures the performance of investment-grade corporate bonds of both U.S. and non-U.S. issuers that are U.S. dollar-denominated and publicly issued in the U.S. domestic market and have a remaining maturity of greater than or equal to five years and less than ten years.

Index Methodology. The Underlying Index consists of investment-grade U.S. corporate bonds of both U.S. and non-U.S. issuers that have a remaining maturity of greater than or equal to five years and less than ten years, have been publicly issued in the U.S. domestic market, and have more than $250 million or more of outstanding face value. The Index Provider deems securities as "investment grade" based on the average rating of Fitch (BBB or better), Moody's (Baa or better) and/or S&P Global Ratings are considered (BBB or better). In addition, the securities must be denominated in U.S. dollars and must be fixed-rate. Original issue zero coupon bonds, 144a securities (with and without registration rights), and pay-in-kind securities are included in the index. Callable perpetual securities are included provided they are at least five years from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least five years from the last call prior to the date the bond transitions from a fixed to a floating rate security. Excluded from the Underlying Index are equity-linked securities, securities in legal default, hybrid securitized corporate bonds, Eurodollar bonds (U.S. dollar-denominated securities not issued in the U.S. domestic market), taxable and tax-exempt U.S. municipal securities and dividends-received-deduction-eligible securities. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last calendar day of each month.

ICE BofA 10+ Year US Corporate Index

Number of Components: approximately 3,530

Index Description. The ICE BofA 10+ Year US Corporate Index measures the performance of investment-grade corporate bonds of both U.S. and non-U.S. issuers that are U.S. dollar-denominated and publicly issued in the U.S. domestic market and have a remaining maturity of greater than or equal to ten years.

Index Methodology. The Underlying Index consists of investment-grade U.S. corporate bonds of both U.S. and non-U.S. issuers that have a remaining maturity of greater than or equal to ten years, have been publicly issued in the U.S. domestic market, and have more than $250 million or more of outstanding face value. The Index Provider deems securities as "investment grade" based on the average rating of Fitch (BBB or better), Moody's (Baa or better) and/or S&P Global Ratings are considered (BBB or better). In addition, the securities must be denominated in U.S. dollars and must be fixed-rate. Original issue zero coupon bonds, 144a securities (with and without registration rights), and pay-in-kind securities are included in the index. Callable perpetual securities are included provided they are at least ten years from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least ten years from the last call prior to the date the bond transitions from a fixed to a floating rate security. Excluded from the Underlying Index are equity-linked securities, securities in legal default, hybrid securitized corporate bonds, Eurodollar bonds (U.S. dollar-denominated securities not issued in the U.S. domestic market), taxable and tax-exempt U.S. municipal securities and dividends-received-deduction-eligible securities. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last calendar day of each month.

ICE BofA Long US Treasury Principal STRIPS Index

Number of Components: approximately 20

Index Description. The ICE BofA Long US Treasury Principal STRIPS Index measures the performance of long maturity Separate Trading of Registered Interest and Principal of Securities ("STRIPS") representing the final principal payment of U.S. Treasury bonds. Qualifying principal STRIPS must have at least 25 years remaining term to final maturity and must be stripped from U.S. Treasury bonds having at least $1 billion in outstanding face value.

Index Methodology. Underlying Index constituents are weighted based on the market price of each constituent multiplied by an assumed face value of $1 billion per constituent. The Underlying Index is rebalanced quarterly, on March 31, June 30, September 30 and December 31, based on information available up to and including the third business day before the last business day of the rebalancing month. Issues that meet the qualifying criteria are included in the Underlying Index for the following quarter. Constituents that no longer meet the criteria during the course of the quarter remain in the Underlying Index until the next rebalancing at which point they are removed from the Underlying Index.

ICE BofA US Corporate Index

Number of Components: approximately 9,831

Index Description. The ICE BofA US Corporate Index measures the performance of investment-grade corporate bonds of both U.S. and non-U.S. issuers that are U.S. dollar-denominated and publicly issued in the U.S. domestic market and have a remaining maturity of greater than or equal to one year. As of February 28, 2023, the Underlying Index included issuers from the following countries: Australia, Austria, Belgium, Bermuda, Brazil, Canada, Chile, China, Colombia, Czech Republic, Denmark, Finland, France, Germany, Hong Kong, India, Indonesia, Ireland, Israel, Italy, Japan, Kazakhstan, Kuwait, Luxembourg, Macau, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Panama, Peru, Portugal, Puerto Rico, Qatar, Saudi Arabia, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, the United Arab Emirates, the U.K. and the U.S.

Index Methodology. The Underlying Index consists of investment-grade U.S. corporate bonds of both U.S. and non-U.S. issuers that have a remaining maturity of greater than or equal to one year, have been publicly issued in the U.S. domestic market, and have more than $250 million or more of outstanding face value. The Index Provider deems securities as “investment grade” based on the average rating of Fitch (BBB or better), Moody’s (Baa or better) and/or S&P Global Ratings are considered (BBB or better). In addition, the securities must be denominated in U.S. dollars and must be fixed-rate. Original issue zero coupon bonds, 144a securities (with and without registration rights), and pay-in-kind securities are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Excluded from the Underlying Index are equity-linked securities, securities in legal default, hybrid securitized corporate bonds, Eurodollar bonds (U.S. dollar-denominated securities not issued in the U.S. domestic market), taxable and tax-exempt U.S. municipal securities and dividends-received-deduction-eligible securities. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last calendar day of each month.

The ICE® U.S. Treasury Bond Index Series

ICE U.S. Treasury 1-3 Year Bond Index

Number of Components: approximately 94

Index Description. The ICE U.S. Treasury 1-3 Year Bond Index measures the performance of public obligations of the U.S. Treasury that have a remaining maturity of greater than or equal to one year and less than three years.

Index Methodology. The Underlying Index consists of publicly-issued U.S. Treasury securities that have a remaining maturity of greater than or equal to one year and less than three years and have $300 million or more of outstanding face value, excluding amounts held by the Fed. In addition, the securities in the Underlying Index must be fixed-rate and denominated in U.S. dollars. Excluded from the Underlying Index are inflation-linked securities, Treasury bills, cash management bills, any government agency debt issued with or without a government guarantee and zero-coupon issues that have been stripped from coupon-paying bonds. The Underlying Index is market value weighted, and the securities in the Underlying Index are updated on the last business day of each month.

ICE U.S. Treasury 3-7 Year Bond Index

Number of Components: approximately 96

Index Description. The ICE U.S. Treasury 3-7 Year Bond Index measures the performance of public obligations of the U.S. Treasury that have a remaining maturity of greater than or equal to three years and less than seven years.

Index Methodology. The Underlying Index consists of publicly-issued U.S. Treasury securities that have a remaining maturity of greater than or equal to three years and less than seven years and have $300 million or more of outstanding face value, excluding amounts held by the Fed. In addition, the securities in the Underlying Index must be fixed-rate and denominated in U.S. dollars. Excluded from the Underlying Index are inflation-linked securities, Treasury bills, cash management bills, any government agency debt issued with or without a government guarantee and zero-coupon issues that have been stripped from coupon-paying bonds. The Underlying Index is market value weighted, and the securities in the Underlying Index are updated on the last business day of each month.

ICE U.S. Treasury 7-10 Year Bond Index

Number of Components: approximately 14

Index Description. The ICE U.S. Treasury 7-10 Year Bond Index measures the performance of public obligations of the U.S. Treasury that have a remaining maturity of greater than or equal to seven years and less than ten years.

Index Methodology. The Underlying Index consists of publicly-issued U.S. Treasury securities that have a remaining maturity of greater than or equal to seven years and less than ten years and have $300 million or more of outstanding face value, excluding amounts held by the Fed. In addition, the securities in the Underlying Index must be fixed-rate and denominated in U.S. dollars. Excluded from the Underlying Index are inflation-linked securities, Treasury bills, cash management bills, any government agency debt issued with or without a government guarantee and zero-coupon issues that have been stripped from coupon-paying bonds. The Underlying Index is market value weighted, and the securities in the Underlying Index are updated on the last business day of each month.

ICE U.S. Treasury 10-20 Year Bond Index

Number of Components: approximately 34

Index Description. The ICE U.S. Treasury 10-20 Year Bond Index measures the performance of public obligations of the U.S. Treasury that have a remaining maturity of greater than or equal to ten years and less than twenty years.

Index Methodology. The Underlying Index consists of publicly-issued U.S. Treasury securities that have a remaining maturity of greater than or equal to ten years and less than twenty years and have $300 million or more of outstanding face value, excluding amounts held by the Fed. In addition, the securities in the Underlying Index must be fixed-rate and denominated in U.S. dollars. Excluded from the Underlying Index are inflation-linked securities, Treasury bills, cash management bills, any government agency debt issued with or without a government guarantee and zero-coupon issues that have been stripped from coupon-paying bonds. The Underlying Index is market value weighted, and the securities in the Underlying Index are updated on the last business day of each month.

ICE U.S. Treasury 20+ Year Bond Index

Number of Components: approximately 40

Index Description. The ICE U.S. Treasury 20+ Year Bond Index measures the performance of public obligations of the U.S. Treasury that have a remaining maturity greater than or equal to twenty years.

Index Methodology. The Underlying Index consists of publicly-issued U.S. Treasury securities that have a remaining maturity greater than or equal to twenty years and have $300 million or more of outstanding face value, excluding amounts held by the Fed. In addition, the securities in the Underlying Index must be fixed-rate and denominated in U.S. dollars. Excluded from the Underlying Index are inflation-linked securities, Treasury bills, cash management bills, any government agency debt issued with or without a government guarantee and zero-coupon issues that have been stripped from coupon-paying bonds. The Underlying Index is market value weighted, and the securities in the Underlying Index are updated on the last business day of each month.

The ICE® AMT-Free US Municipal Index Series

ICE AMT-Free US Municipal Index series includes indexes that track the performance of U.S. dollar denominated investment grade tax-exempt debt publicly issued in the U.S. domestic market by U.S. states and their respective political subdivisions. Qualifying securities must be exempt from Federal income taxes and must not be subject to alternative minimum tax. In addition, qualifying securities must have at least one month remaining term to final maturity, a fixed coupon schedule (including zero coupon and step-up or stepdown bonds) and an investment grade rating (based on lowest rating of Moody’s, S&P and Fitch). Once a bond is removed from an index due to a downgrade it is not eligible to re-enter for six months. Unrated pre-refunded and escrowed-to-maturity securities qualify for inclusion provided they or their original security met the rating criterion at the point of pre-refunding or escrow. Remarketed mandatory put/tender securities are included in the index.

The ICE AMT-Free US Municipal Index series *excludes* the following instruments:

- Health, Hospital, Single-Family Housing, Multi-Family Housing and Tobacco sector bonds
- Securities issued for purposes of student loans, charter schools, prepaid gas or electric contracts, as well as for-profit industrial development or pollution control
- Securities supporting private activities, including convention centers, stadiums, cultural facilities, parks, recreation, housing and industrial development, that are not a general obligation of a state or municipality
- Securities issued for conduit obligors with use of proceeds related to student housing, waste removal, office buildings, shopping centers, airlines, hotels, telephone, electricity, private services and economic development
- Cash flow financing notes (BANs), other than grant anticipation notes
- Limited placement securities prior to the first settlement date

- Securities issued by U.S. territories (but debt issued by the District of Columbia is included)
- Taxable municipal securities
- Floating rate notes and variable rate demand obligations or notes
- Secondarily insured securities
- Custodial receipts
- Municipal commercial paper and auction-rate notes or bonds
- Private placements, 144A securities and securities issued under the Municipal Liquidity Facility
- Securities in legal default

Index constituents are market capitalization weighted, subject to the following capping mechanism and constraints:

- For each of the ICE AMT-Free US National Municipal Index and ICE Short Maturity AMT-Free US National Municipal Index, individual issuers are capped at 10% of the index, with any excess redistributed across the uncapped issuers of the index on a pro rata basis. For each of the ICE AMT-Free California Municipal Index and ICE AMT-Free New York Plus Municipal Index, individual issuers are capped at 25% of the index, with any excess redistributed across the uncapped issuers of the index on a pro rata basis.
- After applying the caps in step 1, the index is segmented into a large cap group, consisting of issuers with index weights greater than or equal to 5%, and a small cap group consisting of issuers with less than 5% weight in the index.
- Issuer weights in the small cap group are capped at 4.85%, with any excess redistributed across the remaining uncapped issuers' securities in the small cap group on a pro rata basis.
- For each of the ICE AMT-Free US National Municipal Index and ICE Short Maturity AMT-Free US National Municipal Index, if the combined weight of the large cap group is greater than 25% of the index, the weight of the group is reduced to 25%, with the weights of all issuers in the group reduced on a pro rata basis, provided no issuer is reduced below 5%. For each of the ICE AMT-Free California Municipal Index and ICE AMT-Free New York Plus Municipal Index, if the combined weight of the large cap group is greater than 50% of the index, the weight of the group is reduced to 50%, with the weights of all issuers in the group reduced on a pro rata basis, provided no issuer is reduced below 5%.
- Any excess weight resulting from the reduction of the large cap group weight in step 4 is redistributed across all issuers in the small cap group on a pro-rata basis, provided no issuer exceeds 4.85%.
- If all small cap issuers reach the 4.85% cap, any remaining excess weight is redistributed across all index issuers on a pro rata basis.

For purposes of applying the above caps, issuers are defined as issuing entities except for conduit debt, in which case the underlying issuer is used. In addition, an issuing entity's general obligation debt is considered to be issued by a separate, distinct issuer from revenue bonds issued by the same entity. Pre-refunded securities are not included in issuer weights and are not subject to any issuer caps, nor do they receive redistributions of any excess weights.

Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments, including interest coupons and principal repayments of maturing or called bonds that are received during the month, are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index. Information concerning constituent bond prices, timing and conventions and index governance and administration is provided in the ICE Bond Index Methodologies, which can be accessed on ICE's public website (https://indices.theice.com), or by sending a request to iceindices@theice.com.

Each index is rebalanced on the last calendar day of the month, based on information available up to and including the third business day before the last business day of the month. New issues must settle on or before the following calendar month end rebalancing date in order to qualify for the coming month (*e.g.*, an issue must settle on or before November 30 in order to be included in the index on October 31). No changes are made to constituent holdings other than on month end rebalancing dates.

ICE AMT-Free California Municipal Index

Number of Components: approximately 3,875

Index Description. The ICE AMT-Free California Municipal Index is a broad, comprehensive, market-value weighted index designed to measure the performance of investment grade tax-exempt debt publicly issued in the U.S. municipal bond market by the state of California and its political subdivisions.

Component Selection Criteria. Qualifying securities must have at least $15 million minimum par amount (*i.e.*, currently outstanding face value) and be part of a deal with an original offering size of at least $100 million.

ICE AMT-Free New York Plus Municipal Index

Number of Components: approximately 25,748 with approximately 6,514 from New York (representing 95% of the Underlying Index) and 19,234 from U.S. states excluding New York (representing 5% of the Underlying Index).

Index Description. The ICE AMT-Free New York Plus Municipal Index is a broad, comprehensive, market-value weighted index designed to measure the performance of investment grade tax-exempt debt publicly issued in the U.S. municipal bond market by the state of New York and its political subdivisions. The Underlying Index includes a 5% weighting to U.S. dollar denominated investment grade tax-exempt debt publicly issued in the U.S. domestic market by states other than New York and such states' political subdivisions.

Component Selection Criteria. Qualifying securities must have at least $5 million minimum par amount (*i.e.*, currently outstanding face value) and be part of a deal with an original offering size of at least $20 million.

ICE AMT-Free US National Municipal Index

Number of Components: approximately 22,659

Index Description. The ICE AMT-Free US National Municipal Index is a broad, comprehensive, market-value weighted index designed to measure the performance of investment-grade tax-exempt debt publicly issued in the U.S. municipal bond market.

Component Selection Criteria. Qualifying securities must have at least $15 million minimum par amount (*i.e.*, currently outstanding face value) and be part of a deal with an original offering size of at least $100 million.

ICE Short Maturity AMT-Free US National Municipal Index

Number of Components: approximately 23,025

Index Description. The ICE Short Maturity AMT-Free US National Municipal Index is a broad, comprehensive, market-value weighted index designed to measure the performance of short maturity investment grade tax-exempt debt publicly issued in the U.S. municipal bond market.

Component Selection Criteria. Qualifying securities must have at least one month but less than five years remaining term to final maturity, at least $5 million minimum par amount (*i.e.*, currently outstanding face value) and be part of a deal with an original offering size of at least $50 million.

The Markit iBoxx Indexes

iBoxx MSCI ESG Advanced USD Liquid Investment Grade Index

Number of Components: approximately 1,738

Index Description. The iBoxx MSCI ESG Advanced USD Liquid Investment Grade Index is designed to apply climate-based and values-based screens to the Markit iBoxx USD Liquid Investment Grade Index (the "parent index"), and also is designed to select issuers with average or above ESG ratings relative to their sector peers, as identified by MSCI ESG Research. The Underlying Index is a modified market value weighted index with a cap on each issuer of 3% of the Underlying Index at each monthly rebalancing.

Bonds with the following characteristics are included in the Underlying Index: fixed coupon bonds; step-up bonds; sinking funds and amortizing bonds; medium term notes; certain senior fixed-to-floating rate bonds; Rule 144A offerings with a registration right; callable bonds; and putable bonds.

The following bond types are specifically excluded from the Underlying Index: preferred shares; optionally and mandatory convertible bonds; subordinated bank or insurance debt with mandatory conversion features; bonds with other equity features attached; perpetual bonds; certain fixed-to-floater bonds; floating rate notes; pay-in kind bonds; zero coupon bonds; zero step-ups; bonds with differences between accrual and coupon payment periods; private placements; and retail bonds.

Index Methodology. To construct the Underlying Index, Markit begins with the parent index and then applies a series of climate-based and values-based screens.

The parent index is designed to reflect the performance of U.S. dollar-denominated investment grade corporate bonds that: (i) are issued by companies domiciled in countries classified as developed markets by Markit; (ii) have an average rating of investment grade (ratings from Fitch, Moody's, or S&P Global Ratings are considered; if more than one agency provides a rating, the average rating is attached to the bond); (iii) have at least $750 million of outstanding face value for the specific bond issue; (iv) are from issuers with at least $2 billion outstanding face value of all of the issuer's bonds eligible for inclusion in the parent index; and (v) have at least three years to maturity at rebalance (three years and six months to maturity for new index insertions). As of February 28, 2023, the Index Provider classifies the following countries as developed markets: Andorra, Australia, Austria, the Bahamas, Belgium, Bermuda, Brunei Darussalam, Canada, Cayman Islands, Cyprus, Denmark, Finland, France, Germany, Greece, Hong Kong, Iceland, Ireland, Israel, Italy, Japan, Liechtenstein, Luxembourg, Macao, Malta, the Netherlands, New Zealand, Norway, Portugal, San Marino, Singapore, Slovenia, Spain, Sweden, Switzerland, the U.K. and the U.S.

The climate-based screens remove issuers with an industry tie to fossil fuels (*e.g*., thermal coal, oil, and gas) including reserve ownership, related revenues and power generation (as determined by MSCI ESG Research); issuers classified by IHS Markit in the Oil and Gas Market Sector; and issuers with MSCI Environmental controversies scores below two (2). The values-based screens remove a variety of controversial business activities (as determined by MSCI ESG Research) including adult entertainment, alcohol, civilian firearms, controversial weapons, conventional weapons, for profit prisons, gambling, genetically modified organisms, nuclear power, nuclear weapons, palm oil, predatory lending, and tobacco based on revenue or percentage of revenue thresholds for certain categories (*e.g*. $500 million or 50%) and categorical exclusions for others (*e.g.* nuclear weapons). The values-based screens also remove issuers violating the United Nations Global Compact. Additionally, the index removes issuers with a MSCI ESG ratings below BBB and issuers with a MSCI ESG controversies score of less than one (1).

To determine if companies are involved in ESG controversies, MSCI assesses the possible negative environmental, social, and/or governance impact of a company's operations or products on a scale from zero to ten, with zero being the most severe controversy rating. To determine if companies are involved in environmental controversies, MSCI assesses the possible impact of a company's operations or products in environmental issues such as energy and climate change, land use and biodiversity, toxic emissions and waste, water stress and operational waste. The impact is rated on a scale from zero to ten, with zero being the most severe controversy rating. To determine ESG ratings, MSCI rates the ESG characteristics of securities on a scale of "CCC" (lowest) to "AAA" (highest). MSCI evaluates a company's risks and opportunities using a sector-specific ESG Key Issues ("Key Issues") (*e.g*., carbon emissions) selection and weighting model. Each company is scored on a scale of 0 to 10, with 10 being the highest, for each Key Issue before being provided an ESG rating based on average Key Issue score.

After applying the criteria mentioned above, the remaining securities are weighted based on market capitalization, with an issuer cap of 3% of the Underlying Index. The securities in the Underlying Index are updated on the last business day of each month.

The exact definitions for the business involvement screens mentioned above are:

- *Adult Entertainment*
  - all companies that produce, direct, or publish adult entertainment materials that fall into the following categories: producer of X-rated films, pay-per-view programming or channels, sexually explicit video games, books or magazines with adult content, live entertainment of an adult nature, adults-only material on the internet.
  - all companies deriving 5% or more aggregate revenue from the production, distribution and retail of adult entertainment materials.
- *Alcohol*

    - all companies classified as a “Producer” that derive 5% or more in revenue from manufacturing, distributing, retailing, licensing, and supplying alcoholic products.
    - all companies classified as a “Producer” that derive USD 500 million or more in revenue from manufacturing, distributing, retailing, licensing, and supplying alcoholic products.
    - all companies deriving 15% or more aggregate revenue from the manufacture, distribution, retailing, licensing, and supply of alcoholic products.
- *Civilian Firearms*
    - all companies that manufacture firearms and small arms ammunitions for civilian markets. It does not include companies that cater to the military, government, and law enforcement markets.
    - all companies deriving 5% or more aggregate revenue from the production and distribution (wholesale or retail) of firearms or small arms ammunition intended for civilian use.
    - all companies deriving USD 20 million or more revenue from the production and distribution (wholesale or retail) of firearms or small arms ammunition intended for civilian use.
- *Controversial Weapons*
    - all companies that manufacture cluster munitions whole weapons systems, components, or delivery platforms.
    - all companies that manufacture landmines whole systems or components.
    - all companies involved in the production of depleted uranium (DU) weapons, ammunition, and armor, including companies that manufacture armor piercing, fin stabilized, discarding sabot tracing rounds (APFSDS-T); Kinetic Energy Missiles made with DU penetrators; and DU-enhanced armor, including composite tank armor.
- *Conventional Weapons*
    - all companies deriving 5% or more revenue from the production of conventional weapons and components.
    - all companies deriving 10% or more aggregate revenue from weapons systems, components, and support systems and services.
- *For Profit Prisons*
    - all companies deriving 50% or more revenue from involvement in the operation of “For Profit Prisons” or the provision of integral services to these types of facilities. These facilities may be alternatively known as private prisons. Only excluded starting from March 31, 2020. Prior to March 31, 2020, exclusions were supplemented historically by using the March 31, 2020 starting universe of constituents to conservatively remove any issuers involved in the screen.
- *Gambling*
    - all companies classified as involved in “Operations” that derive 5% or more in revenue from ownership or operation of gambling facilities, provision of key products or services fundamental to gambling operations, and licensing of gambling products.
    - all companies classified as involved in “Operations” that derive USD 500 million or more in revenue from ownership or operation of gambling facilities, provision of key products or services fundamental to gambling operations, and licensing of gambling products.
    - all companies deriving 15% or more aggregate revenue from ownership or operation of gambling facilities, provision of key products or services fundamental to gambling operations, and licensing of gambling products.
- *Genetically Modified Organisms*
    - all companies deriving more than 0% revenue from genetically modifying plants, such as seeds and crops, and other organisms intended for agricultural use or human consumption.
- *Nuclear Power*
    - all companies that own or operate nuclear power plants.

    - all companies that own or operate active uranium mines.
    - all companies that are involved in uranium enrichment and processing.
    - all companies that are involved in the design and engineering of nuclear power reactors.
    - all companies deriving 15% or more aggregate revenue from ownership or operation of nuclear power plants and supply of key nuclear-specific products or services.
- *Nuclear Weapons*
    - all companies that manufacture nuclear warheads and/or whole nuclear missiles. It includes assembly and integration of warhead and missile body, as well as companies with contracts to operate/manage government-owned facilities that manufacture nuclear warheads and missiles.
    - all companies that manufacture components that were developed or are significantly modified for exclusive use in nuclear weapons (warheads and missiles). It includes companies with contracts to operate/manage government-owned facilities that manufacture components for nuclear warheads and missiles.
    - all companies that manufacture or assemble delivery platforms that were developed or significantly modified for the exclusive delivery of nuclear weapons.
    - all companies that manufacture components that were not developed or not significantly modified for exclusive use in nuclear weapons (warheads and missiles) but can be used in nuclear weapons.
    - all companies that manufacture or assemble delivery platforms that were not developed or not significantly modified for the exclusive delivery of nuclear weapons but have the capability to deliver nuclear weapons.
    - all companies that manufacture components for nuclear-exclusive delivery platforms.
    - all companies that manufacture components for dual-use delivery platforms.
- *Palm Oil*
    - all companies deriving more than 0% revenue from cultivating oil palm trees and harvesting fresh fruit bunches (FFBs) used to produce palm oil products. Only excluded starting from March 31, 2020. Prior to March 31, 2020, exclusions were supplemented historically by using the March 31, 2020 starting universe of constituents to conservatively remove any issuers involved in the screen.
- *Predatory Lending*
    - all companies deriving 5% or more revenue from products and services associated with certain controversial lending practice.
- *Tobacco*
    - all companies that manufacture tobacco products, such as cigars, blunts, cigarettes, e-cigarettes, inhalers, beedis, kreteks, smokeless tobacco, snuff, snus, dissolvable and chewing tobacco. It includes companies that grow or process raw tobacco leaves.
    - all companies deriving 5% or more aggregate revenue from the manufacture, distribution, retailing, licensing, and supply of tobacco products.
- *Fossil Fuels*
    - all companies that have an industry tie to fossil fuels (thermal coal, oil and gas) – in particular, reserve ownership, related revenues and power generation. This list does not include companies providing evidence of owning metallurgical coal reserves.

iBoxx USD Liquid Investment Grade BBB 0+ Index

Number of Components: approximately 2,843

Index Description. The iBoxx USD Liquid Investment Grade BBB 0+ Index is designed to reflect the performance of BBB (or its equivalent) fixed rate U.S. dollar-denominated bonds issued by U.S. and non-U.S. corporate issuers (as determined by Markit. Securities of varying maturities are eligible for inclusion in the Underlying Index. The Underlying Index offers exposure to liquid (according to Markit's liquidity screens, which could vary from other measures of liquidity) investment-grade corporate bonds and is rebalanced on a monthly basis. Only bonds from large issuers with at least $1 billion in aggregate outstanding issuance and $500 million face value per bond are included in the Underlying Index. The Underlying Index uses a modified market-value weighted methodology with a cap on each issuer of 3%.

Index Methodology. Bonds in the Underlying Index are selected from the universe of eligible bonds using defined rules. Currently, the bonds eligible for inclusion in the Underlying Index include fixed rate U.S. dollar-denominated corporate bonds that: (i) are issued by issuers domiciled in the countries classified as developed markets by the index provider; (ii) are rated BBB, or equivalently, by Fitch, Moody's, or S&P Global Ratings; (iii) are from issuers with at least $1 billion aggregate outstanding face value; (iv) have at least $500 million of outstanding face value; (v) have a time to maturity of at least one year at issuance; and (vi) have at least six months to maturity for new index insertions. However, existing bonds in the index are held to maturity.

Component Selection Criteria. Eligible bonds are chosen by applying the eligibility rules listed above. The Underlying Index is a modified market-value weighted index with a cap on each issuer at 3%. There is no maximum number of bond issues per issuer eligible, but to avoid an over-concentration in any single-issuer, the methodology caps single-issuer exposure to no more than 3% of the index weight. The Underlying Index is updated monthly on the last business day of each month.

The composition of the Underlying Index is held constant for any given calendar month to ensure continuity during the month and to avoid jumps unrelated to the price movements of the bonds. The inclusion and exclusion criteria above are applied at month-end. Bonds that were in the Underlying Index, but that no longer satisfy all the criteria at month-end, will be removed from the Underlying Index. A bond that drops out of the Underlying Index at the rebalancing day is excluded from reentering the index for a three-month period. The rule for the lockout period takes precedence over the other rules for the Underlying Index selection. A locked out bond will not be selected, even if it qualifies for the index. If a bond becomes eligible in the middle of the month, it will still need to satisfy the criteria at the end of the month, and can be included only upon rebalancing at month-end. Any bond that enters the Underlying Index must remain in the Underlying Index for a minimum of six months provided it is not downgraded to sub-investment grade, defaulted or fully redeemed in that period. Existing bonds in the Underlying Index that receive a rating upgrade can remain in the index if the six-month minimum has not been satisfied. When a bond is called, it remains in the Underlying Index at its call price until the end of the month, after which it is removed. Changes in issue size that take place during the month are taken into consideration only at the next rebalancing date.

Markit iBoxx® USD Liquid High Yield Index

Number of Components: approximately 1,175

Index Description. The Markit iBoxx® USD Liquid High Yield Index measures the performance of the liquid high yield corporate bond market. As of February 28, 2023, the Underlying Index is a rules-based index consisting of approximately 1,175 liquid high yield, U.S. dollar-denominated corporate bonds that seeks to maximize liquidity while maintaining representation of the broader corporate bond market.

Index Methodology. The Underlying Index is a subset of a broader high yield universe of sub- investment-grade bonds. Bonds in the Underlying Index are selected from the universe of eligible bonds in the Markit iBoxx USD Corporate Bond Index using defined rules. The bonds eligible for inclusion in the Underlying Index include U.S. dollar-denominated corporate bonds that: (i) are issued by companies domiciled in the countries classified as developed markets by the index provider; (ii) have an average rating of sub-investment grade (ratings from Fitch, Moody's or S&P Global Ratings are considered; if more than one agency provides a rating, the average rating is attached to the bond); (iii) are from issuers with at least $1 billion of outstanding face value (iv) are bond issues with at least $400 million of outstanding face value; (v) have an original maturity date of less than 15 years; (vi) have at least one year remaining to maturity; and (vii) have at least one year and 6 months to maturity for new index insertions.

Component Selection Criteria. Eligible bonds are chosen by applying the eligibility rules listed above. The Underlying Index is a modified market value weighted index with a cap on each issuer at 3%. There is no maximum number of bond issues per issuer eligible, but to avoid an over-concentration in any single-issuer, the methodology caps single-issuer exposure to no more than 3% of the index weight, calculated on the last business day of each month. The Underlying Index is updated monthly on the last business day of each month.

Markit iBoxx® USD Liquid Investment Grade Index

Number of Components: approximately 2,570

Index Description. The Markit iBoxx® USD Liquid Investment Grade Index measures the performance as of February 28, 2023, of approximately 2,570 highly liquid investment-grade corporate bonds. The Underlying Index is a rules-based index consisting of highly liquid, investment-grade, U.S. dollar-denominated corporate bonds that seeks to maximize liquidity while maintaining representation of the broader corporate bond market.

Index Methodology. The Underlying Index is a subset of the Markit iBoxx USD Corporate Bond Index, which as of February 28, 2023 is an index of 7,573 investment-grade bonds. Bonds in the Underlying Index are selected from the universe of eligible bonds in the Markit iBoxx USD Corporate Bond Index using defined rules. Currently, the bonds eligible for inclusion in the Underlying Index consist of U.S. dollar-denominated corporate bonds that: (i) are issued by companies domiciled in the countries classified as developed markets by the index provider; (ii) have an average rating of investment grade (ratings from Fitch, Moody's, or S&P Global Ratings are considered; if more than one agency provides a rating, the average rating is attached to the bond); (iii) are from issuers with at least $2 billion outstanding face value; (iv) have at least $750 million of outstanding face value; (v) have at least three years to maturity; and (vi) have at least three years and 6 months to maturity for new index insertions.

Component Selection Criteria. Eligible bonds are chosen by applying the eligibility rules listed above. The Underlying Index is a modified market value weighted index with a cap on each issuer at 3%. The number of bonds in the Underlying Index may change and there is no constraint on the number of index constituents. There is no maximum number of bond issues per issuer eligible, but to avoid an over-concentration in any single-issuer, the methodology caps single-issuer exposure to no more than 3% of the index weight, calculated on the last business day of each month. The Underlying Index is updated monthly on the last business day of each month.

The composition of the Underlying Index is held constant for any given calendar month to ensure continuity during the month and to avoid jumps unrelated to the price movements of the bonds. The inclusion and exclusion criteria above are applied at month-end, after the close of business. Bonds that were in the Underlying Index, but that no longer satisfy all the criteria at month-end, will be removed from the Underlying Index. If a bond becomes eligible in the middle of the month, it will still need to satisfy the criteria at the end of the month, and can be included only upon rebalancing at month-end. When a bond is called, it remains in the Underlying Index at its call price until the end of the month, after which it is removed. Changes in issue size that take place during the month are taken into consideration only at the next rebalancing date.

Markit® and iBoxx® are registered trademarks of Markit Group Limited and Markit Indices Limited, respectively. The methodologies of the iBoxx® indexes are owned by Markit Indices Limited and may be covered by one or more patents or pending patent applications.

Investment Policies

The Board has adopted as fundamental policies the following numbered investment policies, which cannot be changed without the approval of the holders of a majority of the applicable Fund's outstanding voting securities. A vote of a majority of the outstanding voting securities of a Fund is defined in the 1940 Act as the lesser of (i) 67% or more of the voting securities present at a shareholder meeting, if the holders of more than 50% of the outstanding voting securities of the Fund are present or represented by proxy, or (ii) more than 50% of the outstanding voting securities of the Fund. Each Fund has also adopted certain non-fundamental investment policies, including its investment objective. Non-fundamental investment policies may be changed by the Board without shareholder approval. Therefore, each Fund may change its investment objective and its Underlying Index without shareholder approval.

Fundamental Investment Policies

The iShares 1-3 Year Treasury Bond ETF, iShares 7-10 Year Treasury Bond ETF, iShares 20+ Year Treasury Bond ETF, iShares Core U.S. Aggregate Bond ETF and iShares iBoxx $ Investment Grade Corporate Bond ETF will not:

1. Concentrate its investments (*i.e.*, invest 25% or more of its total assets in the securities of a particular industry or group of industries), except that a Fund will concentrate to approximately the same extent that its Underlying Index concentrates in the securities of such particular industry or group of industries. For purposes of this limitation, securities of the U.S. government (including its agencies and instrumentalities), repurchase agreements collateralized by U.S. government securities, and securities of state or municipal governments and their political subdivisions are not considered to be issued by members of any industry.

2. Borrow money, except that (i) each Fund may borrow from banks for temporary or emergency (not leveraging) purposes, including the meeting of redemption requests which might otherwise require the untimely disposition of securities; and (ii) each Fund may, to the extent consistent with its investment policies, enter into repurchase agreements, reverse repurchase agreements, forward roll transactions and similar investment strategies and techniques. To the extent that it engages in transactions described in (i) and (ii), each Fund will be limited so that no more than 33 1/3% of the value of its total assets (including the amount borrowed) is derived from such transactions. Any borrowings which come to exceed this amount will be reduced in accordance with applicable law.
3. Issue any senior security, except as permitted under the 1940 Act, as interpreted, modified or otherwise permitted by regulatory authority having jurisdiction, from time to time.
4. Make loans, except as permitted under the 1940 Act, as interpreted, modified or otherwise permitted by regulatory authority having jurisdiction, from time to time.
5. Purchase or sell real estate, real estate mortgages, commodities or commodity contracts, but this restriction shall not prevent each Fund from trading in futures contracts and options on futures contracts (including options on currencies to the extent consistent with each Fund's investment objective and policies). (Notwithstanding the foregoing, the iShares Core U.S. Aggregate Bond ETF may purchase or sell MBS, commercial MBS and real estate mortgages.)
6. Engage in the business of underwriting securities issued by other persons, except to the extent that each Fund may technically be deemed to be an underwriter under the 1933 Act, in disposing of portfolio securities.

The iShares 1-5 Year Investment Grade Corporate Bond ETF, iShares 3-7 Year Treasury Bond ETF, iShares 5-10 Year Investment Grade Corporate Bond ETF, iShares 10+ Year Investment Grade Corporate Bond ETF, iShares 10-20 Year Treasury Bond ETF, iShares Agency Bond ETF, iShares Broad USD Investment Grade Corporate Bond ETF, iShares California Muni Bond ETF, iShares Core 10+ Year USD Bond ETF, iShares Government/Credit Bond ETF, iShares iBoxx $ High Yield Corporate Bond ETF, iShares Intermediate Government/Credit Bond ETF, iShares MBS ETF, iShares National Muni Bond ETF, iShares New York Muni Bond ETF, iShares Short-Term National Muni Bond ETF and iShares Short Treasury Bond ETF will not:

1. Concentrate its investments (*i.e.*, invest 25% or more of its total assets in the securities of a particular industry or group of industries), except that a Fund will concentrate to approximately the same extent that its Underlying Index concentrates in the securities of such particular industry or group of industries. For purposes of this limitation, securities of the U.S. government (including its agencies and instrumentalities), repurchase agreements collateralized by U.S. government securities, and securities of state or municipal governments and their political subdivisions are not considered to be issued by members of any industry.
2. Borrow money, except that (i) each Fund may borrow from banks for temporary or emergency (not leveraging) purposes, including the meeting of redemption requests which might otherwise require the untimely disposition of securities, and (ii) each Fund may, to the extent consistent with its investment policies, enter into repurchase agreements, reverse repurchase agreements, forward roll transactions and similar investment strategies and techniques. To the extent that it engages in transactions described in (i) and (ii), each Fund will be limited so that no more than 33 1/3% of the value of its total assets (including the amount borrowed) is derived from such transactions. Any borrowings which come to exceed this amount will be reduced in accordance with applicable law.
3. Issue any senior security, except as permitted under the 1940 Act, as amended, and as interpreted, modified or otherwise permitted by regulatory authority having jurisdiction, from time to time.
4. Make loans, except as permitted under the 1940 Act, as interpreted, modified or otherwise permitted by regulatory authority having jurisdiction, from time to time.
5. Purchase or sell real estate unless acquired as a result of ownership of securities or other instruments (but this restriction shall not prevent each Fund from investing in securities of companies engaged in the real estate business or securities or other instruments backed by real estate or mortgages), or commodities or commodity contracts (but this restriction shall not prevent each Fund from trading in futures contracts and options on futures contracts, including options on currencies to the extent consistent with each Fund's investment objective and policies).
6. Engage in the business of underwriting securities issued by other persons, except to the extent that each Fund may technically be deemed to be an underwriter under the 1933 Act, in disposing of portfolio securities.

The iShares 0-3 Month Treasury Bond ETF, iShares 25+ Year Treasury STRIPS Bond ETF, iShares BBB Rated Corporate Bond ETF, iShares Core 5-10 Year USD Bond ETF, iShares ESG Advanced Investment Grade Corporate Bond ETF, iShares ESG Advanced Total USD Bond Market ETF, iShares ESG Aware 1-5 Year USD Corporate Bond ETF, iShares ESG Aware U.S.

Aggregate Bond ETF, iShares ESG Aware USD Corporate Bond ETF, iShares High Yield Systematic Bond ETF, iShares Investment Grade Systematic Bond ETF and iShares USD Systematic Bond ETF may not:

1. Concentrate its investments in a particular industry, as that term is used in the 1940 Act, except that a Fund will concentrate to approximately the same extent that its Underlying Index concentrates in the securities of a particular industry or group of industries.
2. Borrow money, except as permitted under the 1940 Act.
3. Issue senior securities to the extent such issuance would violate the 1940 Act.
4. Purchase or hold real estate, except the Fund may purchase and hold securities or other instruments that are secured by, or linked to, real estate or interests therein, securities of REITs, mortgage-related securities and securities of issuers engaged in the real estate business, and the Fund may purchase and hold real estate as a result of the ownership of securities or other instruments.
5. Underwrite securities issued by others, except to the extent that the sale of portfolio securities by the Fund may be deemed to be an underwriting or as otherwise permitted by applicable law.
6. Purchase or sell commodities or commodity contracts, except as permitted by the 1940 Act.
7. Make loans to the extent prohibited by the 1940 Act.

Notations Regarding each of the iShares 0-3 Month Treasury Bond ETF's, iShares 25+ Year Treasury STRIPS Bond ETF's, iShares BBB Rated Corporate Bond ETF's, iShares Core 5-10 Year USD Bond ETF's, iShares ESG Advanced Investment Grade Corporate Bond ETF's, iShares ESG Advanced Total USD Bond Market ETF's, iShares ESG Aware 1-5 Year USD Corporate Bond ETF's, iShares ESG Aware U.S. Aggregate Bond ETF's, iShares ESG Aware USD Corporate Bond ETF's, iShares High Yield Systematic Bond ETF's, iShares Investment Grade Systematic Bond ETF's and iShares USD Systematic Bond ETF's Fundamental Investment Policies

The following notations are not considered to be part of each Fund's fundamental investment policies and are subject to change without shareholder approval.

With respect to the fundamental policy relating to concentration set forth in (1) above, the Investment Company Act does not define what constitutes "concentration" in an industry. The SEC staff has taken the position that investment of 25% or more of a fund's total assets in one or more issuers conducting their principal activities in the same industry or group of industries constitutes concentration. It is possible that interpretations of concentration could change in the future. The policy in (1) above will be interpreted to refer to concentration as that term may be interpreted from time to time. The policy also will be interpreted to permit investment without limit in the following: securities of the U.S. government and its agencies or instrumentalities; securities of state, territory, possession or municipal governments and their authorities, agencies, instrumentalities or political subdivisions; and repurchase agreements collateralized by any such obligations. Accordingly, issuers of the foregoing securities will not be considered to be members of any industry. There also will be no limit on investment in issuers domiciled in a single jurisdiction or country. Finance companies will be considered to be in the industries of their parents if their activities are primarily related to financing the activities of the parents. Each foreign government will be considered to be a member of a separate industry. With respect to each Fund's industry classifications, each Fund currently utilizes any one or more of the industry sub-classifications used by one or more widely recognized market indexes or rating group indexes, and/or as defined by Fund management. The policy also will be interpreted to give broad authority to each Fund as to how to classify issuers within or among industries.

With respect to the fundamental policy relating to borrowing money set forth in (2) above, the Investment Company Act permits each Fund to borrow money in amounts of up to one-third of the Fund's total assets from banks for any purpose, and to borrow up to 5% of the Fund's total assets from banks or other lenders for temporary purposes. (The Fund's total assets include the amounts being borrowed.) To limit the risks attendant to borrowing, the Investment Company Act requires each Fund to maintain at all times an "asset coverage" of at least 300% of the amount of its borrowings. Asset coverage means the ratio that the value of each Fund's total assets (including amounts borrowed), minus liabilities other than borrowings, bears to the aggregate amount of all borrowings. Borrowing money to increase portfolio holdings is known as "leveraging." Certain trading practices and investments, such as reverse repurchase agreements, may be considered to be borrowings or involve leverage and thus are subject to the Investment Company Act restrictions. In accordance with Rule 18f-4 under the Investment Company Act, when each Fund engages in reverse repurchase agreements and similar financing transactions, the Fund may either (i) maintain asset coverage of at least 300% with respect to such transactions and any other borrowings in the aggregate, or (ii) treat such transactions as "derivatives transactions" and comply with Rule 18f-4 with respect to such transactions. Short-term credits necessary for the settlement of securities transactions and arrangements with respect to securities lending will not be considered to be borrowings under the policy. Practices and investments that may involve leverage but are not considered to be borrowings are not subject to the policy.

With respect to the fundamental policy relating to underwriting set forth in (5) above, the Investment Company Act does not prohibit a fund from engaging in the underwriting business or from underwriting the securities of other issuers; in fact, in the case of diversified funds, the Investment Company Act permits a fund to have underwriting commitments of up to 25% of its assets under certain circumstances. Those circumstances currently are that the amount of a fund's underwriting commitments, when added to the value of a fund's investments in issuers where a fund owns more than 10% of the outstanding voting securities of those issuers, cannot exceed the 25% cap. A fund engaging in transactions involving the acquisition or disposition of portfolio securities may be considered to be an underwriter under the 1933 Act. Although it is not believed that the application of the 1933 Act provisions described above would cause a fund to be engaged in the business of underwriting, the policy in (5) above will be interpreted not to prevent a fund from engaging in transactions involving the acquisition or disposition of portfolio securities, regardless of whether a fund may be considered to be an underwriter under the 1933 Act or is otherwise engaged in the underwriting business to the extent permitted by applicable law.

With respect to the fundamental policy relating to lending set forth in (7) above, the Investment Company Act does not prohibit each Fund from making loans (including lending its securities); however, SEC staff interpretations currently prohibit funds from lending more than one-third of their total assets (including lending its securities), except through the purchase of debt obligations or the use of repurchase agreements. In addition, collateral arrangements with respect to options, forward currency and futures transactions and other derivative instruments (as applicable), as well as delays in the settlement of securities transactions, will not be considered loans.

Non-Fundamental Investment Policies

The iShares 0-3 Month Treasury Bond ETF, iShares 25+ Year Treasury STRIPS Bond ETF, iShares BBB Rated Corporate Bond ETF, iShares Core 5-10 Year USD Bond ETF, iShares ESG Advanced Investment Grade Corporate Bond ETF, iShares ESG Advanced Total USD Bond Market ETF, iShares ESG Aware 1-5 Year USD Corporate Bond ETF, iShares ESG Aware U.S. Aggregate Bond ETF, iShares ESG Aware USD Corporate Bond ETF, iShares High Yield Systematic Bond ETF, iShares Investment Grade Systematic Bond ETF and iShares USD Systematic Bond ETF.

Each Fund has adopted a non-fundamental policy not to make short sales of securities or maintain a short position, except to the extent permitted by each Fund's Prospectus and SAI, as amended from time to time, and applicable law.

All funds other than the iShares 0-3 Month Treasury Bond ETF, iShares 25+ Year Treasury STRIPS Bond ETF, iShares BBB Rated Corporate Bond ETF, iShares Core 5-10 Year USD Bond ETF, iShares ESG Advanced Investment Grade Corporate Bond ETF, iShares ESG Advanced Total USD Bond Market ETF, iShares ESG Aware 1-5 Year USD Corporate Bond ETF, iShares ESG Aware U.S. Aggregate Bond ETF, iShares ESG Aware USD Corporate Bond ETF, iShares High Yield Systematic Bond ETF, iShares Investment Grade Systematic Bond ETF and iShares USD Systematic Bond ETF.

In addition to the investment restrictions adopted as fundamental policies, set forth above, each Fund has adopted a non-fundamental policy not to invest in the securities of a company for the purpose of exercising management or control, or purchase or otherwise acquire any illiquid investment, except as permitted under the 1940 Act, which currently limits each Fund's holdings in illiquid investments to 15% of a Fund's net assets. BFA monitors Fund holdings in illiquid investments pursuant to the Liquidity Program. Except with regard to the fundamental policy relating to senior securities set forth in (3) above for all Funds, if any percentage restriction described above is complied with at the time of an investment, a later increase or decrease in percentage resulting from a change in values of assets will not constitute a violation of such restriction.

Under normal circumstances (i) each of the iShares National Muni Bond ETF and the iShares Short-Term National Muni Bond ETF will invest at least 80% of the value of its net assets, plus the amount of any borrowings for investment purposes, in investments the income of which is free from federal income tax, including AMT; (ii) the iShares California Muni Bond ETF will invest at least 80% of the value of its net assets, plus the amount of any borrowings for investment purposes, in investments the income of which is free from federal income tax, including AMT, and California income tax; and (iii) the iShares New York Muni Bond ETF will invest at least 80% of the value of its net assets, plus the amount of any borrowings for investment purposes, in investments the income of which is free from federal income tax, including AMT, and New York income tax. These policies are fundamental policies of the Municipal Bond Funds and may not be changed without a vote of a majority of each Fund's outstanding voting securities, as defined in the 1940 Act. Each Fund (except the Municipal Bond Funds, iShares 0-3 Month Treasury Bond ETF, iShares 25+ Year Treasury STRIPS Bond ETF, iShares BBB Rated Corporate Bond ETF, iShares ESG Advanced Investment Grade Corporate Bond ETF, iShares ESG Advanced Total USD Bond Market ETF, iShares ESG Aware U.S. Aggregate Bond ETF, iShares High Yield Systematic Bond ETF, iShares Investment Grade Systematic Bond ETF and iShares USD Systematic Bond ETF) has adopted a non-fundamental investment policy to invest, under normal circumstances, at least 80% of the value of its net assets, plus the amount of any borrowings for investment purposes, in securities in the Fund's Underlying Index and (except the iShares 0-3 Month Treasury Bond ETF, iShares 25+ Year Treasury STRIPS Bond ETF, iShares BBB Rated Corporate Bond ETF, iShares ESG Aware 1-5 Year USD Corporate Bond ETF, iShares ESG Advanced Investment Grade Corporate Bond ETF, iShares ESG Advanced Total USD Bond Market ETF, iShares ESG Aware USD Corporate Bond ETF, iShares High Yield Systematic Bond ETF, iShares Investment Grade Systematic Bond ETF and iShares USD Systematic Bond ETF) in TBA transactions with respect to the percentage of the Underlying Index (if any) that consists of mortgage pass-through securities. The iShares ESG Aware U.S. Aggregate Bond ETF has adopted a non-fundamental policy to invest, under normal circumstances, at least 80% of the value of its net assets, plus the amount of any borrowings for investment purposes, in the component securities in the Fund's Underlying Index and in TBA transactions with respect to the percentage of its Underlying Index that consists of mortgage pass-through securities. The iShares Core 10+ Year USD Bond ETF and iShares Core U.S. Aggregate Bond ETF have adopted an additional non-fundamental policy under which the iShares Core 10+ Year USD Bond ETF and iShares Core U.S. Aggregate Bond ETF, under normal circumstances, will invest, at least 80% of its net assets, plus the amount of any borrowings for investment purposes, in securities of U.S. issuers. The iShares 0-3 Month Treasury Bond ETF, iShares 25+ Year Treasury STRIPS Bond ETF, iShares BBB Rated Corporate Bond ETF and iShares ESG Advanced Investment Grade Corporate Bond ETF have adopted a non-fundamental investment policy in accordance with Rule 35d-1 under the 1940 Act to invest, under normal circumstances, at least 80% of the value of its net assets, plus the amount of any borrowings for investment purposes, in the component securities in the Fund's Underlying Index. The iShares ESG Advanced Total USD Bond Market ETF has adopted a non-fundamental investment policy in accordance with Rule 35d-1 under the Investment Company Act to invest, under normal circumstances, at least 80% of the value of its net assets, plus the amount of any borrowings for investment purposes, in component securities in the Fund's Underlying Index and in TBA transactions with respect to the percentage of the Underlying Index that consists of mortgage pass-through securities. The iShares High Yield Systematic Bond ETF, iShares Investment Grade Systematic Bond ETF and iShares USD Systematic Bond ETF have adopted a non-fundamental investment policy in accordance with Rule 35d-1 under the Investment Company Act to invest, under normal circumstances, at least 80% of the value of its net assets, plus the amount of any borrowings for investment purposes, in securities in its Underlying Index and in TBA transactions with respect to the percentage of its Underlying Index (if any) that consists of mortgage pass-through securities. Each Fund also has adopted a policy to provide its shareholders with at least 60 days' prior written notice of any change in such policy. If, subsequent to an investment, an 80% requirement is no longer met, a Fund's future investments will be made in a manner that will bring the Fund into compliance with this policy.

Each Fund has adopted a non-fundamental policy not to purchase securities of other investment companies, except to the extent permitted by the 1940 Act. As a matter of policy, however, a Fund will not purchase shares of any registered open-end investment company or registered unit investment trust, in reliance on Section 12(d)(1)(F) or (G) (the "fund of funds" provisions) of the 1940 Act, at any time the Fund has knowledge that its shares are purchased by another investment company investor in reliance on the provisions of subparagraph (G) of Section 12(d)(1).

Unless otherwise indicated, all limitations under each Fund's fundamental or non-fundamental investment policies apply only at the time that a transaction is undertaken. Any change in the percentage of each Fund's assets invested in certain securities or other instruments resulting from market fluctuations or other changes in each Fund's total assets will not require each Fund to dispose of an investment until BFA determines that it is practicable to sell or close out the investment without undue market or tax consequences.

Continuous Offering

The method by which Creation Units are created and traded may raise certain issues under applicable securities laws. Because new Creation Units are issued and sold by the Funds on an ongoing basis, at any point a "distribution," as such term is used in the 1933 Act, may occur. Broker-dealers and other persons are cautioned that some activities on their part may, depending on the circumstances, result in their being deemed participants in a distribution in a manner that could render them statutory underwriters and subject them to the prospectus delivery requirement and liability provisions of the 1933 Act.

For example, a broker-dealer firm or its client may be deemed a statutory underwriter if it takes Creation Units after placing an order with the Distributor, breaks them down into constituent shares and sells such shares directly to customers or if it chooses to couple the creation of new shares with an active selling effort involving solicitation of secondary market demand for shares. A determination of whether one is an underwriter for purposes of the 1933 Act must take into account all of the facts and circumstances pertaining to the activities of the broker-dealer or its client in the particular case and the examples mentioned above should not be considered a complete description of all the activities that could lead to a categorization as an underwriter.

Broker-dealer firms should also note that dealers who are not "underwriters" but are effecting transactions in shares, whether or not participating in the distribution of shares, generally are required to deliver a prospectus. This is because the prospectus delivery exemption in Section 4(a)(3) of the 1933 Act is not available in respect of such transactions as a result of Section 24(d) of the 1940 Act. Firms that incur a prospectus delivery obligation with respect to shares of the Funds are reminded that, pursuant to Rule 153 under the 1933 Act, a prospectus delivery obligation under Section 5(b)(2) of the 1933 Act owed to an exchange member in connection with a sale on the Listing Exchange generally is satisfied by the fact that the prospectus is available at the Listing Exchange upon request. The prospectus delivery mechanism provided in Rule 153 is available only with respect to transactions on an exchange.

Management

Trustees and Officers. The Board has responsibility for the overall management and operations of the Funds, including general supervision of the duties performed by BFA and other service providers. Each Trustee serves until he or she resigns, is removed, dies, retires or becomes incapacitated. Each officer shall hold office until his or her successor is elected and qualifies or until his or her death, resignation or removal. Trustees who are not "interested persons" (as defined in the 1940 Act) of the Trust are referred to as independent trustees ("Independent Trustees").

The registered investment companies advised by BFA or its affiliates (the "BlackRock-advised Funds") are organized into one complex of open-end equity, multi-asset, index and money market funds and ETFs (the "BlackRock Multi-Asset Complex"), one complex of closed-end funds and open-end non-index fixed-income funds (including ETFs) (the "BlackRock Fixed-Income Complex") and one complex of ETFs ("Exchange-Traded Fund Complex") (each, a "BlackRock Fund Complex"). Each Fund is included in the Exchange-Traded Fund Complex. Each Trustee also serves as a Director of iShares, Inc. and a Trustee of iShares U.S. ETF Trust and, as a result, oversees all of the funds within the Exchange-Traded Fund Complex, which consists of 387 funds as of June 30, 2023. With the exception of Stephen Cohen, Robert S. Kapito and Aaron Wasserman, the address of each Trustee and officer is c/o BlackRock, Inc., 400 Howard Street, San Francisco, CA 94105. The address of Mr. Kapito and Mr. Wasserman is c/o BlackRock, Inc., 50 Hudson Yards, New York, NY 10001. The address of Mr. Cohen is c/o BlackRock, Inc., Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL United Kingdom. The Board has designated John E. Kerrigan as its Independent Board Chair. Additional information about the Funds' Trustees and officers may be found in this SAI, which is available without charge, upon request, by calling toll-free 1-800-iShares (1-800-474-2737).

Interested Trustees

Name (Year of Birth)	Position	Principal Occupation(s) During the Past 5 Years	Other Directorships Held by Trustee
Robert S. Kapito[1] (1957)	Trustee (since 2009).	President of BlackRock, Inc. (since 2006); Vice Chairman of BlackRock, Inc. and Head of BlackRock's Portfolio Management Group (since its formation in 1998) and BlackRock, Inc.'s predecessor entities (since 1988); Trustee, University of Pennsylvania (since 2009); President of Board of Directors, Hope & Heroes Children's Cancer Fund (since 2002).	Director of BlackRock, Inc. (since 2006); Director of iShares, Inc. (since 2009); Trustee of iShares U.S. ETF Trust (since 2011).

Name (Year of Birth)	Position	Principal Occupation(s) During the Past 5 Years	Other Directorships Held by Trustee
Stephen Cohen[2] (1975)	Trustee (since 2024).	Senior Managing Director, Head of Global Product Solutions of BlackRock, Inc. (since 2024); Senior Managing Director, Head of Europe, Middle East and Africa Regions of BlackRock, Inc. (2021-2024); Head of iShares Index and Wealth in EMEA of BlackRock, Inc. (2017-2021); Global Head of Fixed Income Indexing of BlackRock, Inc. (2016-2017); Chief Investment Strategist for International Fixed Income and iShares of BlackRock, Inc. (2011-2015).	Director of iShares, Inc. (since 2024); Trustee of iShares U.S. ETF Trust (since 2024).

1 Robert S. Kapito is deemed to be an "interested person" (as defined in the 1940 Act) of the Trust due to his affiliations with BlackRock, Inc. and its affiliates.

2 Stephen Cohen is deemed to be an "interested person" (as defined in the 1940 Act) of the Trust due to his affiliations with BlackRock, Inc. and its affiliates.

Independent Trustees

Name (Year of Birth)	Position	Principal Occupation(s) During the Past 5 Years	Other Directorships Held by Trustee
John E. Kerrigan (1955)	Trustee (since 2005); Independent Board Chair (since 2022).	Chief Investment Officer, Santa Clara University (since 2002).	Director of iShares, Inc. (since 2005); Trustee of iShares U.S. ETF Trust (since 2011); Independent Board Chair of iShares, Inc. and iShares U.S. ETF Trust (since 2022).
Jane D. Carlin (1956)	Trustee (since 2015); Risk Committee Chair (since 2016).	Consultant (since 2012); Member of the Audit Committee (2012-2018), Chair of the Nominating and Governance Committee (2017-2018) and Director of PHH Corporation (mortgage solutions) (2012-2018); Managing Director and Global Head of Financial Holding Company Governance & Assurance and the Global Head of Operational Risk Management of Morgan Stanley (2006-2012).	Director of iShares, Inc. (since 2015); Trustee of iShares U.S. ETF Trust (since 2015); Member of the Audit Committee (since 2016), Chair of the Audit Committee (since 2020) and Director of The Hanover Insurance Group, Inc. (since 2016).
Richard L. Fagnani (1954)	Trustee (since 2017); Audit Committee Chair (since 2019).	Partner, KPMG LLP (2002-2016); Director of One Generation Away (since 2021).	Director of iShares, Inc. (since 2017); Trustee of iShares U.S. ETF Trust (since 2017).

Name (Year of Birth)	Position	Principal Occupation(s) During the Past 5 Years	Other Directorships Held by Trustee
Cecilia H. Herbert (1949)	Trustee (since 2005); Nominating and Governance and Equity Plus Committee Chairs (since 2022).	Chair of the Finance Committee (since 2019) and Trustee and Member of the Finance, Audit and Quality Committees of Stanford Health Care (since 2016); Trustee of WNET, New York's public media company (since 2011) and Member of the Audit Committee (since 2018), Investment Committee (since 2011) and Personnel Committee (since 2022); Member of the Wyoming State Investment Funds Committee (since 2022); Trustee of Forward Funds (14 portfolios) (2009-2018); Trustee of Salient MF Trust (4 portfolios) (2015-2018); Director of the Jackson Hole Center for the Arts (since 2021).	Director of iShares, Inc. (since 2005); Trustee of iShares U.S. ETF Trust (since 2011).
Drew E. Lawton (1959)	Trustee (since 2017); 15(c) Committee Chair (since 2017).	Senior Managing Director of New York Life Insurance Company (2010-2015).	Director of iShares, Inc. (since 2017); Trustee of iShares U.S. ETF Trust (since 2017); Director of Jackson Financial Inc. (since 2021).
John E. Martinez (1961)	Trustee (since 2003); Securities Lending Committee Chair (since 2019).	Director of Real Estate Equity Exchange, Inc. (since 2005); Director of Cloudera Foundation (2017-2020); and Director of Reading Partners (2012-2016).	Director of iShares, Inc. (since 2003); Trustee of iShares U.S. ETF Trust (since 2011).
Madhav V. Rajan (1964)	Trustee (since 2011); Fixed Income Plus Committee Chair (since 2019).	Dean, and George Pratt Shultz Professor of Accounting, University of Chicago Booth School of Business (since 2017); Advisory Board Member (since 2016) and Director (since 2020) of C.M. Capital Corporation; Chair of the Board for the Center for Research in Security Prices, LLC (since 2020); Director of WellBe Senior Medical (since 2023); Robert K. Jaedicke Professor of Accounting, Stanford University Graduate School of Business (2001-2017); Professor of Law (by courtesy), Stanford Law School (2005-2017); Senior Associate Dean for Academic Affairs and Head of MBA Program, Stanford University Graduate School of Business (2010-2016).	Director of iShares, Inc. (since 2011); Trustee of iShares U.S. ETF Trust (since 2011).

Officers

Name (Year of Birth)	Position	Principal Occupation(s) During the Past 5 Years
Jessica Tan (1980)	President (since 2024).	Managing Director of BlackRock, Inc. (since 2015); Head of Global Product Solutions, Americas of BlackRock, Inc. (since 2024) and Head of Sustainable and Transition Solutions of BlackRock, Inc. (2022-2024); Global Head of Corporate Strategy of BlackRock, Inc. (2019-2022); Chief of Staff to the CEO of BlackRock, Inc. (2017-2019).
Trent Walker (1974)	Treasurer and Chief Financial Officer (since 2020).	Managing Director of BlackRock, Inc. (since 2019); Chief Financial Officer of iShares Delaware Trust Sponsor LLC, BlackRock Funds, BlackRock Funds II, BlackRock Funds IV, BlackRock Funds V and BlackRock Funds VI (since 2021).
Aaron Wasserman (1974)	Chief Compliance Officer (since 2023).	Managing Director of BlackRock, Inc. (since 2018); Chief Compliance Officer of the BlackRock Multi-Asset Complex, the BlackRock Fixed-Income Complex and the Exchange-Traded Fund Complex (since 2023); Deputy Chief Compliance Officer for the BlackRock Multi-Asset Complex, the BlackRock Fixed-Income Complex and the Exchange-Traded Fund Complex (2014-2023).
Marisa Rolland (1980)	Secretary (since 2022).	Managing Director of BlackRock, Inc. (since 2023); Director of BlackRock, Inc. (2018-2022).
Rachel Aguirre (1982)	Executive Vice President (since 2022).	Managing Director of BlackRock, Inc. (since 2018); Head of U.S. iShares Product (since 2022); Head of EII U.S. Product Engineering of BlackRock, Inc. (since 2021); Co-Head of EII's Americas Portfolio Engineering of BlackRock, Inc. (2020-2021); Head of Developed Markets Portfolio Engineering of BlackRock, Inc. (2016-2019).
Jennifer Hsui (1976)	Executive Vice President (since 2022).	Managing Director of BlackRock, Inc. (since 2009); Co-Head of Index Equity of BlackRock, Inc. (since 2022).

Name (Year of Birth)	Position	Principal Occupation(s) During the Past 5 Years
James Mauro (1970)	Executive Vice President (since 2021).	Managing Director of BlackRock, Inc. (since 2010); Head of Fixed Income Index Investments in the Americas and Head of San Francisco Core Portfolio Management of BlackRock, Inc. (since 2020).

The Board has concluded that, based on each Trustee's experience, qualifications, attributes or skills on an individual basis and in combination with those of the other Trustees, each Trustee should serve as a Trustee of the Board. Among the attributes common to all Trustees are their ability to review critically, evaluate, question and discuss information provided to them, to interact effectively with the Funds' investment adviser, other service providers, counsel and the independent registered public accounting firm, and to exercise effective business judgment in the performance of their duties as Trustees. A Trustee's ability to perform his or her duties effectively may have been attained through the Trustee's educational background or professional training; business, consulting, public service or academic positions; experience from service as a Board member of the Funds and the other funds in the Trust (and any predecessor funds), other investment funds, public companies, or non-profit entities or other organizations; and/or other life experiences. Also, set forth below is a brief discussion of the specific experience, qualifications, attributes or skills of each Trustee that led the Board to conclude that he or she should serve (or continue to serve) as a Trustee.

Robert S. Kapito has been a Trustee of the Trust since 2009. Mr. Kapito has also served as a Director of iShares, Inc. since 2009, a Trustee of iShares U.S. ETF Trust since 2011 and a Director of BlackRock, Inc. since 2006. Mr. Kapito served as a Director of iShares MSCI Russia Capped ETF, Inc. from 2010 to 2015. In addition, he has over 20 years of experience as part of BlackRock, Inc. and BlackRock's predecessor entities. Mr. Kapito serves as President of BlackRock, Inc., and is a member of the Global Executive Committee and Chairman of the Global Operating Committee. He is responsible for day-to-day oversight of BlackRock's key operating units, including Investment Strategies, Client Businesses, Technology & Operations, and Risk & Quantitative Analysis. Prior to assuming his current responsibilities in 2007, Mr. Kapito served as Vice Chairman of BlackRock, Inc. and Head of BlackRock's Portfolio Management Group. In that role, he was responsible for overseeing all portfolio management within BlackRock, including the Fixed Income, Equity, Liquidity, and Alternative Investment Groups. Mr. Kapito serves as a member of the Board of Trustees of the University of Pennsylvania and the Harvard Business School Board of Dean's Advisors. He has also been President of the Board of Directors for the Hope & Heroes Children's Cancer Fund since 2002. Mr. Kapito earned a BS degree in economics from the Wharton School of the University of Pennsylvania in 1979, and an MBA degree from Harvard Business School in 1983.

Stephen Cohen has been a Trustee of the Trust since 2024. Mr. Cohen has also served as a Director of iShares, Inc. and a Trustee of iShares U.S. ETF Trust since 2024. Mr. Cohen has also served as a Director of BlackRock Investment Management (UK) Limited, Director of BlackRock Investment Management (UK) Limited, Director of BlackRock International Limited, and Director of BlackRock Group Limited since 2021. Mr. Cohen, Senior Managing Director, is BlackRock's Chief Product Officer and a member of the Global Executive Committee. Mr. Cohen is responsible for the business strategy, innovation and commercialization of BlackRock's full investment product platform, aligning product strategies with client needs and market trends, and unlocking new growth opportunities across iShares, Active, and Private Markets. Before assuming his current role in January 2024, Mr. Cohen served as the Head of Europe, Middle East and Africa from 2021, leading BlackRock in the region. He was previously Head of the iShares, Index and Wealth businesses in EMEA, overseeing BlackRock's relationships with wealth management firms and platforms, the development and distribution of active and index investments, and the firm's equity index portfolio management capability in the region. Having joined BlackRock in 2011, Mr. Cohen initially served as the Chief Investment Strategist for International Fixed Income and iShares, and then, in 2016, as Global Head of Fixed Income Indexing. Prior to BlackRock, Mr. Cohen was Global Head of Equity Linked Strategy at Nomura Holdings, Inc. Mr. Cohen's career began at UBS in 1996 before he joined ING Barings in 2003, having served as Director, Fixed Income at each firm. Mr. Cohen earned a Bachelor of Science degree in Economics from the University of Southampton, and holds certifications as a SFA Futures and Options Representative, a SFA Securities Registered Representative, and an IFPR Material Risk Taker.

John E. Kerrigan has been a Trustee of the Trust since 2005 and Chair of the Trust's Board since 2022. Mr. Kerrigan has also served as a Director of iShares, Inc. since 2005, a Trustee of iShares U.S. ETF Trust since 2011, Chair of the Equity Plus and Nominating and Governance Committees of each Board from 2019 to 2021, and as Chair of each Board since 2022. Mr.

Kerrigan served as a Director of iShares MSCI Russia Capped ETF, Inc. from 2010 to 2015. Mr. Kerrigan has served as Chief Investment Officer of Santa Clara University since 2002. Mr. Kerrigan was formerly a Managing Director at Merrill Lynch & Co., including the following responsibilities: Managing Director, Institutional Client Division, Western United States. Mr. Kerrigan has been a Director, since 1999, of The BASIC Fund (Bay Area Scholarships for Inner City Children). Mr. Kerrigan has a BA degree from Boston College and is a Chartered Financial Analyst Charterholder.

Jane D. Carlin has been a Trustee of the Trust since 2015 and Chair of the Risk Committee since 2016. Ms. Carlin has also served as a Director of iShares, Inc. and a Trustee of iShares U.S. ETF Trust since 2015, and Chair of the Risk Committee of each Board since 2016. Ms. Carlin has served as a consultant since 2012 and formerly served as Managing Director and Global Head of Financial Holding Company Governance & Assurance and the Global Head of Operational Risk Management of Morgan Stanley from 2006 to 2012. In addition, Ms. Carlin served as Managing Director and Global Head of the Bank Operational Risk Oversight Department of Credit Suisse Group from 2003 to 2006. Prior to that, Ms. Carlin served as Managing Director and Deputy General Counsel of Morgan Stanley. Ms. Carlin has over 30 years of experience in the financial sector and has served in a number of legal, regulatory, and risk management positions. Ms. Carlin has served as a member of the Audit Committee and as a Director of The Hanover Insurance Group, Inc., each since 2016, and as Chair of the Audit Committee since 2020. Ms. Carlin served as a member of the Audit Committee from 2012 to 2018, Chair of the Nominating and Governance Committee from 2017 to 2018 and as an Independent Director on the Board of PHH Corporation from 2012 to 2018. She previously served as a Director on the Boards of Astoria Financial Corporation and Astoria Bank. Ms. Carlin was appointed by the United States Treasury to the Financial Services Sector Coordinating Council for Critical Infrastructure Protection and Homeland Security, where she served as Chairperson from 2010 to 2012 and Vice Chair and Chair of the Cyber Security Committee from 2009 to 2010. Ms. Carlin has a BA degree in political science from State University of New York at Stony Brook and a JD degree from Benjamin N. Cardozo School of Law.

Richard L. Fagnani has been a Trustee of the Trust since 2017 and Chair of the Audit Committee of the Trust since 2019. Mr. Fagnani has also served as a Director of iShares, Inc. and a Trustee of iShares U.S. ETF Trust since 2017, and Chair of the Audit Committee of each Board since 2019. Mr. Fagnani served as an Advisory Board Member of the Trust, iShares U.S. ETF Trust and iShares, Inc. from April 2017 to June 2017. Mr. Fagnani served as a Senior Audit Partner at KPMG LLP from 2002 to 2016, most recently as the U.S. asset management audit practice leader responsible for setting strategic direction and execution of the operating plan for the asset management audit practice. In addition, from 1977 to 2002, Mr. Fagnani served as an Audit Partner at Andersen LLP, where he developed and managed the asset management audit practice in the Philadelphia office. Mr. Fagnani served as a Trustee on the Board of the Walnut Street Theater in Philadelphia from 2009 to 2014 and as a member of the School of Business Advisory Board at LaSalle University from 2006 to 2014. Mr. Fagnani has also served as a Director of One Generation Away, a non-profit which works to bring healthy food directly to people in need, since 2021. Mr. Fagnani has a BS degree in Accounting from LaSalle University.

Cecilia H. Herbert has been a Trustee of the Trust since 2005 and Chair of the Equity Plus and Nominating and Governance Committees of the Trust since 2022. Ms. Herbert has also served as a Director of iShares, Inc. since 2005, a Trustee of iShares U.S. ETF Trust since 2011, Chair of the Trust's Board from 2016 to 2021, and Chair of the Equity Plus and Nominating and Governance Committees of each Board since 2022. Ms. Herbert served as a Director of iShares MSCI Russia Capped ETF, Inc. from 2010 to 2015. Previously, Ms. Herbert served as Trustee of the Montgomery Funds from 1992 to 2003, the Pacific Select Funds from 2004 to 2005, the Forward Funds from 2009 to 2018, the Salient Funds from 2015 to 2018 and the Thrivent Church Loan and Income Fund from 2019 to 2022. She has served as a member of the Finance, Audit and Quality Committees and Trustee of Stanford Health Care since 2016 and became Chair of the Finance Committee of Stanford Health Care in 2019. She has served as a Trustee of WNET, New York's public media station, since 2011 and a Member of its Audit Committee since 2018. She was appointed to the Wyoming State Investment Funds Committee in 2022. She became a member of the Governing Council of the Independent Directors Council in 2018. She has served as a Director of the Senior Center of Jackson Hole since 2020 and of the Jackson Hole Center for the Arts since 2021. She was President of the Board of Catholic Charities CYO, the largest social services agency in the San Francisco Bay Area, from 2007 to 2011 and a member of that board from 1992 to 2013. She worked from 1973 to 1990 at J.P. Morgan/Morgan Guaranty Trust doing international corporate finance and corporate lending, retiring as Managing Director and Head of the West Coast Office. Ms. Herbert has been on numerous non-profit boards, chairing investment and finance committees. She holds a double major in economics and communications from Stanford University and an MBA from Harvard Business School.

Drew E. Lawton has been a Trustee of the Trust since 2017 and Chair of the 15(c) Committee of the Trust since 2017. Mr. Lawton has also served as a Director of iShares, Inc., a Trustee of iShares U.S. ETF Trust, and Chair of the 15(c) Committee of each Board since 2017. Mr. Lawton also served as an Advisory Board Member of the Trust, iShares, Inc. and iShares U.S. ETF

Trust from 2016 to 2017. Mr. Lawton served as Director of Principal Funds, Inc., Principal Variable Contracts Funds, Inc. and Principal Exchange-Traded Funds from March 2016 to October 2016. Mr. Lawton has also served as a member of the Compensation and Finance and Risk Committees and Director of Jackson Financial Inc. since 2021. Mr. Lawton served in various capacities at New York Life Insurance Company from 2010 to 2015, most recently as a Senior Managing Director and Chief Executive Officer of New York Life Investment Management. From 2008 to 2010, Mr. Lawton was the President of Fridson Investment Advisors, LLC. Mr. Lawton previously held multiple roles at Fidelity Investments from 1997 to 2008. Mr. Lawton has been an Adjunct Professor at the University of North Texas since 2021. Mr. Lawton has a BA degree in Administrative Science from Yale University and an MBA from University of North Texas.

John E. Martinez has been a Trustee of the Trust since 2003 and Chair of the Securities Lending Committee of the Trust since 2019. Mr. Martinez has also served as a Director of iShares, Inc. since 2003, a Trustee of iShares U.S. ETF Trust since 2011, and Chair of the Securities Lending Committee of each Board since 2019. Mr. Martinez served as a Director of iShares MSCI Russia Capped ETF, Inc. from 2010 to 2015. Mr. Martinez is a Director of Real Estate Equity Exchange, Inc., providing governance oversight and consulting services to this privately held firm that develops products and strategies for homeowners in managing the equity in their homes. From 2017 to 2020, Mr. Martinez served as a Board member for the Cloudera Foundation. Mr. Martinez previously served as Director of Barclays Global Investors ("BGI") UK Holdings, where he provided governance oversight representing BGI's shareholders (Barclays PLC, BGI management shareholders) through oversight of BGI's worldwide activities. Mr. Martinez also previously served as Co-Chief Executive Officer of the Global Index and Markets Group of BGI, Chairman of Barclays Global Investor Services and Chief Executive Officer of the Capital Markets Group of BGI. From 2003 to 2012, he was a Director and Executive Committee Member for Larkin Street Youth Services. He now serves on the Larkin Street Honorary Board. From 2012 to 2016, Mr. Martinez served as a Director for Reading Partners. Mr. Martinez has an AB degree in economics from The University of California, Berkeley and holds an MBA degree in finance and statistics from The University of Chicago Booth School of Business.

Madhav V. Rajan has been a Trustee of the Trust since 2011 and Chair of the Fixed Income Plus Committee of the Trust since 2019. Mr. Rajan has also served as a Director of iShares, Inc. and a Trustee of iShares U.S. ETF Trust since 2011, and Chair of the Fixed Income Plus Committee of each Board since 2019. Mr. Rajan served as a Director of iShares MSCI Russia Capped ETF, Inc. from 2011 to 2015. Mr. Rajan is the Dean and George Pratt Shultz Professor of Accounting at the University of Chicago Booth School of Business and also serves as Chair of the Board for the Center for Research in Security Prices, LLC, an affiliate of the University of Chicago Booth School of Business, since 2020. He has served on the Advisory Board of C.M. Capital Corporation since 2016 and as a Director of C.M. Capital Corporation since 2020. From 2001 to 2017, Mr. Rajan was the Robert K. Jaedicke Professor of Accounting at the Stanford University Graduate School of Business. In April 2017, he received the school's Robert T. Davis Award for Lifetime Achievement and Service. He has taught accounting for over 25 years to undergraduate, MBA and law students, as well as to senior executives. From 2010 to 2016, Mr. Rajan served as the Senior Associate Dean for Academic Affairs and head of the MBA Program at the Stanford University Graduate School of Business. Mr. Rajan served as editor of "The Accounting Review" from 2002 to 2008 and is co-author of "Cost Accounting: A Managerial Emphasis," a leading cost accounting textbook. From 2013 to 2018, Mr. Rajan served on the Board of Directors of Cavium Inc., a semiconductor company. Mr. Rajan holds MS and PhD degrees in Accounting from Carnegie Mellon University.

Board – Leadership Structure and Oversight Responsibilities

Overall responsibility for oversight of the Funds rests with the Board. The Board has engaged BFA to manage the Funds on a day-to-day basis. The Board is responsible for overseeing BFA and other service providers in the operations of the Funds in accordance with the provisions of the 1940 Act, applicable provisions of state and other laws and the Trust's charter. The Board is currently composed of nine members, seven of whom are Independent Trustees. The Board currently conducts regular in person meetings four times a year. In addition, the Board frequently holds special in person or telephonic meetings or informal conference calls to discuss specific matters that may arise or require action between regular meetings. The Independent Trustees meet regularly outside the presence of management, in executive session or with other service providers to the Trust.

The Board has appointed an Independent Trustee to serve in the role of Board Chair. The Board Chair's role is to preside at all meetings of the Board and to act as a liaison with service providers, officers, attorneys, and other Trustees generally between meetings. The Board Chair may also perform such other functions as may be delegated by the Board from time to time. The Board has established seven standing Committees: a Nominating and Governance Committee, an Audit Committee, a 15(c) Committee, a Securities Lending Committee, a Risk Committee, an Equity Plus Committee and a Fixed Income Plus Committee to assist the Board in the oversight and direction of the business and affairs of the Funds, and from time to time the Board may establish ad hoc committees or informal working groups to review and address the policies and practices of the Funds with respect to certain specified matters. The Chair of each standing Committee is an Independent Trustee. The role of the Chair of each Committee is to preside at all meetings of the Committee and to act as a liaison with service providers, officers, attorneys and other Trustees between meetings. Each standing Committee meets regularly to conduct the oversight functions delegated to the Committee by the Board and reports its finding to the Board. The Board and each standing Committee conduct annual assessments of their oversight function and structure. The Board has determined that the Board's leadership structure is appropriate because it allows the Board to exercise independent judgment over management and it allocates areas of responsibility among committees of Independent Trustees and the full Board to enhance effective oversight.

Day-to-day risk management with respect to the Funds is the responsibility of BFA or other service providers (depending on the nature of the risk), subject to the supervision of BFA. Each Fund is subject to a number of risks, including investment, compliance, operational, reputational, counterparty and valuation risks, among others. While there are a number of risk management functions performed by BFA and other service providers, as applicable, it is not possible to identify and eliminate all of the risks applicable to the Funds. The Trustees have an oversight role in this area, satisfying themselves that risk management processes and controls are in place and operating effectively. Risk oversight forms part of the Board's general oversight of each Fund and is addressed as part of various Board and committee activities. In some cases, risk management issues are specifically addressed in presentations and discussions. For example, BFA has an independent dedicated Risk and Quantitative Analysis Group ("RQA") that assists BFA in managing fiduciary and corporate risks, including investment, operational, counterparty credit and enterprise risk. Representatives of RQA meet with the Board to discuss their analysis and methodologies, as well as specific risk topics such as operational and counterparty risks relating to the Funds. The Board, directly or through a committee, also reviews reports from, among others, management and the independent registered public accounting firm for the Trust, as appropriate, regarding risks faced by each Fund and management's risk functions. The Board has appointed a Chief Compliance Officer who oversees the implementation and testing of the Trust's compliance program, including assessments by independent third parties, and reports to the Board regarding compliance matters for the Trust and its principal service providers. In testing and maintaining the compliance program, the Chief Compliance Officer (and his or her delegates) assesses key compliance risks affecting each Fund, and addresses them in periodic reports to the Board. In addition, the Audit Committee meets with both the Funds' independent registered public accounting firm and BFA's internal audit group to review risk controls in place that support each Fund as well as test results. Board oversight of risk is also performed as needed between meetings through communications between BFA and the Board. The Independent Trustees have engaged independent legal counsel to assist them in performing their oversight responsibilities. From time to time, the Board may modify the manner in which it conducts risk oversight. The Board's oversight role does not make it a guarantor of the Funds' investment performance or other activities.

Committees of the Board of Trustees. The members of the Audit Committee are Richard L. Fagnani (Chair), Cecilia H. Herbert and Madhav V. Rajan, each of whom is an Independent Trustee. The purposes of the Audit Committee are to assist the Board (i) in its oversight of the Trust's accounting and financial reporting principles and policies and related controls and procedures maintained by or on behalf of the Trust; (ii) in its oversight of the Trust's financial statements and the independent audit thereof; (iii) in selecting, evaluating and, where deemed appropriate, replacing the independent accountants (or nominating the independent accountants to be proposed for shareholder approval in any proxy statement); (iv) in evaluating the independence of the independent accountants; (v) in complying with legal and regulatory requirements that relate to the Trust's accounting and financial reporting, internal controls, compliance controls and independent audits; and (vi) to assume such other responsibilities as may be delegated by the Board. The Audit Committee met four times during the fiscal year ended February 28, 2023.

The members of the Nominating and Governance Committee are Cecilia H. Herbert (Chair), Madhav V. Rajan and Drew E. Lawton, each of whom is an Independent Trustee. The Nominating and Governance Committee nominates individuals for Independent Trustee membership on the Board and recommends appointments to the Advisory Board. The Nominating and Governance Committee functions include, but are not limited to, the following: (i) reviewing the qualifications of any person properly identified or nominated to serve as an Independent Trustee; (ii) recommending to the Board and current Independent Trustees the nominee(s) for appointment as an Independent Trustee by the Board and current Independent Trustees and/or for election as Independent Trustees by shareholders to fill any vacancy for a position of Independent Trustee(s) on the Board; (iii) recommending to the Board and current Independent Trustees the size and composition of the Board and Board committees and whether they comply with applicable laws and regulations; (iv) recommending a current Independent Trustee to the Board and current Independent Trustees to serve as Board Chair; (v) periodic review of the Board's retirement policy; and (vi) recommending an appropriate level of compensation for the Independent Trustees for their services as Trustees, members or chairpersons of committees of the Board, Board Chair and any other positions as the Nominating and Governance Committee considers appropriate. The Nominating and Governance Committee does not consider Board nominations recommended by shareholders (acting solely in their capacity as a shareholder and not in any other capacity). The Nominating and Governance Committee met one time during the fiscal year ended February 28, 2023.

Each Independent Trustee serves on the 15(c) Committee. The Chair of the 15(c) Committee is Drew E. Lawton. The principal responsibilities of the 15(c) Committee are to support, oversee and organize on behalf of the Board the process for the annual review and renewal of the Trust's advisory and sub-advisory agreements. These responsibilities include: (i) meeting with BlackRock, Inc. in advance of the Board meeting at which the Trust's advisory and sub-advisory agreements are to be considered to discuss generally the process for providing requested information to the Board and the format in which information will be provided; and (ii) considering and discussing with BlackRock, Inc. such other matters and information as may be necessary and appropriate for the Board to evaluate the investment advisory and sub-advisory agreements of the Trust. The 15(c) Committee met two times during the fiscal year ended February 28, 2023.

The members of the Securities Lending Committee are John E. Martinez (Chair), Jane D. Carlin and Drew E. Lawton, each of whom is an Independent Trustee. The principal responsibilities of the Securities Lending Committee are to support, oversee and organize on behalf of the Board the process for oversight of the Trust's securities lending activities. These responsibilities include: (i) requesting that certain information be provided to the Committee for its review and consideration prior to such information being provided to the Board; (ii) considering and discussing with BlackRock, Inc. such other matters and information as may be necessary and appropriate for the Board to oversee the Trust's securities lending activities and make required findings and approvals; and (iii) providing a recommendation to the Board regarding the annual approval of the Trust's Securities Lending Guidelines and the required findings with respect to, and annual approval of, the Trust's agreement with the securities lending agent. The Securities Lending Committee met five times during the fiscal year ended February 28, 2023.

The members of the Equity Plus Committee are Cecilia H. Herbert (Chair), John E. Martinez and Drew E. Lawton, each of whom is an Independent Trustee. The principal responsibilities of the Equity Plus Committee are to support, oversee and organize on behalf of the Board the process for oversight of Trust performance and related matters for equity funds. These responsibilities include: (i) reviewing quarterly reports regarding Trust performance, secondary market trading and changes in net assets to identify any matters that should be brought to the attention of the Board; and (ii) considering any performance or investment related matters as may be delegated to the Committee by the Board from time to time and providing a report or recommendation to the Board as appropriate. The Equity Plus Committee met four times during the fiscal year ended February 28, 2023.

The members of the Fixed Income Plus Committee are Madhav V. Rajan (Chair), Jane D. Carlin and Richard L. Fagnani, each of whom is an Independent Trustee. The principal responsibilities of the Fixed Income Plus Committee are to support, oversee and organize on behalf of the Board the process for oversight of Trust performance and related matters for fixed-income or multi-asset funds. These responsibilities include: (i) reviewing quarterly reports regarding Trust performance, secondary market trading and changes in net assets to identify any matters that should be brought to the attention of the Board; and (ii) considering any performance or investment related matters as may be delegated to the Committee by the Board from time to time and providing a report or recommendation to the Board as appropriate. The Fixed Income Plus Committee met four times during the fiscal year ended February 28, 2023.

The members of the Risk Committee are Jane D. Carlin (Chair), Richard L. Fagnani and John E. Martinez, each of whom is an Independent Trustee. The principal responsibility of the Risk Committee is to consider and organize on behalf of the Board risk related matters of the Funds so the Board may most effectively structure itself to oversee them. The Risk Committee commenced on January 1, 2016. The Risk Committee met six times during the fiscal year ended February 28, 2023.

As the Chair of the Board, John E. Kerrigan may serve as an ex-officio member of each Committee.

The following table sets forth, as of December 31, 2022, the dollar range of equity securities beneficially owned by each Trustee in the Funds and in other registered investment companies overseen by the Trustee within the same family of investment companies as the Trust. If a fund is not listed below, the Trustee did not own any securities in that fund as of the date indicated above:

Name	Fund	Dollar Range of Equity Securities in Named Fund	Aggregate Dollar Range of Equity Securities in all Registered Investment Companies Overseen by Trustee in Family of Investment Companies
Robert S. Kapito	None	None	None
Salim Ramji	iShares Broad USD Investment Grade Corporate Bond ETF	Over $100,000	Over $100,000
	iShares Commodity Curve Carry Strategy ETF	$50,001-$100,000	
	iShares Core Aggressive Allocation ETF	Over $100,000	
	iShares Core Dividend Growth ETF	Over $100,000	
	iShares Core MSCI Emerging Markets ETF	Over $100,000	
	iShares Core MSCI Total International Stock ETF	$1-$10,000	
	iShares Core S&P 500 ETF	$1-$10,000	
	iShares Core S&P Mid-Cap ETF	Over $100,000	
	iShares Core S&P Small-Cap ETF	Over $100,000	
	iShares Core S&P Total U.S. Stock Market ETF	$1-$10,000	
	iShares ESG Aware MSCI USA ETF	$1-$10,000	
	iShares Expanded Tech Sector ETF	$1-$10,000	
	iShares Expanded Tech-Software Sector ETF	$1-$10,000	
	iShares Global Clean Energy ETF	$1-$10,000	
	iShares GSCI Commodity Dynamic Roll Strategy ETF	$50,001-$100,000	
	iShares High Yield Corporate Bond Buywrite Strategy ETF	$10,001-$50,000	
	iShares Investment Grade Corporate Bond Buywrite Strategy ETF	$10,001-$50,000	
	iShares MSCI Emerging Markets Min Vol Factor ETF	$10,001-$50,000	
	iShares Robotics and Artificial Intelligence Multisector ETF	$1-$10,000	
	iShares TIPS Bond ETF	$10,001-$50,000	
John E. Kerrigan	iShares Core S&P 500 ETF	Over $100,000	Over $100,000
	iShares Core S&P Small-Cap ETF	$10,001-$50,000	
	iShares ESG Advanced MSCI EAFE ETF	$1-$10,000	
	iShares ESG Advanced MSCI USA ETF	$1-$10,000	
	iShares ESG Aware MSCI EAFE ETF	$10,001-$50,000	
	iShares ESG Aware MSCI EM ETF	$1-$10,000	
	iShares ESG Aware MSCI USA ETF	Over $100,000	
	iShares ESG Aware MSCI USA Small-Cap ETF	$1-$10,000	
	iShares Exponential Technologies ETF	Over $100,000	

Name	Fund	Dollar Range of Equity Securities in Named Fund	Aggregate Dollar Range of Equity Securities in all Registered Investment Companies Overseen by Trustee in Family of Investment Companies
	iShares Genomics Immunology and Healthcare ETF	$10,001-$50,000	
	iShares Global Clean Energy ETF	Over $100,000	
	iShares Global Infrastructure ETF	Over $100,000	
	iShares GSCI Commodity Dynamic Roll Strategy ETF	$1-$10,000	
	iShares MSCI ACWI ex U.S. ETF	Over $100,000	
	iShares MSCI EAFE Growth ETF	$10,001-$50,000	
	iShares MSCI EAFE Value ETF	$50,001-$100,000	
	iShares MSCI Emerging Markets Min Vol Factor ETF	$10,001-$50,000	
	iShares MSCI KLD 400 Social ETF	$10,001-$50,000	
	iShares MSCI USA ESG Select ETF	$1-$10,000	
	iShares MSCI USA Min Vol Factor ETF	$10,001-$50,000	
	iShares MSCI USA Momentum Factor ETF	$10,001-$50,000	
	iShares U.S. Energy ETF	$1-$10,000	
	iShares U.S. Infrastructure ETF	$1-$10,000	
	iShares U.S. Technology ETF	$10,001-$50,000	
Jane D. Carlin	iShares Core MSCI EAFE ETF	Over $100,000	Over $100,000
	iShares Core MSCI Emerging Markets ETF	$50,001-$100,000	
	iShares Core S&P Mid-Cap ETF	$10,001-$50,000	
	iShares Core S&P Small-Cap ETF	Over $100,000	
	iShares Global Clean Energy ETF	$10,001-$50,000	
	iShares MSCI ACWI ex U.S. ETF	Over $100,000	
	iShares MSCI Global Metals & Mining Producers ETF	$10,001-$50,000	
	iShares Select Dividend ETF	$50,001-$100,000	
Richard L. Fagnani	iShares Core Dividend Growth ETF	$50,001-$100,000	Over $100,000
	iShares Core MSCI EAFE ETF	$50,001-$100,000	
	iShares Core MSCI International Developed Markets ETF	$10,001-$50,000	
	iShares Core S&P 500 ETF	$50,001-$100,000	
	iShares Core S&P Small-Cap ETF	Over $100,000	
	iShares Core S&P Total U.S. Stock Market ETF	$50,001-$100,000	
	iShares Core S&P U.S. Growth ETF	$50,001-$100,000	
	iShares Morningstar Growth ETF	Over $100,000	

Name	Fund	Dollar Range of Equity Securities in Named Fund	Aggregate Dollar Range of Equity Securities in all Registered Investment Companies Overseen by Trustee in Family of Investment Companies
	iShares Morningstar Mid-Cap Value ETF	$10,001-$50,000	
	iShares MSCI Intl Value Factor ETF	$10,001-$50,000	
Cecilia H. Herbert	iShares California Muni Bond ETF	Over $100,000	Over $100,000
	iShares Core Dividend Growth ETF	$50,001-$100,000	
	iShares Core MSCI Total International Stock ETF	$10,001-$50,000	
	iShares Core S&P 500 ETF	Over $100,000	
	iShares Core S&P U.S. Growth ETF	Over $100,000	
	iShares Core S&P U.S. Value ETF	Over $100,000	
	iShares iBoxx $ High Yield Corporate Bond ETF	$10,001-$50,000	
	iShares MSCI USA Value Factor ETF	Over $100,000	
	iShares National Muni Bond ETF	$10,001-$50,000	
	iShares Preferred and Income Securities ETF	$1-$10,000	
Drew E. Lawton	iShares 20+ Year Treasury Bond BuyWrite Strategy ETF	$50,001-$100,000	Over $100,000
	iShares Biotechnology ETF	Over $100,000	
	iShares Core Dividend Growth ETF	Over $100,000	
	iShares Core MSCI Total International Stock ETF	$10,001-$50,000	
	iShares Core S&P Total U.S. Stock Market ETF	Over $100,000	
	iShares Expanded Tech Sector ETF	$50,001-$100,000	
	iShares Exponential Technologies ETF	Over $100,000	
	iShares Global Financials ETF	$10,001-$50,000	
	iShares iBonds Dec 2023 Term Treasury ETF	Over $100,000	
	iShares U.S. Financial Services ETF	$10,001-$50,000	
	iShares U.S. Financials ETF	$10,001-$50,000	
	iShares U.S. Healthcare ETF	Over $100,000	
John E. Martinez	iShares 1-5 Year Investment Grade Corporate Bond ETF	Over $100,000	Over $100,000
	iShares Core MSCI International Developed Markets ETF	$10,001-$50,000	
	iShares Core S&P 500 ETF	Over $100,000	
	iShares Core S&P Small-Cap ETF	Over $100,000	
	iShares Core S&P Total U.S. Stock Market ETF	Over $100,000	
	iShares Global Consumer Staples ETF	Over $100,000	
	iShares Russell 1000 ETF	Over $100,000	

Name	Fund	Dollar Range of Equity Securities in Named Fund	Aggregate Dollar Range of Equity Securities in all Registered Investment Companies Overseen by Trustee in Family of Investment Companies
	iShares Russell 1000 Value ETF	Over $100,000	
	iShares Russell 2000 ETF	Over $100,000	
Madhav V. Rajan	iShares Core MSCI International Developed Markets ETF	Over $100,000	Over $100,000
	iShares Core S&P 500 ETF	Over $100,000	

As of December 31, 2022, none of the Independent Trustees or their immediate family members owned beneficially or of record any securities of BFA (the Funds' investment adviser), the Distributor or any person controlling, controlled by or under common control with BFA or the Distributor.

Remuneration of Trustees and Advisory Board Members. Effective January 1, 2023, each current Independent Trustee is paid an annual retainer of $440,000 for his or her services as a Board member to the BlackRock-advised Funds in the Exchange-Traded Fund Complex, together with out-of-pocket expenses in accordance with the Board's policy on travel and other business expenses relating to attendance at meetings. The annual retainer for services as an Advisory Board Member is the same as the annual retainer for services as a Board member. The Independent Chair of the Board is paid an additional annual retainer of $125,000. The Chair of each of the Equity Plus Committee, Fixed Income Plus Committee, Securities Lending Committee, Nominating and Governance Committee and 15(c) Committee is paid an additional annual retainer of $30,000. The Chair of each of the Audit Committee and Risk Committee is paid an additional annual retainer of $45,000. Each Independent Trustee that served as a director of subsidiaries of the Exchange-Traded Fund Complex is paid an additional annual retainer of $10,000 (plus an additional $1,765 paid annually to compensate for taxes due in the Republic of Mauritius in connection with such Trustee's service on the boards of certain Mauritius-based subsidiaries).

The tables below set forth the compensation earned by each Independent Trustee and Interested Trustee for services to each Fund for the fiscal year ended February 28, 2023 and the aggregate compensation paid to them for services to the Exchange-Traded Fund Complex for the calendar year ended December 31, 2022.

Name	iShares 0-3 Month Treasury Bond ETF	iShares 1-3 Year Treasury Bond ETF	iShares 1-5 Year Investment Grade Corporate Bond ETF	iShares 3-7 Year Treasury Bond ETF
Independent Trustees:				
Jane D. Carlin	$1,747	$5,665	$5,198	$2,584
Richard L. Fagnani	1,747	5,665	5,198	2,584
Cecilia H. Herbert	1,787	5,796	5,318	2,644
John E. Kerrigan	1,921	6,229	5,716	2,842
Drew E. Lawton	1,691	5,483	5,032	2,502
John E. Martinez	1,691	5,483	5,032	2,502
Madhav V. Rajan	1,691	5,483	5,032	2,502
Interested Trustees:				
Robert S. Kapito	$ 0	$ 0	$ 0	$ 0
Salim Ramji[1]	0	0	0	0

Name	iShares 5-10 Year Investment Grade Corporate Bond ETF	iShares 7-10 Year Treasury Bond ETF	iShares 10+ Year Investment Grade Corporate Bond ETF	iShares 10-20 Year Treasury Bond ETF
Independent Trustees:				
Jane D. Carlin	$2,371	$4,946	$326	$1,782
Richard L. Fagnani	2,371	4,946	326	1,782
Cecilia H. Herbert	2,426	5,061	334	1,823
John E. Kerrigan	2,608	5,439	359	1,959
Drew E. Lawton	2,295	4,788	316	1,725
John E. Martinez	2,295	4,788	316	1,725
Madhav V. Rajan	2,295	4,788	316	1,725
Interested Trustees:				
Robert S. Kapito	$ 0	$ 0	$ 0	$ 0
Salim Ramji[1]	0	0	0	0

Name	iShares 20+ Year Treasury Bond ETF	iShares 25+ Year Treasury STRIPS Bond ETF	iShares Agency Bond ETF	iShares BBB Rated Corporate Bond ETF
Independent Trustees:				
Jane D. Carlin	$6,519	$61	$148	$5
Richard L. Fagnani	6,519	61	148	5
Cecilia H. Herbert	6,670	62	151	5
John E. Kerrigan	7,169	67	162	6
Drew E. Lawton	6,310	59	143	5
John E. Martinez	6,310	59	143	5
Madhav V. Rajan	6,310	59	143	5
Interested Trustees:				
Robert S. Kapito	$ 0	$ 0	$ 0	$0
Salim Ramji[1]	0	0	0	0

Name	iShares Broad USD Investment Grade Corporate Bond ETF	iShares California Muni Bond ETF	iShares Core 5-10 Year USD Bond ETF	iShares Core 10+ Year USD Bond ETF
Independent Trustees:				
Jane D. Carlin	$1,761	$416	$35	$73
Richard L. Fagnani	1,761	416	35	73
Cecilia H. Herbert	1,802	426	36	74
John E. Kerrigan	1,937	458	39	80
Drew E. Lawton	1,705	403	34	70
John E. Martinez	1,705	403	34	70
Madhav V. Rajan	1,705	403	34	70
Interested Trustees:				
Robert S. Kapito	$ 0	$ 0	$ 0	$ 0
Salim Ramji[1]	0	0	0	0

Name	iShares Core U.S. Aggregate Bond ETF	iShares ESG Advanced Investment Grade Corporate Bond ETF	iShares ESG Advanced Total USD Bond Market ETF	iShares ESG Aware 1-5 Year USD Corporate Bond ETF
Independent Trustees:				
Jane D. Carlin	$18,435	$3	$123	$194
Richard L. Fagnani	18,435	3	123	194
Cecilia H. Herbert	18,861	3	126	199
John E. Kerrigan	20,272	3	135	214
Drew E. Lawton	17,844	2	119	188
John E. Martinez	17,844	2	119	188
Madhav V. Rajan	17,844	2	119	188
Interested Trustees:				
Robert S. Kapito	$ 0	$0	$ 0	$ 0
Salim Ramji[1]	0	0	0	0

Name	iShares ESG Aware U.S. Aggregate Bond ETF	iShares ESG Aware USD Corporate Bond ETF	iShares Government/Credit Bond ETF	iShares High Yield Systematic Bond ETF
Independent Trustees:				
Jane D. Carlin	$513	$245	$33	$29
Richard L. Fagnani	513	245	33	29
Cecilia H. Herbert	524	251	34	30
John E. Kerrigan	564	270	37	32
Drew E. Lawton	496	237	32	28
John E. Martinez	496	237	32	28
Madhav V. Rajan	496	237	32	28
Interested Trustees:				
Robert S. Kapito	$ 0	$ 0	$ 0	$ 0
Salim Ramji[1]	0	0	0	0

Name	iShares iBoxx $ High Yield Corporate Bond ETF	iShares iBoxx $ Investment Grade Corporate Bond ETF	iShares Intermediate Government/Credit Bond ETF	iShares Investment Grade Systematic Bond ETF
Independent Trustees:				
Jane D. Carlin	$2,664	$7,012	$530	$51
Richard L. Fagnani	2,664	7,012	530	51
Cecilia H. Herbert	2,725	7,174	542	52
John E. Kerrigan	2,929	7,710	582	56
Drew E. Lawton	2,578	6,787	513	49
John E. Martinez	2,578	6,787	513	49
Madhav V. Rajan	2,578	6,787	513	49
Interested Trustees:				
Robert S. Kapito	$ 0	$ 0	$ 0	$ 0
Salim Ramji[1]	0	0	0	0

Name	iShares MBS ETF	iShares National Muni Bond ETF	iShares New York Muni Bond ETF	iShares Short-Term National Muni Bond ETF
Independent Trustees:				
Jane D. Carlin	$5,319	$6,767	$117	$2,256
Richard L. Fagnani	5,319	6,767	117	2,256
Cecilia H. Herbert	5,442	6,924	120	2,309
John E. Kerrigan	5,849	7,441	128	2,481
Drew E. Lawton	5,149	6,550	113	2,184
John E. Martinez	5,149	6,550	113	2,184
Madhav V. Rajan	5,149	6,550	113	2,184
Interested Trustees:				
Robert S. Kapito	$ 0	$ 0	$ 0	$ 0
Salim Ramji[1]	0	0	0	0

Name	iShares Short Treasury Bond ETF	iShares USD Systematic Bond ETF
Independent Trustees:		
Jane D. Carlin	$5,108	$3
Richard L. Fagnani	5,108	3
Cecilia H. Herbert	5,227	3
John E. Kerrigan	5,617	3
Drew E. Lawton	4,945	3
John E. Martinez	4,945	3
Madhav V. Rajan	4,945	3
Interested Trustees:		
Robert S. Kapito	$ 0	$0
Salim Ramji[1]	0	0

Name	Pension or Retirement Benefits Accrued As Part of Trust Expenses[2]	Estimated Annual Benefits Upon Retirement[2]	Total Compensation From the Funds and Fund Complex[3]
Independent Trustees:			
Jane D. Carlin	Not Applicable	Not Applicable	$465,000
Richard L. Fagnani	Not Applicable	Not Applicable	476,764
Cecilia H. Herbert	Not Applicable	Not Applicable	475,000
John E. Kerrigan	Not Applicable	Not Applicable	505,000
Drew E. Lawton	Not Applicable	Not Applicable	461,764
John E. Martinez	Not Applicable	Not Applicable	450,000
Madhav V. Rajan	Not Applicable	Not Applicable	450,000
Interested Trustees:			
Robert S. Kapito	Not Applicable	Not Applicable	$ 0

Name	Pension or Retirement Benefits Accrued As Part of Trust Expenses[2]	Estimated Annual Benefits Upon Retirement[2]	Total Compensation From the Funds and Fund Complex[3]
Salim Ramji[1]	Not Applicable	Not Applicable	0

[1] Served as an Interested Trustee through January 31, 2024.

[2] No Trustee or officer is entitled to any pension or retirement benefits from the Trust.

[3] Also includes compensation for service on the Board of Trustees of iShares U.S. ETF Trust and the Board of Directors of iShares, Inc.

Control Persons and Principal Holders of Securities.

The Trustees and officers of the Trust collectively owned less than 1% of each Fund's outstanding shares as of May 31, 2023.

Although the Trust does not have information concerning the beneficial ownership of shares held in the names of Depository Trust Company ("DTC") participants (as defined below), as of May 31, 2023, the name and percentage ownership of each DTC participant that owned of record 5% or more of the outstanding shares of a Fund were as follows:

Fund	Name	Percentage of Ownership
iShares 0-3 Month Treasury Bond ETF	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	17.49%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	16.84%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	11.84%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	7.66%
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	5.88%
	Morgan Stanley Smith Barney LLC One New York Plaza New York, NY 10004	5.10%
iShares 1-3 Year Treasury Bond ETF	National Financial Services LLC 245 Summer Street Boston, MA 02210	14.19%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	10.71%
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	6.88%
	Morgan Stanley Smith Barney LLC One New York Plaza New York, NY 10004	5.55%

Fund	Name	Percentage of Ownership
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	5.23%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	5.01%
iShares 1-5 Year Investment Grade Corporate Bond ETF	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	15.12%
	Northern Trust Company (The) 801 South Canal Street Chicago, IL 60607	13.32%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	12.36%
	JPMorgan Chase Bank, National Association 1111 Polaris Parkway Columbus, OH 43240	9.09%
	The Bank of New York Mellon 111 Sanders Creek Parkway 2nd Floor East Syracuse, NY 13057	7.22%
iShares 3-7 Year Treasury Bond ETF	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	17.45%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	14.29%
	JPMorgan Chase Bank, National Association 1111 Polaris Parkway Columbus, OH 43240	8.17%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	7.07%
	Ameriprise Enterprise Investment Services, Inc. 901 3rd Avenue South Minneapolis, MN 55474	5.76%
iShares 5-10 Year Investment Grade Corporate Bond ETF	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	18.30%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	11.77%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	11.14%

Fund	Name	Percentage of Ownership
	The Bank of New York Mellon 111 Sanders Creek Parkway 2nd Floor East Syracuse, NY 13057	7.63%
	Citibank, N.A. 3800 CitiBank Center Tampa Building B/1st Floor Zone 8 Tampa, FL 33610-9122	6.37%
	JPMorgan Chase Bank, National Association 1111 Polaris Parkway Columbus, OH 43240	6.18%
iShares 7-10 Year Treasury Bond ETF	National Financial Services LLC 245 Summer Street Boston, MA 02210	18.94%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	10.79%
	J.P. Morgan Securities, LLC/JPMC 383 Madison Avenue New York, NY 10179	9.51%
	State Street Bank and Trust Company 1776 Heritage Drive North Quincy, MA 02171	9.34%
	JPMorgan Chase Bank, National Association 1111 Polaris Parkway Columbus, OH 43240	6.47%
iShares 10+ Year Investment Grade Corporate Bond ETF	The Bank of New York Mellon 111 Sanders Creek Parkway 2nd Floor East Syracuse, NY 13057	21.52%
	Citibank, N.A. 3800 CitiBank Center Tampa Building B/1st Floor Zone 8 Tampa, FL 33610-9122	8.24%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	7.68%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	7.42%
	Northern Trust Company (The) 801 South Canal Street Chicago, IL 60607	7.00%
	JPMorgan Chase Bank, National Association 1111 Polaris Parkway Columbus, OH 43240	6.83%

Fund	Name	Percentage of Ownership
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	5.57%
iShares 10-20 Year Treasury Bond ETF	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	22.08%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	13.11%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	12.71%
	Morgan Stanley Smith Barney LLC One New York Plaza New York, NY 10004	7.96%
	Ameriprise Enterprise Investment Services, Inc. 901 3rd Avenue South Minneapolis, MN 55474	7.67%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	6.13%
	UBS Financial Services Inc. 1000 Harbor Blvd. Weehawken, NJ 07086	5.52%
iShares 20+ Year Treasury Bond ETF	National Financial Services LLC 245 Summer Street Boston, MA 02210	30.65%
	Citibank, N.A. 3800 CitiBank Center Tampa Building B/1st Floor Zone 8 Tampa, FL 33610-9122	20.80%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	10.47%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	6.19%
iShares 25+ Year Treasury STRIPS Bond ETF	The Bank of New York Mellon 111 Sanders Creek Parkway 2nd Floor East Syracuse, NY 13057	45.61%
	Northern Trust Company (The) 801 South Canal Street Chicago, IL 60607	12.20%

Fund	Name	Percentage of Ownership
	National Financial Services LLC 245 Summer Street Boston, MA 02210	10.68%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	7.53%
iShares Agency Bond ETF	National Financial Services LLC 245 Summer Street Boston, MA 02210	23.53%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	17.69%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	9.72%
	Raymond, James & Associates, Inc. 880 Carillon Parkway P.O. Box 12749 St. Petersburg, FL 33733	6.32%
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	5.40%
iShares BBB Rated Corporate Bond ETF	State Street Bank and Trust Company 1776 Heritage Drive North Quincy, MA 02171	83.33%
iShares Broad USD Investment Grade Corporate Bond ETF	UBS Financial Services Inc. 1000 Harbor Blvd. Weehawken, NJ 07086	24.56%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	17.13%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	9.43%
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	7.79%
	JPMorgan Chase Bank, National Association 1111 Polaris Parkway Columbus, OH 43240	5.59%
iShares California Muni Bond ETF	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	44.06%

Fund	Name	Percentage of Ownership
	National Financial Services LLC 245 Summer Street Boston, MA 02210	16.60%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	8.74%
	Morgan Stanley Smith Barney LLC One New York Plaza New York, NY 10004	6.01%
iShares Core 5-10 Year USD Bond ETF	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	58.53%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	16.18%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	10.01%
iShares Core 10+ Year USD Bond ETF	National Financial Services LLC 245 Summer Street Boston, MA 02210	18.29%
	Ameriprise Enterprise Investment Services, Inc. 901 3rd Avenue South Minneapolis, MN 55474	17.72%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	17.50%
	The Bank of New York Mellon 111 Sanders Creek Parkway 2nd Floor East Syracuse, NY 13057	15.77%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	8.63%
iShares Core U.S. Aggregate Bond ETF	Edward D. Jones & Co. 12555 Manchester Road Saint Louis, MO 63131	10.71%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	10.61%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	9.06%
	Raymond, James & Associates, Inc. 880 Carillon Parkway P.O. Box 12749 St. Petersburg, FL 33733	7.57%

Fund	Name	Percentage of Ownership
	State Street Bank and Trust Company 1776 Heritage Drive North Quincy, MA 02171	5.51%
	Wells Fargo Clearing Services LLC 2801 Market Street St Louis, MO 63103	5.48%
iShares ESG Advanced Investment Grade Corporate Bond ETF	State Street Bank and Trust Company 1776 Heritage Drive North Quincy, MA 02171	87.33%
iShares ESG Advanced Total USD Bond Market ETF	Northern Trust Company (The) 801 South Canal Street Chicago, IL 60607	32.44%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	27.05%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	9.51%
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	8.68%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	7.42%
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	25.10%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	14.46%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	13.03%
	Goldman, Sachs & Co. 30 Hudson Street 16th Floor Jersey City, NJ 07302	6.30%
	Ameriprise Enterprise Investment Services, Inc. 901 3rd Avenue South Minneapolis, MN 55474	6.07%
iShares ESG Aware U.S. Aggregate Bond ETF	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	26.84%

Fund	Name	Percentage of Ownership
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	12.80%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	11.50%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	9.83%
iShares ESG Aware USD Corporate Bond ETF	National Financial Services LLC 245 Summer Street Boston, MA 02210	23.71%
	Ameriprise Enterprise Investment Services, Inc. 901 3rd Avenue South Minneapolis, MN 55474	23.54%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	9.62%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	9.39%
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	6.66%
	UBS Financial Services Inc. 1000 Harbor Blvd. Weehawken, NJ 07086	5.27%
	RBC Capital Markets, LLC 3 World Financial Center 200 Vesey Street New York, NY 10281-8098	5.22%
iShares Government/Credit Bond ETF	National Financial Services LLC 245 Summer Street Boston, MA 02210	19.75%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	17.63%
	Morgan Stanley Smith Barney LLC One New York Plaza New York, NY 10004	16.47%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	6.87%
	U.S. Bank N.A. 1555 North Rivercenter Dr. Suite 302 Milwaukee, WI 53212	6.75%

Fund	Name	Percentage of Ownership
iShares High Yield Systematic Bond ETF	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	35.75%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	17.74%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	7.09%
	J.P. Morgan Securities, LLC/JPMC 383 Madison Avenue New York, NY 10179	6.63%
	Wells Fargo Clearing Services LLC 2801 Market Street St Louis, MO 63103	5.82%
iShares iBoxx $ High Yield Corporate Bond ETF	National Financial Services LLC 245 Summer Street Boston, MA 02210	17.54%
	The Bank of New York Mellon 111 Sanders Creek Parkway 2nd Floor East Syracuse, NY 13057	16.72%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	5.51%
iShares iBoxx $ Investment Grade Corporate Bond ETF	The Bank of New York Mellon 111 Sanders Creek Parkway 2nd Floor East Syracuse, NY 13057	9.56%
	JPMorgan Chase Bank, National Association 1111 Polaris Parkway Columbus, OH 43240	8.77%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	8.37%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	8.13%
	Citibank, N.A. 3800 CitiBank Center Tampa Building B/1st Floor Zone 8 Tampa, FL 33610-9122	7.27%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	6.29%

Fund	Name	Percentage of Ownership
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	5.14%
iShares Intermediate Government/Credit Bond ETF	National Financial Services LLC 245 Summer Street Boston, MA 02210	16.47%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	15.17%
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	9.49%
	Reliance Trust Company, FIS TrustDesk MKE 11277 West Park Place, Suite 300 Milwaukee, WI 53224	6.04%
	U.S. Bank N.A. 1555 North Rivercenter Dr. Suite 302 Milwaukee, WI 53212	5.44%
iShares Investment Grade Systematic Bond ETF	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	33.44%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	24.48%
	Wells Fargo Clearing Services LLC 2801 Market Street St Louis, MO 63103	14.08%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	7.75%
	Ameriprise Enterprise Investment Services, Inc. 901 3rd Avenue South Minneapolis, MN 55474	5.37%
iShares MBS ETF	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	22.13%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	14.29%
	J.P. Morgan Securities, LLC/JPMC 383 Madison Avenue New York, NY 10179	7.87%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	6.59%

Fund	Name	Percentage of Ownership
	LPL Financial Corporation 9785 Towne Centre Drive San Diego, CA 92121-1968	6.30%
	Ameriprise Enterprise Investment Services, Inc. 901 3rd Avenue South Minneapolis, MN 55474	5.56%
iShares National Muni Bond ETF	National Financial Services LLC 245 Summer Street Boston, MA 02210	20.26%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	17.67%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	5.39%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	5.34%
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	5.25%
iShares New York Muni Bond ETF	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	21.97%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	21.41%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	7.40%
	Morgan Stanley Smith Barney LLC One New York Plaza New York, NY 10004	6.86%
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	6.11%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	5.51%
iShares Short-Term National Muni Bond ETF	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	20.42%

Fund	Name	Percentage of Ownership
	National Financial Services LLC 245 Summer Street Boston, MA 02210	14.49%
	The Bank of New York Mellon/Wealth Management One Wall Street New York, NY 10005	9.66%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	6.96%
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	5.53%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	5.40%
	SEI Private Trust Company/C/O GWP 1 Freedom Valley Drive Oaks, PA 19456	5.08%
iShares Short Treasury Bond ETF	Citibank, N.A. S.D. Indeval Institucion 3800 CitiBank Center Tampa Building B/1st Floor Zone 8 Tampa, FL 33610-9122	21.79%
	National Financial Services LLC 245 Summer Street Boston, MA 02210	12.52%
	Charles Schwab & Co., Inc. 101 Montgomery Street San Francisco, CA 94014	10.27%
	TD Ameritrade Clearing, Inc. 200 South 108th Avenue Omaha, NE 68154	7.32%
	Morgan Stanley Smith Barney LLC One New York Plaza New York, NY 10004	6.54%
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	6.42%
iShares USD Systematic Bond ETF	State Street Bank and Trust Company 1776 Heritage Drive North Quincy, MA 02171	98.27%

Conflicts of Interest. Certain activities of BFA, BlackRock, Inc. and the other subsidiaries of BlackRock, Inc. (collectively referred to in this section as "BlackRock") and their respective directors, officers and employees, with respect to the Funds and/or other accounts managed by BlackRock, may give rise to actual or perceived conflicts of interest such as those described below.

BlackRock is one of the world's largest asset management firms. BlackRock, its subsidiaries and their respective directors, officers and employees, including the business units or entities and personnel who may be involved in the investment activities and business operations of a Fund, are engaged worldwide in businesses, including managing equities, fixed-income securities, cash and alternative investments, and have interests other than that of managing the Funds. These are considerations of which investors in a Fund should be aware, and which may cause conflicts of interest that could disadvantage a Fund and its shareholders. These businesses and interests include potential multiple advisory, financial and other relationships with, or interests in, companies and interests in securities or other instruments that may be purchased or sold by a Fund.

BlackRock has proprietary interests in, and may manage or advise with respect to, accounts or funds (including separate accounts and other funds and collective investment vehicles) that have investment objectives similar to those of a Fund and/or that engage in transactions in the same types of securities, currencies and instruments as the Funds. BlackRock is also a major participant in the global currency, equities, swap and fixed income markets, in each case, for the accounts of clients and, in some cases, on a proprietary basis. As such, BlackRock is or may be actively engaged in transactions in the same securities, currencies, and instruments in which a Fund invests. Such activities could affect the prices and availability of the securities, currencies, and instruments in which a Fund invests, which could have an adverse impact on a Fund's performance. Such transactions, particularly in respect of most proprietary accounts or client accounts, will be executed independently of a Fund's transactions and thus at prices or rates that may be more or less favorable than those obtained by the Funds.

When BlackRock seeks to purchase or sell the same assets for managed accounts, including a Fund, the assets actually purchased or sold may be allocated among the accounts on a basis determined in its good faith discretion to be equitable. In some cases, this system may adversely affect the size or price of the assets purchased or sold for a Fund. In addition, transactions in investments by one or more other accounts managed by BlackRock may have the effect of diluting or otherwise disadvantaging the values, prices or investment strategies of a Fund, particularly, but not limited to, with respect to small-capitalization, emerging market or less liquid strategies. This may occur with respect to BlackRock-advised accounts when investment decisions regarding a Fund are based on research or other information that is also used to support decisions for other accounts. When BlackRock implements a portfolio decision or strategy on behalf of another account ahead of, or contemporaneously with, similar decisions or strategies for a Fund, market impact, liquidity constraints, or other factors could result in the Fund receiving less favorable trading results and the costs of implementing such decisions or strategies could be increased or the Fund could otherwise be disadvantaged. BlackRock may, in certain cases, elect to implement internal policies and procedures designed to limit such consequences, which may cause a Fund to be unable to engage in certain activities, including purchasing or disposing of securities, when it might otherwise be desirable for it to do so.

Conflicts may also arise because portfolio decisions regarding a Fund may benefit other accounts managed by BlackRock. For example, the sale of a long position or establishment of a short position by a Fund may impair the price of the same security sold short by (and therefore benefit) BlackRock or its other accounts or funds, and the purchase of a security or covering of a short position in a security by a Fund may increase the price of the same security held by (and therefore benefit) BlackRock or its other accounts or funds. In addition, to the extent permitted by applicable law, certain Funds may invest their assets in other funds advised by BlackRock, including funds that are managed by one or more of the same portfolio managers, which could result in conflicts of interest relating to asset allocation, timing of Fund purchases and sales, and increased remuneration and profitability for BlackRock, and/or its personnel, including portfolio managers.

In certain circumstances, BlackRock, on behalf of the Funds, may seek to buy from or sell securities to another fund or account advised by BlackRock. BlackRock may (but is not required to) effect purchases and sales between BlackRock clients ("cross trades"), including the Funds, if BlackRock believes such transactions are appropriate based on each party's investment objectives and guidelines, subject to applicable law and regulation. There may be potential conflicts of interest or regulatory issues relating to these transactions which could limit BlackRock's decision to engage in these transactions for the Funds. BlackRock may have a potentially conflicting division of loyalties and responsibilities to the parties in such transactions. On any occasion when a Fund participates in a cross trade, BlackRock will comply with procedures adopted under applicable rules and SEC guidance.

BlackRock and its clients may pursue or enforce rights with respect to an issuer in which a Fund has invested, and those activities may have an adverse effect on the Fund. As a result, prices, availability, liquidity and terms of a Fund's investments may be negatively impacted by the activities of BlackRock or its clients, and transactions for the Fund may be impaired or effected at prices or terms that may be less favorable than would otherwise have been the case.

The results of a Fund's investment activities may differ significantly from the results achieved by BlackRock for its proprietary accounts or other accounts (including investment companies or collective investment vehicles) which it manages or advises. It is possible that one or more accounts managed or advised by BlackRock and such other accounts will achieve investment results that are substantially more or less favorable than the results achieved by a Fund. Moreover, it is possible that a Fund will sustain losses during periods in which one or more proprietary or other accounts managed or advised by BlackRock achieve significant profits. The opposite result is also possible.

From time to time, a Fund may be restricted from purchasing or selling securities, or from engaging in other investment activities because of regulatory, legal or contractual requirements applicable to BlackRock or other accounts managed or advised by BlackRock, and/or the internal policies of BlackRock designed to comply with such requirements. As a result, there may be periods, for example, when BlackRock will not initiate or recommend certain types of transactions in certain securities or instruments with respect to which BlackRock is performing services or when position limits have been reached. For example, the investment activities of BlackRock for its proprietary accounts and accounts under its management may limit the investment opportunities for a Fund in certain emerging and other markets in which limitations are imposed upon the amount of investment, in the aggregate or in individual issuers, by affiliated foreign investors.

In connection with its management of a Fund, BlackRock may have access to certain fundamental analysis and proprietary technical models developed by BlackRock. BlackRock will not be under any obligation, however, to effect transactions on behalf of a Fund in accordance with such analysis and models. In addition, BlackRock will not have any obligation to make available any information regarding its proprietary activities or strategies, or the activities or strategies used for other accounts managed by them, for the benefit of the management of a Fund and it is not anticipated that BlackRock will have access to such information for the purpose of managing the Fund. The proprietary activities or portfolio strategies of BlackRock, or the activities or strategies used for accounts managed by BlackRock or other client accounts could conflict with the transactions and strategies employed by BlackRock in managing a Fund.

The Funds may be included in investment models developed by BlackRock for use by clients and financial advisors. To the extent clients invest in these investment models and increase the assets under management of the Funds, the investment management fee amounts paid by the Funds to BlackRock may also increase. The price, availability and liquidity of a Fund may be impacted by purchases and sales of the Fund by model-driven investment portfolios, as well as by BlackRock itself and by its advisory clients.

In addition, certain principals and certain employees of a Fund's investment adviser are also principals or employees of other business units or entities within BlackRock. As a result, these principals and employees may have obligations to such other business units or entities or their clients and such obligations to other business units or entities or their clients may be a consideration of which investors in a Fund should be aware.

BlackRock may enter into transactions and invest in securities, instruments and currencies on behalf of a Fund in which clients of BlackRock or, to the extent permitted by the SEC and applicable law, BlackRock serves as the counterparty, principal or issuer. In such cases, such party's interests in the transaction will be adverse to the interests of the Fund, and such party may have no incentive to assure that the Fund obtains the best possible prices or terms in connection with the transactions. In addition, the purchase, holding and sale of such investments by a Fund may enhance the profitability of BlackRock.

BlackRock may also create, write or issue derivatives for clients based on the underlying securities, currencies or instruments in which a Fund may invest or on the performance of the Fund. An entity in which BlackRock has a significant minority interest will create, write or issue options which may be based on the performance of certain Funds. BlackRock has the right to receive a portion of the gross revenue earned by such entity. Options writing by such entity on a Fund could potentially lead to increased purchase activity with respect to the Fund and increased assets under management for BlackRock.

BlackRock has entered into an arrangement with Markit Indices Limited, the index provider for underlying fixed-income indexes used by certain iShares funds, related to derivative fixed-income products that are based on such iShares funds. BlackRock may receive certain payments for licensing intellectual property belonging to BlackRock and for facilitating the provision of data in connection with such derivative products, which may include payments based on the trading volumes of, or revenues generated by, the derivative products. However, BlackRock will not receive any such payments on those derivative products utilized by the Funds or other BlackRock funds or accounts. Other funds and accounts managed by BlackRock may from time to time transact in such derivative products, which could contribute to the viability or success of such derivative products by making them more appealing to funds and accounts managed by third parties, and in turn lead to increased payments to BlackRock. Trading activity in such derivative products could also potentially lead to increased purchase activity with respect to these iShares funds and increased assets under management for BlackRock.

A Fund may, subject to applicable law, purchase investments that are the subject of an underwriting or other distribution by BlackRock and may also enter into transactions with other clients of BlackRock where such other clients have interests adverse to those of the Fund.

At times, these activities may cause business units or entities within BlackRock to give advice to clients that may cause these clients to take actions adverse to the interests of a Fund. To the extent such transactions are permitted, a Fund will deal with BlackRock on an arm's-length basis.

To the extent authorized by applicable law, BlackRock may act as broker, dealer, agent, lender or adviser or in other commercial capacities for a Fund. It is anticipated that the commissions, mark-ups, mark-downs, financial advisory fees, underwriting and placement fees, sales fees, financing and commitment fees, brokerage fees, other fees, compensation or profits, rates, terms and conditions charged by BlackRock will be in its view commercially reasonable, although BlackRock, including its sales personnel, will have an interest in obtaining fees and other amounts that are favorable to BlackRock and such sales personnel, which may have an adverse effect on the Funds. Index based funds may use an index provider that is affiliated with another service provider of a Fund or BlackRock that acts as a broker, dealer, agent, lender or in other commercial capacities for a Fund or BlackRock.

Subject to applicable law, BlackRock (and its personnel and other distributors) will be entitled to retain fees and other amounts that they receive in connection with their service to the Funds as broker, dealer, agent, lender, adviser or in other commercial capacities. No accounting to the Funds or their shareholders will be required, and no fees or other compensation payable by the Funds or their shareholders will be reduced by reason of receipt by BlackRock of any such fees or other amounts.

When BlackRock acts as broker, dealer, agent, adviser or in other commercial capacities in relation to the Funds, BlackRock may take commercial steps in its own interests, which may have an adverse effect on the Funds. A Fund will be required to establish business relationships with its counterparties based on the Fund's own credit standing. BlackRock will not have any obligation to allow its credit to be used in connection with a Fund's establishment of its business relationships, nor is it expected that the Fund's counterparties will rely on the credit of BlackRock in evaluating the Fund's creditworthiness.

BTC, an affiliate of BFA pursuant to SEC exemptive relief, acts as securities lending agent to, and receives a share of securities lending revenues from, the Funds. BlackRock will also receive compensation for managing the reinvestment of the cash collateral from securities lending. There are potential conflicts of interests in managing a securities lending program, including but not limited to: (i) BlackRock as securities lending agent may have an incentive to increase or decrease the amount of securities on loan or to lend particular securities in order to generate additional risk-adjusted revenue for BlackRock and its affiliates; and (ii) BlackRock as securities lending agent may have an incentive to allocate loans to clients that would provide more revenue to BlackRock. As described further below, BlackRock seeks to mitigate this conflict by providing its securities lending clients with equal lending opportunities over time in order to approximate *pro rata* allocation.

As part of its securities lending program, BlackRock indemnifies the Funds and certain other clients and/or funds against a shortfall in collateral in the event of borrower default. On a regular basis, BlackRock calculates the potential dollar exposure of collateral shortfall resulting from a borrower default ("shortfall risk") in the securities lending program. BlackRock establishes program-wide borrower limits ("credit limits") to actively manage borrower-specific credit exposure. BlackRock oversees the risk model that calculates projected collateral shortfall values using loan-level factors such as loan and collateral type and market value as well as specific borrower credit characteristics. When necessary, BlackRock may adjust securities lending program attributes by restricting eligible collateral or reducing borrower credit limits. As a result, the management of program-wide exposure as well as BlackRock-specific indemnification exposure may affect the amount of securities lending activity BlackRock may conduct at any given point in time by reducing the volume of lending opportunities for certain loans (including by asset type, collateral type and/or revenue profile).

BlackRock uses a predetermined systematic process in order to approximate *pro rata* allocation over time. In order to allocate a loan to a portfolio: (i) BlackRock as a whole must have sufficient lending capacity pursuant to the various program limits (*i.e.,* indemnification exposure limit and borrower credit limits); (ii) the lending portfolio must hold the asset at the time a loan opportunity arrives; and (iii) the lending portfolio must also have enough inventory, either on its own or when aggregated with other portfolios into one single market delivery, to satisfy the loan request. In doing so, BlackRock seeks to provide equal lending opportunities for all portfolios, independent of whether BlackRock indemnifies the portfolio. Equal opportunities for lending portfolios does not guarantee equal outcomes. Specifically, short and long-term outcomes for individual clients may vary due to asset mix, asset/liability spreads on different securities, and the overall limits imposed by the firm.

BlackRock may decline to make a securities loan on behalf of a Fund, discontinue lending on behalf of a Fund or terminate a securities loan on behalf of a Fund for any reason, including but not limited to regulatory requirements and/or market rules, liquidity considerations, or credit considerations, which may impact Funds by reducing or eliminating the volume of lending opportunities for certain types of loans, loans in particular markets, loans of particular securities or types of securities, or for loans overall.

Purchases and sales of securities and other assets for a Fund may be bunched or aggregated with orders for other BlackRock client accounts, including with accounts that pay different transaction costs solely due to the fact that they have different research payment arrangements. BlackRock, however, is not required to bunch or aggregate orders if portfolio management decisions for different accounts are made separately, or if they determine that bunching or aggregating is not practicable or required, or in cases involving client direction.

Prevailing trading activity frequently may make impossible the receipt of the same price or execution on the entire volume of securities purchased or sold. When this occurs, the various prices may be averaged, and the Funds will be charged or credited with the average price. Thus, the effect of the aggregation may operate on some occasions to the disadvantage of the Funds. In addition, under certain circumstances, the Funds will not be charged the same commission or commission equivalent rates in connection with a bunched or aggregated order.

Subject to applicable law, BlackRock may select brokers that furnish BlackRock, the Funds, other BlackRock client accounts or personnel, directly or through correspondent relationships, with research or other appropriate services which provide, in BlackRock's view, appropriate assistance to BlackRock in the investment decision-making process (including with respect to futures, fixed-price offerings and OTC transactions). Such research or other services may include, to the extent permitted by law, research reports on companies, industries and securities; economic and financial data; financial publications; proxy analysis; trade industry seminars; computer data bases; research-oriented software and other services and products. Research or other services obtained in this manner may be used in servicing any or all of the Funds and other BlackRock client accounts, including in connection with BlackRock client accounts other than those that pay commissions to the broker relating to the research or other service arrangements. Such products and services may disproportionately benefit other BlackRock client accounts relative to the Funds based on the amount of brokerage commissions paid by the Funds and such other BlackRock client accounts. For example, research or other services that are paid for through one client's commissions may not be used in managing that client's account. In addition, other BlackRock client accounts may receive the benefit, including disproportionate benefits, of economies of scale or price discounts in connection with products and services that may be provided to the Funds and to such other BlackRock client accounts. To the extent that BlackRock uses soft dollars, it will not have to pay for those products and services itself.

BlackRock does not currently enter into arrangements to use the Funds' assets for, or participate in, soft dollars, although BlackRock may receive research that is bundled with the trade execution, clearing, and/or settlement services provided by a particular broker-dealer. To the extent that BlackRock receives research on this basis, many of the same conflicts related to traditional soft dollars may exist. For example, the research effectively will be paid by client commissions that also will be used to pay for the execution, clearing, and settlement services provided by the broker-dealer and will not be paid by BlackRock. BlackRock, unless prohibited by applicable law, may endeavor to execute trades through brokers who, pursuant to such arrangements, provide research or other services in order to ensure the continued receipt of research or other services BlackRock believes are useful in its investment decision-making process. BlackRock may from time to time choose not to engage in the above described arrangements to varying degrees. BlackRock, unless prohibited by applicable law, may also enter into commission sharing arrangements under which BlackRock may execute transactions through a broker-dealer, and request that the broker-dealer allocate a portion of the commissions or commission credits to another firm that provides research to BlackRock. To the extent that BlackRock engages in commission sharing arrangements, many of the same conflicts related to traditional soft dollars may exist.

BlackRock may utilize certain electronic crossing networks ("ECNs") (including, without limitation, ECNs in which BlackRock has an investment or other interest, to the extent permitted by applicable law) in executing client securities transactions for certain types of securities. These ECNs may charge fees for their services, including access fees and transaction fees. The transaction fees, which are similar to commissions or markups/markdowns, will generally be charged to clients and, like commissions and markups/markdowns, would generally be included in the cost of the securities purchased. Access fees may be paid by BlackRock even though incurred in connection with executing transactions on behalf of clients, including the Funds. In certain circumstances, ECNs may offer volume discounts that will reduce the access fees typically paid by BlackRock. BlackRock will only utilize ECNs consistent with its obligation to seek to obtain best execution in client transactions.

BlackRock owns a minority interest in, and is a member of, Members Exchange ("MEMX"), a newly created U.S. stock exchange. Transactions for a Fund may be executed on MEMX if third party brokers select MEMX as the appropriate venue for execution of orders placed by BlackRock traders on behalf of such Funds. In addition, transactions in Fund shares may be executed on MEMX if third party brokers select MEMX as the appropriate venue for the execution of such orders.

BlackRock has adopted policies and procedures designed to prevent conflicts of interest from influencing proxy voting decisions that it makes on behalf of advisory clients, including the Funds, and to help ensure that such decisions are made in accordance with BlackRock's fiduciary obligations to its clients. Nevertheless, notwithstanding such proxy voting policies and procedures, actual proxy voting decisions of BlackRock may have the effect of favoring the interests of other clients or businesses of other divisions or units of BlackRock, provided that BlackRock believes such voting decisions to be in accordance with its fiduciary obligations. For a more detailed discussion of these policies and procedures, see the *Proxy Voting Policy* section of this SAI.

It is also possible that, from time to time, BlackRock and/or its advisory clients (including other funds and separately managed accounts) may, subject to compliance with applicable law, purchase and hold shares of a Fund. Increasing a Fund's assets may enhance liquidity, investment flexibility and diversification and may contribute to economies of scale that tend to reduce the Fund's expense ratio. BlackRock reserves the right, subject to compliance with applicable law, to sell into the market or redeem in Creation Units through an Authorized Participant at any time some or all of the shares of a Fund acquired for its own accounts or the account of a BlackRock advisory client. A large sale or redemption of shares of a Fund by BlackRock itself or a BlackRock advisory client could significantly reduce the asset size of the Fund, which might have an adverse effect on the Fund's liquidity, investment flexibility, portfolio diversification, expense ratio or ability to comply with the listing requirements for the Fund.

It is possible that a Fund may invest in securities of, or engage in transactions with, companies in which BlackRock has significant debt or equity investments or other interests. A Fund may also invest in issuances (such as structured notes) by entities for which BlackRock provides and is compensated for cash management services relating to the proceeds from the sale of such issuances. In making investment decisions for a Fund, BlackRock is not permitted to obtain or use material non-public information acquired by any unit of BlackRock in the course of these activities. In addition, from time to time, the activities of BlackRock may limit a Fund's flexibility in purchases and sales of securities. As indicated below, BlackRock may engage in transactions with companies in which BlackRock-advised funds or other clients of BlackRock have an investment.

BlackRock, its personnel and other financial service providers may have interests in promoting sales of the Funds. With respect to BlackRock and its personnel, the remuneration and profitability relating to services to and sales of the Funds or other products may be greater than remuneration and profitability relating to services to and sales of certain funds or other products that might be provided or offered. BlackRock and its sales personnel may directly or indirectly receive a portion of the fees and commissions charged to the Funds or their shareholders. BlackRock and its advisory or other personnel may also benefit from increased amounts of assets under management. Fees and commissions may also be higher than for other products or services, and the remuneration and profitability to BlackRock and such personnel resulting from transactions on behalf of or management of the Funds may be greater than the remuneration and profitability resulting from other funds or products.

Third parties, including service providers to BlackRock or a Fund, may sponsor events (including, but not limited to, marketing and promotional activities and presentations, educational training programs and conferences) for registered representatives, other professionals and individual investors. There is a potential conflict of interest as such sponsorships may defray the costs of such activities to BlackRock, and may provide an incentive to BlackRock to retain such third parties to provide services to a Fund.

BlackRock may provide valuation assistance to certain clients with respect to certain securities or other investments and the valuation recommendations made for such clients' accounts may differ from the valuations for the same securities or investments assigned by a Fund's pricing vendors, especially if such valuations are based on broker-dealer quotes or other data sources unavailable to the Fund's pricing vendors. While BlackRock will generally communicate its valuation information or determinations to a Fund's pricing vendors and/or fund accountants, there may be instances where the Fund's pricing vendors or fund accountants assign a different valuation to a security or other investment than the valuation for such security or investment determined or recommended by BlackRock.

As disclosed in more detail in the *Determination of Net Asset Value* section in this SAI, when market quotations are not readily available or are believed by BFA to be unreliable, each Fund's investments are valued at fair value by BFA. BFA has been designated as each Fund's valuation designee pursuant to Rule 2a-5 under the Investment Company Act and acts through BFA's Rule 2a-5 Committee (the "2a-5 Committee"), with assistance from other BFA pricing committees and in accordance with BFA's policies and procedures (the "Valuation Procedures"). When determining a "fair value price," the 2a-5 Committee seeks to determine the price that a Fund might reasonably expect to receive from the current sale of that asset or liability in an arm's-length transaction. The price generally may not be determined based on what a Fund might reasonably expect to receive for selling an asset or liability at a later time or if it holds the asset or liability to maturity. While fair value determinations will be based upon all available factors that BFA deems relevant at the time of the determination, and may be based on analytical values determined by BFA using proprietary or third-party valuation models, fair value represents only a good faith approximation of the value of an asset or liability. The fair value of one or more assets or liabilities may not, in retrospect, be the price at which those assets or liabilities could have been sold during the period in which the particular fair values were used in determining a Fund's NAV. As a result, a Fund's sale or redemption of its shares at NAV, at a time when a holding or holdings are valued by the 2a-5 Committee at fair value, may have the effect of diluting or increasing the economic interest of existing shareholders and may affect the amount of revenue received by BFA with respect to services for which it receives an asset-based fee.

To the extent permitted by applicable law, a Fund may invest all or some of its short-term cash investments in any money market fund or similarly-managed private fund advised or managed by BlackRock. In connection with any such investments, a Fund, to the extent permitted by the 1940 Act, may pay its share of expenses of a money market fund or other similarly-managed private fund in which it invests, which may result in a Fund bearing some additional expenses.

BlackRock and its directors, officers and employees, may buy and sell securities or other investments for their own accounts and may have conflicts of interest with respect to investments made on behalf of a Fund. As a result of differing trading and investment strategies or constraints, positions may be taken by directors, officers and employees that are the same, different from or made at different times than positions taken for a Fund. To lessen the possibility that a Fund will be adversely affected by this personal trading, each Fund, BFA and BlackRock have each adopted a code of ethics in compliance with Section 17(j) of the 1940 Act that restricts securities trading in the personal accounts of investment professionals and others who normally come into possession of information regarding a Fund's portfolio transactions. Each code of ethics is available by contacting BlackRock at the telephone number on the back cover of each Fund's Prospectus or by accessing the EDGAR Database on the SEC's Internet site at http://www.sec.gov, and copies may be obtained, after paying a duplicating fee, by e-mail at publicinfo@sec.gov.

BlackRock will not purchase securities or other property from, or sell securities or other property to, a Fund, except that a Fund may in accordance with rules or guidance adopted under the 1940 Act engage in transactions with another Fund or accounts that are affiliated with a Fund as a result of common officers, directors, or investment advisers or pursuant to exemptive orders granted to the Funds and/or BlackRock by the SEC. These transactions would be effected in circumstances in which BlackRock determined that it would be appropriate for a Fund to purchase and another client of BlackRock to sell, or the Fund to sell and another client of BlackRock to purchase, the same security or instrument on the same day. From time to time, the activities of a Fund may be restricted because of regulatory requirements applicable to BlackRock and/or BlackRock's internal policies designed to comply with, limit the applicability of, or otherwise relate to such requirements. A client not advised by BlackRock would not be subject to some of those considerations. There may be periods when BlackRock may not initiate or recommend certain types of transactions, or may otherwise restrict or limit its advice in certain securities or instruments issued by or related to companies for which BlackRock is performing advisory or other services or has proprietary positions. For example, when BlackRock is engaged to provide advisory or risk management services for a company, BlackRock may be prohibited from or limited in purchasing or selling securities of that company on behalf of a Fund, particularly where such services result in BlackRock obtaining material non-public information about the company (*e.g.*, in connection with participation in a creditors' committee). Similar situations could arise if personnel of BlackRock serve as directors of companies the securities of which a Fund wishes to purchase or sell. However, if permitted by applicable law, and where consistent with BlackRock's policies and procedures (including the necessary implementation of appropriate information barriers), the Funds may purchase securities or instruments that are issued by such companies, are the subject of an advisory or risk management assignment by BlackRock, or where personnel of BlackRock are directors or officers of the issuer.

The investment activities of BlackRock for its proprietary accounts and for client accounts may also limit the investment strategies and rights of the Funds. For example, in certain circumstances where the Funds invest in securities issued by companies that operate in certain regulated industries or in certain emerging or international markets, or are subject to corporate or regulatory ownership restrictions, or invest in certain futures or other derivative transactions, there may be limits on the aggregate amount invested by BlackRock for their proprietary accounts and for client accounts (including the Funds) that may not be exceeded without the grant of a license or other regulatory or corporate consent or, if exceeded, may cause BlackRock, the Funds or other client accounts to suffer disadvantages or business restrictions.

If certain aggregate ownership thresholds are reached either through the actions of BlackRock or a Fund or as a result of third-party transactions, the ability of BlackRock, on behalf of clients (including the Funds), to purchase or dispose of investments, or exercise rights or undertake business transactions, may be restricted by regulation or otherwise impaired. As a result, BlackRock, on behalf of its clients (including the Funds), may limit purchases, sell existing investments, or otherwise restrict, forgo or limit the exercise of rights (including transferring, outsourcing or limiting voting rights or forgoing the right to receive dividends) when BlackRock, in its sole discretion, deems it appropriate in light of potential regulatory or other restrictions on ownership or other consequences resulting from reaching investment thresholds.

In those circumstances where ownership thresholds or limitations must be observed, BlackRock seeks to allocate limited investment opportunities equitably among clients (including the Funds), taking into consideration benchmark weight and investment strategy. BlackRock has adopted certain controls designed to prevent the occurrence of a breach of any applicable ownership threshold or limits, including, for example, when ownership in certain securities nears an applicable threshold, BlackRock may remove such securities from the list of Deposit Securities to be delivered to the Fund in connection with purchases of Creation Units of such Fund and may limit purchases in such securities to the issuer's weighting in the applicable benchmark used by BlackRock to manage such Fund. If client (including Fund) holdings of an issuer exceed an applicable threshold and BlackRock is unable to obtain relief to enable the continued holding of such investments, it may be necessary to sell down these positions to meet the applicable limitations. In these cases, benchmark overweight positions will be sold prior to benchmark positions being reduced to meet applicable limitations.

In addition to the foregoing, other ownership thresholds may trigger reporting requirements to governmental and regulatory authorities, and such reports may entail the disclosure of the identity of a client or BlackRock's intended strategy with respect to such security or asset.

BlackRock may not serve as an Authorized Participant in the creation and redemption of iShares ETFs.

Under an ETF Services Agreement, certain Funds have retained BlackRock Investments, LLC, an Affiliate of BFA, to perform certain order processing, Authorized Participant communications, and related services in connection with the issuance and redemption of Creation Units of the Funds ("ETF Services"). BRIL will retain a portion of the standard transaction fee received from Authorized Participants on each creation or redemption order from the Authorized Participant for the ETF Services provided. BlackRock collaborated with, and received payment from, Citibank, N.A. ("Citibank") on the design and development of the ETF Services platform. Citibank may have, or from time to time may develop, additional relationships with BlackRock or funds managed by BFA and its affiliates.

In order to defray transaction expenses and protect against possible shareholder dilution, the Funds may collect certain fees from Authorized Participants in connection with creation and redemption transactions. While BlackRock uses good faith estimates of the expected costs to the Funds in determining the rates for fees collected by the Funds related to creation and redemption activity, BlackRock may have incentives to improve Fund performance through the collection of these fees. As these charges are based on estimates, where the charges exceed actual transaction-related costs and/or expenses incurred by a Fund, Fund performance could improve as a result. BlackRock has established processes to oversee the determination of these estimates in an effort to mitigate this conflict.

BlackRock may maintain securities indices. To the extent permitted by applicable laws, the Funds may seek to license and use such indices as part of their investment strategy. Index based funds that seek to track the performance of securities indices also may use the name of the index or index provider in the fund name. Index providers, including BlackRock (to the extent permitted by applicable law), may be paid licensing fees for use of their index or index name. BlackRock may benefit from the Funds using BlackRock indices by creating increasing acceptance in the marketplace for such indices. BlackRock is not obligated to license its indices to a Fund and the Funds are under no obligation to use BlackRock indices. Any Fund that enters into a license for a BlackRock index cannot be assured that the terms of any index licensing agreement with BlackRock will be as favorable as those terms offered to other licensees.

The custody arrangement described in “Investment Advisory, Administrative and Distribution Services” may lead to potential conflicts of interest with BlackRock where BlackRock has agreed to waive fees and/or reimburse ordinary operating expenses in order to cap expenses of the Funds (or where BlackRock charges a unitary management fee). This is because the custody arrangements with certain Funds’ custodian may have the effect of reducing custody fees when the Funds leave cash balances uninvested. This could be viewed as having the potential to provide BlackRock an incentive to keep high positive cash balances for Funds in order to offset fund custody fees that BlackRock might otherwise reimburse or pay. However, BlackRock’s portfolio managers do not intentionally keep uninvested balances high, but rather make investment decisions that they anticipate will be beneficial to fund performance. For funds without a unitary management fee, when a fund’s actual operating expense ratio exceeds a stated cap, a reduction in custody fees reduces the amount of waivers and/or reimbursements BlackRock would be required to make to the fund.

BlackRock may enter into contractual arrangements with third-party service providers to a Fund (*e.g.*, custodians, administrators and index providers) pursuant to which BlackRock receives fee discounts or concessions in recognition of BlackRock’s overall relationship with such service providers. BlackRock may also enter into contractual arrangements with such service providers pursuant to which BlackRock incurs additional costs if the service provider’s services are terminated with respect to a Fund. To the extent that BlackRock is responsible for paying these service providers out of its management fee, the benefits of any such fee discounts or concessions, or any additional costs, may accrue, in whole or in part, to BlackRock, which could result in conflicts of interest relating to the use or termination of service providers to a Fund.

BlackRock owns or has an ownership interest in certain trading, portfolio management, operations and/or information systems used by Fund service providers. These systems are, or will be, used by a Fund service provider in connection with the provision of services to accounts managed by BlackRock and funds managed and sponsored by BlackRock, including the Funds, that engage the service provider (typically the custodian). A Fund’s service provider remunerates BlackRock for the use of the systems. A Fund service provider’s payments to BlackRock for the use of these systems may enhance the profitability of BlackRock.

BlackRock’s receipt of fees from a service provider in connection with the use of systems provided by BlackRock may create an incentive for BlackRock to recommend that a Fund enter into or renew an arrangement with the service provider.

In recognition of a BlackRock client’s overall relationship with BlackRock, BlackRock may offer special pricing arrangements for certain services provided by BlackRock. Any such special pricing arrangements will not apply to the client’s investment in a Fund.

Present and future activities of BlackRock (including BFA), its directors, officers and employees, in addition to those described in this section, may give rise to additional conflicts of interest.

Investment Advisory, Administrative and Distribution Services

Investment Adviser. BFA serves as investment adviser to each Fund pursuant to an investment advisory agreement between the Trust, on behalf of each Fund, and BFA. BFA is a California corporation indirectly owned by BlackRock, Inc. and is registered as an investment adviser under the Investment Advisers Act of 1940, as amended. Under the investment advisory agreement, BFA, subject to the supervision of the Board and in conformity with the stated investment policies of each Fund, manages and administers the Trust and the investment of each Fund’s assets. BFA is responsible for placing purchase and sale orders and providing continuous supervision of the investment portfolio of each Fund.

Pursuant to the investment advisory agreement, BFA may, from time to time, in its sole discretion and to the extent permitted by applicable law, appoint one or more sub-advisers, including, without limitation, affiliates of BFA, to perform investment advisory or other services with respect to a Fund. In addition, BFA may delegate certain of its investment advisory functions under the investment advisory agreement to one or more of its affiliates to the extent permitted by applicable law. BFA may terminate any or all sub-advisers or such delegation arrangements in its sole discretion upon appropriate notice at any time to the extent permitted by applicable law.

BFA is responsible, under the investment advisory agreement, for substantially all expenses of the Funds, including the cost of transfer agency, custody, fund administration, legal, audit and other services. BFA is not responsible for, and the Funds will bear, the management fees, interest expenses, taxes, expenses incurred with respect to the acquisition and disposition of portfolio securities and the execution of portfolio transactions, including brokerage commissions, distribution fees or expenses, and litigation expenses and any extraordinary expenses (as determined by a majority of the Independent Trustees).

The following describes the calculation of the management fee for each Fund whose management fee is subject to breakpoints. The management fee for all Funds is set forth in the table that follows the description of breakpoints.
For its investment advisory services to the iShares iBoxx $ High Yield Corporate Bond ETF, BFA is paid a management fee from the Fund based on the aggregate average daily net assets of the following iShares funds: iShares iBoxx $ High Yield Corporate Bond ETF and iShares J.P. Morgan USD Emerging Markets Bond ETF. The management fee for the Fund equals the ratio of the Fund's net assets over the aggregate net assets of the above iShares funds multiplied by the amount calculated as follows: 0.5000% per annum of the aggregate net assets less than or equal to $19 billion, plus 0.4750% per annum of the aggregate net assets over $19 billion, up to and including $33 billion, plus 0.4513% per annum of the aggregate net assets over $33 billion, up to and including $47 billion, plus 0.4287% per annum of the aggregate net assets in excess of $47 billion.

For its investment advisory services to the iShares 1-5 Year Investment Grade Corporate Bond ETF, iShares 5-10 Year Investment Grade Corporate Bond ETF, iShares 10+ Year Investment Grade Corporate Bond ETF, iShares iBoxx $ Investment Grade Corporate Bond ETF and iShares MBS ETF, BFA is paid a management fee from each Fund calculated based on the aggregate average daily net assets of the following iShares funds: iShares 1-5 Year Investment Grade Corporate Bond ETF, iShares 5-10 Year Investment Grade Corporate Bond ETF, iShares 10+ Year Investment Grade Corporate Bond ETF, iShares Biotechnology ETF, iShares Cohen & Steers REIT ETF, iShares iBoxx $ Investment Grade Corporate Bond ETF, iShares MBS ETF, iShares Russell 1000 Growth ETF, iShares Russell 1000 Value ETF, iShares Russell Mid-Cap ETF, iShares Russell Mid-Cap Growth ETF, iShares Russell Mid-Cap Value ETF, iShares S&P Mid-Cap 400 Growth ETF and iShares TIPS Bond ETF.

The management fee for the iShares iBoxx $ Investment Grade Corporate Bond ETF equals the ratio of the Fund's net assets over the aggregate net assets of the above iShares funds multiplied by the amount calculated as follows: 0.1500% per annum of the aggregate net assets less than or equal to $121 billion, plus 0.1425% per annum of the aggregate net assets over $121 billion, up to and including $181 billion, plus 0.1354% per annum of the aggregate net assets over $181 billion, up to and including $231 billion, plus 0.1287% per annum of the aggregate net assets over $231 billion, up to and including $281 billion, plus 0.1222% per annum of the aggregate net assets in excess of $281 billion.

From March 1, 2022 through December 15, 2022, the management fee for each of the iShares 1-5 Year Investment Grade Corporate Bond ETF, iShares 5-10 Year Investment Grade Corporate Bond ETF and iShares 10+ Year Investment Grade Corporate Bond ETF equaled the ratio of the Fund's net assets over the aggregate net assets of the above iShares funds multiplied by the amount calculated as follows: 0.0600% per annum of the aggregate net assets less than or equal to $121 billion, plus 0.0570% per annum of the aggregate net assets over $121 billion, up to and including $181 billion, plus 0.0542% per annum of the aggregate net assets over $181 billion, up to and including $231 billion, plus 0.0515% per annum of the aggregate net assets over $231 billion, up to and including $281 billion, plus 0.0489% per annum of the aggregate net assets in excess of $281 billion.

Effective December 16, 2022, the management fee for each of the iShares 1-5 Year Investment Grade Corporate Bond ETF, iShares 5-10 Year Investment Grade Corporate Bond ETF and iShares 10+ Year Investment Grade Corporate Bond ETF equals the ratio of the Fund's net assets over the aggregate net assets of the above iShares funds multiplied by 0.0400% per annum of the aggregate net assets.

The management fee for the iShares MBS ETF equals the ratio of the Fund's net assets over the aggregate net assets of the above iShares funds multiplied by the amount calculated as follows: 0.0400% per annum of the aggregate net assets less than or equal to $121 billion, plus 0.0380% per annum of the aggregate net assets over $121 billion, up to and including $181 billion, plus 0.0361% per annum of the aggregate net assets over $181 billion, up to and including $231 billion, plus 0.0343% per annum of the aggregate net assets over $231 billion, up to and including $281 billion, plus 0.0326% per annum of the aggregate net assets in excess of $281 billion.

BFA may from time to time voluntarily waive and/or reimburse fees or expenses to reduce the Total Annual Fund Operating Expenses (excluding Acquired Fund Fees and Expenses, if any). Any such voluntary waiver or reimbursement may be eliminated by BFA at any time.

The following table sets forth the management fee at the annual rate (as a percentage of each Fund's average daily net assets) BFA received from each Fund for the fiscal year ended February 28, 2023 and the management fees (net of waivers) each Fund paid BFA for the fiscal years noted:

Fund	Management Fee	Fund Inception Date	Management Fees Paid Net of Waivers for Fiscal Year Ended February 28, 2023	Management Fees Paid Net of Waivers for Fiscal Year Ended February 28, 2022	Management Fees Paid Net of Waivers for Fiscal Year Ended February 28, 2021
iShares 0-3 Month Treasury Bond ETF[1]	0.04%	05/26/20	$ 1,681,624	$ 219,282	$ 162,126
iShares 1-3 Year Treasury Bond ETF	0.15%	07/22/02	38,927,762	29,945,144	32,106,936
iShares 1-5 Year Investment Grade Corporate Bond ETF[2]	0.05%	01/05/07	11,544,984	13,551,064	10,705,449
iShares 3-7 Year Treasury Bond ETF	0.15%	01/05/07	17,295,366	16,244,679	17,168,658
iShares 5-10 Year Investment Grade Corporate Bond ETF[3]	0.05%	01/05/07	5,269,012	6,406,219	5,827,292
iShares 7-10 Year Treasury Bond ETF	0.15%	07/22/02	31,344,908	22,158,598	28,670,072
iShares 10+ Year Investment Grade Corporate Bond ETF[4]	0.05%	12/08/09	776,844	1,386,564	1,169,310
iShares 10-20 Year Treasury Bond ETF	0.15%	01/05/07	6,561,022	2,050,536	1,958,386
iShares 20+ Year Treasury Bond ETF	0.15%	07/22/02	35,618,839	23,523,424	27,770,333
iShares 25+ Year Treasury STRIPS Bond ETF[5]	0.04%	09/22/20	119,477	122,500	4,960
iShares Agency Bond ETF	0.20%	11/05/08	1,252,551	1,579,828	1,610,512
iShares BBB Rated Corporate Bond ETF	0.15%	05/18/21	67,924	89,307	N/A
iShares Broad USD Investment Grade Corporate Bond ETF[6]	0.04%	01/05/07	2,774,655	2,574,479	3,098,584
iShares California Muni Bond ETF[7]	0.25%	10/04/07	4,607,963	4,634,842	3,911,631
iShares Core 5-10 Year USD Bond ETF[8]	0.05%	11/01/16	57,708	62,677	57,076
iShares Core 10+ Year USD Bond ETF	0.06%	12/08/09	168,231	232,367	241,944
iShares Core U.S. Aggregate Bond ETF[9,10]	0.03%	09/22/03	21,767,151	28,768,959	26,526,094
iShares ESG Advanced Investment Grade Corporate Bond ETF	0.18%	11/08/21	27,715	10,689	N/A
iShares ESG Advanced Total USD Bond Market ETF[11]	0.11%	06/23/20	877,840	463,035	71,650
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	0.12%	07/11/17	1,139,234	1,152,913	468,841
iShares ESG Aware U.S. Aggregate Bond ETF[12]	0.09%	10/18/18	1,956,167	1,330,990	437,376
iShares ESG Aware USD Corporate Bond ETF	0.18%	07/11/17	1,657,303	1,509,984	823,272
iShares Government/Credit Bond ETF	0.20%	01/05/07	484,135	689,717	444,376
iShares High Yield Systematic Bond ETF	0.35%	07/11/17	437,996	516,377	144,014
iShares iBoxx $ High Yield Corporate Bond ETF	0.49%	04/04/07	73,274,146	97,173,850	118,223,615
iShares iBoxx $ Investment Grade Corporate Bond ETF	0.14%	07/22/02	48,580,938	55,071,034	72,561,952
iShares Intermediate Government/Credit Bond ETF	0.20%	01/05/07	4,939,299	4,912,048	4,506,647
iShares Investment Grade Systematic Bond ETF	0.18%	07/11/17	306,093	292,204	256,032
iShares MBS ETF[13,14]	0.03%	03/13/07	6,958,456	10,387,393	10,391,914
iShares National Muni Bond ETF[15, 16]	0.07%	09/07/07	20,030,561	16,265,453	12,577,499
iShares New York Muni Bond ETF	0.25%	10/04/07	1,325,245	1,329,048	1,176,607
iShares Short-Term National Muni Bond ETF	0.07%	11/05/08	6,383,302	4,024,798	2,497,984
iShares Short Treasury Bond ETF[17,18]	0.14%	01/05/07	28,757,510	21,461,175	31,357,144

Fund	Management Fee	Fund Inception Date	Management Fees Paid Net of Waivers for Fiscal Year Ended February 28, 2023	Management Fees Paid Net of Waivers for Fiscal Year Ended February 28, 2022	Management Fees Paid Net of Waivers for Fiscal Year Ended February 28, 2021
iShares USD Systematic Bond ETF[19]	0.16%	10/12/21	26,950	11,968	N/A

[1] For the iShares 0-3 Month Treasury Bond ETF, from March 1, 2022 through June 28, 2022, BFA contractually agreed to waive a portion of its management fee so that the Fund's total annual fund operating expenses after the fee waiver did not exceed 0.03%. This contractual waiver was terminated as of June 29, 2022 by written agreement of the Trust and BFA. Effective June 29, 2022, BFA contractually agreed to waive a portion of its management fee so that the Fund's total annual fund operating expenses after the fee waiver did not exceed 0.05% through June 30, 2023. Effective June 30, 2023, BFA has contractually agreed to waive a portion of its management fee so that the Fund's total annual fund operating expenses after fee waiver will not exceed 0.07% through June 30, 2024. The contractual waiver may be terminated prior to June 30, 2024 only upon written agreement of the Trust and BFA. Prior to September 30, 2020, BFA had contractually agreed to waive a portion of its management fee so that the Fund's total annual fund operating expenses after the fee waiver would not exceed 0.07%. The contractual waiver was discontinued as of September 30, 2020, by written agreement of the Trust and BFA. Prior to September 30, 2020, BFA had implemented a voluntary fee waiver at an annual rate of 0.04%. As of September 30, 2020, the voluntary waiver is no longer in effect. Any voluntary waiver or reimbursement implemented by BFA may be eliminated by BFA at any time. For the fiscal years ended February 28, 2023, February 28, 2022 and February 28, 2021, BFA waived $3,364,416, $768,551 and $557,585 of management fees, respectively.

[2] Effective December 16, 2022, the management fee for the iShares 1-5 Year Investment Grade Corporate Bond ETF is 0.04%. Prior to December 16, 2022, the management fee for the iShares 1-5 Year Investment Grade Corporate Bond ETF was 0.06%.

[3] Effective December 16, 2022, the management fee for the iShares 5-10 Year Investment Grade Corporate Bond ETF is 0.04%. Prior to December 16, 2022, the management fee for the iShares 5-10 Year Investment Grade Corporate Bond ETF was 0.06%.

[4] Effective December 16, 2022, the management fee for the iShares 10+ Year Investment Grade Corporate Bond ETF is 0.04%. Prior to December 16, 2022, the management fee for the iShares 10+ Year Investment Grade Corporate Bond ETF was 0.06%.

[5] For the iShares 25+ Year Treasury STRIPS Bond ETF, BFA has contractually agreed to waive a portion of its management fee so that the Fund's total annual fund operating expenses after the fee waiver will not exceed 0.10% through February 28, 2029. The contractual waiver may be terminated prior to February 28, 2029 only upon written agreement of the Trust and BFA. Prior to September 30, 2021, BFA had contractually agreed to waive a portion of its management fee so that the Fund's total annual fund operating expenses after the fee waiver would not exceed 0.07%. The contractual waiver was discontinued as of September 30, 2021, by written agreement of the Trust and BFA. Effective May 20, 2021, BFA implemented a voluntary fee waiver in order to limit the Fund's total annual operating expenses after the fee waiver to 0.04%. The voluntary waiver was discontinued effective June 30, 2023. Any voluntary waiver or reimbursement implemented by BFA may be eliminated by BFA at any time. For the fiscal years ended February 28, 2023, February 28, 2022 and February 28, 2021, BFA waived $328,566, $330,046 and $5,669 of management fees, respectively.

[6] Effective April 1, 2021, the management fee for the iShares Broad USD Investment Grade Corporate Bond ETF is 0.04%. From June 26, 2018 to March 31, 2021, the management fee for the iShares Broad USD Investment Grade Corporate Bond ETF was 0.06%.

[7] Effective January 29, 2024, the management fee for the iShares California Muni Bond ETF is 0.08%. Prior to January 29, 2024, the management fee for the iShares California Muni Bond ETF was 0.25%

[8] For the iShares Core 5-10 Year USD Bond ETF, BFA has contractually agreed to waive a portion of its management fees in an amount equal to the acquired fund fees and expenses, if any, attributable to investments by the Fund in other registered investment companies advised by BFA, or its affiliates, through February 28, 2026. The contractual waiver may be terminated prior to February 28, 2026 only upon written agreement of the Trust and BFA. For the fiscal years ended February 28, 2023, February 28, 2022 and February 28, 2021, BFA waived $13,740, $13,938 and $18,174 of management fees, respectively.

[9] For the iShares Core U.S. Aggregate Bond ETF, BFA has contractually agreed to waive a portion of its management fees in an amount equal to acquired fund fees and expenses, if any, attributable to investments by the Fund in other registered investment companies advised by BFA, or its affiliates, through June 30, 2026. The contractual waiver may be terminated prior to June 30, 2026 only upon written agreement of the Trust and BFA. For the fiscal years ended February 28, 2023, February 28, 2022 and February 28, 2021, BFA waived $3,615,479, $6,674,326 and $5,419,096 of management fees, respectively.

[10] Effective March 31, 2022, the management fee for the iShares Core U.S. Aggregate Bond ETF is 0.03%. From March 27, 2020 to March 31, 2022, the management fee for the iShares Core U.S. Aggregate Bond ETF was 0.04%.

[11] For the iShares ESG Advanced Total USD Bond Market ETF, BFA has contractually agreed to waive a portion of its management fees in an amount equal to the acquired fund fees and expenses, if any, attributable to investments by the Fund in other registered investment companies advised by BFA, or its affiliates, through June 30, 2025. The contractual waiver may be terminated prior to June 30, 2025 only upon written agreement of the Trust and BFA. For the fiscal years ended February 28, 2023, February 28, 2022 and February 28, 2021, BFA waived $40,782, $44,901 and $9,318 of management fees, respectively.

[12] For the iShares ESG Aware U.S. Aggregate Bond ETF, BFA has contractually agreed to waive a portion of its management fees in an amount equal to the acquired fund fees and expenses, if any, attributable to investments by the Fund in other registered investment companies advised by BFA, or its affiliates, through June 30, 2024. The contractual waiver may be terminated prior to June 30, 2024 only upon written agreement of the Trust and BFA. For the fiscal years ended February 28, 2023, February 28, 2022 and February 28, 2021, BFA waived $143,652, $162,985 and $84,769 of management fees, respectively.

[13] Effective January 5, 2022, the management fee for the iShares MBS ETF is 0.04%. From December 13, 2019 to January 4, 2022, the management fee for the iShares MBS ETF was 0.06%.

[14] Effective January 5, 2022, for the iShares MBS ETF, BFA has contractually agreed to waive a portion of its management fee such that the Fund's total annual fund operating expenses after the fee waiver will not exceed 0.04% through February 28, 2027. The contractual waiver may be terminated prior to February 28, 2027 only upon written agreement of the Trust and BFA. BFA contractually agreed to waive a portion of its management fee such that the Fund's total annual fund operating expenses after the fee waiver would not exceed 0.06% through February 29, 2024 effective December 13, 2019 through January 4, 2022. BFA contractually agreed to waive a portion of its management fee such that the Fund's total annual fund operating expenses after the fee waiver would not exceed 0.07% through February 29, 2024 effective June 20, 2019 through December 12, 2019. BFA contractually agreed to waive a portion of its management fee such that the Fund's total annual fund operating expenses after the fee waiver would not exceed 0.09% through February 28, 2023 effective July 13, 2017 through June 19, 2019. For the fiscal years ended February 28, 2023, February 28, 2022 and February 28, 2021, BFA waived $1,401,797, $3,050,045 and $2,679,408 of management fees, respectively.

[15] For the iShares National Muni Bond ETF, BFA has contractually agreed to waive a portion of its management fees in an amount equal to acquired fund fees and expenses, if any, attributable to investments by the Fund in other series of iShares Trust and iShares, Inc. through June 30, 2026. The contractual waiver may be terminated prior to June 30, 2026 only upon written agreement of the Trust and BFA. For the fiscal years ended February 28, 2023, February 28, 2022 and February 28, 2021, BFA waived $0, $0 and $0 of management fees, respectively.

[16] Effective December 15, 2023, the management fee for the iShares National Muni Bond ETF, net of any applicable waivers, is 0.05%. Prior to December 15, 2023, the management fee for the National Muni Bond ETF, net of any applicable waivers, was 0.07%.

[17] For the iShares Short Treasury Bond ETF, for the fiscal year ended February 28, 2021, BFA waived $0 of its management fees.

[18] Effective October 20, 2021, for the iShares Short Treasury Bond ETF, BFA has contractually agreed to waive a portion of its management fees in an amount equal to the acquired fund fees and expenses, if any, attributable to investments by the Fund in other funds advised by BFA or its affiliates, through June 30, 2026. The contractual waiver may be terminated prior to June 30, 2026 only upon written agreement of the Trust and BFA. For the fiscal years ended February 28, 2023 and February 28, 2022, BFA waived $1,140,264 and $83,242 of its management fees, respectively.

[19] Effective October 28, 2021, for the iShares USD Systematic Bond ETF, BFA has contractually agreed to waive a portion of its management fees in an amount equal to the acquired fund fees and expenses, if any, attributable to investments by the Fund in other funds advised by BFA, or its affiliates, through June 30, 2026. The contractual waiver may be terminated prior to June 30, 2026 only upon written agreement of the Trust and BFA. For the fiscal years ended February 28, 2023 and February 28, 2022, BFA waived $2,797 and $1,568 of its management fees, respectively.

The investment advisory agreement with respect to each Fund continues in effect for two years from its effective date, and thereafter is subject to annual approval by (i) the Board, or (ii) the vote of a majority of the outstanding voting securities (as defined in the 1940 Act) of the applicable Fund, provided that in either event such continuance also is approved by a majority of the Board members who are not interested persons (as defined in the 1940 Act) of the applicable Fund, by a vote cast in person at a meeting called for the purpose of voting on such approval.

The investment advisory agreement with respect to each Fund is terminable without penalty, on 60 days' notice, by the Board or by a vote of the holders of a majority of the applicable Fund's outstanding voting securities (as defined in the 1940 Act). The investment advisory agreement is also terminable upon 60 days' notice by BFA and will terminate automatically in the event of its assignment (as defined in the 1940 Act).

Portfolio Managers. As of February 28, 2023, the individuals named as Portfolio Managers in each Fund's Prospectus were also primarily responsible for the day-to-day management of other iShares funds and certain other types of portfolios and/or accounts as follows:

James Mauro

Types of Accounts	Number	Total Assets
Registered Investment Companies	86	$189,451,000,000
Other Pooled Investment Vehicles	9	34,510,000,000
Other Accounts	5	5,793,000,000

Scott Radell*

Types of Accounts	Number	Total Assets
Registered Investment Companies	12	$24,029,000,000
Other Pooled Investment Vehicles	54	41,217,000,000
Other Accounts	7	4,983,000,000

* Portfolio Manager for iShares ESG Aware 1-5 Year USD Corporate Bond ETF, iShares ESG Aware U.S. Aggregate Bond ETF, iShares ESG Aware USD Corporate Bond ETF, iShares High Yield Systematic Bond ETF, iShares Investment Grade Systematic Bond ETF and iShares USD Systematic Bond ETF only.

Karen Uyehara*

Types of Accounts	Number	Total Assets
Registered Investment Companies	80	$183,837,000,000
Other Pooled Investment Vehicles	14	3,000,000,000
Other Accounts	7	4,124,000,000

* Portfolio Manager for all Funds except iShares ESG Aware 1-5 Year USD Corporate Bond ETF, iShares ESG Aware U.S. Aggregate Bond ETF, iShares ESG Aware USD Corporate Bond ETF, iShares High Yield Systematic Bond ETF, iShares Investment Grade Systematic Bond ETF and iShares USD Systematic Bond ETF.

Jeff Rosenberg* (as of October 31, 2023)

Types of Accounts	Number	Total Assets
Registered Investment Companies	2	$14,632,000,000
Other Pooled Investment Vehicles	8	290,000,000
Other Accounts	3	269,000,000

* Portfolio Manager for iShares High Yield Systematic Bond ETF, iShares Investment Grade Systematic Bond ETF and iShares USD Systematic Bond ETF only.

Each of the portfolios or accounts for which the Portfolio Managers are primarily responsible for the day-to-day management seeks to track the rate of return, risk profile and other characteristics of independent third-party indexes by either replicating the same combination of securities and other financial instruments that compose those indexes or through a representative sampling of the securities and other financial instruments that compose those indexes based on objective criteria and data. Pursuant to BFA policy, investment opportunities are allocated equitably among the Funds and other portfolios and accounts. For example, under certain circumstances, an investment opportunity may be restricted due to limited supply in the market, legal constraints or other factors, in which event the investment opportunity will be allocated equitably among those portfolios and accounts, including the Funds, seeking such investment opportunity. As a consequence, from time to time the Funds may receive a smaller allocation of an investment opportunity than they would have if the Portfolio Managers and BFA and its affiliates did not manage other portfolios or accounts.

Like the Funds, the other portfolios or accounts for which the Portfolio Managers are primarily responsible for the day-to-day portfolio management generally pay an asset-based fee to BFA or its affiliates, as applicable, for its advisory services. One or more of those other portfolios or accounts, however, may pay BFA or its affiliates a performance-based fee in lieu of, or in addition to, an asset-based fee for its advisory services. A portfolio or account with a performance-based fee would pay BFA or its affiliates a portion of that portfolio's or account's gains, or would pay BFA or its affiliates more for its services than would otherwise be the case if BFA or its affiliates meets or exceeds specified performance targets. Performance-based fee arrangements could present an incentive for BFA or its affiliates to devote greater resources, and allocate more investment opportunities, to the portfolios or accounts that have those fee arrangements, relative to other portfolios or accounts, in order to earn larger fees. Although BFA and its affiliates have an obligation to allocate resources and opportunities equitably among portfolios and accounts and intend to do so, shareholders of the Funds should be aware that, as with any group of portfolios and accounts managed by an investment adviser and/or its affiliates pursuant to varying fee arrangements, including performance-based fee arrangements, there is the potential for a conflict of interest, which may result in the Portfolio Managers' favoring those portfolios or accounts with performance-based fee arrangements.

The tables below show, for each Portfolio Manager, the number of portfolios or accounts of the types set forth in the above tables and the aggregate of total assets in those portfolios or accounts with respect to which the investment management fees are based on the performance of those portfolios or accounts as of February 28, 2023:

James Mauro

Types of Accounts	Number of Other Accounts with Performance Fees Managed by Portfolio Manager	Aggregate of Total Assets
Registered Investment Companies	0	N/A

James Mauro

Types of Accounts	Number of Other Accounts with Performance Fees Managed by Portfolio Manager	Aggregate of Total Assets
Other Pooled Investment Vehicles	0	N/A
Other Accounts	0	N/A

Scott Radell*

Types of Accounts	Number of Other Accounts with Performance Fees Managed by Portfolio Manager	Aggregate of Total Assets
Registered Investment Companies	0	N/A
Other Pooled Investment Vehicles	2	$101,000,000
Other Accounts	2	677,000,000

* Portfolio Manager for iShares ESG Aware 1-5 Year USD Corporate Bond ETF, iShares ESG Aware U.S. Aggregate Bond ETF, iShares ESG Aware USD Corporate Bond ETF, iShares High Yield Systematic Bond ETF, iShares Investment Grade Systematic Bond ETF and iShares USD Systematic Bond ETF only.

Karen Uyehara*

Types of Accounts	Number of Other Accounts with Performance Fees Managed by Portfolio Manager	Aggregate of Total Assets
Registered Investment Companies	0	N/A
Other Pooled Investment Vehicles	3	$1,055,000,000
Other Accounts	3	1,289,000,000

* Portfolio Manager for all Funds except iShares ESG Aware 1-5 Year USD Corporate Bond ETF, iShares ESG Aware U.S. Aggregate Bond ETF, iShares ESG Aware USD Corporate Bond ETF, iShares High Yield Systematic Bond ETF, iShares Investment Grade Systematic Bond ETF and iShares USD Systematic Bond ETF.

Jeff Rosenberg* (as of October 31, 2023)

Types of Accounts	Number of Other Accounts with Performance Fees Managed by Portfolio Manager	Aggregate of Total Assets
Registered Investment Companies	0	N/A
Other Pooled Investment Vehicles	0	N/A
Other Accounts	0	N/A

* Portfolio Manager for iShares High Yield Systematic Bond ETF, iShares Investment Grade Systematic Bond ETF and iShares USD Systematic Bond ETF only.

Portfolio Manager Compensation Overview

The discussion below describes the Portfolio Managers' compensation as of February 28, 2023.

BlackRock, Inc.'s financial arrangements with its portfolio managers, its competitive compensation and its career path emphasis at all levels reflect the value senior management places on key resources. Compensation may include a variety of components and may vary from year to year based on a number of factors. The principal components of compensation include a base salary, a performance-based discretionary bonus, participation in various benefits programs and one or more of the incentive compensation programs established by BlackRock, Inc.

Each portfolio manager receives base compensation based on their position with the firm, as well as retirement and other benefits offered to all BlackRock employees. Additionally, each portfolio manager receives discretionary incentive compensation, determined based on several components, including: the performance of BlackRock, Inc., the performance of the portfolio manager's group within BlackRock, the performance of portfolios managed by the portfolio manager and the team relative to the portfolios' investment objectives (which in the case of index ETFs would be how closely the ETF tracks its Underlying Index), and the individual's performance and contribution to the overall performance of these portfolios and BlackRock. Discretionary incentive compensation is paid in cash up to a certain threshold with the remaining portion represented by deferred BlackRock, Inc. stock awards. In some cases, additional deferred BlackRock, Inc. stock may be granted to certain key employees as part of a long-term incentive award to aid in retention, align interests with long-term shareholders and motivate performance.

The discretionary incentive income for James Mauro, Scott Radell, Karen Uyehara and Jeff Rosenberg includes as an additional consideration the performance of actively-managed portfolios they manage over 1, 3 and 5 year periods measured against the respective benchmark of each portfolio as well as peer group performance. A portion of the discretionary incentive compensation for James Mauro, Scott Radell, Karen Uyehara and Jeff Rosenberg is distributed in the form of deferred cash awards that notionally track the returns of select BlackRock, Inc. investment products they manage, which provides direct alignment of portfolio manager discretionary incentive compensation with investment product results. Deferred cash awards vest ratably over a number of years and, once vested, settle in the form of cash.

As of February 28, 2023, the Portfolio Managers beneficially owned shares of the Funds in the amounts reflected in the following tables:

James Mauro

	Dollar Range						
Fund	**None**	**$1 to $10k**	**$10,001 to $50k**	**$50,001 to $100k**	**$100,001 to $500k**	**$500,001 to $1m**	**over $1m**
iShares 0-3 Month Treasury Bond ETF	X						
iShares 1-3 Year Treasury Bond ETF	X						
iShares 1-5 Year Investment Grade Corporate Bond ETF			X				
iShares 3-7 Year Treasury Bond ETF	X						
iShares 5-10 Year Investment Grade Corporate Bond ETF	X						
iShares 7-10 Year Treasury Bond ETF	X						
iShares 10+ Year Investment Grade Corporate Bond ETF	X						
iShares 10-20 Year Treasury Bond ETF	X						
iShares 20+ Year Treasury Bond ETF			X				
iShares 25+ Year Treasury STRIPS Bond ETF			X				
iShares Agency Bond ETF	X						
iShares BBB Rated Corporate Bond ETF	X						
iShares Broad USD Investment Grade Corporate Bond ETF	X						
iShares California Muni Bond ETF	X						
iShares Core 5-10 Year USD Bond ETF	X						
iShares Core 10+ Year USD Bond ETF	X						
iShares Core U.S. Aggregate Bond ETF				X			
iShares ESG Advanced Investment Grade Corporate Bond ETF	X						
iShares ESG Advanced Total USD Bond Market ETF	X						

James Mauro

	Dollar Range						
Fund	None	$1 to $10k	$10,001 to $50k	$50,001 to $100k	$100,001 to $500k	$500,001 to $1m	over $1m
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	X						
iShares ESG Aware U.S. Aggregate Bond ETF	X						
iShares ESG Aware USD Corporate Bond ETF	X						
iShares Government/Credit Bond ETF	X						
iShares High Yield Systematic Bond ETF	X						
iShares iBoxx $ High Yield Corporate Bond ETF	X						
iShares iBoxx $ Investment Grade Corporate Bond ETF	X						
iShares Intermediate Government/Credit Bond ETF	X						
iShares Investment Grade Systematic Bond ETF	X						
iShares MBS ETF	X						
iShares National Muni Bond ETF	X						
iShares New York Muni Bond ETF	X						
iShares Short-Term National Muni Bond ETF	X						
iShares Short Treasury Bond ETF	X						
iShares USD Systematic Bond ETF	X						

Scott Radell

	Dollar Range						
Fund	None	$1 to $10k	$10,001 to $50k	$50,001 to $100k	$100,001 to $500k	$500,001 to $1m	over $1m
iShares 0-3 Month Treasury Bond ETF	X						
iShares 1-3 Year Treasury Bond ETF	X						
iShares 1-5 Year Investment Grade Corporate Bond ETF	X						
iShares 3-7 Year Treasury Bond ETF	X						
iShares 5-10 Year Investment Grade Corporate Bond ETF	X						
iShares 7-10 Year Treasury Bond ETF	X						
iShares 10+ Year Investment Grade Corporate Bond ETF	X						
iShares 10-20 Year Treasury Bond ETF	X						
iShares 20+ Year Treasury Bond ETF	X						
iShares 25+ Year Treasury STRIPS Bond ETF	X						
iShares Agency Bond ETF	X						
iShares BBB Rated Corporate Bond ETF	X						
iShares Broad USD Investment Grade Corporate Bond ETF	X						
iShares California Muni Bond ETF	X						
iShares Core 5-10 Year USD Bond ETF	X						
iShares Core 10+ Year USD Bond ETF	X						
iShares Core U.S. Aggregate Bond ETF		X					
iShares ESG Advanced Investment Grade Corporate Bond ETF	X						

Scott Radell

Fund	None	$1 to $10k	$10,001 to $50k	$50,001 to $100k	$100,001 to $500k	$500,001 to $1m	over $1m
	Dollar Range						
iShares ESG Advanced Total USD Bond Market ETF	X						
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	X						
iShares ESG Aware U.S. Aggregate Bond ETF	X						
iShares ESG Aware USD Corporate Bond ETF	X						
iShares Government/Credit Bond ETF	X						
iShares High Yield Systematic Bond ETF	X						
iShares iBoxx $ High Yield Corporate Bond ETF	X						
iShares iBoxx $ Investment Grade Corporate Bond ETF	X						
iShares Intermediate Government/Credit Bond ETF	X						
iShares Investment Grade Systematic Bond ETF	X						
iShares MBS ETF	X						
iShares National Muni Bond ETF	X						
iShares New York Muni Bond ETF	X						
iShares Short-Term National Muni Bond ETF	X						
iShares Short Treasury Bond ETF	X						
iShares USD Systematic Bond ETF	X						

Karen Uyehara

Fund	None	$1 to $10k	$10,001 to $50k	$50,001 to $100k	$100,001 to $500k	$500,001 to $1m	over $1m
	Dollar Range						
iShares 0-3 Month Treasury Bond ETF	X						
iShares 1-3 Year Treasury Bond ETF	X						
iShares 1-5 Year Investment Grade Corporate Bond ETF	X						
iShares 3-7 Year Treasury Bond ETF	X						
iShares 5-10 Year Investment Grade Corporate Bond ETF	X						
iShares 7-10 Year Treasury Bond ETF	X						
iShares 10+ Year Investment Grade Corporate Bond ETF	X						
iShares 10-20 Year Treasury Bond ETF	X						
iShares 20+ Year Treasury Bond ETF	X						
iShares 25+ Year Treasury STRIPS Bond ETF	X						
iShares Agency Bond ETF	X						
iShares BBB Rated Corporate Bond ETF	X						
iShares Broad USD Investment Grade Corporate Bond ETF	X						
iShares California Muni Bond ETF	X						
iShares Core 5-10 Year USD Bond ETF	X						
iShares Core 10+ Year USD Bond ETF	X						
iShares Core U.S. Aggregate Bond ETF	X						

Karen Uyehara

Fund	None	$1 to $10k	$10,001 to $50k	$50,001 to $100k	$100,001 to $500k	$500,001 to $1m	over $1m
	Dollar Range						
iShares ESG Advanced Investment Grade Corporate Bond ETF	X						
iShares ESG Advanced Total USD Bond Market ETF	X						
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	X						
iShares ESG Aware U.S. Aggregate Bond ETF	X						
iShares ESG Aware USD Corporate Bond ETF	X						
iShares Government/Credit Bond ETF	X						
iShares High Yield Systematic Bond ETF	X						
iShares iBoxx $ High Yield Corporate Bond ETF	X						
iShares iBoxx $ Investment Grade Corporate Bond ETF	X						
iShares Intermediate Government/Credit Bond ETF	X						
iShares Investment Grade Systematic Bond ETF	X						
iShares MBS ETF	X						
iShares National Muni Bond ETF	X						
iShares New York Muni Bond ETF	X						
iShares Short-Term National Muni Bond ETF	X						
iShares Short Treasury Bond ETF	X						
iShares USD Systematic Bond ETF	X						

Jeff Rosenberg (as of October 31, 2023)

Fund	None	$1 to $10k	$10,001 to $50k	$50,001 to $100k	$100,001 to $500k	$500,001 to $1m	over $1m
	Dollar Range						
iShares 0-3 Month Treasury Bond ETF	X						
iShares 1-3 Year Treasury Bond ETF	X						
iShares 1-5 Year Investment Grade Corporate Bond ETF	X						
iShares 3-7 Year Treasury Bond ETF	X						
iShares 5-10 Year Investment Grade Corporate Bond ETF	X						
iShares 7-10 Year Treasury Bond ETF	X						
iShares 10+ Year Investment Grade Corporate Bond ETF	X						
iShares 10-20 Year Treasury Bond ETF	X						
iShares 20+ Year Treasury Bond ETF	X						
iShares 25+ Year Treasury STRIPS Bond ETF	X						
iShares Agency Bond ETF	X						
iShares BBB Rated Corporate Bond ETF	X						
iShares Broad USD Investment Grade Corporate Bond ETF	X						
iShares California Muni Bond ETF	X						
iShares Core 5-10 Year USD Bond ETF	X						

Jeff Rosenberg (as of October 31, 2023)

Fund	Dollar Range						
	None	$1 to $10k	$10,001 to $50k	$50,001 to $100k	$100,001 to $500k	$500,001 to $1m	over $1m
iShares Core 10+ Year USD Bond ETF	X						
iShares Core U.S. Aggregate Bond ETF	X						
iShares ESG Advanced Investment Grade Corporate Bond ETF	X						
iShares ESG Advanced Total USD Bond Market ETF	X						
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	X						
iShares ESG Aware U.S. Aggregate Bond ETF	X						
iShares ESG Aware USD Corporate Bond ETF	X						
iShares Government/Credit Bond ETF	X						
iShares High Yield Systematic Bond ETF	X						
iShares iBoxx $ High Yield Corporate Bond ETF	X						
iShares iBoxx $ Investment Grade Corporate Bond ETF	X						
iShares Intermediate Government/Credit Bond ETF	X						
iShares Investment Grade Systematic Bond ETF	X						
iShares MBS ETF	X						
iShares National Muni Bond ETF	X						
iShares New York Muni Bond ETF	X						
iShares Short-Term National Muni Bond ETF	X						
iShares Short Treasury Bond ETF	X						
iShares USD Systematic Bond ETF	X						

Codes of Ethics. The Trust, BFA and the Distributor have adopted codes of ethics pursuant to Rule 17j-1 under the 1940 Act. The codes of ethics permit personnel subject to the codes of ethics to invest in securities, subject to certain limitations, including securities that may be purchased or held by the Funds. Each code of ethics is available by contacting BlackRock at the telephone number on the back cover of each Fund's Prospectus or by accessing the EDGAR Database on the SEC's Internet site at http://www.sec.gov, and copies may be obtained, after paying a duplicating fee, by e-mail at publicinfo@sec.gov.

Anti-Money Laundering Requirements. The Funds are subject to the USA PATRIOT Act (the "Patriot Act"). The Patriot Act is intended to prevent the use of the U.S. financial system in furtherance of money laundering, terrorism or other illicit activities. Pursuant to requirements under the Patriot Act, a Fund may request information from Authorized Participants to enable it to form a reasonable belief that it knows the true identity of its Authorized Participants. This information will be used to verify the identity of Authorized Participants or, in some cases, the status of financial professionals; it will be used only for compliance with the requirements of the Patriot Act.

The Funds reserve the right to reject purchase orders from persons who have not submitted information sufficient to allow a Fund to verify their identity. Each Fund also reserves the right to redeem any amounts in a Fund from persons whose identity it is unable to verify on a timely basis. It is the Funds' policy to cooperate fully with appropriate regulators in any investigations conducted with respect to potential money laundering, terrorism or other illicit activities.

Administrator, Custodian and Transfer Agent.

State Street Bank and Trust Company ("State Street") serves as administrator, custodian and transfer agent for the Funds under the Master Services Agreement and related Service Schedule (the "Service Module"). State Street's principal address is One Congress Street, Suite 1, Boston, MA 02114-2016. Pursuant to the Service Module for Fund Administration and Accounting Services with the Trust, State Street provides necessary administrative, legal, tax and accounting and financial reporting services for the maintenance and operations of the Trust and each Fund. In addition, State Street makes available the office space, equipment, personnel and facilities required to provide such services. Pursuant to the Service Module for Custodial Services with the Trust, State Street maintains, in separate accounts, cash, securities and other assets of the Trust and each Fund, keeps all necessary accounts and records and provides other services. State Street is required, upon the order of the Trust, to deliver securities held by State Street and to make payments for securities purchased by the Trust for each Fund. State Street is authorized to appoint certain foreign custodians or foreign custody managers for Fund investments outside the U.S. Pursuant to the Service Module for Transfer Agency Services with the Trust, State Street acts as a transfer agent for each Fund's authorized and issued shares of beneficial interest, and as dividend disbursing agent of the Trust. As compensation for these services, State Street receives certain out-of-pocket costs, transaction fees and asset-based fees which are accrued daily and paid monthly by BFA from its management fee.

The following table sets forth the administration, custodian and transfer agency expenses of each Fund paid by BFA to State Street for the fiscal years noted:

Fund	Fund Inception Date	Administration, Custodian & Transfer Agency Expenses Paid During Fiscal Year Ended February 28, 2023	Administration, Custodian & Transfer Agency Expenses Paid During Fiscal Year Ended February 28, 2022	Administration, Custodian & Transfer Agency Expenses Paid During Fiscal Year Ended February 28, 2021
iShares 0-3 Month Treasury Bond ETF	05/26/20	$ 33,753	$ 29,235	$ 18,453
iShares 1-3 Year Treasury Bond ETF	07/22/02	318,726	260,406	293,086
iShares 1-5 Year Investment Grade Corporate Bond ETF	01/05/07	260,692	320,682	259,137
iShares 3-7 Year Treasury Bond ETF	01/05/07	148,312	144,480	157,721
iShares 5-10 Year Investment Grade Corporate Bond ETF	01/05/07	125,549	158,762	147,375
iShares 7-10 Year Treasury Bond ETF	07/22/02	265,444	194,148	259,581
iShares 10+ Year Investment Grade Corporate Bond ETF	12/08/09	27,134	40,685	36,954
iShares 10-20 Year Treasury Bond ETF	01/05/07	63,191	27,979	28,196
iShares 20+ Year Treasury Bond ETF	07/22/02	305,160	205,197	251,775
iShares 25+ Year Treasury STRIPS Bond ETF	09/22/20	17,909	19,909	8,110
iShares Agency Bond ETF	11/05/08	20,093	24,769	25,162
iShares BBB Rated Corporate Bond ETF	05/18/21	16,195	15,202	N/A
iShares Broad USD Investment Grade Corporate Bond ETF	01/05/07	94,286	91,883	81,315
iShares California Muni Bond ETF	10/04/07	25,387	31,846	30,586
iShares Core 5-10 Year USD Bond ETF	11/01/16	70,003	73,663	53,340
iShares Core 10+ Year USD Bond ETF	12/08/09	20,028	23,556	24,041
iShares Core U.S. Aggregate Bond ETF	09/22/03	1,081,184	1,266,564	1,101,230
iShares ESG Advanced Investment Grade Corporate Bond ETF	11/08/21	16,453	7,400	N/A
iShares ESG Advanced Total USD Bond Market ETF	06/23/20	63,334	57,688	34,188
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	07/11/17	23,630	26,903	21,850
iShares ESG Aware U.S. Aggregate Bond ETF	10/18/18	65,857	54,796	27,685
iShares ESG Aware USD Corporate Bond ETF	07/11/17	25,609	26,579	23,974
iShares Government/Credit Bond ETF	01/05/07	18,475	21,142	21,031
iShares High Yield Systematic Bond ETF	07/11/17	17,356	19,666	18,621
iShares iBoxx $ High Yield Corporate Bond ETF	04/04/07	164,562	268,125	327,838
iShares iBoxx $ Investment Grade Corporate Bond ETF	07/22/02	391,646	509,691	681,410

Fund	Fund Inception Date	Administration, Custodian & Transfer Agency Expenses Paid During Fiscal Year Ended February 28, 2023	Administration, Custodian & Transfer Agency Expenses Paid During Fiscal Year Ended February 28, 2022	Administration, Custodian & Transfer Agency Expenses Paid During Fiscal Year Ended February 28, 2021
iShares Intermediate Government/Credit Bond ETF	01/05/07	40,685	42,013	40,864
iShares Investment Grade Systematic Bond ETF	07/11/17	19,699	20,499	23,273
iShares MBS ETF	03/13/07	810,898	821,939	366,128
iShares National Muni Bond ETF	09/07/07	364,205	304,972	248,725
iShares New York Muni Bond ETF	10/04/07	19,499	21,496	21,220
iShares Short-Term National Muni Bond ETF	11/05/08	133,185	101,382	63,452
iShares Short Treasury Bond ETF	01/05/07	127,571	199,139	262,116
iShares USD Systematic Bond ETF	10/12/21	41,170	20,052	N/A

JPMorgan serves as custodian for the Funds in connection with certain securities lending activities under a Custody Services Agreement. JPMorgan's principal address is 383 Madison Avenue, 11th Floor, New York, NY 10179. Pursuant to the Custody Services Agreement with BTC and the Trust, JPMorgan provides custody and related services required to facilitate securities lending by each Fund. JPMorgan maintains custody as may be necessary to facilitate Fund securities lending activity in coordination with other funds, maintains custodial records and provides other services. As compensation for these services, JPMorgan receives certain fees and expenses paid by BTC from its compensation for its services as securities lending agent.

Distributor. The Distributor's principal address is 50 Hudson Yards, New York, NY 10001. Shares are continuously offered for sale by the Funds through the Distributor or its agent only in Creation Units, as described in the applicable Prospectus and below in the *Creation and Redemption of Creation Units* section of this SAI. Fund shares in amounts less than Creation Units are generally not distributed by the Distributor or its agent. The Distributor or its agent will arrange for the delivery of the applicable Prospectus and, upon request, this SAI to persons purchasing Creation Units and will maintain records of both orders placed with it or its agents and confirmations of acceptance furnished by it or its agents. The Distributor is a broker-dealer registered under the Securities Exchange Act of 1934, as amended (the "1934 Act"), and a member of the Financial Industry Regulatory Authority, Inc. ("FINRA"). The Distributor is also licensed as a broker-dealer in all 50 U.S. states, as well as in Puerto Rico, the U.S. Virgin Islands and the District of Columbia.

The Distribution Agreement for each Fund provides that it may be terminated at any time, without the payment of any penalty, on at least 60 days' prior written notice to the other party following (i) the vote of a majority of the Independent Trustees, or (ii) the vote of a majority of the outstanding voting securities (as defined in the 1940 Act) of the relevant Fund. The Distribution Agreement will terminate automatically in the event of its assignment (as defined in the 1940 Act).

The Distributor may also enter into agreements with securities dealers ("Soliciting Dealers") who will solicit purchases of Creation Units of Fund shares. Such Soliciting Dealers may also be Authorized Participants (as described below), DTC participants and/or investor services organizations.

BFA or its affiliates may, from time to time and from its own resources, pay, defray or absorb costs relating to distribution, including payments out of its own resources to the Distributor, or to otherwise promote the sale of shares.

Securities Lending. To the extent that a Fund engages in securities lending, each Fund conducts its securities lending pursuant to SEC exemptive relief, and BTC acts as securities lending agent for the Funds, subject to the overall supervision of BFA, pursuant to a written agreement (the "Securities Lending Agency Agreement").

Each Fund retains a portion of the securities lending income and remits the remaining portion to BTC as compensation for its services as securities lending agent. Securities lending income is generally equal to the total of income earned from the reinvestment of cash collateral (and excludes collateral investment fees as defined below), and any fees or other payments to and from borrowers of securities. As securities lending agent, BTC bears all operational costs directly related to securities lending, including custodial costs of JPMorgan. Each Fund is responsible for fees in connection with the investment of cash collateral received for securities on loan in a money market fund managed by BFA (the "collateral investment fees"); however, BTC has agreed to reduce the amount of securities lending income it receives in order to effectively limit the collateral investment fees the Fund bears to an annual rate of 0.04%. Such money market fund shares will not be subject to a sales load, redemption fee, distribution fee or service fee.

Under the securities lending program, the Funds are categorized into one of several specific asset classes. The determination of a Fund's asset class category (fixed-income, domestic equity, international equity or fund-of-funds), each of which may be subject to a different fee arrangement, is based on a methodology agreed to by the Trust and BTC.

Pursuant to the Securities Lending Agency Agreement:

(i) fixed-income funds, such as the Funds, retain 82% of securities lending income (which excludes collateral investment fees), and (ii) this amount can never be less than 70% of the sum of securities lending income plus collateral investment fees.

In addition, commencing the business day following the date that the aggregate securities lending income (which includes, for this purpose, collateral investment fees) earned across the Exchange-Traded Fund Complex (as defined in the *Management — Trustees and Officers* section of this SAI) in a calendar year exceeds a specified threshold, each applicable fixed income fund, pursuant to the current Securities Lending Agency Agreement, will receive for the remainder of that calendar year securities lending income as follows:

(i) 85% of securities lending income (which excludes collateral investment fees) and (ii) this amount can never be less than 70% of the sum of securities lending income plus collateral investment fees.

The services provided to the Funds by BTC in the most recent fiscal year ended February 28, 2023 primarily included the following:

(1) selecting borrowers from an approved list of borrowers and executing a securities lending agreement as agent on behalf of the Funds with each such borrower;

(2) negotiating the terms of securities loans, including the amount of fees;

(3) directing the delivery of loaned securities;

(4) monitoring the daily value of the loaned securities and directing the payment of additional collateral or the return of excess collateral, as necessary;

(5) investing cash collateral received in connection with any loaned securities;

(6) monitoring distributions on loaned securities (for example, interest and dividend activity);

(7) in the event of default by a borrower with respect to any securities loan, using the collateral or the proceeds of the liquidation of collateral to purchase replacement securities of the same issue, type, class and series as that of the loaned securities; and

(8) terminating securities loans and arranging for the return of loaned securities to the Funds at loan termination.

The following tables show the dollar amounts of income and fees/compensation related to the securities lending activities of each Fund during its most recent fiscal year ended February 28, 2023.

Fund	iShares 0-3 Month Treasury Bond ETF	iShares 1-3 Year Treasury Bond ETF	iShares 1-5 Year Investment Grade Corporate Bond ETF	iShares 3-7 Year Treasury Bond ETF
Gross income from securities lending activities	$11,569,818	$3,520,324	$38,254,307	$79,255
Fees and/or compensation for securities lending activities and related services				

Fund	iShares 0-3 Month Treasury Bond ETF	iShares 1-3 Year Treasury Bond ETF	iShares 1-5 Year Investment Grade Corporate Bond ETF	iShares 3-7 Year Treasury Bond ETF
Securities lending income paid to BTC for services as securities lending agent	188,332	139,170	993,573	4,112
Cash collateral management expenses not included in securities lending income paid to BTC	151,670	99,479	564,146	3,094
Administrative fees not included in securities lending income paid to BTC	0	0	0	0
Indemnification fees not included in securities lending income paid to BTC	0	0	0	0
Rebates (paid to borrowers)	10,235,366	2,569,832	32,015,179	51,025
Other fees not included in securities lending income paid to BTC	0	0	0	0
Aggregate fees/compensation for securities lending activities	$10,575,368	$2,808,481	$33,572,898	$58,231
Net income from securities lending activities	$ 994,450	$ 711,843	$ 4,681,409	$21,024

Fund	iShares 5-10 Year Investment Grade Corporate Bond ETF	iShares 7-10 Year Treasury Bond ETF	iShares 10+ Year Investment Grade Corporate Bond ETF	iShares 10-20 Year Treasury Bond ETF
Gross income from securities lending activities	$28,404,974	$743,146	$2,821,535	$854,465
Fees and/or compensation for securities lending activities and related services				
Securities lending income paid to BTC for services as securities lending agent	663,123	23,668	81,538	45,101

Fund	iShares 5-10 Year Investment Grade Corporate Bond ETF	iShares 7-10 Year Treasury Bond ETF	iShares 10+ Year Investment Grade Corporate Bond ETF	iShares 10-20 Year Treasury Bond ETF
Cash collateral management expenses not included in securities lending income paid to BTC	429,097	15,201	44,130	8,419
Administrative fees not included in securities lending income paid to BTC	0	0	0	0
Indemnification fees not included in securities lending income paid to BTC	0	0	0	0
Rebates (paid to borrowers)	24,189,356	578,445	2,312,665	539,767
Other fees not included in securities lending income paid to BTC	0	0	0	0
Aggregate fees/compensation for securities lending activities	$25,281,576	$ 617,314	$2,438,333	$593,287
Net income from securities lending activities	$ 3,123,398	$125,832	$ 383,202	$ 261,178

Fund	iShares 20+ Year Treasury Bond ETF	iShares 25+ Year Treasury STRIPS Bond ETF	iShares Agency Bond ETF	iShares BBB Rated Corporate Bond ETF
Gross income from securities lending activities	$1,425,275	$169	$91,764	$56,357
Fees and/or compensation for securities lending activities and related services				
Securities lending income paid to BTC for services as securities lending agent	91,484	3	5,711	1,447
Cash collateral management expenses not included in securities lending income paid to BTC	15,051	6	1,261	917
Administrative fees not included in securities lending income paid to BTC	0	0	0	0

Fund	iShares 20+ Year Treasury Bond ETF	iShares 25+ Year Treasury STRIPS Bond ETF	iShares Agency Bond ETF	iShares BBB Rated Corporate Bond ETF
Indemnification fees not included in securities lending income paid to BTC	0	0	0	0
Rebates (paid to borrowers)	790,414	138	57,968	47,165
Other fees not included in securities lending income paid to BTC	0	0	0	0
Aggregate fees/compensation for securities lending activities	$896,949	$147	$64,940	$49,529
Net income from securities lending activities	$528,326	$ 22	$26,824	$ 6,828

Fund	iShares Broad USD Investment Grade Corporate Bond ETF	iShares California Muni Bond ETF	iShares Core 5-10 Year USD Bond ETF	iShares Core 10+ Year USD Bond ETF
Gross income from securities lending activities	$ 17,001,081	N/A	$42,836	$121,013
Fees and/or compensation for securities lending activities and related services				
Securities lending income paid to BTC for services as securities lending agent	443,843	N/A	2,509	7,926
Cash collateral management expenses not included in securities lending income paid to BTC	247,695	N/A	722	1,679
Administrative fees not included in securities lending income paid to BTC	0	N/A	0	0
Indemnification fees not included in securities lending income paid to BTC	0	N/A	0	0
Rebates (paid to borrowers)	14,221,603	N/A	27,567	73,144

Fund	iShares Broad USD Investment Grade Corporate Bond ETF	iShares California Muni Bond ETF	iShares Core 5-10 Year USD Bond ETF	iShares Core 10+ Year USD Bond ETF
Other fees not included in securities lending income paid to BTC	0	N/A	0	0
Aggregate fees/compensation for securities lending activities	$14,913,141	N/A	$30,798	$ 82,749
Net income from securities lending activities	$ 2,087,940	N/A	$ 12,038	$38,264

Fund	iShares Core U.S. Aggregate Bond ETF	iShares ESG Advanced Investment Grade Corporate Bond ETF	iShares ESG Advanced Total USD Bond Market ETF	iShares ESG Aware1-5 Year USD Corporate Bond ETF
Gross income from securities lending activities	$18,903,121	$10,480	$290,703	$902,596
Fees and/or compensation for securities lending activities and related services				
Securities lending income paid to BTC for services as securities lending agent	687,617	56	12,452	18,413
Cash collateral management expenses not included in securities lending income paid to BTC	359,872	139	5,304	13,519
Administrative fees not included in securities lending income paid to BTC	0	0	0	0
Indemnification fees not included in securities lending income paid to BTC	0	0	0	0
Rebates (paid to borrowers)	14,427,788	9,806	211,346	783,216
Other fees not included in securities lending income paid to BTC	0	0	0	0
Aggregate fees/compensation for securities lending activities	$15,475,277	$10,001	$ 229,102	$ 815,148

Fund	iShares Core U.S. Aggregate Bond ETF	iShares ESG Advanced Investment Grade Corporate Bond ETF	iShares ESG Advanced Total USD Bond Market ETF	iShares ESG Aware1-5 Year USD Corporate Bond ETF
Net income from securities lending activities	$3,427,844	$479	$61,601	$87,448

Fund	iShares ESG Aware U.S. Aggregate Bond ETF	iShares ESG Aware USD Corporate Bond ETF	iShares Government/Credit Bond ETF	iShares High Yield Systematic Bond ETF
Gross income from securities lending activities	$280,901	$1,349,994	$ 57,328	$ 643,195
Fees and/or compensation for securities lending activities and related services				
Securities lending income paid to BTC for services as securities lending agent	9,231	32,307	2,816	37,601
Cash collateral management expenses not included in securities lending income paid to BTC	5,596	19,060	1,297	8,513
Administrative fees not included in securities lending income paid to BTC	0	0	0	0
Indemnification fees not included in securities lending income paid to BTC	0	0	0	0
Rebates (paid to borrowers)	216,802	1,147,088	39,807	420,180
Other fees not included in securities lending income paid to BTC	0	0	0	0
Aggregate fees/compensation for securities lending activities	$231,629	$1,198,455	$43,920	$466,294

Fund	iShares ESG Aware U.S. Aggregate Bond ETF	iShares ESG Aware USD Corporate Bond ETF	iShares Government/Credit Bond ETF	iShares High Yield Systematic Bond ETF
Net income from securities lending activities	$49,272	$151,539	$13,408	$176,901

Fund	iShares iBoxx $ High Yield Corporate Bond ETF	iShares iBoxx $ Investment Grade Corporate Bond ETF	iShares Intermediate Government/Credit Bond ETF	iShares Investment Grade Systematic Bond ETF
Gross income from securities lending activities	$88,243,703	$66,633,732	$768,649	$176,232
Fees and/or compensation for securities lending activities and related services				
Securities lending income paid to BTC for services as securities lending agent	3,595,569	1,434,596	30,350	3,625
Cash collateral management expenses not included in securities lending income paid to BTC	1,284,899	971,795	14,201	2,426

Fund	iShares iBoxx $ High Yield Corporate Bond ETF	iShares iBoxx $ Investment Grade Corporate Bond ETF	iShares Intermediate Government/Credit Bond ETF	iShares Investment Grade Systematic Bond ETF
Administrative fees not included in securities lending income paid to BTC	0	0	0	0
Indemnification fees not included in securities lending income paid to BTC	0	0	0	0
Rebates (paid to borrowers)	66,451,902	57,419,795	576,175	153,049
Other fees not included in securities lending income paid to BTC	0	0	0	0
Aggregate fees/compensation for securities lending activities	$71,332,370	$59,826,186	$620,726	$159,100
Net income from securities lending activities	$16,911,333	$ 6,807,546	$ 147,923	$ 17,132

Fund	iShares MBS ETF	iShares National Muni Bond ETF	iShares New York Muni Bond ETF	iShares Short-Term National Muni Bond ETF
Gross income from securities lending activities	N/A	N/A	N/A	N/A
Fees and/or compensation for securities lending activities and related services				
Securities lending income paid to BTC for services as securities lending agent	N/A	N/A	N/A	N/A
Cash collateral management expenses not included in securities lending income paid to BTC	N/A	N/A	N/A	N/A
Administrative fees not included in securities lending income paid to BTC	N/A	N/A	N/A	N/A
Indemnification fees not included in securities lending income paid to BTC	N/A	N/A	N/A	N/A
Rebates (paid to borrowers)	N/A	N/A	N/A	N/A
Other fees not included in securities lending income paid to BTC	N/A	N/A	N/A	N/A
Aggregate fees/compensation for securities lending activities	N/A	N/A	N/A	N/A
Net income from securities lending activities	N/A	N/A	N/A	N/A

Fund	iShares Short Treasury Bond ETF	iShares USD Systematic Bond ETF
Gross income from securities lending activities	$27,383,891	$3,955
Fees and/or compensation for securities lending activities and related services		

Fund	iShares Short Treasury Bond ETF	iShares USD Systematic Bond ETF
Securities lending income paid to BTC for services as securities lending agent	561,346	147
Cash collateral management expenses not included in securities lending income paid to BTC	456,441	66
Administrative fees not included in securities lending income paid to BTC	0	0
Indemnification fees not included in securities lending income paid to BTC	0	0
Rebates (paid to borrowers)	23,464,170	2,935
Other fees not included in securities lending income paid to BTC	0	0
Aggregate fees/compensation for securities lending activities	$24,481,957	$3,148
Net income from securities lending activities	$ 2,901,934	$ 807

Payments by BFA and its Affiliates. BFA and/or its affiliates ("BFA Entities") may pay certain broker-dealers, registered investment advisers, banks and other financial intermediaries ("Intermediaries") for certain activities related to the Funds, other iShares funds or exchange-traded products in general. BFA Entities make these payments from their own assets and not from the assets of the Funds. Although a portion of BFA Entities' revenue comes directly or indirectly in part from fees paid by the Funds, other iShares funds or exchange-traded products, these payments do not increase the price paid by investors for the purchase of shares of, or the cost of owning, the Funds, other iShares funds or exchange-traded products. BFA Entities make payments for Intermediaries' participation in activities that are designed to make registered representatives, other professionals and individual investors more knowledgeable about exchange-traded products, including the Funds and other iShares funds, or for other activities, such as participation in marketing activities and presentations, educational training programs, conferences, the development of technology platforms and reporting systems ("Education Costs"). BFA Entities also make payments to Intermediaries for certain printing, publishing and mailing costs or materials relating to the Funds, other iShares funds or exchange-traded products ("Publishing Costs"). In addition, BFA Entities make payments to Intermediaries that make shares of the Funds, other iShares funds or exchange-traded products available to their clients, in some cases at a waived or reduced commission rate or ticket charge, develop new products that feature iShares, create educational content about the Fund, other iShares funds or exchange-traded products that is featured on an Intermediary's platform, or otherwise promote the Funds, other iShares funds and exchange-traded products. BFA Entities may also reimburse expenses or make payments from their own assets to Intermediaries or other persons in consideration of services or other activities that the BFA Entities believe may benefit the iShares business or facilitate investment in the Funds, other iShares funds or exchange-traded products. Payments of the type described above are sometimes referred to as revenue-sharing 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, what services to provide for various products, or what marketing content to make available to its clients based on payments it receives or is eligible to receive, such payments may create conflicts of interest between the Intermediary and its clients. These financial incentives may cause the Intermediary to recommend the Funds, other iShares funds or exchange-traded products, or otherwise promote the Fund, other iShares funds or exchange-traded products over other investments. The same conflicts of interest and financial incentives exist with respect to your salesperson or other investment professional if he or she receives similar payments from his or her Intermediary firm.

In addition to the payments described above, BFA Entities have developed proprietary tools, calculators and related interactive or digital content that is made available through the www.BlackRock.com website at no additional cost to Intermediaries. BlackRock may configure these tools and calculators and localize the content for Intermediaries as part of its customary digital marketing support and promotion of the Funds, other iShares funds, exchange-traded products and BlackRock mutual funds.

As of March 1, 2013, BFA Entities have contractual arrangements to make payments (in addition to payments for Education Costs or Publishing Costs) to one Intermediary, Fidelity Brokerage Services LLC (“FBS”). Effective June 4, 2016, this relationship was expanded to include National Financial Services, LLC (“NFS”), an affiliate of FBS. Pursuant to this special, long-term and significant arrangement (the “Marketing Program”), FBS, NFS and certain of their affiliates (collectively “Fidelity”) have agreed, among other things, to actively promote iShares funds to customers, investment professionals and other intermediaries and in advertising campaigns as the preferred exchange-traded product, to offer certain iShares funds in certain Fidelity platforms and investment programs, in some cases at a waived or reduced commission rate or ticket charge, and to provide marketing data to BFA Entities. BFA Entities have agreed to facilitate the Marketing Program by, among other things, making certain payments to FBS and NFS for marketing and implementing certain brokerage and investment programs. Upon termination of the arrangement, the BFA Entities will make additional payments to FBS and/or NFS based upon a number of criteria, including the overall success of the Marketing Program and the level of services provided by FBS and NFS during the wind-down period.

In addition, BFA Entities may enter into other contractual arrangements with Intermediaries and certain other third parties that the BFA Entities believe may benefit the iShares business or facilitate investment in iShares funds. Such agreements may include payments by BFA Entities to such Intermediaries and third parties for data collection and provision, technology support, platform enhancement, or educational content, co-marketing and cross-promotional efforts. Payments made pursuant to such arrangements may vary in any year and may be different for different Intermediaries and third parties. In certain cases, the payments to Intermediaries are subject to certain minimum payment levels or tiered payments. As of the date of this SAI, the Intermediaries and other third parties receiving one or more types of the contractual payments described above include (in addition to FBS and NFS): Advisor Credit Exchange, Avantax Investment Services, Inc., BNY Mellon Capital Markets, LLC, BNY Mellon Performance & Risk Analytics, LLC, Charles Schwab & Co., Inc., Clearstream Fund Centre AG, Commonwealth Equity Services, LLC, Dorsey Wright and Associates, LLC, E*Trade Securities LLC, Envestnet Asset Management, Inc., eToro USA Securities Inc., LPL Financial LLC, Merrill Lynch, Pierce, Fenner & Smith Incorporated, Morgan Stanley Smith Barney LLC, Northwestern Mutual Investment Services, LLC, Orion Portfolio Solutions, LLC, Pershing LLC, Public Holdings, Inc., Raymond James Financial Services, Inc., Riskalyze, Inc., Sanctuary Wealth Group, LLC, Stash investments, LLC, TD Ameritrade, Inc., UBS Financial Services Inc., Wells Fargo Clearing Services, LLC and Wells Fargo Advisors Financial Network, LLC. Any additions, modifications, or deletions to Intermediaries and other third parties listed above that have occurred since the date of this SAI are not included in the list.

Further, BFA Entities make Education Costs and Publishing Costs payments to other Intermediaries that are not listed in the immediately preceding paragraph. BFA Entities may determine to make such payments based on any number of metrics. For example, BFA 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 iShares 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, BFA anticipates that the payments paid by BFA Entities in connection with the Funds, iShares funds and exchange-traded products in general will be immaterial to BFA Entities in the aggregate for the next year. **Please contact your salesperson or other investment professional for more information regarding any such payments or financial incentives his or her Intermediary firm may receive. Any payments made, or financial incentives**

offered, by the BFA Entities to an Intermediary may create the incentive for the Intermediary to encourage customers to buy shares of the Funds, other iShares funds or other exchange-traded products.

The Funds may participate in certain market maker incentive programs of a national securities exchange in which an affiliate of the Funds would pay a fee to the exchange used for the purpose of incentivizing one or more market makers in the securities of a Fund to enhance the liquidity and quality of the secondary market of securities of a Fund. The fee would then be credited by the exchange to one or more market makers that meet or exceed liquidity and market quality standards with respect to the securities of a Fund. Each market maker incentive program is subject to approval from the SEC. Any such fee payments made to an exchange will be made by an affiliate of a Fund solely for the benefit of a Fund and will not be paid from any Fund assets. Other funds managed by BFA may also participate in such programs.

Determination of Net Asset Value

Valuation of Shares. The NAV for each Fund (except for the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF) is generally calculated as of the close of regular trading hours on the NYSE (normally 4:00 p.m. Eastern Time) on each business day the NYSE is open. The NAV of each of the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF is generally calculated twice per day: as of 12:00 p.m., Eastern time and as of the close of regular trading hours on the NYSE (normally 4:00 p.m., Eastern time), on each business day the NYSE is open. Valuation of assets held by a Fund is as follows:

Equity Investments. Equity securities traded on a recognized securities exchange (*e.g.*, NYSE), on separate trading boards of a securities exchange or through a market system that provides contemporaneous transaction pricing information (each an "Exchange") are valued using information obtained via independent pricing services, generally at the closing price or, if an Exchange closing price is not available, the last traded price on that Exchange prior to the time as of which the assets or liabilities are valued. However, under certain circumstances, other means of determining current market value may be used. If an equity security is traded on more than one Exchange, the current market value of the security where it is primarily traded generally will be used. In the event that there are no sales involving an equity security held by a Fund on a day on which a Fund values such security, the prior day's price will be used, unless BFA determines that such prior day's price no longer reflects the fair value of the security, in which case such asset would be treated as a Fair Value Asset (as defined below).

Fixed-Income Investments. Fixed-income securities for which market quotations are readily available are generally valued using such securities' current market value. A Fund values fixed-income portfolio securities using the last available bid prices or current market quotations provided by dealers or prices (including evaluated prices) supplied by a Fund's approved independent third-party pricing services, each in accordance with the Valuation Procedures. The pricing services may use matrix pricing or valuation models that utilize certain inputs and assumptions to derive values, including transaction data (*e.g.*, recent representative bids and offers), credit quality information, perceived market movements, news, and other relevant information and by other methods, which may include consideration of: yields or prices of securities of comparable quality, coupon, maturity and type; indications as to values from dealers; general market conditions; and/or other factors and assumptions. Pricing services generally value fixed-income securities assuming orderly transactions of an institutional round lot size, but a Fund may hold or transact in such securities in smaller, odd lot sizes. Odd lots may trade at lower prices than institutional round lots. The amortized cost method of valuation may be used with respect to debt obligations with 60 days or less remaining to maturity unless such method does not represent fair value. Certain fixed-income investments, including asset-backed and mortgage-related securities, may be valued based on valuation models that consider the estimated cash flows of each tranche of the issuer, establish a benchmark yield and develop an estimated tranche-specific spread to the benchmark yield based on the unique attributes of the tranche.

Options, Futures, Swaps and Other Derivatives. Exchange-traded equity options (except those that are customized) for which market quotations are readily available are valued at the mean of the last bid and ask prices as quoted on the Exchange or the board of trade on which such options are traded. In the event that there is no mean price available for an exchange traded equity option held by a Fund on a day on which a Fund values such option, the last bid (long positions) or ask (short positions) price, if available, will be used as the value of such option. If no bid or ask price is available on a day on which a Fund values such option, the prior day's price will be used, unless BFA determines that such prior day's price no longer reflects the fair value of the option, in which case such option will be treated as a Fair Value Asset (as defined below). Customized exchange-traded equity options, as well as OTC derivatives, may be valued using a mathematical model which may incorporate a number of market data factors. Financial futures contracts and options thereon, which are traded on exchanges, are valued at their last sale price or settle price as of the close of such exchanges. Swap agreements and other derivatives are generally valued daily based upon quotations from market makers or by a pricing service in accordance with the Valuation Procedures.

Underlying Funds. Shares of underlying open-end funds (including money market funds) are valued at NAV. Shares of underlying exchange-traded closed-end funds or other ETFs will be valued at their most recent closing price.

General Valuation Information. Prices obtained from independent third-party pricing services, broker-dealers or market makers to value a Fund's securities and other assets and liabilities are based on information available at the time a Fund values its assets and liabilities. In the event that a pricing service quotation is revised or updated subsequent to the day on which a Fund valued such security, the revised pricing service quotation generally will be applied prospectively. Such determination will be made considering pertinent facts and circumstances surrounding the revision.

The price a Fund could receive upon the sale of any particular portfolio investment may differ from a Fund's valuation of the investment, particularly for assets that trade in thin or volatile markets or that are valued using a fair valuation methodology or a price provided by an independent pricing service. As a result, the price received upon the sale of an investment may be less than the value ascribed by a Fund, and a Fund could realize a greater than expected loss or lesser than expected gain upon the sale of the investment. A Fund's ability to value its investment may also be impacted by technological issues and/or errors by pricing services or other third-party service providers.

All cash, receivables and current payables are carried on a Fund's books at their fair value.

In the event that application of the methods of valuation discussed above result in a price for a security which is deemed not to be representative of the fair market value of such security, the security will be valued by, under the direction of or in accordance with a method approved by BFA, each Fund's valuation designee, as reflecting fair value. All other assets and liabilities (including securities for which market quotations are not readily available) held by a Fund (including restricted securities) are valued at fair value as determined in good faith by BFA pursuant to the Valuation Procedures. Any assets and liabilities which are denominated in a foreign currency are translated into U.S. dollars at the prevailing market rates.

Use of fair value prices and certain current market valuations could result in a difference between the prices used to calculate a Fund's NAV and the prices used in the Underlying Index, which, in turn, could result in a difference between a Fund's performance and the performance of the Underlying Index.

Fair Value. When market quotations are not readily available or are believed by BFA to be unreliable, a Fund's investments are valued at fair value ("Fair Value Assets"). Fair Value Assets are valued by BFA in accordance with the Valuation Procedures. Pursuant to Rule 2a-5 under the Investment Company Act, the Board of Trustees has designated BFA as the valuation designee for the respective Funds for which it serves as investment adviser. BFA may reasonably conclude that a market quotation is not readily available or is unreliable if, among other things, a security or other asset or liability does not have a price source due to its complete lack of trading, if BFA believes a market quotation from a broker-dealer or other source is unreliable (*e.g.*, where it varies significantly from a recent trade, or no longer reflects the fair value of the security or other asset or liability subsequent to the most recent market quotation), or where the security or other asset or liability is only thinly traded or due to the occurrence of a significant event subsequent to the most recent market quotation. For this purpose, a "significant event" is deemed to occur if BFA determines, in its reasonable business judgment, that an event has occurred after the close of trading for an asset or liability but prior to or at the time of pricing a Fund's assets or liabilities, is likely to cause a material change to the last exchange closing price or closing market price of one or more assets held by, or liabilities of, a Fund. On any day the NYSE is open and a foreign market or the primary exchange on which a foreign asset or liability is traded is closed, such asset or liability will be valued using the prior day's price, provided that BFA is not aware of any significant event or other information that would cause such price to no longer reflect the fair value of the asset or liability, in which case such asset or liability would be treated as a Fair Value Asset.

BFA's Rule 2a-5 Committee is responsible for reviewing and approving methodologies by investment type and significant inputs used in the fair valuation of Fund assets or liabilities. In addition, a Fund's accounting agent assists BFA by periodically endeavoring to confirm the prices it receives from all third-party pricing services, index providers and broker-dealers and regularly evaluating the values assigned to the securities and other assets and liabilities of a Fund. The pricing of all Fair Value Assets is subsequently reported to the Board or a committee thereof.

When determining the price for a Fair Value Asset, BFA will seek to determine the price that a Fund might reasonably expect to receive from the current sale of that asset or liability in an arm's-length transaction on the date on which the asset or liability is being valued, and does not seek to determine the price a Fund might reasonably expect to receive for selling an asset or liability at a later time or if it holds the asset or liability to maturity. Fair value determinations will be based upon all available factors that BFA deems relevant at the time of the determination, and may be based on analytical values determined by BFA using proprietary or third-party valuation models.

Fair value represents a good faith approximation of the value of an asset or liability. When determining the fair value of an investment, one or more fair value methodologies may be used (depending on certain factors, including the asset type). For example, the investment may be initially priced based on the original cost of the investment or, alternatively, using proprietary or third-party models that may rely upon one or more unobservable inputs. Prices of actual, executed or historical transactions in the relevant investment (or comparable instruments) or, where appropriate, an appraisal by a third-party experienced in the valuation of similar instruments, may also be used as a basis for establishing the fair value of an investment.

The fair value of one or more assets or liabilities may not, in retrospect, be the price at which those assets or liabilities could have been sold during the period in which the particular fair values were used in determining a Fund's NAV. As a result, a Fund's sale or redemption of its shares at NAV, at a time when a holding or holdings are valued at fair value, may have the effect of diluting or increasing the economic interest of existing shareholders.

Each Fund's annual audited financial statements, which are prepared in accordance with US GAAP, follow the requirements for valuation set forth in Financial Accounting Standards Board Accounting Standards Codification Topic 820, "Fair Value Measurements and Disclosures" ("ASC 820"), which defines and establishes a framework for measuring fair value under US GAAP and expands financial statement disclosure requirements relating to fair value measurements.

Generally, ASC 820 and other accounting rules applicable to funds and various assets in which they invest are evolving. Such changes may adversely affect a Fund. For example, the evolution of rules governing the determination of the fair market value of assets or liabilities, to the extent such rules become more stringent, would tend to increase the cost and/or reduce the availability of third-party determinations of fair market value. This may in turn increase the costs associated with selling assets or affect their liquidity due to a Fund's inability to obtain a third-party determination of fair market value.

Brokerage Transactions

Subject to policies established by the Board, BFA is primarily responsible for the execution of a Fund's portfolio transactions and the allocation of brokerage. BFA does not execute transactions through any particular broker or dealer, but seeks to obtain the best net results for the Funds, taking into account such factors as price (including the applicable brokerage commission or dealer spread), size of order, difficulty of execution, operational facilities of the firm and the firm's risk and skill in positioning blocks of securities. While BFA generally seeks reasonable trade execution costs, a Fund does not necessarily pay the lowest spread or commission available, and payment of the lowest commission or spread is not necessarily consistent with obtaining the best price and execution in particular transactions. Subject to applicable legal requirements, BFA may select a broker based partly upon brokerage or research services provided to BFA and its clients, including a Fund. In return for such services, BFA may cause a Fund to pay a higher commission than other brokers would charge if BFA determines in good faith that the commission is reasonable in relation to the services provided.

In selecting brokers or dealers to execute portfolio transactions, BFA seeks to obtain the best price and most favorable execution for a Fund and may take into account a variety of factors including: (i) the size, nature and character of the security or instrument being traded and the markets in which it is purchased or sold; (ii) the desired timing of the transaction; (iii) BFA's knowledge of the expected commission rates and spreads currently available; (iv) the activity existing and expected in the market for the particular security or instrument, including any anticipated execution difficulties; (v) the full range of brokerage services provided; (vi) the broker's or dealer's capital; (vii) the quality of research and research services provided; (viii) the reasonableness of the commission, dealer spread or its equivalent for the specific transaction; and (ix) BFA's knowledge of any actual or apparent operational problems of a broker or dealer. Brokers may also be selected because of their ability to handle special or difficult executions, such as may be involved in large block trades, thinly traded securities, or other circumstances.

Section 28(e) of the 1934 Act ("Section 28(e)") permits a U.S. investment adviser, under certain circumstances, to cause an account to pay a broker or dealer a commission for effecting a transaction in securities that exceeds the amount another broker or dealer would have charged for effecting the same transaction in recognition of the value of brokerage and research services provided by that broker or dealer. This includes commissions paid on riskless principal transactions in securities under certain conditions.

From time to time, a Fund may purchase new issues of securities in a fixed price offering. In these situations, the broker may be a member of the selling group that will, in addition to selling securities, provide BFA with research services. FINRA has adopted rules expressly permitting these types of arrangements under certain circumstances. Generally, the broker will provide research "credits" in these situations at a rate that is higher than that available for typical secondary market transactions. These arrangements may not fall within the safe harbor of Section 28(e).

OTC issues, including most fixed-income securities such as corporate debt and U.S. Government securities, are normally traded on a "net" basis without a stated commission, through dealers acting for their own account and not as brokers. The Funds will primarily engage in transactions with these dealers or deal directly with the issuer unless a better price or execution could be obtained by using a broker. Prices paid to a dealer with respect to both foreign and domestic securities will generally include a "spread," which is the difference between the prices at which the dealer is willing to purchase and sell the specific security at the time, and includes the dealer's normal profit.

Under the 1940 Act, persons affiliated with a 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 Funds will not deal with affiliated persons and affiliated persons of such affiliated persons in connection with such transactions. The Funds will not purchase securities during the existence of any underwriting or selling group relating to such securities of which BFA, BRIL or any affiliated person (as defined in the 1940 Act) thereof is a member except pursuant to procedures adopted by the Board in accordance with Rule 10f-3 under the 1940 Act.

Purchases of money market instruments by the Funds are made from dealers, underwriters and issuers. The Funds do not currently expect to incur any brokerage commission expense on such transactions because money market instruments are generally traded on a "net" basis with dealers acting as principal for their own accounts without a stated commission. The price of the security, however, usually includes a profit to the dealer.

BFA may, from time to time, effect trades on behalf of and for the account of the Funds with brokers or dealers that are affiliated with BFA, in conformity with Rule 17e-1 under the 1940 Act and SEC rules and regulations. Under these provisions, any commissions paid to affiliated brokers or dealers must be reasonable and fair compared to the commissions charged by other brokers or dealers in comparable transactions.

Securities purchased in underwritten offerings include a fixed amount of compensation to the underwriter, generally referred to as the underwriter's concession or discount. When securities are purchased or sold directly from or to an issuer, no commissions or discounts are paid.

Investment decisions for the Funds and for other investment accounts managed by BFA and the other Affiliates are made independently of each other in light of differing conditions. A variety of factors will be considered in making investment allocations. These factors include: (i) investment objectives or strategies for particular accounts, including sector, industry, country or region and capitalization weightings; (ii) tax considerations of an account; (iii) risk or investment concentration parameters for an account; (iv) supply or demand for a security at a given price level; (v) size of available investment; (vi) cash availability and liquidity requirements for accounts; (vii) regulatory restrictions; (viii) minimum investment size of an account; (ix) relative size of account; and (x) such other factors as may be approved by BlackRock's general counsel. Moreover, investments may not be allocated to one client account over another based on any of the following considerations: (i) to favor one client account at the expense of another; (ii) to generate higher fees paid by one client account over another or to produce greater performance compensation to BlackRock; (iii) to develop or enhance a relationship with a client or prospective client; (iv) to compensate a client for past services or benefits rendered to BlackRock or to induce future services or benefits to be rendered to BlackRock; or (v) to manage or equalize investment performance among different client accounts. BFA and the other Affiliates may deal, trade and invest for their own respective accounts in the types of securities in which the Funds may invest.

Initial public offerings ("IPOs") of securities may be over-subscribed and subsequently trade at a premium in the secondary market. When BFA is given an opportunity to invest in such an initial offering or "new" or "hot" issue, the supply of securities available for client accounts is often less than the amount of securities the accounts would otherwise take. In order to allocate these investments fairly and equitably among client accounts over time, each portfolio manager or a member of his or her respective investment team will indicate to BFA's trading desk their level of interest in a particular offering with respect to eligible clients' accounts for which that team is responsible. IPOs of U.S. equity securities will be identified as eligible for particular client accounts that are managed by portfolio teams who have indicated interest in the offering based on market capitalization of the issuer of the security and the investment mandate of the client account and in the case of international equity securities, the country where the offering is taking place and the investment mandate of the client account. Generally, shares received during the IPO will be allocated among participating client accounts within each investment mandate on a *pro rata* basis. This *pro rata* allocation may result in a Fund receiving less of a particular security than if pro-rating had not occurred. All allocations of securities will be subject, where relevant, to share minimums established for accounts and compliance constraints. In situations where supply is too limited to be allocated among all accounts for which the investment is eligible, portfolio managers may rotate such investment opportunities among one or more accounts so long as the rotation system provides for fair access for all client accounts over time. Other allocation methodologies that are considered by BFA to be fair and equitable to clients may be used as well.

Because different accounts may have differing investment objectives and policies, BFA may buy and sell the same securities at the same time for different clients based on the particular investment objective, guidelines and strategies of those accounts. For example, BFA may decide that it may be entirely appropriate for a growth fund to sell a security at the same time a value fund is buying that security. To the extent that transactions on behalf of more than one client of BFA or the other Affiliates during the same period increase the demand for securities being purchased or the supply of securities being sold, there may be an adverse effect on price. For example, sales of a security by BlackRock on behalf of one or more of its clients may decrease the market price of such security, adversely impacting other BlackRock clients that still hold the security. If purchases or sales of securities arise for consideration at or about the same time that would involve the Funds or other clients or funds for which BFA or another Affiliate act as investment manager, transactions in such securities will be made, insofar as feasible, for the respective funds and clients in a manner deemed equitable to all.

In certain instances, BFA may find it efficient for purposes of seeking to obtain best execution, to aggregate or "bunch" certain contemporaneous purchases or sale orders of its advisory accounts and advisory accounts of affiliates. In general, all contemporaneous trades for client accounts under management by the same portfolio manager or investment team will be bunched in a single order if the trader believes the bunched trade would provide each client with an opportunity to achieve a more favorable execution at a potentially lower execution cost. The costs associated with a bunched order will be shared *pro rata* among the clients in the bunched order. Generally, if an order for a particular portfolio manager or management team is filled at several different prices through multiple trades, all accounts participating in the order will receive the average price (except in the case of certain international markets where average pricing is not permitted). While in some cases this practice could have a detrimental effect upon the price or value of the security as far as the Funds are concerned, in other cases it could be beneficial to the Funds. Transactions effected by BFA or the other Affiliates on behalf of more than one of its clients during the same period may increase the demand for securities being purchased or the supply of securities being sold, causing an adverse effect on price. The trader will give the bunched order to the broker-dealer that the trader has identified as being able to provide the best execution of the order. Orders for purchase or sale of securities will be placed within a reasonable amount of time of the order receipt and bunched orders will be kept bunched only long enough to execute the order.

The table below sets forth the brokerage commissions paid by each Fund for the fiscal years noted. Any differences in brokerage commissions paid by a Fund from year to year are principally due to increases or decreases in that Fund's assets over those periods or the magnitude of changes to the components of a Fund's Underlying Index:

Fund	Fund Inception Date	Brokerage Commissions Paid During Fiscal Year Ended Feb. 28, 2023	Brokerage Commissions Paid During Fiscal Year Ended Feb. 28, 2022	Brokerage Commissions Paid During Fiscal Year Ended Feb. 28, 2021
iShares 0-3 Month Treasury Bond ETF	05/26/20	$0	$0	$0
iShares 1-3 Year Treasury Bond ETF	07/22/02	0	0	0

Fund	Fund Inception Date	Brokerage Commissions Paid During Fiscal Year Ended Feb. 28, 2023	Brokerage Commissions Paid During Fiscal Year Ended Feb. 28, 2022	Brokerage Commissions Paid During Fiscal Year Ended Feb. 28, 2021
iShares 1-5 Year Investment Grade Corporate Bond ETF	01/05/07	0	0	0
iShares 3-7 Year Treasury Bond ETF	01/05/07	0	0	0
iShares 5-10 Year Investment Grade Corporate Bond ETF	01/05/07	0	0	0
iShares 7-10 Year Treasury Bond ETF	07/22/02	0	0	0
iShares 10+ Year Investment Grade Corporate Bond ETF	12/08/09	0	0	0
iShares 10-20 Year Treasury Bond ETF	01/05/07	0	0	0
iShares 20+ Year Treasury Bond ETF	07/22/02	0	0	0
iShares 25+ Year Treasury STRIPS Bond ETF	09/22/20	0	0	0
iShares Agency Bond ETF	11/05/08	0	0	0
iShares BBB Rated Corporate Bond ETF	05/18/21	0	0	N/A
iShares Broad USD Investment Grade Corporate Bond ETF	01/05/07	0	0	0
iShares California Muni Bond ETF	10/04/07	0	0	0
iShares Core 5-10 Year USD Bond ETF	11/01/16	0	5	4
iShares Core 10+ Year USD Bond ETF	12/08/09	0	0	0
iShares Core U.S. Aggregate Bond ETF	09/22/03	0	0	0
iShares ESG Advanced Investment Grade Corporate Bond ETF	11/08/21	0	0	N/A
iShares ESG Advanced Total USD Bond Market ETF	06/23/20	0	0	0
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	07/11/17	0	0	0
iShares ESG Aware U.S. Aggregate Bond ETF	10/18/18	0	0	0
iShares ESG Aware USD Corporate Bond ETF	07/11/17	0	0	0
iShares Government/Credit Bond ETF	01/05/07	0	0	0
iShares High Yield Systematic Bond ETF	07/11/17	0	0	0
iShares iBoxx $ High Yield Corporate Bond ETF	04/04/07	0	7,819	5,494
iShares iBoxx $ Investment Grade Corporate Bond ETF	07/22/02	0	0	0
iShares Intermediate Government/Credit Bond ETF	01/05/07	0	0	0
iShares Investment Grade Systematic Bond ETF	07/11/17	0	0	0
iShares MBS ETF	03/13/07	0	0	0
iShares National Muni Bond ETF	09/07/07	0	0	0
iShares New York Muni Bond ETF	10/04/07	0	0	0
iShares Short-Term National Muni Bond ETF	11/05/08	0	0	0
iShares Short Treasury Bond ETF	01/05/07	0	0	0
iShares USD Systematic Bond ETF	10/12/21	169	41	N/A

The following table sets forth the names of the Funds' "regular" broker-dealers, as defined under Rule 10b-1 of the 1940 Act, which derive more than 15% of their gross revenues from securities-related activities and in which the Funds invest, together with the market value of each investment as of the fiscal year ended February 28, 2023:

Fund	Issuer	Market Value of Investment
iShares 1-5 Year Investment Grade Corporate Bond ETF	Bank of America Corp.	$665,530,448

Fund	Issuer	Market Value of Investment
	JPMorgan Chase & Co.	622,670,399
	Morgan Stanley	521,060,315
	Citigroup, Inc.	426,163,007
	Goldman Sachs Group Inc. (The)	396,934,047
	Wells Fargo & Co.	390,544,455
	Royal Bank of Canada	190,030,317
	Barclays PLC	156,989,312
	Bank of New York Mellon Corp. (The)	142,032,475
iShares 5-10 Year Investment Grade Corporate Bond ETF	Bank of America Corp.	$ 265,813,836
	JPMorgan Chase & Co.	244,351,603
	Morgan Stanley	172,590,954
	Citigroup, Inc.	171,351,785
	Goldman Sachs Group Inc. (The)	128,397,577
	Wells Fargo & Co.	96,981,847
	Barclays PLC	61,781,277
	BNP Paribas SA	52,399,339
	Bank of New York Mellon Corp. (The)	40,166,607
	Royal Bank of Canada	20,433,416
iShares 10+ Year Investment Grade Corporate Bond ETF	Bank of America Corp.	$ 19,876,738
	JPMorgan Chase & Co.	18,888,123
	Wells Fargo & Co.	15,792,951
	Goldman Sachs Group Inc. (The)	15,045,564
	Citigroup, Inc.	10,887,177
	Morgan Stanley	9,480,257
	Barclays PLC	2,989,180
iShares BBB Rated Corporate Bond ETF	Barclays PLC	$ 371,720
	Citigroup, Inc.	266,626
	Goldman Sachs Group Inc. (The)	169,065
	Deutsche Bank AG	134,324
	Morgan Stanley	81,102
iShares Broad USD Investment Grade Corporate Bond ETF	Bank of America Corp.	$ 175,125,160
	JPMorgan Chase & Co.	160,444,992
	Morgan Stanley	119,086,197
	Citigroup, Inc.	106,895,982
	Goldman Sachs Group Inc. (The)	100,823,376
	Wells Fargo & Co.	89,059,903
	Barclays PLC	37,725,985
	Bank of New York Mellon Corp. (The)	27,005,804
	Deutsche Bank AG	23,429,817
iShares Core 5-10 Year USD Bond ETF	Bank of America Corp.	$ 641,867
	JPMorgan Chase & Co.	604,525
	Morgan Stanley	462,867

Fund	Issuer	Market Value of Investment
	Citigroup, Inc.	456,400
	Goldman Sachs Group Inc. (The)	354,373
	Wells Fargo & Co.	247,619
	Barclays PLC	209,273
	Nomura Holdings Inc.	98,556
iShares Core 10+ Year USD Bond ETF	Bank of America Corp.	$ 2,170,460
	JPMorgan Chase & Co.	1,973,922
	Goldman Sachs Group Inc. (The)	1,659,850
	Citigroup, Inc.	1,179,062
	Morgan Stanley	1,042,413
	HSBC Holdings PLC	578,476
	Barclays PLC	285,262
iShares Core U.S. Aggregate Bond ETF	Bank of America Corp.	$ 569,377,080
	JPMorgan Chase & Co.	528,818,121
	Morgan Stanley	380,436,143
	Citigroup, Inc.	352,499,270
	Goldman Sachs Group Inc. (The)	341,181,339
	Wells Fargo & Co.	302,226,359
	Barclays PLC	119,307,599
	Royal Bank of Canada	89,783,623
	Nomura Holdings Inc.	48,625,496
	Credit Suisse Group AG	18,602,731
iShares ESG Advanced Investment Grade Corporate Bond ETF	Citigroup, Inc.	$ 291,145
	Morgan Stanley	290,872
	Goldman Sachs Group Inc. (The)	264,766
	JPMorgan Chase & Co.	259,809
	Bank of America Corp.	251,210
	Barclays PLC	195,979
	Bank of New York Mellon Corp. (The)	13,383
iShares ESG Advanced Total USD Bond Market ETF	Morgan Stanley	$ 6,245,608
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	Morgan Stanley	$ 29,581,724
	Bank of America Corp.	26,281,343
	JPMorgan Chase & Co.	18,957,323
	Citigroup, Inc.	17,542,602
	Goldman Sachs Group Inc. (The)	14,327,129
	Deutsche Bank AG	8,486,073
	Barclays PLC	7,987,553
	Royal Bank of Canada	5,684,711
	Bank of New York Mellon Corp. (The)	5,151,015
iShares ESG Aware U.S. Aggregate Bond ETF	Bank of America Corp.	$ 10,170,164
	Morgan Stanley	9,088,961

Fund	Issuer	Market Value of Investment
	JPMorgan Chase & Co.	8,706,374
	Citigroup, Inc.	7,070,210
	Goldman Sachs Group Inc. (The)	6,808,476
	Barclays PLC	4,018,812
	Wells Fargo & Co.	2,554,460
	Nomura Holdings Inc.	1,214,567
	Credit Suisse Group AG	1,187,675
iShares ESG Aware USD Corporate Bond ETF	Bank of America Corp.	$ 18,290,998
	JPMorgan Chase & Co.	17,463,735
	Morgan Stanley	17,156,754
	Goldman Sachs Group Inc. (The)	12,191,645
	Bank of New York Mellon Corp. (The)	12,167,034
	Citigroup, Inc.	12,015,691
	Wells Fargo & Co.	6,722,636
	Barclays PLC	6,571,726
	Royal Bank of Canada	1,559,296
iShares Government/Credit Bond ETF	Bank of America Corp.	$ 1,299,474
	JPMorgan Chase & Co.	987,798
	Morgan Stanley	935,877
	HSBC Holdings PLC	763,037
	Wells Fargo & Co.	732,700
	Citigroup, Inc.	713,983
	Goldman Sachs Group Inc. (The)	602,801
	Royal Bank of Canada	173,984
iShares iBoxx $ Investment Grade Corporate Bond ETF	JPMorgan Chase & Co.	$ 1,009,275,651
	Bank of America Corp.	988,136,522
	Goldman Sachs Group Inc. (The)	776,978,217
	Morgan Stanley	742,299,768
	Citigroup, Inc.	735,761,634
	Wells Fargo & Co.	701,349,763
	HSBC Holdings PLC	505,598,848
	Barclays PLC	223,215,826
	Deutsche Bank AG	57,702,320
	Bank of New York Mellon Corp. (The)	38,507,074
iShares Intermediate Government/Credit Bond ETF	Bank of America Corp.	$ 25,854,392
	JPMorgan Chase & Co.	22,772,654
	Morgan Stanley	17,867,651
	Citigroup, Inc.	16,204,228
	Goldman Sachs Group Inc. (The)	13,768,208
	HSBC Holdings PLC	12,034,163
	Royal Bank of Canada	4,695,523

Fund	Issuer	Market Value of Investment
iShares Investment Grade Systematic Bond ETF	Bank of America Corp.	$7,680,929
	JPMorgan Chase & Co.	6,890,842
	Morgan Stanley	4,610,988
	Goldman Sachs Group Inc. (The)	1,549,614
	Citigroup, Inc.	1,408,655
	Bank of New York Mellon Corp. (The)	1,233,034
iShares USD Systematic Bond ETF	JPMorgan Chase & Co.	$ 173,459
	Bank of America Corp.	145,526
	Morgan Stanley	123,905
	Wells Fargo & Co.	74,533
	Citigroup, Inc.	72,711
	Goldman Sachs Group Inc. (The)	67,029
	Bank of New York Mellon Corp. (The)	42,545

The Funds' purchase and sale orders for securities may be combined with those of other investment companies, clients or accounts that BlackRock manages or advises. If purchases or sales of portfolio securities of the Funds and one or more other accounts managed or advised by BlackRock are considered at or about the same time, transactions in such securities are allocated among the Funds and the other accounts in a manner deemed equitable to all by BlackRock. In some cases, this procedure could have a detrimental effect on the price or volume of the security as far as the Funds are concerned. However, in other cases, it is possible that the ability to participate in volume transactions and to negotiate lower transaction costs will be beneficial to the Funds. BlackRock may deal, trade and invest for its own account in the types of securities in which the Funds may invest. BlackRock may, from time to time, effect trades on behalf of and for the account of the Funds with brokers or dealers that are affiliated with BFA, in conformity with the 1940 Act and SEC rules and regulations. Under these provisions, any commissions paid to affiliated brokers or dealers must be reasonable and fair compared to the commissions charged by other brokers or dealers in comparable transactions. The Funds will not deal with affiliates in principal transactions unless permitted by applicable SEC rules or regulations, or by SEC exemptive order.

Portfolio turnover may vary from year to year, as well as within a year. Certain Funds may use TBA transactions, which are expected to cause a higher portfolio turnover rate and may cause significant variation in portfolio turnover rate because TBA positions are rolled every month. High turnover rates may result in comparatively greater brokerage expenses. While each Fund's portfolio turnover rates are generally expected to be low, the portfolio turnover rate for that portion of the iShares Core 5-10 Year USD Bond ETF's, iShares Core U.S. Aggregate Bond ETF's, iShares ESG Advanced Total USD Bond Market ETF's, iShares ESG Aware U.S. Aggregate Bond ETF's, iShares MBS ETF's and iShares USD Systematic Bond ETF's assets invested through TBA transactions, if any, is expected to be substantially higher because TBA positions are rolled every month. Higher turnover rates would likely result in comparatively greater transaction costs.

The table below sets forth the portfolio turnover rates of each Fund for the fiscal years noted:

Fund	Fiscal Year Ended February 28, 2023	Fiscal Year Ended February 28, 2022
iShares 0-3 Month Treasury Bond ETF	0%	0%
iShares 1-3 Year Treasury Bond ETF	73%	148%
iShares 1-5 Year Investment Grade Corporate Bond ETF	26%	30%
iShares 3-7 Year Treasury Bond ETF	36%	62%
iShares 5-10 Year Investment Grade Corporate Bond ETF	24%	27%
iShares 7-10 Year Treasury Bond ETF	53%	114%
iShares 10+ Year Investment Grade Corporate Bond ETF	9%	9%
iShares 10-20 Year Treasury Bond ETF	56%	114%
iShares 20+ Year Treasury Bond ETF	22%	43%

Fund	Fiscal Year Ended February 28, 2023	Fiscal Year Ended February 28, 2022
iShares 25+ Year Treasury STRIPS Bond ETF	50%	40%
iShares Agency Bond ETF	92%	146%
iShares BBB Rated Corporate Bond ETF	10%	19%[1,2]
iShares Broad USD Investment Grade Corporate Bond ETF	11%	12%
iShares California Muni Bond ETF	17%	8%
iShares Core 5-10 Year USD Bond ETF[9]	335%	279%
iShares Core 10+ Year USD Bond ETF	10%	15%
iShares Core U.S. Aggregate Bond ETF[9]	104%	163%
iShares ESG Advanced Investment Grade Corporate Bond ETF	35%	7%[3,4]
iShares ESG Advanced Total USD Bond Market ETF[9]	167%	243%
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	30%	37%
iShares ESG Aware U.S. Aggregate Bond ETF[9]	158%	234%
iShares ESG Aware USD Corporate Bond ETF	23%	17%
iShares Government/Credit Bond ETF	17%	21%
iShares High Yield Systematic Bond ETF	60%	67%
iShares iBoxx $ High Yield Corporate Bond ETF	31%	19%
iShares iBoxx $ Investment Grade Corporate Bond ETF	27%	14%
iShares Intermediate Government/Credit Bond ETF	22%	30%
iShares Investment Grade Systematic Bond ETF	87%	59%
iShares MBS ETF[9]	249%[5]	349%
iShares National Muni Bond ETF	20%	9%
iShares New York Muni Bond ETF	12%	8%
iShares Short-Term National Muni Bond ETF	26%	16%
iShares Short Treasury Bond ETF	107%	86%
iShares USD Systematic Bond ETF[9]	519%[8]	243%[6,7]

1 The portfolio turnover for the iShares BBB Rated Corporate Bond ETF relates to the period of May 18, 2021 to February 28, 2022 and is not annualized.

2 The inception date for the iShares BBB Rated Corporate Bond ETF was May 18, 2021.

3 The portfolio turnover for the iShares ESG Advanced Investment Grade Corporate Bond ETF relates to the period of November 8, 2021 to February 28, 2022 and is not annualized.

4 The inception date for the iShares ESG Advanced Investment Grade Corporate Bond ETF was November 8, 2021.

5 The variation in the portfolio turnover rate in the fiscal year ended February 28, 2023, when compared to the prior fiscal year, was primarily due to decreases in the Fund's holdings of TBA securities.

6 The portfolio turnover for the iShares USD Systematic Bond ETF relates to the period of October 12, 2021 to February 28, 2022 and is not annualized.

7 The inception date for the iShares USD Systematic Bond ETF was October 12, 2021.

8 The variation in the portfolio turnover rate in the fiscal year ended February 28, 2023, when compared to the prior fiscal year, was primarily due to volatility in high yield bond prices and its impact on allocations within the Fund's Underlying Index.

9 Portfolio turnover rate includes TBA transactions, as described above.

Additional Information Concerning the Trust

Shares. The Trust currently consists of more than 315 separate investment series or portfolios called funds. The Trust issues shares of beneficial interests in the funds with no par value. The Board may designate additional iShares funds.

Each share issued by a fund has a *pro rata* interest in the assets of that fund. Shares have no preemptive, exchange, subscription or conversion rights and are freely transferable. Each share is entitled to participate equally in dividends and distributions declared by the Board with respect to the relevant fund, and in the net distributable assets of such fund on liquidation.

Each share has one vote with respect to matters upon which the shareholder is entitled to vote. In any matter submitted to shareholders for a vote, each fund shall hold a separate vote, provided that shareholders of all affected funds will vote together when: (i) required by the 1940 Act, or (ii) the Trustees determine that the matter affects the interests of more than one fund.

Under Delaware law, the Trust is not required to hold an annual meeting of shareholders unless required to do so under the 1940 Act. The policy of the Trust is not to hold an annual meeting of shareholders unless required to do so under the 1940 Act. All shares (regardless of the fund) have noncumulative voting rights in the election of members of the Board. Under Delaware law, Trustees of the Trust may be removed by vote of the shareholders.

Following the creation of the initial Creation Unit(s) of shares of a fund and immediately prior to the commencement of trading in such fund's shares, a holder of shares may be a "control person" of the fund, as defined in Rule 0-1 under the 1940 Act. A fund cannot predict the length of time for which one or more shareholders may remain a control person of the fund.

Shareholders may make inquiries by writing to iShares Trust, c/o BlackRock Investments, LLC, 1 University Square Drive, Princeton, NJ 08540.

Absent an applicable exemption or other relief from the SEC or its staff, beneficial owners of more than 5% of the shares of a fund may be subject to the reporting provisions of Section 13 of the 1934 Act and the SEC's rules promulgated thereunder. In addition, absent an applicable exemption or other relief from the SEC or its staff, officers and trustees of a fund and beneficial owners of 10% of the shares of a fund ("Insiders") may be subject to the insider reporting, short-swing profit and short sale provisions of Section 16 of the 1934 Act and the SEC's rules promulgated thereunder. Beneficial owners and Insiders should consult with their own legal counsel concerning their obligations under Sections 13 and 16 of the 1934 Act and existing guidance provided by the SEC staff.

In accordance with the Trust's current Agreement and Declaration of Trust (the "Declaration of Trust"), the Board may, without shareholder approval (unless such shareholder approval is required by the Declaration of Trust or applicable law, including the 1940 Act), authorize certain funds to merge, reorganize, consolidate, sell all or substantially all of their assets, or take other similar actions with, to or into another fund. The Trust or a fund may be terminated by a majority vote of the Board, subject to the affirmative vote of a majority of the shareholders of the Trust or such fund entitled to vote on termination; however, in certain circumstances described in the Declaration of Trust, only a majority vote of the Board is required. Although the shares are not automatically redeemable upon the occurrence of any specific event, the Declaration of Trust provides that the Board will have the unrestricted power to alter the number of shares in a Creation Unit. Therefore, in the event of a termination of the Trust or a fund, the Board, in its sole discretion, could determine to permit the shares to be redeemable in aggregations smaller than Creation Units or to be individually redeemable. In such circumstance, the Trust or a fund may make redemptions in-kind, for cash or for a combination of cash or securities. Further, in the event of a termination of the Trust or a fund, the Trust or a fund might elect to pay cash redemptions to all shareholders, with an in-kind election for shareholders owning in excess of a certain stated minimum amount.

DTC as Securities Depository for Shares of the Funds. Shares of each Fund are represented by securities registered in the name of DTC or its nominee and deposited with, or on behalf of, DTC.

DTC was created in 1973 to enable electronic movement of securities between its participants ("DTC Participants"), and NSCC was established in 1976 to provide a single settlement system for securities clearing and to serve as central counterparty for securities trades among DTC Participants. In 1999, DTC and NSCC were consolidated within The Depository Trust & Clearing Corporation ("DTCC") and became wholly-owned subsidiaries of DTCC. The common stock of DTCC is owned by the DTC Participants, but NYSE and FINRA, through subsidiaries, hold preferred shares in DTCC that provide them with the right to elect one member each to the DTCC board of directors. Access to the DTC system is available to entities, such as banks, brokers, dealers and trust companies, that clear through or maintain a custodial relationship with a DTC Participant, either directly or indirectly ("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. The laws of some jurisdictions may require that certain purchasers of securities take physical delivery of such securities in definitive form. Such laws may impair the ability of certain investors to acquire beneficial interests in shares of the Fund.

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 of each Fund held by 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 of the Trust. 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 of each Fund 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 aspect 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 decide to discontinue providing its service with respect to shares of the Trust 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 to find a replacement for DTC to perform its functions at a comparable cost.

Distribution of Shares. In connection with each Fund's launch, each Fund was seeded through the sale of one or more Creation Units by each Fund to one or more initial investors. Initial investors participating in the seeding may be Authorized Participants, a lead market maker or other third party investor or an affiliate of each Fund or each Fund's adviser. Each such initial investor may sell some or all of the shares underlying the Creation Unit(s) held by them pursuant to the registration statement for each Fund (each, a "Selling Shareholder"), which shares have been registered to permit the resale from time to time after purchase. Each Fund will not receive any of the proceeds from the resale by the Selling Shareholders of these shares.

Selling Shareholders may sell shares owned by them directly or through broker-dealers, in accordance with applicable law, on any national securities exchange on which the shares may be listed or quoted at the time of sale, through trading systems, in the OTC market or in transactions other than on these exchanges or systems at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected through brokerage transactions, privately negotiated trades, block sales, entry into options or other derivatives transactions or through any other means authorized by applicable law. Selling Shareholders may redeem the shares held in Creation Unit size by them through an Authorized Participant.

Any Selling Shareholder and any broker-dealer or agents participating in the distribution of shares may be deemed to be "underwriters" within the meaning of Section 2(a)(11) of the 1933 Act, in connection with such sales.

Any Selling Shareholder and any other person participating in such distribution will be subject to applicable provisions of the 1934 Act and the rules and regulations thereunder.

Creation and Redemption of Creation Units

General. The Trust issues and sells shares of each Fund only in Creation Units on a continuous basis through the Distributor or its agent, without a sales load, at a price based on each Fund's NAV next determined after receipt, on any Business Day (as defined below), of an order received by the Distributor or its agent in proper form. On days when the applicable Listing

Exchange or the bond markets close earlier than normal, a Fund may require orders to be placed earlier in the day. The following table sets forth the number of shares of a Fund that constitute a Creation Unit for such Fund and the approximate value of such Creation Unit as of March 31, 2023:

Fund	Shares Per Creation Unit	Approximate Value Per Creation Unit (U.S.)
iShares 0-3 Month Treasury Bond ETF	50,000	$ 5,027,781.45
iShares 1-3 Year Treasury Bond ETF	100,000	8,211,093.00
iShares 1-5 Year Investment Grade Corporate Bond ETF	50,000	2,520,477.85
iShares 3-7 Year Treasury Bond ETF	100,000	11,753,352.50
iShares 5-10 Year Investment Grade Corporate Bond ETF	50,000	2,554,255.70
iShares 7-10 Year Treasury Bond ETF	100,000	9,905,120.70
iShares 10+ Year Investment Grade Corporate Bond ETF	100,000	5,218,439.50
iShares 10-20 Year Treasury Bond ETF	100,000	11,403,078.00
iShares 20+ Year Treasury Bond ETF	100,000	10,612,519.40
iShares 25+ Year Treasury STRIPS Bond ETF	50,000	687,674.70
iShares Agency Bond ETF	50,000	5,406,667.85
iShares BBB Rated Corporate Bond ETF	50,000	4,252,025.05
iShares Broad USD Investment Grade Corporate Bond ETF	50,000	2,527,921.80
iShares California Muni Bond ETF	50,000	2,862,116.80
iShares Core 5-10 Year USD Bond ETF	100,000	4,373,602.10
iShares Core 10+ Year USD Bond ETF	50,000	2,673,911.65
iShares Core U.S. Aggregate Bond ETF	100,000	9,955,972.60
iShares ESG Advanced Investment Grade Corporate Bond ETF	50,000	4,094,330.40
iShares ESG Advanced Total USD Bond Market ETF	100,000	4,313,337.00
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	50,000	1,201,809.40
iShares ESG Aware U.S. Aggregate Bond ETF	100,000	4,796,333.00
iShares ESG Aware USD Corporate Bond ETF	50,000	1,148,167.80
iShares Government/Credit Bond ETF	50,000	5,279,316.55
iShares High Yield Systematic Bond ETF	50,000	2,210,631.95
iShares iBoxx $ High Yield Corporate Bond ETF	100,000	7,494,555.80
iShares iBoxx $ Investment Grade Corporate Bond ETF	100,000	10,936,771.10
iShares Intermediate Government/Credit Bond ETF	50,000	5,221,816.40
iShares Investment Grade Systematic Bond ETF	50,000	2,227,687.40
iShares MBS ETF	100,000	9,470,891.70
iShares National Muni Bond ETF	100,000	10,745,433.20
iShares New York Muni Bond ETF	50,000	2,672,750.85
iShares Short-Term National Muni Bond ETF	50,000	5,238,705.55
iShares Short Treasury Bond ETF	10,000	1,104,662.36
iShares USD Systematic Bond ETF	50,000	4,271,356.40

In its discretion, the Trust reserves the right to increase or decrease the number of a 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 any 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 each Fund is any day the Fund is open for business, including any day when it satisfies redemption requests as required by Section 22(e) of the 1940 Act. Each Fund is open for business any day on which the Listing Exchange on which the Fund is listed for trading is open for business. As of the date of this SAI, each Listing Exchange observes the following holidays, as observed: 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.

Fund Deposit. The consideration for purchase of Creation Units of a Fund, generally consists of the Deposit Securities and the Cash Component computed as described below. Together, the Deposit Securities and the Cash Component constitute the "Fund Deposit," which, when combined with a Fund's portfolio securities, is designed to generate performance that has a collective investment profile similar to that of the Underlying Index. The Fund Deposit represents the minimum initial and subsequent investment amount for a Creation Unit of any Fund. Such Fund Deposit is applicable, subject to any adjustments as described below, to purchases of Creation Units of shares of a given Fund until such time as the next-announced Fund Deposit is made available.

The "Cash Component" is 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, and serves to compensate for any differences between the NAV per Creation Unit and the Deposit Amount. Payment of any stamp duty or other similar fees and expenses payable upon transfer of beneficial ownership of the Deposit Securities are the sole responsibility of the Authorized Participant purchasing a Creation Unit.

The iShares Core U.S. Aggregate Bond ETF, iShares ESG Advanced Total USD Bond Market ETF, iShares MBS ETF, iShares National Muni Bond ETF and iShares Short-Term National Muni Bond ETF (the "Partial Cash Funds") generally offer Creation Units partially for cash, but may, in certain circumstances, offer Creation Units solely for cash or solely in-kind. The iShares California Muni Bond ETF and iShares New York Muni Bond ETF generally offer Creation Units for cash, but may offer Creation Units partially for cash or solely in-kind. Please see the *Cash Purchase Method* section below and the following discussion summarizing the Deposit Security method for further information on purchasing Creation Units of the Funds.

The identity and number or par value of the Deposit Securities change pursuant to changes in the composition of a Fund's portfolio and as rebalancing adjustments and corporate action events are reflected from time to time by BFA with a view to the investment objective of the Fund. The composition of the Deposit Securities may also change in response to adjustments to the weighting or composition of the component securities constituting the relevant Underlying Index.

The Trust may require the substitution of an amount of cash (*i.e.*, a "cash in lieu" amount) to replace any Deposit Security of the Partial Cash Funds that is a TBA transaction or an interest in a mortgage pass-through security. The amount of cash contributed will be equivalent to the price of the TBA transaction or mortgage pass-through security interest listed as a Deposit Security. A transaction fee may be charged on the cash amount contributed in lieu of the TBA transaction or mortgage pass-through security.

The Fund Deposit may also be modified to minimize the Cash Component by redistributing the cash to the Deposit Securities portion of the Fund Deposit through "systematic rounding." The rounding methodology "rounds up" position sizes of securities in the Deposit Securities (which in turn reduces the cash portion). However, the methodology limits the maximum allowed percentage change in weight and share quantity of any given security in the Fund Deposit.

Fund Deposits may also be modified to position a fund towards a forward index rebalance to reflect revisions that account for index additions, deletions, and re-weights.

The Trust may, in its sole discretion, substitute a "cash in lieu" amount to be added to the Cash Component to replace any Deposit Security in certain circumstances, including: (i) when instruments are not available in sufficient quantity for delivery; (ii) when instruments are not eligible for transfer through DTC or the clearing process (as discussed below); (iii) when instruments that the Authorized Participant (or an investor on whose behalf the Authorized Participant is acting) are not able to be traded due to a trading restriction; (iv) when delivery of the Deposit Security by the Authorized Participant (or by an investor on whose behalf the Authorized Participant is acting) would be restricted under applicable securities or other local laws; (v) in connection with distribution payments to be made by a Fund; or (vi) in certain other situations.

Cash Purchase Method. Although the Trust does not generally permit partial or full cash purchases of Creation Units of its funds, when partial or full cash purchases of Creation Units are available or specified for a Fund (Creation Units of the Partial Cash Funds are generally offered partially for cash and all or a substantial portion of the Deposit Securities of iShares California Muni Bond ETF, iShares National Muni Bond ETF, iShares New York Muni Bond ETF and iShares Short-Term National Muni Bond ETF may be substituted for cash), they will be effected in essentially the same manner as in-kind purchases thereof. In the case of a partial or full cash purchase, the Authorized Participant must pay the cash equivalent of the Deposit Securities it would otherwise be required to provide through an in-kind purchase, plus the same Cash Component required to be paid by an in-kind purchaser.

Procedures for Creation of Creation Units. To be eligible to place orders with the Distributor and to create a Creation Unit of the Funds, an entity must be: (i) a "Participating Party," *i.e.*, a broker-dealer or other participant in the clearing process through the Continuous Net Settlement System of the NSCC (the "Clearing Process"), a clearing agency that is registered with the SEC, or (ii) a DTC Participant, and must have executed an agreement with the Distributor, with respect to creations and redemptions of Creation Units ("Authorized Participant Agreement") (discussed below). A member or participant of a clearing agency registered with the SEC which has a written agreement with the Funds or one of their service providers that allows such member or participant to place orders for the purchase and redemption of Creation Units is referred to as an "Authorized Participant." All shares of the Funds, however created, will be entered on the records of DTC in the name of Cede & Co. for the account of a DTC Participant.

Role of the Authorized Participant. Creation Units may be purchased only by or through a member or participant of a clearing agency registered with the SEC, which has a written agreement with the Funds or one of their service providers that allows such member or participant to place orders for the purchase and redemption of Creation Units. Such Authorized Participant will agree, pursuant to the terms of such Authorized Participant Agreement and on behalf of itself or any investor on whose behalf it will act, to certain conditions, including that such Authorized Participant will make available in advance of each purchase of shares an amount of cash sufficient to pay the Cash Component, once the NAV of a Creation Unit is next determined after receipt of the purchase order in proper form, together with the transaction fees described below. An Authorized Participant, acting on behalf of an investor, may require the investor to enter into an agreement with such Authorized Participant with respect to certain matters, including payment of the Cash Component. Investors who are not Authorized Participants must make appropriate arrangements with an Authorized Participant. Investors should be aware that their particular broker may not be a DTC Participant or may not have executed an Authorized Participant Agreement and that orders to purchase Creation Units may have to be placed by the investor's broker through an Authorized Participant. As a result, purchase orders placed through an Authorized Participant may result in additional charges to such investor. The Trust does not expect to enter into an Authorized Participant Agreement with more than a small number of DTC Participants. A list of current Authorized Participants may be obtained from the Distributor. The Distributor has adopted guidelines regarding Authorized Participants' transactions in Creation Units that are made available to all Authorized Participants. These guidelines set forth the processes and standards for Authorized Participants to transact with the Distributor and its agents in connection with creation and redemption transactions. In addition, the Distributor may be appointed as the proxy of the Authorized Participant and may be granted a power of attorney under its Authorized Participant Agreement.

Placement of Creation Orders. Fund Deposits must be delivered through the Federal Reserve System (for cash and U.S. government securities), through DTC (for corporate and municipal securities) or through a central depository account, such as with Euroclear or DTC, maintained by State Street or a sub-custodian (a "Central Depository Account"). Any portion of a Fund Deposit that may not be delivered through the Fed or DTC must be delivered through a Central Depository Account. The Fund Deposit transfers made through DTC 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 Funds generally before 3:00 p.m., Eastern time on the Settlement Date. Fund Deposit transfers made through the Fed must be deposited by the participant institution in a timely fashion so as to ensure the delivery of the requisite number or amount of Deposit Securities or cash through the Fed to the account of the Fund generally before 3:00 p.m., Eastern time on the Settlement Date. Fund Deposit transfers made through a Central Depository Account must be completed pursuant to the requirements established by the custodian or sub-custodian for such Central Depository Account generally before 2:00 p.m., Eastern time on the Settlement Date. The "Settlement Date" for all funds is generally the second business day after 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 amount of cash equal to the Cash Component must be transferred directly to State Street through the Federal Reserve Bank wire transfer system in a timely manner so as to be received by State Street generally before 3:00 p.m., Eastern time on the Settlement Date. If the Cash Component and the Deposit Securities are not received by 3:00 p.m., Eastern time on the Settlement Date, the creation order may be canceled. Upon written notice to the Distributor, such canceled order may be resubmitted the following Business Day using a Fund Deposit as newly constituted to reflect the then current NAV of the Funds. The delivery of Creation Units so created generally will occur no later than the second Business Day following the day on which the purchase order is deemed received by the Distributor, provided that the relevant Fund Deposit has been received by the Funds prior to such time.

Purchase Orders. To initiate an order for a Creation Unit, an Authorized Participant must submit to the Distributor or its agent an irrevocable order to purchase shares of a Fund (except for the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF), in proper form, generally before 4:00 p.m., Eastern time on any Business Day to receive that day's NAV. For the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF, shares of a Fund are sold or redeemed only in Creation Units at a price based on the Fund's NAV next determined, on any business day, of an order tendered to, and received by, the Distributor or its agent in proper form. Generally, an order will be implemented as of the next determined NAV, as described in the handbook for Authorized Participants. The Distributor or its agent will notify BFA and the custodian of such order. The custodian will then provide such information to any appropriate sub-custodian. Procedures and requirements governing the delivery of the Fund Deposit are set forth in the procedures handbook for Authorized Participants and may change from time to time. Investors, other than Authorized Participants, are responsible for making arrangements for a creation request to be made through an Authorized Participant. The Distributor or its agent will provide a list of current Authorized Participants upon request. Those placing orders to purchase Creation Units through an Authorized Participant should allow sufficient time to permit proper submission of the purchase order to the Distributor or its agent by the Cutoff Time (as defined below) on such Business Day.

The Authorized Participant must also make available on or before the contractual settlement date, by means satisfactory to the Funds, immediately available or same day funds estimated by the Funds to be sufficient to pay the Cash Component next determined after acceptance of the purchase order, together with the applicable purchase transaction fees. Those placing orders should ascertain the applicable deadline for cash transfers by contacting the operations department of the broker or depositary institution effectuating the transfer of the Cash Component. This deadline is likely to be significantly earlier than the Cutoff Time of the Funds. Investors should be aware that an Authorized Participant may require orders for purchases of shares placed with it to be in the particular form required by the individual Authorized Participant.

The Authorized Participant is responsible for any and all expenses and costs incurred by a Fund, including any applicable cash amounts, in connection with any purchase order.

Timing of Submission of Purchase Orders. An Authorized Participant must submit an irrevocable order to purchase shares of a Fund (except for the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF) generally before 4:00 p.m., Eastern time on any Business Day in order to receive that day's NAV. For the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF, shares of a Fund are sold or redeemed only in Creation Units at a price based on the Fund's NAV next determined, on any business day, of an order tendered to, and received by, the Distributor or its agent in proper form. Generally, an order will be implemented as of the next determined NAV, as described in the handbook for Authorized Participants. Creation Orders must be transmitted by an Authorized Participant in the form required by the Funds to the Distributor or its agent pursuant to procedures set forth in the Authorized Participant Agreement. Economic or market disruptions or changes, or telephone or other communication failure, may impede the ability to reach the Distributor or its agent or an Authorized Participant. Each Fund's deadline specified above for the submission of purchase orders is referred to as that Fund's "Cutoff Time." The Distributor or its agent, in their discretion, may permit the submission of such orders and requests by or through an Authorized Participant at any time (including on days on which the Listing Exchange is not open for business) via communication through the facilities of the Distributor's or its agent's proprietary website maintained for this purpose. Purchase orders and redemption requests, if accepted by the Trust, will be processed based on the NAV next determined after such acceptance in accordance with a Fund's Cutoff Times as provided in the Authorized Participant Agreement and disclosed in this SAI.

Acceptance of Orders for Creation Units. Subject to the conditions that (i) an irrevocable purchase order has been submitted by the Authorized Participant (either on its own or another investor's behalf) and (ii) arrangements satisfactory to the Funds are in place for payment of the Cash Component and any other cash amounts which may be due, the Funds will accept the order, subject to each Fund's right (and the right of the Distributor and BFA) to reject any order until acceptance, as set forth below.

Once a Fund has accepted an order, upon the next determination of the NAV of the shares, the Fund will confirm the issuance of a Creation Unit, against receipt of payment, at such NAV. The Distributor or its agent will then transmit a confirmation of acceptance to the Authorized Participant that placed the order.

Each Fund reserves the right to reject or revoke a creation order transmitted to it by the Distributor or its agent provided that a rejection or revocation of a creation order does not violate Rule 6c-11 under the Investment Company Act. For example, a Fund may reject or revoke a creation order transmitted to it by the Distributor or its agent 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 the Fund; (iii) the Deposit Securities delivered do not conform to the identity and number of shares specified, as described above; (iv) acceptance of the Deposit Securities is not legally required or would, in the opinion of counsel, be unlawful or have an adverse effect on the Fund or its shareholders (*e.g.*, jeopardize the Fund's tax status); or (v) circumstances outside the control of the Fund, the Distributor or its agent and BFA make it impracticable to process purchase orders. The Distributor or its agent shall notify a prospective purchaser of a Creation Unit and/or the Authorized Participant acting on behalf of such purchaser of its rejection of such order. The Funds, State Street, the sub-custodian and the Distributor or its agent 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 failure to give such notification.

Issuance of a Creation Unit. Except as provided herein, a Creation Unit will not be issued until the transfer of good title to the applicable Fund of the Deposit Securities and the payment of the Cash Component have been completed. When the sub-custodian has confirmed to the custodian that the securities included in the Fund Deposit (or the cash value thereof) have been delivered to the account of the relevant sub-custodian or sub-custodians, the Distributor or its agent and BFA shall be notified of such delivery and the applicable Fund will issue and cause the delivery of the Creation Unit. Creation Units are generally issued on a "T+2 basis" (*i.e.*, two Business Days after trade date) (except for the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF). For the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF, Creation Units are generally issued on a "T+1 basis" (*i.e.*, one Business Day after trade date). Each Fund reserves the right to settle Creation Unit transactions on a different basis, including a shorter settlement period, if necessary or appropriate under the circumstances and compliant with applicable law.

To the extent contemplated by an Authorized Participant Agreement with the Distributor, each Fund will issue Creation Units to such Authorized Participant, notwithstanding the fact that the corresponding Fund Deposits have not been received in part or in whole, in reliance on the undertaking of the Authorized Participant to deliver the missing Deposit Securities as soon as possible, which undertaking shall be secured by such Authorized Participant's delivery and maintenance of collateral as set forth in the handbook for Authorized Participants. The Trust may use such collateral at any time to buy Deposit Securities for the Funds. Such collateral must be delivered no later than the time specified by a Fund or its custodian on the contractual settlement date. Information concerning the Funds' current procedures for collateralization of missing Deposit Securities is available from the Distributor or its agent. The Authorized Participant Agreement will permit the Funds to buy the missing Deposit Securities at any time and will subject the Authorized Participant to liability for any shortfall between the cost to the Funds of purchasing such securities and the collateral including, without limitation, liability for related brokerage, borrowings and other charges.

In certain cases, Authorized Participants may create and redeem Creation Units on the same trade date and in these instances, the Funds reserve the right to settle these transactions on a net basis or require a representation from the Authorized Participants that the creation and redemption transactions are for separate beneficial owners. All questions as to the number of shares of each security in the Deposit Securities and the validity, form, eligibility and acceptance for deposit of any securities to be delivered shall be determined by each Fund and the Fund's determination shall be final and binding.

Costs Associated with Creation Transactions.

A standard creation transaction fee is imposed to offset the transfer and other transaction costs associated with the issuance of Creation Units. Under an ETF Services Agreement, the Funds have retained BRIL, an affiliate of BFA, to perform the ETF Services. BRIL will receive from an Authorized Participant a standard transaction fee on each creation order, which consists of (1) a fee for providing the ETF Services (the "ETF Servicing Fee") and (2) transfer, processing and other transaction costs charged by a Fund custodian in connection with the issuance of Creation Units for such creation order ("Custody Transaction Costs"). BRIL is entitled to retain the ETF Servicing Fee pursuant to the ETF Services Agreement, but BRIL will reimburse any Custody Transaction Costs to the applicable Fund custodian according to the amounts invoiced by such custodian.

The ETF Servicing Fee is a flat fee per order regardless of the number of Creation Units being purchased, which amount will vary among different Funds based on a number of factors, including the complexity of the order and the types of securities or instruments included in a Fund's Creation Basket, among other variables. The actual Custody Transaction Costs vary per order based on the number of trades, underlying markets and settlement locations associated with the issuance of a Creation Unit. The following table sets forth, for each Fund, an estimate of the creation transaction fee for a Creation Unit based on data as of November 13, 2023 and December 1, 2023, respectively. The actual fee charged to an Authorized Participant in connection with a creation order will vary over time depending on the factors discussed above, and may be higher than the fee set forth below.

In order to defray transaction expenses for a Fund and protect against possible shareholder dilution, if a creation transaction consists solely or partially of cash, the Authorized Participant may also be required to cover (up to the maximum amount shown below) certain brokerage, tax, foreign exchange, execution and other costs and expenses related to the execution of trades resulting from such transaction (which may, in certain instances, be based on a good faith estimate of transaction costs based on historical data or other inputs, at BlackRock's discretion, and may include part or all of the spread between the expected bid and offer side of the market and anticipated market impact). However, a Fund is not obligated to trade identical securities to the securities identified by BlackRock in estimating these transaction and other costs and expenses. In certain cases, BlackRock or an affiliate may determine in its discretion to deviate from the regular charge, subject to the maximum amounts shown below.

For the iShares iBoxx $ High Yield Corporate Bond ETF and the iShares iBoxx $ Investment Grade Corporate Bond ETF, in order to offset certain potential market impacts related to the use of custom baskets in the fixed income market and protect against possible shareholder dilution, if a creation transaction is executed solely or partially in-kind, the Authorized Participant may be assessed a fee, payable to the Fund, which will be identical for each Creation Unit of the applicable Fund on the day of the transaction (up to the maximum amount shown below). The fee is an estimate based on historical data that is indicative of market impact.

Authorized Participants will also bear the costs of transferring the Deposit Securities to the Funds. Certain fees/costs associated with creation transactions may be waived in certain circumstances. Investors who use the services of a broker or other financial intermediary to acquire Fund shares may be charged a fee for such services.

The following table sets forth each Fund's estimated creation transaction based on data as of November 13, 2023 and December 1, 2023, respectively, and maximum additional charge (as described above):

Fund	Standard Creation Transaction Fee*	Maximum Additional Charge**
iShares 0-3 Month Treasury Bond ETF	$315.00	3.0%
iShares 1-3 Year Treasury Bond ETF	387.50	3.0%
iShares 1-5 Year Investment Grade Corporate Bond ETF	527.50	3.0%
iShares 3-7 Year Treasury Bond ETF	368.75	3.0%
iShares 5-10 Year Investment Grade Corporate Bond ETF	508.75	3.0%
iShares 7-10 Year Treasury Bond ETF	318.75	3.0%
iShares 10+ Year Investment Grade Corporate Bond ETF	566.25	3.0%
iShares 10-20 Year Treasury Bond ETF	317.50	3.0%
iShares 20+ Year Treasury Bond ETF	336.25	3.0%
iShares 25+ Year Treasury STRIPS Bond ETF	322.50	3.0%
iShares Agency Bond ETF	312.50	3.0%
iShares BBB Rated Corporate Bond ETF	590.00	3.0%
iShares Broad USD Investment Grade Corporate Bond ETF	622.50	3.0%
iShares California Muni Bond ETF	326.25	3.0%
iShares Core 5-10 Year USD Bond ETF	445.00	3.0%
iShares Core 10+ Year USD Bond ETF	532.50	3.0%
iShares Core U.S. Aggregate Bond ETF	631.25	3.0%
iShares ESG Advanced Investment Grade Corporate Bond ETF	598.75	3.0%
iShares ESG Advanced Total USD Bond Market ETF	665.00	3.0%
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	396.25	3.0%
iShares ESG Aware U.S. Aggregate Bond ETF	618.75	3.0%
iShares ESG Aware USD Corporate Bond ETF	561.25	3.0%
iShares Government/Credit Bond ETF	487.50	3.0%
iShares High Yield Systematic Bond ETF	281.25	3.0%
iShares iBoxx $ High Yield Corporate Bond ETF	855.00	3.0%
iShares iBoxx $ Investment Grade Corporate Bond ETF	587.50	3.0%
iShares Intermediate Government/Credit Bond ETF	637.50	3.0%
iShares Investment Grade Systematic Bond ETF	431.25	3.0%
iShares MBS ETF	385.00	3.0%
iShares National Muni Bond ETF	318.75	3.0%
iShares New York Muni Bond ETF	301.25	3.0%
iShares Short-Term National Muni Bond ETF	346.25	3.0%
iShares Short Treasury Bond ETF	312.50	3.0%

Fund	Standard Creation Transaction Fee*	Maximum Additional Charge**
iShares USD Systematic Bond ETF	556.25	3.0%

* Estimated Fees.

** As a percentage of the net asset value per Creation Unit.

Redemption of Creation Units. Shares of a Fund may be redeemed by Authorized Participants only in Creation Units at their NAV next determined after receipt of a redemption request in proper form by the Distributor or its agent and only on a Business Day. The Funds will not redeem shares in amounts less than Creation Units. There can be no assurance, however, that there will be sufficient liquidity in the secondary market at any time to permit assembly of a Creation Unit. Investors should expect to incur brokerage and other costs in connection with assembling a sufficient number of shares to constitute a Creation Unit that could be redeemed by an Authorized Participant. Beneficial owners also may sell shares in the secondary market.

The Partial Cash Funds generally redeem Creation Units partially for cash. However, the Funds reserve the right to distribute securities and other portfolio instruments in-kind as payment for Creation Units being redeemed. Please see the *Cash Redemption Method* section below and the following discussion summarizing the in-kind method for further information on redeeming Creation Units of the Funds.

Each Fund publishes the designated portfolio of securities (including any portion of such securities for which cash may be substituted) that will be applicable to redemption requests received in proper form (as defined below) on that day ("Fund Securities" or "Redemption Basket"), and an amount of cash (the "Cash Amount," as described below) in order to effect redemptions of Creation Units of a Fund. Such Fund Securities and Cash Amount will remain in effect until such time as the next announced composition of the Fund Securities and Cash Amount is made available. The Fund Securities and Cash Amount are subject to possible amendment or correction. Fund Securities received on redemption may not be identical to Deposit Securities that are applicable to creations of Creation Units. Procedures and requirements governing redemption transactions are set forth in the handbook for Authorized Participants and may change from time to time.

Unless cash redemptions are available or specified for a Fund, the redemption proceeds for a Creation Unit generally consist of Fund Securities, plus the Cash Amount, which is an amount equal to the difference between the NAV of the shares being redeemed, as next determined after the receipt of a redemption request in proper form, and the value of Fund Securities, less a redemption transaction fee (as described below).

The Trust may, in its sole discretion, substitute a "cash in lieu" amount to replace any Fund Security in certain circumstances, including: (i) when the delivery of a Fund Security to the Authorized Participant (or to an investor on whose behalf the Authorized Participant is acting) would be restricted under applicable securities or other local laws or due to a trading restriction; (ii) when the delivery of a Fund Security to the Authorized Participant would result in the disposition of the Fund Security by the Authorized Participant due to restrictions under applicable securities or other local laws; (iii) when the delivery of a Fund Security to the Authorized Participant would result in unfavorable tax treatment; (iv) when a Fund Security cannot be settled or otherwise delivered in time to facilitate an in-kind redemption; or (v) in certain other situations. The amount of cash paid out in such cases will be equivalent to the value of the substituted security listed as a Fund Security. Notwithstanding the foregoing, the Trust may, in its sole discretion, substitute a "cash in lieu" amount to replace any Fund Security of the Partial Cash Funds that is a TBA transaction or mortgage pass-through security. In such cases, a transaction fee may be charged on the cash amount paid in lieu of the TBA transaction or mortgage pass through 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 or through an Authorized Participant by the redeeming shareholder. Each Fund generally redeems Creation Units for Fund Securities (except for the Partial Cash Funds, which generally redeem Creation Units partially for cash), and the iShares California Muni Bond ETF, iShares National Muni Bond ETF, iShares New York Muni Bond ETF and iShares Short-Term National Muni Bond ETF which may substitute all or a substantial portion of the Fund Securities for cash, but each Fund reserves the right to utilize a cash option for redemption of Creation Units. Each Fund may, in its sole discretion, provide such redeeming Authorized Participant a portfolio of securities that differs from the exact composition of the Fund Securities, but does not differ in NAV. The Redemption Basket may also be modified to minimize the Cash Component by redistributing the cash to the Fund Securities portion of the Redemption Basket through systematically rounding. The rounding methodology allows position sizes of securities in the Fund Securities to be "rounded up," while limiting the maximum allowed percentage change in weight and share quantity of any given security in the Redemption

Basket. Redemption Baskets may also be modified to position a fund towards a forward index rebalance to reflect revisions that account for index additions, deletions, and re-weights.

Cash Redemption Method. Although the Trust does not generally permit full cash redemptions of Creation Units of its funds, when partial or full cash redemptions of Creation Units are available or specified (*e.g.,* Creation Units of the Partial Cash Funds are generally redeemed partially for cash and the iShares California Muni Bond ETF, iShares National Muni Bond ETF, iShares New York Muni Bond ETF and iShares Short-Term National Muni Bond ETF which may substitute cash for all or a substantial portion of the Fund Securities for cash), they will be effected in essentially the same manner as in-kind redemptions thereof. In the case of partial or full cash redemption, the Authorized Participant receives the cash equivalent of the Fund Securities and other instruments it would otherwise receive through an in-kind redemption, plus the same Cash Amount to be paid to an in-kind redeemer.

Costs Associated with Redemption Transactions.

A standard redemption transaction fee is imposed to offset transfer and other transaction costs that may be incurred by the relevant Fund. As described above, under an ETF Services Agreement, the Funds have retained BRIL, an affiliate of BFA, to perform certain ETF Services. BRIL will receive from an Authorized Participant a standard transaction fee on each redemption order, which consists of (1) the ETF Servicing Fee and (2) Custody Transaction Costs. BRIL is entitled to retain the ETF Servicing Fee pursuant to the ETF Services Agreement, but BRIL will reimburse any Custody. Transaction Costs to the applicable Fund custodian according to the amounts invoiced by such custodian.

The ETF Servicing Fee is a flat fee per order regardless of the number of Creation Units being redeemed, which amount will vary among different Funds based on a number of factors, including the complexity of the order and the types of securities or instruments included in a Fund's Redemption Basket, among other variables. The actual Custody Transaction Costs vary per order based on the number of trades, underlying markets, and settlement locations associated with the redemption of a Creation Unit. The following table sets forth, for each Fund, an estimate of the redemption transaction fee for a Creation Unit based on data as of November 13, 2023 and December 1, 2023, respectively. The actual fee charged to an Authorized Participant in connection with a redemption order will vary over time depending on the factors discussed above, and may be higher than the fee set forth below.

In order to defray transaction expenses for a Fund and protect against possible shareholder dilution, if a redemption transaction consists solely or partially of cash, the Authorized Participant may also be required to cover (up to the maximum amount shown below) certain brokerage, tax, foreign exchange, execution and other costs and expenses related to the execution of trades resulting from such transaction (which may, in certain instances, be based on a good faith estimate of transaction costs based on historical data or other inputs, at BlackRock's discretion, and may include part or all of the spread between the expected bid and offer side of the market and anticipated market impact). However, a Fund is not obligated to trade identical securities to the securities identified by BlackRock in estimating these transaction and other costs and expenses. In certain cases, BlackRock or an affiliate may determine in its discretion to deviate from the regular charge, subject to the maximum amounts shown below.

For the iShares iBoxx $ High Yield Corporate Bond ETF and the iShares iBoxx $ Investment Grade Corporate Bond ETF, in order to offset certain potential market impacts related to the use of custom baskets in the fixed income market and protect against possible shareholder dilution, if a redemption transaction is executed solely or partially in-kind, the Authorized Participant may be assessed a fee, payable to the Fund, which will be identical for each Creation Unit of the applicable Fund on the day of the transaction (up to the maximum amount shown below). The fee is an estimate based on historical data that is indicative of market impact.

Authorized Participants will also bear the costs of transferring the Fund Securities from a Fund to their account on their order. Certain fees/costs associated with redemption transactions may be waived in certain circumstances. Investors who use the services of a broker or other financial intermediary to dispose of Fund shares may be charged a fee for such services.

The following table sets forth each Fund's estimated redemption transaction based on data as of November 13, 2023 and December 1, 2023, respectively, and maximum additional charge (as described above):

Fund	Standard Redemption Transaction Fee*	Maximum Additional Charge**
iShares 0-3 Month Treasury Bond ETF	$ 315.00	2.0%
iShares 1-3 Year Treasury Bond ETF	387.50	2.0%
iShares 1-5 Year Investment Grade Corporate Bond ETF	527.50	2.0%
iShares 3-7 Year Treasury Bond ETF	368.75	2.0%
iShares 5-10 Year Investment Grade Corporate Bond ETF	508.75	2.0%
iShares 7-10 Year Treasury Bond ETF	318.75	2.0%
iShares 10+ Year Investment Grade Corporate Bond ETF	566.25	2.0%
iShares 10-20 Year Treasury Bond ETF	317.50	2.0%
iShares 20+ Year Treasury Bond ETF	336.25	2.0%
iShares 25+ Year Treasury STRIPS Bond ETF	322.50	2.0%
iShares Agency Bond ETF	312.50	2.0%
iShares BBB Rated Corporate Bond ETF	590.00	2.0%
iShares Broad USD Investment Grade Corporate Bond ETF	622.50	2.0%
iShares California Muni Bond ETF	326.25	2.0%
iShares Core 5-10 Year USD Bond ETF	445.00	2.0%
iShares Core 10+ Year USD Bond ETF	532.50	2.0%
iShares Core U.S. Aggregate Bond ETF	631.25	2.0%
iShares ESG Advanced Investment Grade Corporate Bond ETF	598.75	2.0%
iShares ESG Advanced Total USD Bond Market ETF	665.00	2.0%
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	396.25	2.0%
iShares ESG Aware U.S. Aggregate Bond ETF	618.75	2.0%
iShares ESG Aware USD Corporate Bond ETF	561.25	2.0%
iShares Government/Credit Bond ETF	487.50	2.0%
iShares High Yield Systematic Bond ETF	281.25	2.0%
iShares iBoxx $ High Yield Corporate Bond ETF	855,00	2.0%
iShares iBoxx $ Investment Grade Corporate Bond ETF	587.50	2.0%
iShares Intermediate Government/Credit Bond ETF	637.50	2.0%
iShares Investment Grade Systematic Bond ETF	431.25	2.0%
iShares MBS ETF	385.00	2.0%
iShares National Muni Bond ETF	318.75	2.0%
iShares New York Muni Bond ETF	301.25	2.0%
iShares Short-Term National Muni Bond ETF	346.25	2.0%
iShares Short Treasury Bond ETF	312.50	2.0%
iShares USD Systematic Bond ETF	556.25	2.0%

* Estimated Fees

** As a percentage of the net asset value per Creation Unit, inclusive of the standard redemption transaction fee.

Placement of Redemption Orders. Redemption requests for Creation Units of the Funds must be submitted to the Distributor or its agent by or through an Authorized Participant. An Authorized Participant must submit an irrevocable request to redeem shares of a Fund (except for the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF) generally before 4:00 p.m., Eastern time on any Business Day in order to receive that day's NAV. For the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF, shares of a Fund are redeemed only in creation units at a price based on the Fund's NAV next determined, on any business day, of an order tendered to, and received by, the Distributor or its agent in proper form. Generally, an order will be implemented as of the next determined NAV, as described in the handbook for Authorized Participants. On days when the Listing Exchange closes earlier than normal, a Fund may require orders to redeem Creation Units to be placed earlier that day. Investors, other than Authorized Participants, are responsible for making arrangements for a redemption request to be made through an Authorized Participant. The Distributor or its agent will provide a list of current Authorized Participants upon request.

The Authorized Participant must transmit the request for redemption in the form required by the Funds to the Distributor or its agent in accordance with procedures set forth in the Authorized Participant Agreement. Investors should be aware that their particular broker may not have executed an Authorized Participant Agreement and that, therefore, requests to redeem

Creation Units may have to be placed by the investor's broker through an Authorized Participant who has executed an Authorized Participant Agreement. At any time, only a limited number of broker-dealers will have an Authorized Participant Agreement in effect. Investors making a redemption request should be aware that such request must be in the form specified by such Authorized Participant. Investors making a request to redeem Creation Units should allow sufficient time to permit proper submission of the request by an Authorized Participant and transfer of the shares to the Funds' transfer agent; such investors should allow for the additional time that may be required to effect redemptions through their banks, brokers or other financial intermediaries if such intermediaries are not Authorized Participants.

A redemption request is considered to be in "proper form" if: (i) an Authorized Participant has transferred or caused to be transferred to the Funds' transfer agent the Creation Unit redeemed through the book-entry system of DTC so as to be effective by the Listing Exchange closing time on any Business Day on which the redemption request is submitted; (ii) a request in form satisfactory to the applicable Fund is received by the Distributor or its agent from the Authorized Participant on behalf of itself or another redeeming investor within the time periods specified above; and (iii) all other procedures set forth in the Authorized Participant Agreement are properly followed.

Upon receiving a redemption request, the Distributor or its agent shall notify the applicable Fund and the Fund's transfer agent of such redemption request. The tender of an investor's shares for redemption and the distribution of the securities and/or cash included in the redemption payment made in respect of Creation Units redeemed will be made through DTC and the relevant Authorized Participant to the Beneficial Owner thereof as recorded on the book-entry system of DTC or the DTC Participant through which such investor holds, as the case may be, or by such other means specified by the Authorized Participant submitting the redemption request.

A redeeming Authorized Participant, whether on its own account or acting on behalf of a Beneficial Owner, must maintain appropriate security arrangements with a qualified broker-dealer, bank or other custody providers in each jurisdiction in which any of the portfolio securities are customarily traded, to which account such portfolio securities will be delivered.

Deliveries of redemption proceeds by each Fund are generally made within two Business Days (*i.e.*, "T+2") (except for the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF). For the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF, for redemption orders tendered before 12:00 p.m., Eastern time, creation units are generally settled on a "T+0 basis" (*i.e.*, on trade date) and all other redemption orders are generally settled on a "T+1 basis". Each Fund reserves the right to settle redemption transactions on a different basis, if necessary or appropriate under the circumstances and compliant with applicable law.

If a Fund includes a foreign investment in its basket, and if a local market holiday, or series of consecutive holidays, or the extended delivery cycles for transferring foreign investments to redeeming Authorized Participants prevents timely delivery of the foreign investment in response to a redemption request, a Fund may delay delivery of the foreign investment more than seven days if a Fund delivers the foreign investment as soon as practicable, but in no event later than 15 days. Delayed settlement may occur due to a number of different reasons, including, without limitation, settlement cycles for the underlying securities, unscheduled market closings, an effort to link distribution to dividend record dates and ex-dates and newly announced holidays. For example, the redemption settlement process may be extended because of the occurrence of a holiday in a non-U.S. market or in the U.S. bond market that is not a holiday observed in the U.S. equity market.

To the extent contemplated by an Authorized Participant's agreement with the Distributor or its agent, in the event an Authorized Participant has submitted a redemption request in proper form but is unable to transfer all or part of the Creation Unit to be redeemed to a Fund, at or prior to the time specified by a Fund or its custodian on the Business Day after the date of submission of such redemption request, the Distributor or its agent will accept the redemption request in reliance on the undertaking by the Authorized Participant to deliver the missing shares as soon as possible. Such undertaking shall be secured by the Authorized Participant's delivery and maintenance of collateral as set forth in the handbook for Authorized Participants. Such collateral must be delivered no later than the time specified by a Fund or its custodian on the Business Day after the date of submission of such redemption request and shall be held by State Street and marked-to-market daily. The fees of State Street and any sub-custodians in respect of the delivery, maintenance and redelivery of the collateral shall be payable by the Authorized Participant. The Authorized Participant Agreement permits the Funds to acquire shares of the Funds at any time and subjects the Authorized Participant to liability for any shortfall between the aggregate of the cost to the Funds of purchasing such shares, plus the value of the Cash Amount, and the value of the collateral together with liability for related brokerage and other charges.

Because the portfolio securities of a Fund may trade on exchange(s) on days that the Listing Exchange is closed or are otherwise not Business Days for such Fund, shareholders may not be able to redeem their shares of such Fund or purchase or sell shares of such Fund on the Listing Exchange on days when the NAV of such a Fund could be significantly affected by events in the relevant non-U.S. markets.

Under normal circumstances, each of the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF may postpone and/or suspend redemption and payment beyond one business day only as follows: (i) for any period during which there is a non-routine closure of the Fedwire or applicable Federal Reserve Banks; (ii) for any period during which the Listing Exchange is closed (other than customary weekend and holiday closings); (iii) for any period during which trading on the Listing Exchange is suspended or restricted; (iv) for any period during which an emergency exists as a result of which disposal of the shares of the Fund's portfolio securities or determination of its net asset value is not reasonably practicable; (v) in such other circumstance as is permitted by the SEC; (vi) for any period during which the Fund, as part of a necessary liquidation of the Fund, has properly postponed and/or suspended redemption of shares and payment in accordance with federal securities laws; or (vii) on the Fund's ex-dividend dates. Any such suspension or postponement described above will be consistent with the Fund's obligations under Section 22(e)of the 1940 Act.

The right of redemption may be suspended or the date of payment postponed with respect to any Fund (other than the iShares 0-3 Month Treasury Bond ETF and iShares Short Treasury Bond ETF): (i) for any period during which the Listing Exchange is closed (other than customary weekend and holiday closings); (ii) for any period during which trading on the Listing Exchange is suspended or restricted; (iii) for any period during which an emergency exists as a result of which disposal of the shares of the Fund's portfolio securities or determination of its NAV is not reasonably practicable; or (iv) in such other circumstance as is permitted by the SEC.

Custom Baskets. Creation and Redemption baskets may differ and each Fund will accept "custom baskets." A custom basket may include any of the following: (i) a basket that is composed of a non-representative selection of a Fund's portfolio holdings; (ii) a representative basket that is different from the initial basket used in transactions on the same business day; or (iii) a basket that contains bespoke cash substitutions for a single Authorized Participant. Each Fund has adopted policies and procedures that govern the construction and acceptance of baskets, including heightened requirements for certain types of custom baskets. Such policies and procedures provide the parameters for the construction and acceptance of custom baskets that are in the best interests of a Fund and its shareholders, establish processes for revisions to, or deviations from, such parameters, and specify the titles and roles of the employees of BFA who are required to review each custom basket for compliance with those parameters. In addition, when constructing custom baskets for redemptions, the tax efficiency of a Fund may be taken into account. The policies and procedures distinguish among different types of custom baskets that may be used for each Fund and impose different requirements for different types of custom baskets in order to seek to mitigate against potential risks of conflicts and/or overreaching by an Authorized Participant. BlackRock has established a governance process to oversee basket compliance for the Funds, as set forth in each Fund's policies and procedures.

Taxation on Creations and Redemptions of Creation Units. An Authorized Participant generally will recognize either gain or loss upon the exchange of Deposit Securities for Creation Units. This gain or loss is calculated by taking the market value of the Creation Units purchased over the Authorized Participant's aggregate basis in the Deposit Securities exchanged therefor. However, the IRS may apply the wash sales rules to determine that any loss realized upon the exchange of Deposit Securities for Creation Units is not currently deductible. Authorized Participants should consult their own tax advisors.

Current U.S. federal income tax laws dictate that capital gain or loss realized from the redemption of Creation Units will generally create long-term capital gain or loss if the Authorized Participant holds the Creation Units for more than one year, or short-term capital gain or loss if the Creation Units were held for one year or less, if the Creation Units are held as capital assets.

Taxes

The following is a summary of certain material U.S. federal income tax considerations regarding the purchase, ownership and disposition of shares of a Fund. This summary does not address all of the potential U.S. federal income tax consequences that may be applicable to a Fund or to all categories of investors, some of which may be subject to special tax rules. Current and prospective shareholders are urged to consult their own tax advisors with respect to the specific federal, state, local and non-U.S. tax consequences of investing in a Fund. The summary is based on the laws and judicial and administrative interpretations thereof in effect on the date of this SAI, all of which are subject to change, possibly with retroactive effect.

Regulated Investment Company Qualifications. Each Fund intends to continue to qualify for and to elect treatment as a separate RIC under Subchapter M of the Internal Revenue Code. To qualify for treatment as a RIC, each Fund must annually distribute at least 90% of its investment company taxable income (which includes dividends, interest and net short-term capital gains) and meet several other requirements. Among such other requirements are the following: (i) at least 90% of each Fund's annual gross income must be derived from dividends, interest, payments with respect to securities loans, gains from the sale or other disposition of stock or securities or non-U.S. currencies, 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 (*i.e.*, partnerships that are traded on an established securities market or tradable on a secondary market, other than a partnership that derives at least 90% of its income from interest, dividends, capital gains and other traditionally permitted RIC income); and (ii) at the close of each quarter of each Fund's taxable year, (a) at least 50% of the market value of each Fund's total assets must be represented by cash and cash items, U.S. government securities, securities of other RICs and other securities, with such other securities limited for purposes of this calculation in respect of any one issuer to an amount not greater than 5% of the value of the Fund's assets and not greater than 10% of the outstanding voting securities of such issuer, and (b) not more than 25% of the value of the Fund's total assets may be invested in the securities of any one issuer, of two or more issuers of which 20% or more of the voting stock is held by the Fund and that are engaged in the same or similar trades or businesses or related trades or businesses (other than the securities of other RICs) or the securities of one or more qualified publicly-traded partnerships.

A Fund may be able to cure a failure to derive at least 90% of its income from the sources specified above or a failure to diversify its holdings in the manner described above by paying a tax and/or by disposing of certain assets. If, in any taxable year, a Fund fails one of these tests and does not timely cure the failure, that Fund will be taxed in the same manner as an ordinary corporation and distributions to its shareholders will not be deductible by that Fund in computing its taxable income.

Although in general the passive loss rules of the Internal Revenue 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. A Fund's investments in partnerships, including in qualified publicly-traded partnerships, may result in the Fund being subject to state, local, or non-U.S. income, franchise or withholding tax liabilities.

Taxation of RICs. As a RIC, a Fund will not be subject to U.S. federal income tax on the portion of its taxable investment income and capital gains that it distributes to its shareholders, provided that it satisfies a minimum distribution requirement. To satisfy the minimum distribution requirement, a Fund must distribute to its shareholders at least the sum of (i) 90% of its "investment company taxable income" (*i.e.*, income other than its net realized long-term capital gain over its net realized short-term capital loss), plus or minus certain adjustments, and (ii) 90% of its net tax-exempt income for the taxable year. A Fund will be subject to income tax at regular corporate rates on any taxable income or gains that it does not distribute to its shareholders. If a Fund fails to qualify for any taxable year as a RIC or fails to meet the distribution requirement, all of its taxable income will be subject to tax at regular corporate income tax rates without any deduction for distributions to shareholders, and such distributions generally will be taxable to shareholders as ordinary dividends to the extent of the Fund's current and accumulated earnings and profits. In such event, distributions to individuals should be eligible to be treated as qualified dividend income and distributions to corporate shareholders generally should be eligible for the dividends-received deduction. Although each Fund intends to distribute substantially all of its net investment income and its capital gains for each taxable year, a Fund may decide to retain a portion of its income or gains if the Fund determines that doing so is in the interest of its shareholders. Each Fund will be subject to U.S. federal income taxation to the extent any such income or gains are not distributed. Moreover, if a Fund fails to qualify as a RIC in any year, it must pay out its earnings and profits accumulated in that year in order to qualify again as a RIC. If a Fund fails to qualify as a RIC for a period greater than two taxable years, the Fund may be required to recognize any net built-in gains with respect to certain of its assets (*i.e.*, the excess of the aggregate gains, including items of income, over aggregate losses that would have been realized with respect to such assets if the Fund had been liquidated) if it qualifies as a RIC in a subsequent year.

Net Capital Loss Carryforwards. Net capital loss carryforwards may be applied against any net realized capital gains in each succeeding year, until they have been reduced to zero.

In the event that a Fund were to experience an ownership change as defined under the Internal Revenue Code, the loss carryforwards and other favorable tax attributes of a Fund, if any, may be subject to limitation.

The following Funds had tax basis net capital loss carryforwards as set forth in the table below as of February 28, 2023, the tax year-end for the Funds listed:

Fund	Non-Expiring Capital Loss Carryforward
iShares 0-3 Month Treasury Bond ETF	$ 107,538
iShares 1-3 Year Treasury Bond ETF	537,386,460
iShares 1-5 Year Investment Grade Corporate Bond ETF	191,027,043
iShares 3-7 Year Treasury Bond ETF	328,296,172
iShares 5-10 Year Investment Grade Corporate Bond ETF	297,485,519
iShares 7-10 Year Treasury Bond ETF	1,738,878,831
iShares 10+ Year Investment Grade Corporate Bond ETF	49,738,805
iShares 10-20 Year Treasury Bond ETF	649,968,036
iShares 20+ Year Treasury Bond ETF	2,324,751,253
iShares 25+ Year Treasury STRIPS Bond ETF	49,339,292
iShares Agency Bond ETF	22,338,739
iShares BBB Rated Corporate Bond ETF	507,250
iShares Broad USD Investment Grade Corporate Bond ETF	74,831,628
iShares California Muni Bond ETF	14,154,871
iShares Core 5-10 Year USD Bond ETF	2,955,780
iShares Core 10+ Year USD Bond ETF	5,098,934
iShares Core U.S. Aggregate Bond ETF	1,047,632,595
iShares ESG Advanced Investment Grade Corporate Bond ETF	857,986
iShares ESG Advanced Total USD Bond Market ETF	21,003,615
iShares ESG Aware 1-5 Year USD Corporate Bond ETF	13,015,455
iShares ESG Aware U.S. Aggregate Bond ETF	36,336,783
iShares ESG Aware USD Corporate Bond ETF	22,413,546
iShares Government/Credit Bond ETF	3,949,245
iShares High Yield Systematic Bond ETF	11,986,708
iShares iBoxx $ High Yield Corporate Bond ETF	1,735,059,098

Fund	Non-Expiring Capital Loss Carryforward
iShares iBoxx $ Investment Grade Corporate Bond ETF	973,210,854
iShares Intermediate Government/Credit Bond ETF	19,061,143
iShares Investment Grade Systematic Bond ETF	12,519,533
iShares MBS ETF	483,299,459
iShares National Muni Bond ETF	253,203,122
iShares New York Muni Bond ETF	1,758,989
iShares Short-Term National Muni Bond ETF	13,079,046
iShares Short Treasury Bond ETF	47,319,478
iShares USD Systematic Bond ETF	1,966,331

Excise Tax. A Fund will be subject to a 4% excise tax on certain undistributed income if it does not distribute to its shareholders in each calendar year at least 98% of its ordinary income for the calendar year plus at least 98.2% of its capital gain net income for the 12 months ended October 31 of such year. For this purpose, however, any ordinary income or capital gain net income retained by a Fund that is subject to corporate income tax will be considered to have been distributed by year-end. In addition, the minimum amounts that must be distributed in any year to avoid the excise tax will be increased or decreased to reflect any underdistribution or overdistribution, as the case may be, from the previous year. Each Fund intends to declare and distribute dividends and distributions in the amounts and at the times necessary to avoid the application of this 4% excise tax.

Taxation of U.S. Shareholders. Dividends and other distributions by a Fund are generally treated under the Internal Revenue Code as received by the shareholders at the time the dividend or distribution is made. However, any dividend or capital gain distribution declared by a Fund in October, November or December of any calendar year and payable to shareholders of record on a specified date in such a month shall be deemed to have been received by each shareholder on December 31 of such calendar year and to have been paid by the Fund not later than such December 31, provided such dividend is actually paid by the Fund during January of the following calendar year.

Each Fund intends to distribute annually to its shareholders substantially all of its net tax-exempt income, investment company taxable income and any net realized long-term capital gains in excess of net realized short-term capital losses (including any capital loss carryovers). However, if a Fund retains for investment an amount equal to all or a portion of its net long-term capital gains in excess of its net short-term capital losses (including any capital loss carryovers), it will be subject to a corporate tax (at a flat rate of 21%) on the amount retained. In that event, the Fund will report such retained amounts as undistributed capital gains in a notice to its shareholders who (a) will be required to include in income for U.S. federal income tax purposes, as long-term capital gains, their proportionate shares of the undistributed amount, (b) will be entitled to credit their proportionate shares of the tax paid by the Fund on the undistributed amount against their U.S. federal income tax liabilities, if any, and to claim refunds to the extent their credits exceed their liabilities, if any, and (c) will be entitled to increase their tax basis, for U.S. federal income tax purposes, in their shares by an amount equal to the excess of the amount in clause (a) over the amount in clause (b). Organizations or persons not subject to U.S. federal income tax on such capital gains will be entitled to a refund of their *pro rata* share of such taxes paid by the Fund upon filing appropriate returns or claims for refund with the IRS.

Distributions of net realized long-term capital gains, if any, that a Fund reports as capital gain dividends are taxable as long-term capital gains, whether paid in cash or in shares and regardless of how long a shareholder has held shares of the Fund. All other dividends of a Fund (including dividends from short-term capital gains) from its current and accumulated earnings and profits ("regular dividends") are generally subject to tax as ordinary income. Long-term capital gains are eligible for taxation at a maximum rate of 15% or 20% for non-corporate shareholders, depending on whether their income exceeds certain threshold amounts.

If an individual receives a regular dividend qualifying for the long-term capital gain rates and such dividend constitutes an "extraordinary dividend," and the individual subsequently recognizes a loss on the sale or exchange of stock in respect of which the extraordinary dividend was paid, then the loss will be long-term capital loss to the extent of such extraordinary dividend. An "extraordinary dividend" on common stock for this purpose is generally a dividend (i) in an amount greater than or equal to 10% of the taxpayer's tax basis (or trading value) in a share of stock, aggregating dividends with ex-dividend dates within an 85-day period, or (ii) in an amount greater than 20% of the taxpayer's tax basis (or trading value) in a share of stock, aggregating dividends with ex-dividend dates within a 365-day period.

Distributions in excess of a Fund's current and accumulated earnings and profits will, as to each shareholder, be treated as a tax-free return of capital to the extent of a shareholder's basis in shares of the Fund, and as a capital gain thereafter (if the shareholder holds shares of the Fund as capital assets). Distributions in excess of a Fund's minimum distribution requirements, but not in excess of the Fund's earnings and profits, will be taxable to shareholders and will not constitute nontaxable returns of capital. The Fund's capital loss carryovers, if any, carried from taxable years beginning before 2011 do not reduce current earnings and profits, even if such carryforwards offset current year realized gains. Shareholders receiving dividends or distributions in the form of additional shares should be treated for U.S. federal income tax purposes as receiving a distribution in an amount equal to the amount of money that the shareholders receiving cash dividends or distributions will receive and should have a cost basis in the shares received equal to such amount. No deduction would be allowed to an investor for interest on indebtedness incurred or continued to purchase or carry shares of the Fund to the extent the interest deduction would relate to exempt-interest dividends received.

A 3.8% U.S. federal Medicare contribution tax is imposed on net investment income, including, but not limited to, interest, dividends, and net gain from investments, of U.S. individuals with income exceeding $200,000 (or $250,000 if married and filing jointly), and of estates and trusts.

Investors considering buying shares just prior to a dividend or capital gain distribution should be aware that, although the price of shares purchased at that time may reflect the amount of the forthcoming distribution, such dividend or distribution may nevertheless be taxable to them. If a Fund is the holder of record of any security on the record date for any dividends payable with respect to such security, such dividends will be included in the Fund's gross income not as of the date received but as of the later of (i) the date such security became ex-dividend with respect to such dividends (*i.e.*, the date on which a buyer of the security would not be entitled to receive the declared, but unpaid, dividends); or (ii) the date the Fund acquired such security. Accordingly, in order to satisfy its income distribution requirements, a Fund may be required to pay dividends based on anticipated earnings, and shareholders may receive dividends in an earlier year than would otherwise be the case.

In certain situations, a Fund may, for a taxable year, defer all or a portion of its net capital loss (or if there is no net capital loss, then any net long-term or short-term capital loss) realized after October and its late-year ordinary loss (defined as the sum of the excess of post-October foreign currency and passive foreign investment company ("PFIC") losses over post-October foreign currency and PFIC gains, plus the excess of post-December ordinary losses over post-December ordinary income) until the next taxable year in computing its investment company taxable income and net capital gain, which will defer the recognition of such realized losses. Such deferrals and other rules regarding gains and losses realized after October (or December) may affect the tax character of shareholder distributions.

Sales of Shares. Upon the sale or exchange of shares of a Fund, a shareholder will realize a taxable gain or loss equal to the difference between the amount realized and the shareholder's basis in shares of the Fund. A redemption of shares by a Fund will be treated as a sale for this purpose. 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 capital gain or loss if the shares are held for more than one year and short-term capital gain or loss if the shares are held for one year or less. Any loss realized on a sale or exchange will be disallowed to the extent the shares disposed of are replaced, including replacement through the reinvesting of dividends or capital gains distributions, or by an option, or contract to acquire substantially identical shares, within a 61-day period beginning 30 days before and ending 30 days after the disposition of the shares. In such a case, the basis of the shares acquired will be increased to reflect the disallowed loss. Any loss realized by a shareholder on the sale of Fund shares held by the shareholder for six months or less will be treated for U.S. federal income tax purposes as a long-term capital loss to the extent of any distributions or deemed distributions of long-term capital gains received by the shareholder with respect to such share. The Medicare contribution tax described above will apply to the sale of Fund shares.

If a shareholder incurs a sales charge in acquiring shares of a Fund, disposes of those shares within 90 days and then, on or before January 31 of the following calendar year, acquires shares in a mutual fund for which the otherwise applicable sales charge is reduced by reason of a reinvestment right (*e.g.*, an exchange privilege), the original sales charge will not be taken into account in computing gain/loss on the original shares to the extent the subsequent sales charge is reduced. Instead, the disregarded portion of the original sales charge will be added to the tax basis of the newly acquired shares. Furthermore, the same rule also applies to a disposition of the newly acquired shares made within 90 days of the second acquisition. This provision prevents a shareholder from immediately deducting the sales charge by shifting his or her investment within a family of mutual funds.

Backup Withholding. In certain cases, a Fund will be required to withhold at a 24% rate and remit to the U.S. Treasury such amounts withheld from any distributions paid to a shareholder who: (i) has failed to provide a correct taxpayer identification number; (ii) is subject to backup withholding by the IRS; (iii) has failed to certify to a Fund that such shareholder is not subject to backup withholding; or (iv) has not certified that such shareholder is a U.S. person (including a U.S. resident alien). Backup withholding is not an additional tax and any amount withheld may be credited against a shareholder's U.S. federal income tax liability.

Sections 351 and 362. The Trust, on behalf of each Fund, has the right to reject an order for a purchase of shares of the Fund if the purchaser (or group of purchasers) would, upon obtaining the shares so ordered, own 80% or more of the outstanding shares of a given Fund and if, pursuant to Sections 351 and 362 of the Internal Revenue Code, that Fund would have a basis in the securities different from the market value of such securities on the date of deposit. If a Fund's basis in such securities on the date of deposit was less than market value on such date, the Fund, upon disposition of the securities, would recognize more taxable gain or less taxable loss than if its basis in the securities had been equal to market value. It is not anticipated that the Trust will exercise the right of rejection except in a case where the Trust determines that accepting the order could result in material adverse tax consequences to a Fund or its shareholders. The Trust also has the right to require information necessary to determine beneficial share ownership for purposes of the 80% determination.

Tax-Exempt Interest Income. Dividends paid by the Municipal Bond Funds that are properly reported as exempt-interest dividends will not be subject to regular federal income tax. Each Municipal Bond Fund intends to invest its assets in a manner such that dividend distributions to its shareholders will generally be exempt from U.S. federal income taxation. Dividends paid by the Fund will be exempt from federal income tax (though not necessarily exempt from state and local taxation) to the extent of the Fund's tax-exempt interest income as long as 50% or more of the value of the Fund's assets at the end of each quarter is invested in state, municipal and other bonds that are excluded from gross income for federal income tax purposes and as long as the Fund properly reports such dividends as exempt-interest dividends.

So long as, at the close of each quarter of the taxable year of the California Fund, at least 50% of the value of the California Fund's total assets consists of obligations of the U.S. and of the State of California and its political subdivisions, the interest on which is exempt from California personal income tax and California corporate income tax ("CA-exempt Obligations"), exempt-interest dividends (i) paid by the California Fund in an amount not exceeding the interest received on such CA-exempt Obligations during the California Fund's taxable year, and (ii) reported by the California Fund as exempt-interest dividends (in a written notice mailed to the California Fund's shareholders) will be treated as an item of interest excludable from income for California personal income tax purposes and corporate income tax purposes. Exempt-interest dividends paid to a corporate shareholder subject to California corporate franchise tax, however, will be taxable as ordinary income for purposes of such tax. Distributions derived from interest on tax-exempt obligations issued by governmental authorities in states other than California or on other obligations or investments the interest on which is not exempt from California personal income tax or corporate income tax, and distributions to shareholders derived from short-term or long-term capital gains, will be taxed as ordinary income for California personal and corporate income tax purposes and California corporate franchise tax purposes. Interest on indebtedness incurred or continued by a shareholder of the California Fund to purchase or carry shares of the California Fund generally will not be deductible for California personal or corporate income tax purposes. It should be noted that California law deviates from the provisions of Subchapter M of Chapter 1 of Subtitle A of the Internal Revenue Code, relating to regulated investment companies in certain potentially material respects.

The foregoing is a general, abbreviated summary of certain of the provisions of California law presently in effect that govern the taxation of the shareholders of the California Fund. These provisions are subject to change by legislative or administrative action, and any such change may be retroactive. Shareholders are advised to consult with their own tax advisors for more detailed information concerning California tax matters.

Individual shareholders of the iShares New York Muni Bond ETF will not be required to include in their gross income for New York State and City purposes any portion of distributions received from the Fund that are directly attributable to (i) interest earned on tax-exempt obligations issued by New York State or any political subdivision thereof (including New York City) or (ii) interest earned on obligations of U.S. possessions or territories that is exempt from state taxation pursuant to federal law, provided that the Fund qualifies as a RIC and satisfies the requirement that at least 50% of its assets at the close of each quarter of its taxable year constitute such obligations. Distributions from the Fund that are attributable to sources other than those described in the preceding sentence (including interest on obligations of other states and their political subdivisions) will generally be taxable to individual shareholders as ordinary income.

Shareholders of the iShares New York Muni Bond ETF that are subject to New York State corporation franchise tax or New York City general corporation tax will be required to include exempt-interest dividends paid by the Fund in their "entire net income" for purposes of such taxes and will be required to include their shares of the Fund in their investment capital for purposes of such taxes. If a shareholder is subject to unincorporated business taxation by New York City, income and gains distributed by the Fund will be subject to such taxation except to the extent such distributions are directly attributable to interest earned on tax-exempt obligations issued by New York State or any political subdivision thereof (including New York City). However, shareholders of the Fund will not be subject to the unincorporated business tax imposed by New York City solely by reason of their ownership of shares in the Fund. Shares of the iShares New York Muni Bond ETF will not be subject to property taxes imposed by New York State or City.

Interest on indebtedness incurred by shareholders to purchase or carry shares of New York Municipal Income generally will not be deductible for New York State personal income tax purposes.

Interest income on the Fund that is distributed to its shareholders will generally not be taxable to the Fund for purposes of New York State corporation franchise tax or New York City general corporation tax.

The foregoing is a general, abbreviated summary of certain of the provisions of the tax laws of New York State and City presently in effect as they directly govern the taxation of shareholders of the Fund. These provisions are subject to change by legislative or administrative action, and any such change may be retroactive with respect to New York Municipal Income transactions. Shareholders are advised to consult with their own tax advisers for more detailed information concerning New York State and City matters.

Taxation of Certain Derivatives. A Fund's transactions in zero coupon securities, non-U.S. currencies, forward contracts, options and futures contracts (including options and futures contracts on non-U.S. currencies), to the extent permitted, will be subject to special provisions of the Internal Revenue Code (including provisions relating to "hedging transactions" and "straddles") that, among other consequences, may affect the character of gains and losses realized by the Fund (*i.e.*, may affect whether gains or losses are ordinary or capital), accelerate recognition of income to the Fund and defer Fund losses. These rules could therefore affect the character, amount and timing of distributions to shareholders. These provisions also (a) will require the Fund to mark-to-market certain types of the positions in its portfolio (*i.e.*, treat them as if they were closed out at the end of each year) and (b) may cause the Fund to recognize income without receiving cash with which to pay dividends or make distributions in amounts necessary to satisfy the distribution requirements for avoiding income and excise taxes. Each Fund will monitor its transactions, will make the appropriate tax elections and will make the appropriate entries in its books and records when it acquires any zero coupon security, non-U.S. currency, forward contract, option, futures contract or hedged investment in order to mitigate the effect of these rules and prevent disqualification of the Fund as a RIC.

A Fund's investments in so-called "section 1256 contracts," such as regulated futures contracts, most non-U.S. currency forward contracts traded in the interbank market and options on most security indexes, are subject to special tax rules. All section 1256 contracts held by the Fund at the end of its taxable year are required to be marked to their market value, and any unrealized gain or loss on those positions will be included in the Fund's income as if each position had been sold for its fair market value at the end of the taxable year. The resulting gain or loss will be combined with any gain or loss realized by the Fund from positions in section 1256 contracts closed during the taxable year. Provided such positions were held as capital assets and were not part of a "hedging transaction" nor part of a "straddle," 60% of the resulting net gain or loss will be treated as long-term capital gain or loss, and 40% of such net gain or loss will be treated as short-term capital gain or loss, regardless of the period of time the positions were actually held by the Fund.

As a result of entering into swap contracts, a Fund may make or receive periodic net payments. A Fund may also make or receive a payment when a swap is terminated prior to maturity through an assignment of the swap or other closing transaction. Periodic net payments will generally constitute ordinary income or deductions, while termination of a swap will generally result in capital gain or loss (which will be a long-term capital gain or loss if the Fund has been a party to the swap for more than one year). The cost of any payments made by the Fund on a swap transaction will be netted *pro rata* against both tax exempt and taxable gross income. With respect to certain types of swaps, a Fund may be required to currently recognize income or loss with respect to future payments on such swaps or may elect under certain circumstances to mark such swaps to market annually for tax purposes as ordinary income or loss. Periodic net payments that would otherwise constitute ordinary deductions but are allocable under the Internal Revenue Code to exempt-interest dividends will not be allowed as deductions but instead will reduce net tax-exempt income.

Market Discount. Any market discount recognized on a bond is taxable as ordinary income. A market discount bond is a bond acquired in the secondary market at a price below redemption value or adjusted issue price if issued with original issue discount ("OID"). To the extent a Fund does not include the market discount in income as it accrues, gain on the Fund's disposition of such an obligation will be treated as ordinary income rather than capital gain to the extent of the accrued market discount.

Non-U.S. Investments. Income (including, in some cases, capital gains) received by certain of the Funds from investments in non-U.S. securities may be subject to withholding and other taxes imposed by non-U.S. countries. Tax conventions between certain countries and the U.S. may reduce or eliminate such taxes in some cases. If more than 50% of a Fund's total assets at the close of its taxable year consists of securities of non-U.S. corporations, the Fund may elect for U.S. income tax purposes to treat non-U.S. income taxes paid by it as paid by its shareholders. A Fund may qualify for and make this election in some, but not necessarily all, of its taxable years. If a Fund were to make an election, shareholders of the Fund would be required to take into account an amount equal to their pro rata portions of such non-U.S. taxes in computing their taxable income and then treat an amount equal to those non-U.S. taxes as a U.S. federal income tax deduction or as a foreign tax credit against their U.S. federal income taxes. Shortly after any year for which it makes such an election, a Fund will report to its shareholders the amount per share of such non-U.S. income tax that must be included in each shareholder's gross income and the amount which will be available for the deduction or credit. No deduction for non-U.S. taxes may be claimed by a shareholder who does not itemize deductions. Certain limitations will be imposed on the extent to which the credit (but not the deduction) for non-U.S. taxes may be claimed.

Under Section 988 of the Internal Revenue Code, gains or losses attributable to fluctuations in exchange rates between the time a Fund accrues income or receivables or expenses or other liabilities denominated in a non-U.S. currency and the time a Fund actually collects such income or pays such liabilities are generally treated as ordinary income or ordinary loss. In general, gains (and losses) realized on debt instruments will be treated as Section 988 gain (or loss) to the extent attributable to changes in exchange rates between the U.S. dollar and the currencies in which the instruments are denominated. Similarly, gain or losses on non-U.S. currency, non-U.S. currency forward contracts, certain non-U.S. currency options or futures contracts and the disposition of debt securities denominated in non-U.S. currency, to the extent attributable to fluctuations in exchange rates between the acquisition and disposition dates, are also treated as ordinary income or loss unless the Fund were to elect otherwise.

Original Issue Discount. OID on tax-exempt bonds is recognized over the term of the bond and is tax-exempt to the holder of the bond. STRIPS are treated as newly issued debt instruments having OID. Special U.S. federal income tax rules apply to inflation-indexed bonds. Generally, all stated interest on such bonds is taken into income by a Fund under its regular method of accounting for interest income. The amount of a positive inflation adjustment, which results in an increase in the inflation-adjusted principal amount of the bond, is treated as OID. The OID is included in a Fund's gross income ratably during the period ending with the maturity of the bond, under the general OID inclusion rules. The amount of a Fund's OID in a taxable year with respect to a bond will increase a Fund's taxable income for such year without a corresponding receipt of cash, until the bond matures. As a result, a Fund may need to use other sources of cash to satisfy its distributions for such year. The amount of negative inflation adjustment, which results in a decrease in the inflation-adjusted principal amount of the bond, reduces the amount of interest (including stated, interest, OID, and market discount, if any) otherwise includible in a Fund's income with respect to the bond for the taxable year.

Reporting. If a shareholder recognizes a loss with respect to 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 IRS Form 8886. Direct shareholders of portfolio securities are in many cases exempted from this reporting requirement, but under current guidance, shareholders of a RIC are not exempted. The fact that a loss is reportable under these regulations does not affect the legal determination of whether the taxpayer's treatment of the loss is proper. Shareholders should consult their tax advisors to determine the applicability of these regulations in light of their individual circumstances.

Other Taxes. Dividends, distributions and redemption proceeds may also be subject to additional state, local and non-U.S. taxes depending on each shareholder's particular situation.

Taxation of Non-U.S. Shareholders. Dividends paid by a Fund to non-U.S. shareholders are generally subject to withholding tax at a 30% rate or a reduced rate specified by an applicable income tax treaty to the extent derived from investment income and short-term capital gains. Dividends paid by a Fund from net tax-exempt income or long-term capital gains are generally not subject to such withholding tax. In order to obtain a reduced rate of withholding, a non-U.S. shareholder will be required to provide an IRS Form W-8BEN or IRS Form W-8BEN-E certifying its entitlement to benefits under a treaty. The withholding tax does not apply to regular dividends paid to a non-U.S. shareholder who provides an IRS Form W-8ECI, certifying that the dividends are effectively connected with the non-U.S. shareholder's conduct of a trade or business within the U.S. Instead, the effectively connected dividends will be subject to regular U.S. income tax as if the non-U.S. shareholder were a U.S. shareholder. A non-U.S. corporation receiving effectively connected dividends may also be subject to additional "branch profits tax" imposed at a rate of 30% (or lower treaty rate). A non-U.S. shareholder who fails to provide an IRS Form W-8BEN, IRS Form W-8BEN-E or other applicable form may be subject to backup withholding at the appropriate rate.

Properly-reported dividends are generally exempt from U.S. federal withholding tax where they (i) are 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 a Fund is at least a 10% shareholder or partner, reduced by expenses that are allocable to such income); or (ii) are paid in respect of a Fund's "qualified short-term capital gains" (generally, the excess of a Fund's net short-term capital gain over a Fund's long-term capital loss for such taxable year). However, depending on its circumstances, a Fund may report all, some or none of its potentially eligible dividends as such qualified net interest income or as qualified short-term capital gains and/or treat such dividends, in whole or in part, as ineligible for this exemption from withholding. In order to qualify for this exemption from withholding, a non-U.S. shareholder will need to comply with applicable certification requirements relating to its non-U.S. status (including, in general, furnishing an IRS Form W-8BEN, IRS Form W-8BEN-E or substitute Form). In the case of shares held through an intermediary, the intermediary may withhold even if a Fund reports the payment as qualified net interest income or qualified short-term capital gain. Non-U.S. shareholders should contact their intermediaries with respect to the application of these rules to their accounts.

Special rules may apply to a foreign shareholder receiving a Fund distribution if at least 50% of the Fund's assets consist of interests in U.S. real property interests, including certain REITs and U.S. real property holding corporations (as defined in the Internal Revenue Code and Treasury regulations). Fund distributions that are attributable to gain from the disposition of a U.S. real property interest will be taxable as ordinary dividends and subject to withholding at a 30% or lower treaty rate if the foreign shareholder held no more than 5% of the Fund's shares at any time during the one-year period ending on the date of the distribution. If the foreign shareholder held at least 5% of the Fund's shares, the distribution would be treated as income effectively connected with a trade or business within the U.S. and the foreign shareholder would be subject to withholding tax at a rate of 21% and would generally be required to file a U.S. federal income tax return.

Similar consequences would generally apply to a foreign shareholder's gain on the sale of Fund shares unless the Fund is domestically controlled (meaning that more than 50% of the value of the Fund's shares is held by U.S. shareholders) or the foreign shareholder owns no more than 5% of the Fund's shares at any time during the five-year period ending on the date of sale. Finally, a domestically controlled Fund may be required to recognize a portion of its gain on the in-kind distribution of certain U.S. real property interests. Shareholders that are nonresident aliens or foreign entities are urged to consult their own tax advisors concerning the particular tax consequences to them of an investment in the Fund.

The rules laid out in the previous paragraph, other than the withholding rules, will apply notwithstanding the Fund's participation in a wash sale transaction or its payment of a substitute dividend.

Shareholders that are nonresident aliens or foreign entities are urged to consult their own tax advisors concerning the particular tax consequences to them of an investment in a Fund.

Separately, a 30% withholding tax is currently imposed on U.S.-source dividends, interest and other income items paid to: (i) foreign financial institutions, including non-U.S. investment funds, unless they agree to collect and disclose to the IRS information regarding their direct and indirect U.S. account holders and (ii) certain other foreign entities, unless they certify certain information regarding their direct and indirect U.S. owners. To avoid withholding, foreign financial institutions will need to: (i) enter into agreements with the IRS that state that they will provide the IRS information including the names, addresses and taxpayer identification numbers of direct and indirect U.S. account holders; comply with due diligence procedures with respect to the identification of U.S. accounts; report to the IRS certain information with respect to U.S. accounts maintained; agree to withhold tax on certain payments made to non-compliant foreign financial institutions or to account holders who fail to provide the required information; and determine certain other information as to their account holders, or (ii) in the event that an applicable intergovernmental agreement and implementing legislation are adopted, provide local revenue authorities with similar account holder information. Other foreign entities will need to provide the name, address and taxpayer identification number of each substantial U.S. owner or provide certifications of no substantial U.S. ownership, unless certain exceptions apply.

Shares of a Fund held by a non-U.S. shareholder at death will be considered situated within the U.S. and subject to the U.S. estate tax.

The foregoing discussion is a summary of certain material U.S. federal income tax considerations only and is not intended as a substitute for careful tax planning. Purchasers of shares should consult their own tax advisors as to the tax consequences of investing in such shares, including consequences under state, local and non-U.S. tax laws. Finally, the foregoing discussion is based on applicable provisions of the Internal Revenue Code, regulations, judicial authority and administrative interpretations in effect on the date of this SAI. Changes in applicable authority could materially affect the conclusions discussed above, and such changes often occur.

Financial Statements

Each Fund's audited Financial Statements, including the Financial Highlights, appearing in the applicable Annual Report to Shareholders and the report therein of PricewaterhouseCoopers LLP, an independent registered public accounting firm, are hereby incorporated by reference in this SAI. The applicable Annual Report to Shareholders, which contains the referenced audited financial statements, is available upon request and without charge.

Miscellaneous Information

Counsel. Willkie Farr & Gallagher LLP, located at 787 Seventh Avenue, New York, NY 10019, is counsel to the Trust.

Independent Registered Public Accounting Firm. PricewaterhouseCoopers LLP, located at Two Commerce Square, 2001 Market Street, Philadelphia, PA 19103, serves as the Trust's independent registered public accounting firm, audits the Funds' financial statements, and may perform other services.

Shareholder Communications to the Board. The Board has established a process for shareholders to communicate with the Board. Shareholders may contact the Board by mail. Correspondence should be addressed to iShares Board of Trustees, c/o BlackRock Fund Advisors, iShares Fund Administration, 400 Howard Street, San Francisco, CA 94105. Shareholder communications to the Board should include the following information: (i) the name and address of the shareholder; (ii) the number of shares owned by the shareholder; (iii) the Fund(s) of which the shareholder owns shares; and (iv) if these shares are owned indirectly through a broker, financial intermediary or other record owner, the name of the broker, financial intermediary or other record owner. All correspondence received as set forth above shall be reviewed by the Secretary of the Trust and reported to the Board.

Regulation Under the Alternative Investment Fund Managers Directive. The Alternative Investment Fund Managers Directive ("AIFMD") imposes detailed and prescriptive obligations on fund managers established in the EU ("EU Operative Provisions"). These do not currently apply to managers established outside of the EU, such as BFA. Rather, non-EU managers are only required to comply with certain disclosure, reporting and transparency obligations of AIFMD ("AIFMD Disclosure Provisions") if such managers market a fund to EU investors.

Where the AIFMD Disclosure Provisions relate to EU Operative Provisions that do not apply to BFA, no meaningful disclosure can be made. These EU Operative Provisions include prescriptive rules on: measuring and capping leverage in line with known European standards; the treatment of investors; the use of "depositaries"; and coverage for professional liability risks.

AIFMD imposes certain conditions on the marketing of funds, such as the Funds, to EU investors. AIFMD requires that an 'alternative investment fund manager' ("AIFM") be identified to meet such conditions where such marketing is sought. For these purposes BFA, as the legal entity responsible for performing the portfolio and risk management of the Funds, shall be the AIFM.

AIFMD requires disclosure on an ongoing basis of certain information relating to the use of special arrangements, leverage, rights of reuse of collateral, guarantees granted under leverage arrangements and the use of gates, side pockets and similar liquidity management tools. Given that the Funds do not use any special arrangements or allow for collateral reuse, it is not intended that such disclosures will need to be made by the Funds. Each Fund will, however, to the extent relevant and appropriate, disclose in its annual report information on the Fund's leverage, risk profile and risk management systems employed by BFA. Each Fund will also disclose material changes, if any, to the liquidity management systems and procedures employed in respect of the Fund.

BFA has registered the following Funds for marketing to investors in Finland, the Netherlands, Sweden, and the U.K.:

iShares 1-5 Year Investment Grade Corporate Bond ETF

iShares 5-10 Year Investment Grade Corporate Bond ETF

iShares 7-10 Year Treasury Bond ETF

iShares 20+ Year Treasury Bond ETF

iShares Core U.S. Aggregate Bond ETF

iShares iBoxx $ Investment Grade Corporate Bond ETF

iShares iBoxx $ High Yield Corporate Bond ETF

Investors' Rights. Each Fund relies on the services of BFA and its other service providers, including the Distributor, administrator, custodian and transfer agent. Further information about the duties and roles of these service providers is set out in this SAI. Investors who acquire shares of a Fund are not parties to the relevant agreement with these service providers and do not have express contractual rights against the Fund or its service providers, except certain institutional investors that are Authorized Participants may have certain express contractual rights with respect to the Distributor under the terms of the relevant Authorized Participant Agreement. Investors may have certain legal rights under federal or state law against a Fund or its service providers. In the event that an investor considers that it may have a claim against a Fund, or against any service provider in connection with its investment in a Fund, such investor should consult its own legal advisor.

By contract, Authorized Participants irrevocably submit to the non-exclusive jurisdiction of any New York State or U.S. federal court sitting in New York City over any suit, action or proceeding arising out of or relating to the Authorized Participant Agreement. Jurisdiction over other claims, whether by investors or Authorized Participants, will turn on the facts of the particular case and the law of the jurisdiction in which the proceeding is brought.

Appendix A - iShares ETFs Proxy Voting Policies

Open-End Fund Proxy Voting Policy

Procedures Governing Delegation of Proxy Voting to Fund Advisers

Effective Date: August 1, 2021

Last Review Date: August 25, 2023

Open-End Mutual Funds (including money market funds)

Exchange-Traded Funds

Objective and Scope

Set forth below is the Open-End Fund Proxy Voting Policy.

Policy/Document Requirements and Statements

The Boards of Trustees/Directors ("Directors") of open-end funds (the "Funds") advised by BlackRock Fund Advisors or BlackRock Advisors, LLC ("BlackRock"), have the responsibility for the oversight of voting proxies relating to portfolio securities of the Funds, and have determined that it is in the best interests of the Funds and their shareholders to delegate the responsibility to vote proxies to BlackRock, subject to the principles outlined in this Policy, as part of BlackRock's authority to manage, acquire and dispose of account assets, all as contemplated by the Funds' respective investment management agreements.

BlackRock has adopted guidelines and procedures (together and as from time to time amended, the "BlackRock proxy voting guidelines") governing proxy voting by accounts managed by BlackRock.

BlackRock will cast votes on behalf of each of the Funds on specific proxy issues in respect of securities held by each such Fund (or may refrain from voting) in accordance with the BlackRock proxy voting guidelines.

BlackRock will report on an annual basis to the Directors on (1) a summary of the proxy voting process as applicable to the Funds in the preceding year together with a representation that all votes were in accordance with the BlackRock proxy voting guidelines, and (2) any changes to the BlackRock proxy voting guidelines that have not previously been reported.

BlackRock Investment Stewardship

Global Principles

Effective as of January 2023

BlackRock

Contents

The purpose of this document is to provide an overarching explanation of BlackRock's approach globally to our responsibilities as a shareholder on behalf of our clients, our expectations of companies, and our commitments to clients in terms of our own governance and transparency.

Introduction to BlackRock

BlackRock's purpose is to help more and more people experience financial well-being. We manage assets on behalf of institutional and individual clients, across a full spectrum of investment strategies, asset classes, and regions. Our client base includes pension plans, endowments, foundations, charities, official institutions, insurers, and other financial institutions, as well as individuals around the world. As part of our fiduciary duty to our clients, we consider it one of our responsibilities to promote sound corporate governance, as an informed, engaged shareholder on their behalf. At BlackRock, this is the responsibility of the Investment Stewardship team.

Philosophy on investment stewardship

Companies are responsible for ensuring they have appropriate governance structures to serve the interests of shareholders and other key stakeholders. We believe that there are certain fundamental rights attached to shareholding. Companies and their boards should be accountable to shareholders and structured with appropriate checks and balances to ensure that they operate in shareholders' best interests to create sustainable value. Shareholders should have the right to vote to elect, remove, and nominate directors, approve the appointment of the auditor, and amend the corporate charter or by-laws. Shareholders should be able to vote on key board decisions that are material to the protection of their investment, including but not limited to, changes to the purpose of the business, dilution levels and pre-emptive rights, and the distribution of income and capital structure. In order to make informed decisions, shareholders need sufficient and timely information. In addition, shareholder voting rights should be proportionate to their economic ownership—the principle of "one share, one vote" helps achieve this balance.

Consistent with these shareholder rights, BlackRock has a responsibility to monitor and provide feedback to companies in our role as stewards of our clients' investments. Investment stewardship is how we use our voice as an investor to promote sound corporate governance and business practices to help maximize long-term shareholder value for our clients, the vast majority of whom are investing for long-term goals such as retirement. BlackRock Investment Stewardship (BIS) does this through engagement with management teams and/or board members on material business issues and, for those clients who have given us authority, through voting proxies in their best long-term financial interests.[1] We also contribute to consultations on public policy and private sector initiatives on industry standards, consistent with our clients' interests as long-term shareholders.

BlackRock looks to companies to provide timely, accurate, and comprehensive disclosure on all material governance and business matters. This transparency allows shareholders to appropriately understand and assess how relevant risks and opportunities are being effectively identified and managed. Where company reporting and disclosure is inadequate or where the governance approach taken may be inconsistent with durable, long-term value creation for shareholders, we will engage with a company and/or vote in a manner that advances long-term shareholders' interests.

BlackRock views engagement as an important activity; engagement provides us with the opportunity to improve our understanding of the business and of the risks and opportunities that are material to the companies in which our clients invest. Engagement may also inform our voting decisions. As long-term investors on behalf of clients, we seek to have regular and continuing dialogue with executives and board directors to advance sound governance and durable business practices aligned with long-term value creation, as well as to understand the effectiveness of the company's management and oversight of material issues. Engagement is an important mechanism for providing feedback on company practices and disclosures, particularly where we believe they could be enhanced to support a company's ability to deliver financial performance. Similarly, it provides us with an opportunity to hear directly from company boards and management on how they believe their actions are aligned with durable, long-term value creation.

We generally vote in support of management and boards that exhibit an approach to decision-making that is consistent with creating durable, long-term value for shareholders. If we have concerns about a company's approach, we may choose to explain our expectations to the company's board and management. Following that engagement, we may signal through our voting that we have outstanding concerns, generally by voting against the re-election of directors we view as having responsibility for an issue. We apply our regional proxy voting guidelines to achieve the outcome that is most aligned with our clients' long-term financial interests.

Key Themes

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1 Through BlackRock Voting Choice we have, since January 2022, made proxy voting easier and more accessible for investors in separate accounts and certain pooled vehicles. As a result, the shares attributed to BlackRock in company share registers may be voted differently depending on whether our clients have authorized BIS to vote on their behalf, have authorized BIS to vote in accordance with a third party policy, or have elected to vote shares in accordance with their own policy. We are not able to disclose which clients have opted to exercise greater control over their voting, nor are we able to disclose which proxy voting policies they have selected.

We recognize that accepted standards and norms of corporate governance can differ between markets. However, in our experience, there are certain fundamental elements of governance practice that are intrinsic globally to a company's ability to create long-term value for shareholders. These global themes are set out in this overarching set of principles (the Principles), which are anchored in transparency and accountability. At a minimum, it is our view that companies should observe the accepted corporate governance standards in their domestic market and ask that, if they do not, they explain how their approach better supports durable, long-term value creation.

These Principles cover seven key themes:

- Boards and directors
- Auditors and audit-related issues
- Capital structure, mergers, asset sales, and other special transactions
- Compensation and benefits
- Material sustainability-related risks and opportunities
- Other corporate governance matters and shareholder protections
- Shareholder proposals

Our regional and market-specific voting guidelines explain how these Principles inform our voting decisions in relation to specific ballot items for shareholder meetings.

Boards and directors

Our primary focus is on the performance of the board of directors to promote sound corporate governance. The performance of the board is critical to the economic success of the company and the protection of shareholders' interests. As part of their responsibilities, board members owe fiduciary duties to shareholders in overseeing the strategic direction and operation of the company. For this reason, BIS sees engaging with and the election of directors as one of our most important and impactful responsibilities.

We support boards whose approach is consistent with creating durable, long-term value. This includes the effective corporate governance and management of material sustainability-related risks and opportunities,[2] as well as the consideration of the company's key constituents including their employees, clients, suppliers, and the communities within which they operate. The board should establish and maintain a framework of robust and effective governance mechanisms to support its oversight of the company's strategic aims. We look to the board to articulate the effectiveness of these mechanisms in overseeing the management of business risks and opportunities and the fulfillment of the company's purpose. Disclosure of all material issues that affect the company's long-term strategy and ability to create value is essential for shareholders to be able to appropriately understand and assess how risks are effectively identified, managed and mitigated.

Where a company has not adequately disclosed and demonstrated that they have fulfilled these responsibilities, we will consider voting against the re-election of directors whom we consider to have particular responsibility for the issue. We assess director performance on a case-by-case basis and in light of each company's circumstances, taking into consideration our assessment of their governance, business practices that support durable, long-term value creation, and performance. In serving the interests of shareholders, the responsibility of the board of directors includes, but is not limited to, the following:

- Establishing an appropriate corporate governance structure
- Supporting and overseeing management in setting long-term strategic goals and applicable measures of value-creation and milestones that will demonstrate progress, and taking steps to address anticipated or actual obstacles to success
- Providing oversight on the identification and management of material governance and sustainability-related risks

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[2] By material sustainability-related risks and opportunities, we mean the drivers of risk and value creation in a company's business model that have an environmental or social dependency or impact. Examples of environmental issues include, but are not limited to, water use, land use, waste management and climate risk. Examples of social issues include, but are not limited to, human capital management, impacts on the communities in which a company operates, customer loyalty and relationships with regulators. It is our view that well-managed companies will effectively evaluate and manage material sustainability-related risks and opportunities relevant to their businesses. Governance is the core means by which boards can oversee the creation of durable, long-term value. Appropriate risk oversight of business-relevant and material sustainability-related considerations is a component of a sound governance framework.

- Overseeing the financial resilience of the company, the integrity of financial statements, and the robustness of a company's Enterprise Risk Management[3] framework
- Making decisions on matters that require independent evaluation, which may include mergers, acquisitions and dispositions, activist situations or other similar cases
- Establishing appropriate executive compensation structures
- Monitoring business issues including material sustainability-related risks and opportunities, that have the potential to significantly impact the company's long-term value

There should be clear descriptions of the role of the board and the committees of the board and how they engage with and oversee management. Set out below are ways in which boards and directors can demonstrate a commitment to acting in the best long-term economic interests of all shareholders.

We will seek to engage with the appropriate directors where we have concerns about the performance of the company, board, or individual directors and may signal outstanding concerns in our voting. While we consider these principles to be globally relevant, when assessing a board's composition and governance processes, we consider local market norms and regulations.

Regular accountability

It is our view that directors should stand for re-election on a regular basis, ideally annually. In our experience, annual re-elections allow shareholders to reaffirm their support for board members or hold them accountable for their decisions in a timely manner. When board members are not re-elected annually, in our experience, it is good practice for boards to have a rotation policy to ensure that, through a board cycle, all directors have had their appointment re-confirmed, with a proportion of directors being put forward for re-election at each annual general meeting.

Effective board composition

Regular director elections also give boards the opportunity to adjust their composition in an orderly way to reflect the evolution of the company's strategy and the market environment. In our view, it is beneficial for new directors to be brought onto the board periodically to refresh the group's thinking and in a manner that supports both continuity and appropriate succession planning. We consider the average overall tenure of the board, where we are seeking a balance between the knowledge and experience of longer-serving members and the fresh perspectives of newer members. We encourage companies to keep under regular review the effectiveness of their board (including its size), and assess directors nominated for election or re-election in the context of the composition of the board as a whole. This assessment should consider a number of factors, including the potential need to address gaps in skills, experience, independence, and diversity.

In our view, there should be a sufficient number of independent directors, free from conflicts of interest or undue influence from connected parties, to ensure objectivity in the decision-making of the board and its ability to oversee management. Common impediments to independence may include but are not limited to:

- Current or recent employment at the company or subsidiary
- Being, or representing, a shareholder with a substantial shareholding in the company
- Interlocking directorships
- Having any other interest, business or other relationship which could, or could reasonably be perceived to, materially interfere with a director's ability to act in the best interests of the company and their shareholders

In our experience, boards are most effective at overseeing and advising management when there is a senior independent board leader. This director may chair the board, or, where the chair is also the CEO (or is otherwise not independent), be designated as a lead independent director. The role of this director is to enhance the effectiveness of the independent members of the board through shaping the agenda, ensuring adequate information is provided to the board, and encouraging independent director participation in board deliberations. The lead independent director or another appropriate director should be available to shareholders in those situations where an independent director is best placed to explain and contextualize a company's approach.

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[3] Enterprise risk management is a process, effected by the entity's board of directors, management, and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within the risk appetite, to provide reasonable assurance regarding the achievement of objectives. (Committee of Sponsoring Organizations of the Treadway Commission (COSO), Enterprise Risk Management — Integrated Framework, September 2004, New York, NY).

When nominating new directors to the board, we look to companies to provide sufficient information on the individual candidates so that shareholders can assess the suitability of each individual nominee and the overall board composition. These disclosures should give an understanding of how the collective experience and expertise of the board aligns with the company's long-term strategy and business model. Highly qualified, engaged directors with professional characteristics relevant to a company's business enhance the ability of the board to add value and be the voice of shareholders in board discussions. In our view, a strong board provides a competitive advantage to a company, providing valuable oversight and contributing to the most important management decisions that support long-term financial performance.

It is in this context that we are interested in diversity in the board room. We see it as a means to promoting diversity of thought and avoiding "group think" in the board's exercise of its responsibilities to advise and oversee management. It allows boards to have deeper discussions and make more resilient decisions. We ask boards to disclose how diversity is considered in board composition, including professional characteristics, such as a director's industry experience, specialist areas of expertise and geographic location; as well as demographic characteristics such as gender, race/ethnicity and age.

We look to understand a board's diversity in the context of a company's domicile, market capitalization, business model and strategy. Increasingly, we see leading boards adding members whose experience deepens the board's understanding of the company's customers, employees and communities. Self-identified board demographic diversity can usefully be disclosed in aggregate, consistent with local law. We believe boards should aspire to meaningful diversity of membership, at least consistent with local regulatory requirements and best practices, while recognizing that building a strong, diverse board can take time.

This position is based on our view that diversity of perspective and thought – in the board room, in the management team and throughout the company – leads to better long term economic outcomes for companies. Academic research already reveals correlations between specific dimensions of diversity and effects on decision-making processes and outcomes.[4] In our experience, greater diversity in the board room contributes to more robust discussions and more innovative and resilient decisions. Over time, greater diversity in the board room can also promote greater diversity and resilience in the leadership team, and the workforce more broadly. That diversity can enable companies to develop businesses that more closely reflect and resonate with the customers and communities they serve.

There are matters for which the board has responsibility that may involve a conflict of interest for executives or for affiliated directors. It is our view that objective oversight of such matters is best achieved when the board forms committees comprised entirely of independent directors. In many markets, these committees of the board specialize in audit, director nominations, and compensation matters. An ad hoc committee might also be formed to decide on a special transaction, particularly one involving a related party, or to investigate a significant adverse event.

Sufficient capacity

As the role and expectations of a director are increasingly demanding, directors must be able to commit an appropriate amount of time to board and committee matters. It is important that directors have the capacity to meet all of their responsibilities - including when there are unforeseen events – and therefore, they should not take on an excessive number of roles that would impair their ability to fulfill their duties.

Auditors and audit-related issues

BlackRock recognizes the critical importance of financial statements, which should provide a true and fair picture of a company's financial condition. Accordingly, the assumptions made by management and reviewed by the auditor in preparing the financial statements should be reasonable and justified.

The accuracy of financial statements, inclusive of financial and non-financial information as required or permitted under market-specific accounting rules, is of paramount importance to BlackRock. Investors increasingly recognize that a broader range of risks and opportunities have the potential to materially impact financial performance. Over time, we anticipate investors and other users of company reporting will increasingly seek to understand and scrutinize the assumptions underlying financial statements, particularly those that pertain to the impact of the transition to a low carbon economy on a company's business model and asset mix. We recognize that this is an area of evolving practice and we look to international standards setters, the International Accounting Standards Board (IASB) and the International Auditing and Assurance Standards Board (IAASB) to provide additional guidance to companies.

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4 For a discussion on the different impacts of diversity see: McKinsey, "Diversity Wins: How Inclusion Matters", May 2022; Harvard Business Review, Diverse Teams Feel Less Comfortable – and That's Why They Perform Better, September 2016; "Do Diverse Directors Influence DEI Outcomes", September 2022.

In this context, audit committees, or equivalent, play a vital role in a company's financial reporting system by providing independent oversight of the accounts, material financial and, where appropriate to the jurisdiction, non-financial information, internal control frameworks, and in the absence of a dedicated risk committee, Enterprise Risk Management systems. In our view, effective audit committee oversight strengthens the quality and reliability of a company's financial statements and provides an important level of reassurance to shareholders.

We hold members of the audit committee or equivalent responsible for overseeing the management of the audit function. Audit committees or equivalent should have clearly articulated charters that set out their responsibilities and have a rotation plan in place that allows for a periodic refreshment of the committee membership to introduce fresh perspectives to audit oversight. We recognize that audit committees will rely on management, internal audit and the independent auditor in fulfilling their responsibilities but look to committee members to demonstrate they have relevant expertise to monitor and oversee those functions.

We take particular note of unexplained changes in reporting methodology, cases involving significant financial restatements, or ad hoc notifications of material financial weakness. In this respect, audit committees should provide timely disclosure on the remediation of Key and Critical Audit Matters identified either by the external auditor or internal audit function.

The integrity of financial statements depends on the auditor being free of any impediments to being an effective check on management. To that end, it is important that auditors are, and are seen to be, independent. Where an audit firm provides services to the company in addition to the audit, the fees earned should be disclosed and explained. Audit committees should have in place a procedure for assessing annually the independence of the auditor and the quality of the external audit process.

Comprehensive disclosure provides investors with a sense of the company's long-term operational risk management practices and, more broadly, the quality of the board's oversight. The audit committee or equivalent, or a dedicated risk committee, should periodically review the company's risk assessment and risk management policies and the significant risks and exposures identified by management, the internal auditors or the independent accountants, and management's steps to address them. In the absence of robust disclosures, we may reasonably conclude that companies are not adequately managing risk.

Capital structure, mergers, asset sales, and other special transactions

The capital structure of a company is critical to shareholders as it impacts the value of their investment and the priority of their interest in the company relative to that of other equity or debt investors. Pre-emptive rights are a key protection for shareholders against the dilution of their interests.

Effective voting rights are basic rights of share ownership. It is our view that one vote for one share as a guiding principle supports effective corporate governance. Shareholders, as the residual claimants, have the strongest interest in protecting company value, and voting rights should match economic exposure.

In principle, we disagree with the creation of a share class with equivalent economic exposure and preferential, differentiated voting rights. In our view, this structure violates the fundamental corporate governance principle of proportionality and results in a concentration of power in the hands of a few shareholders, thus disenfranchising other shareholders and amplifying any potential conflicts of interest. However, we recognize that in certain markets, at least for a period of time, companies may have a valid argument for listing dual classes of shares with differentiated voting rights. In our view, such companies should review these share class structures on a regular basis or as company circumstances change.

Additionally, they should seek shareholder approval of their capital structure on a periodic basis via a management proposal at the company's shareholder meeting. The proposal should give unaffiliated shareholders the opportunity to affirm the current structure or establish mechanisms to end or phase out controlling structures at the appropriate time, while minimizing costs to shareholders.

In assessing mergers, asset sales, or other special transactions, BlackRock's primary consideration is the long-term economic interests of our clients as shareholders. Boards proposing a transaction need to clearly explain the economic and strategic rationale behind it. We will review a proposed transaction to determine the degree to which it can enhance long-term shareholder value. We would prefer that proposed transactions have the unanimous support of the board and have been negotiated at arm's length. We may seek reassurance from the board that executives' and/or board members' financial interests in a given transaction have not adversely affected their ability to place shareholders' interests before their own. Where the transaction involves related parties, the recommendation to support should come from the independent directors, a best practice in most markets, and ideally, the terms should have been assessed through an independent appraisal process. In addition, it is good practice that it be approved by a separate vote of the non-conflicted parties.

As a matter of sound governance practice, shareholders should have a right to dispose of company shares in the open market without unnecessary restriction. In our view, corporate mechanisms designed to limit shareholders' ability to sell their shares are contrary to basic property rights. Such mechanisms can serve to protect and entrench interests other than those of the shareholders. In our experience, shareholders are broadly capable of making decisions in their own best interests. We encourage any so-called "shareholder rights plans" proposed by a board to be subject to shareholder approval upon introduction and periodically thereafter.

Compensation and benefits

In most markets, one of the most important roles for a company's board of directors is to put in place a compensation structure that incentivizes and rewards executives appropriately. There should be a clear link between variable pay and operational and financial performance. Performance metrics should be stretching and aligned with a company's strategy and business model. BIS does not have a position on the use of sustainability-related criteria, but in our view, where companies choose to include them, they should be as rigorous as other financial or operational targets. Long-term incentive plans should vest over timeframes aligned with the delivery of long-term shareholder value. Compensation committees should guard against contractual arrangements that would entitle executives to material compensation for early termination of their employment. Finally, pension contributions and other deferred compensation arrangements should be reasonable in light of market practice.

We are not supportive of one-off or special bonuses unrelated to company or individual performance. Where discretion has been used by the compensation committee or its equivalent, we expect disclosure relating to how and why the discretion was used, and how the adjusted outcome is aligned with the interests of shareholders. We acknowledge that the use of peer group evaluation by compensation committees can help ensure competitive pay; however, we are concerned when the rationale for increases in total compensation at a company is solely based on peer benchmarking rather than a rigorous measure of outperformance. We encourage companies to clearly explain how compensation outcomes have rewarded outperformance against peer firms.

We believe consideration should be given to building claw back provisions into incentive plans such that executives would be required to forgo rewards when they are not justified by actual performance and/or when compensation was based on faulty financial reporting or deceptive business practices. We also favor recoupment from any senior executive whose behavior caused material financial harm to shareholders, material reputational risk to the company, or resulted in a criminal investigation, even if such actions did not ultimately result in a material restatement of past results.

Non-executive directors should be compensated in a manner that is commensurate with the time and effort expended in fulfilling their professional responsibilities. Additionally, these compensation arrangements should not risk compromising directors' independence or aligning their interests too closely with those of the management, whom they are charged with overseeing.

We use third party research, in addition to our own analysis, to evaluate existing and proposed compensation structures. We may vote against members of the compensation committee or equivalent board members for poor compensation practices or structures.

Material sustainability-related risks and opportunities

It is our view that well-managed companies will effectively evaluate and manage material sustainability-related risks and opportunities relevant to their businesses. Appropriate oversight of sustainability considerations is a core component of having an effective governance framework, which supports durable, long-term value creation.

Robust disclosure is essential for investors to effectively evaluate companies' strategy and business practices related to material sustainability-related risks and opportunities. Given the increased understanding of material sustainability-related risks and opportunities and the need for better information to assess them, BlackRock advocates for continued improvement in companies' reporting, where necessary, and will express any concerns through our voting where a company's actions or disclosures are inadequate.

BlackRock encourages companies to use the framework developed by the Task Force on Climate-related Financial Disclosures (TCFD) to disclose their approach to ensuring they have a sustainable business model and to supplement that disclosure with industry-specific metrics such as those identified by the Sustainability Accounting Standards Board (SASB), now part of the International Sustainability Standards Board (ISSB) under the International Financial Reporting Standards

(IFRS) Foundation.[5] While the TCFD framework was developed to support climate-related risk disclosure, the four pillars of the TCFD governance, strategy, risk management, and metrics and targets are a useful way for companies to disclose how they identify, assess, manage, and oversee a variety of sustainability-related risks and opportunities. SASB's industry-specific guidance (as identified in its materiality map) is beneficial in helping companies identify key performance indicators (KPIs) across various dimensions of sustainability that are considered to be financially material and decision-useful within their industry. In particular, we encourage companies to consider reporting on nature-related factors, given the growing materiality of these issues for many businesses.[6] We recognize that some companies may report using different standards, which may be required by regulation, or one of a number of voluntary standards. In such cases, we ask that companies highlight the metrics that are industry- or company-specific.

Climate and other sustainability-related disclosures often require companies to collect and aggregate data from various internal and external sources. We recognize that the practical realities of data-collection and reporting may not line up with financial reporting cycles and companies may require additional time after their fiscal year-end to accurately collect, analyze and report this data to investors. To give investors time to assess the data, we encourage companies to produce climate and other sustainability-related disclosures sufficiently in advance of their annual meeting.

Companies may also adopt or refer to guidance on sustainable and responsible business conduct issued by supranational organizations such as the United Nations or the Organization for Economic Cooperation and Development. Further, industry initiatives on managing specific operational risks may provide useful guidance to companies on best practices and disclosures. Companies should disclose any relevant global climate and other sustainability-related standards adopted, the industry initiatives in which they participate, any peer group benchmarking undertaken, and any assurance processes to help investors understand their approach to sustainable and responsible business practices.

Climate risk

It is our view that climate change has become a key factor in many companies' long-term prospects. As such, as long-term investors we are interested in understanding how companies may be impacted by material climate-related risks and opportunities – just as we seek to understand other business-relevant risks and opportunities – and how these factors are considered within strategy in a manner consistent with the company's business model and sector. Specifically, we look for companies to disclose strategies they have in place that mitigate and are resilient to any material risks to their long-term business model associated with a range of climate-related scenarios, including a scenario in which global warming is limited to well below 2°C, considering global ambitions to achieve a limit of 1.5°C.[7] It is, of course, up to each company to define their own strategy: that is not the role of BlackRock or other investors.

BIS recognizes that climate change can be challenging for many companies, as they seek to drive long-term value by mitigating risks and capturing opportunities. A growing number of companies, financial institutions, as well as governments, have committed to advancing decarbonization in line with the Paris Agreement. There is growing consensus that companies can benefit from the more favorable macro-economic environment under an orderly, timely and equitable global energy transition.[8] Yet the path ahead is deeply uncertain and uneven, with different parts of the economy moving at different speeds.[9] Many companies are asking what their role should be in contributing to an orderly and equitable transition – in ensuring a reliable energy supply and energy security, and in protecting the most vulnerable from energy price shocks and economic dislocation. In this context, we encourage companies to include in their disclosure a business plan for how they intend to deliver long-term financial performance through a transition to global net zero carbon emissions, consistent with their business model and sector.

We look to companies to disclose short-, medium- and long-term targets, ideally science-based targets where these are available for their sector, for Scope 1 and 2 greenhouse gas emissions (GHG) reductions and to demonstrate how their targets are consistent with the long-term economic interests of their shareholders. Many companies have an opportunity to

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5 The International Financial Reporting Standards (IFRS) Foundation announced in November 2021 the formation of an International Sustainability Standards Board (ISSB) to develop a comprehensive global baseline of high-quality sustainability disclosure standards to meet investors' information needs. SASB standards will over time be adapted to ISSB standards but are the reference reporting tool in the meantime.

6 While guidance is still under development for a unified disclosure framework related to natural capital, the emerging recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD), may prove useful to some companies.

7 The global aspiration to achieve a net-zero global economy by 2050 is reflective of aggregated efforts; governments representing over 90% of GDP have committed to move to net-zero over the coming decades. In determining how to vote on behalf of clients who have authorized us to do so, we look to companies only to address issues within their control and do not anticipate that they will address matters that are the domain of public policy.

8 For example, BlackRock's Capital Markets Assumptions anticipate 25 points of cumulative economic gains over a 20-year period in an orderly transition as compared to the alternative. This better macro environment will support better economic growth, financial stability, job growth, productivity, as well as ecosystem stability and health outcomes.

9 BlackRock, "Managing the net-zero transition", February 2022.

use and contribute to the development of low carbon energy sources and technologies that will be essential to decarbonizing the global economy over time. We also recognize that continued investment in traditional energy sources, including oil and gas, is required to maintain an orderly and equitable transition — and that divestiture of carbon-intensive assets is unlikely to contribute to global emissions reductions. We encourage companies to disclose how their capital allocation to various energy sources is consistent with their strategy.

At this stage, we view Scope 3 emissions differently from Scopes 1 and 2, given methodological complexity, regulatory uncertainty, concerns about double-counting, and lack of direct control by companies. While we welcome any disclosures and commitments companies choose to make regarding Scope 3 emissions, we recognize these are provided on a good-faith basis as methodology develops. Our publicly available commentary provides more information on our approach to climate risk.

Key stakeholder interests

In order to advance long-term shareholders' interests, companies should consider the interests of the various parties on whom they depend for their success over time. It is for each company to determine their key stakeholders based on what is material to their business and long-term financial performance. Most commonly, key stakeholders include employees, business partners (such as suppliers and distributors), clients and consumers, regulators, and the communities in which they operate.

Considering the interests of key stakeholders recognizes the collective nature of long-term value creation and the extent to which each company's prospects for growth are tied to its ability to foster strong sustainable relationships with and support from those stakeholders. Companies should articulate how they address adverse impacts that could arise from their business practices and affect critical business relationships with their stakeholders. We encourage companies to implement, to the extent appropriate, monitoring processes (often referred to as due diligence) to identify and mitigate potential adverse impacts and grievance mechanisms to remediate any actual adverse material impacts. In our view, maintaining trust within these relationships can contribute to a company's long-term success.

As a long-term shareholder on behalf of our clients, we find it helpful when companies disclose how they have identified their key stakeholders and considered their interests in business decision-making. We are also interested to understand the role of the board, which is well positioned to ensure that the approach taken is informed by and aligns with the company's strategy and purpose.

Other corporate governance matters and shareholder protections

It is our view that shareholders have a right to material and timely information on the financial performance and viability of the companies in which they invest. In addition, companies should publish information on the governance structures in place and the rights of shareholders to influence these structures. The reporting and disclosure provided by companies help shareholders assess whether their economic interests have been protected and the quality of the board's oversight of management. We believe shareholders should have the right to vote on key corporate governance matters, including changes to governance mechanisms, to submit proposals to the shareholders' meeting, and to call special meetings of shareholders.

Corporate Form

In our view, it is the responsibility of the board to determine the corporate form that is most appropriate given the company's purpose and business model.[10] Companies proposing to change their corporate form to a public benefit corporation or similar entity should put it to a shareholder vote if not already required to do so under applicable law. Supporting documentation from companies or shareholder proponents proposing to alter the corporate form should clearly articulate how the interests of shareholders and different stakeholders would be impacted as well as the accountability and voting mechanisms that would be available to shareholders. As a fiduciary on behalf of clients, we generally support management proposals if our analysis indicates that shareholders' interests are adequately protected. Relevant shareholder proposals are evaluated on a case-by-case basis.

Shareholder proposals

In most markets in which BlackRock invests on behalf of clients, shareholders have the right to submit proposals to be voted on by shareholders at a company's annual or extraordinary meeting, as long as eligibility and procedural requirements are met. The matters that we see put forward by shareholders address a wide range of topics, including governance reforms, capital management, and improvements in the management or disclosure of sustainability-related risks.

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10 Corporate form refers to the legal structure by which a business is organized.

BlackRock is subject to certain requirements under antitrust law in the United States that place restrictions and limitations on how BlackRock can interact with the companies in which we invest on behalf of our clients, including our ability to submit shareholder proposals. As noted above, we can vote, on behalf of clients who authorize us to do so, on proposals put forth by others.

When assessing shareholder proposals, we evaluate each proposal on its merit, with a singular focus on its implications for long-term value creation. We consider the business and economic relevance of the issue raised, as well as its materiality and the urgency with which we believe it should be addressed. We take into consideration the legal effect of the proposal, as shareholder proposals may be advisory or legally binding depending on the jurisdiction. We would not support proposals that we believe would result in over-reaching into the basic business decisions of the company.

Where a proposal is focused on a material governance or sustainability-related risk that we agree needs to be addressed and the intended outcome is consistent with long-term value creation, we will look to the board and management to demonstrate that the company has met the intent of the request made in the shareholder proposal. Where our analysis and/or engagement indicate an opportunity for improvement in the company's approach to the issue, we may support shareholder proposals that are reasonable and not unduly prescriptive or constraining on management. Alternatively, or in addition, we may vote against the re-election of one or more directors if, in our assessment, the board has not responded sufficiently or with an appropriate sense of urgency. While we may not agree with all aspects of a shareholder proponent's views or all facets of the proponent's supporting statement, we may still support proposals that address material governance or sustainability-related risks where we believe it would be helpful for shareholders to have more detailed information on how those risks are identified, monitored, and managed to support a company's ability to deliver long-term financial returns. We may also support a proposal if management is on track, but we believe that voting in favor might accelerate progress.

BlackRock's oversight of its investment stewardship activities

Oversight

BlackRock maintains three regional advisory committees (Stewardship Advisory Committees) for a) the Americas; b) Europe, the Middle East and Africa (EMEA); and c) Asia-Pacific, generally consisting of senior BlackRock investment professionals and/or senior employees with practical boardroom experience. The regional Stewardship Advisory Committees review and advise on amendments to BIS proxy voting guidelines covering markets within each respective region (Guidelines). The advisory committees do not determine voting decisions, which are the responsibility of BIS.

In addition to the regional Stewardship Advisory Committees, the Investment Stewardship Global Oversight Committee (Global Committee) is a risk-focused committee, comprised of senior representatives from various BlackRock investment teams, a senior legal representative, the Global Head of Investment Stewardship (Global Head), and other senior executives with relevant experience and team oversight. The Global Oversight Committee does not determine voting decisions, which are the responsibility of BIS.

The Global Head has primary oversight of the activities of BIS, including voting in accordance with the Guidelines, which require the application of professional judgment and consideration of each company's unique circumstances. The Global Committee reviews and approves amendments to these Principles. The Global Committee also reviews and approves amendments to the regional Guidelines, as proposed by the regional Stewardship Advisory Committees.

In addition, the Global Committee receives and reviews periodic reports regarding the votes cast by BIS, as well as updates on material process issues, procedural changes, and other risk oversight considerations. The Global Committee reviews these reports in an oversight capacity as informed by the BIS corporate governance engagement program and the Guidelines.

BIS carries out engagement with companies, monitors and executes proxy votes, and conducts vote operations (including maintaining records of votes cast) in a manner consistent with the relevant Guidelines. BIS also conducts research on corporate governance issues and participates in industry discussions to contribute to and keep abreast of important developments in the corporate governance field. BIS may utilize third parties for certain of the foregoing activities and performs oversight of those third parties. BIS may raise complicated or particularly controversial matters for internal discussion with the relevant investment teams and governance specialists for discussion and guidance prior to making a voting decision.

Vote execution

BlackRock votes on proxy issues when our clients authorize us to do so. We offer certain clients who prefer their holdings to be voted consistent with specific values or views Voting Choice.[11] When BlackRock votes on behalf of our clients, we carefully

[11] To learn more visit https://www.blackrock.com/corporate/about-us/investment-stewardship/blackrock-voting-choice

consider proxies submitted to funds and other fiduciary account(s) (Fund or Funds) for which we have voting authority. BlackRock votes (or refrains from voting) proxies for each Fund for which we have voting authority based on our evaluation of the best long-term economic interests of our clients as shareholders, in the exercise of our independent business judgment, and without regard to the relationship of the issuer of the proxy (or any shareholder proponent or dissident shareholder) to the Fund, the Fund's affiliates (if any), BlackRock or BlackRock's affiliates, or BlackRock employees (see "Conflicts management policies and procedures", below).

When exercising voting rights, BlackRock will normally vote on specific proxy issues in accordance with the Guidelines for the relevant market. The Guidelines are reviewed annually and are amended consistent with changes in the local market practice, as developments in corporate governance occur, or as otherwise deemed advisable by the applicable Stewardship Advisory Committees. BIS analysts may, in the exercise of their professional judgment, conclude that the Guidelines do not cover the specific matter upon which a proxy vote is required or that an exception to the Guidelines would be in the best long-term economic interests of BlackRock's clients.

In the uncommon circumstance of there being a vote with respect to fixed income securities or the securities of privately held issuers, the decision generally will be made by a Fund's portfolio managers and/or BIS based on their assessment of the particular transactions or other matters at issue.

In certain markets, proxy voting involves logistical issues which can affect BlackRock's ability to vote such proxies, as well as the desirability of voting such proxies. These issues include, but are not limited to: i) untimely notice of shareholder meetings; ii) restrictions on a foreigner's ability to exercise votes; iii) requirements to vote proxies in person; iv) "share-blocking" (requirements that investors who exercise their voting rights surrender the right to dispose of their holdings for some specified period in proximity to the shareholder meeting); v) potential difficulties in translating the proxy; vi) regulatory constraints; and vii) requirements to provide local agents with unrestricted powers of attorney to facilitate voting instructions. We are not supportive of impediments to the exercise of voting rights such as share-blocking or overly burdensome administrative requirements.

As a consequence, BlackRock votes proxies in these situations on a "best-efforts" basis. In addition, BIS may determine that it is generally in the best interests of BlackRock's clients not to vote proxies (or not to vote our full allocation) if the costs (including but not limited to opportunity costs associated with share-blocking constraints) associated with exercising a vote are expected to outweigh the benefit the client would derive by voting on the proposal.

Portfolio managers have full discretion to vote the shares in the Funds they manage based on their analysis of the economic impact of a particular ballot item on their investors. Portfolio managers may, from time to time, reach differing views on how best to maximize economic value with respect to a particular investment. Therefore, portfolio managers may, and sometimes do, vote shares in the Funds under their management differently from BIS or from one another. However, because BlackRock's clients are mostly long-term investors with long-term economic goals, ballots are frequently cast in a uniform manner.

Conflicts management policies and procedures

BIS maintains policies and procedures that seek to prevent undue influence on BlackRock's proxy voting activity. Such influence might stem from any relationship between the investee company (or any shareholder proponent or dissident shareholder) and BlackRock, BlackRock's affiliates, a Fund or a Fund's affiliates, or BlackRock employees. The following are examples of sources of perceived or potential conflicts of interest:

- BlackRock clients who may be issuers of securities or proponents of shareholder resolutions
- BlackRock business partners or third parties who may be issuers of securities or proponents of shareholder resolutions
- BlackRock employees who may sit on the boards of public companies held in Funds managed by BlackRock
- Significant BlackRock, Inc. investors who may be issuers of securities held in Funds managed by BlackRock
- Securities of BlackRock, Inc. or BlackRock investment funds held in Funds managed by BlackRock
- BlackRock, Inc. board members who serve as senior executives of public companies held in Funds managed by BlackRock

BlackRock has taken certain steps to mitigate perceived or potential conflicts including, but not limited to, the following:

- Adopted the Guidelines which are designed to advance our clients' interests in the companies in which BlackRock invests on their behalf
- Established a reporting structure that separates BIS from employees with sales, vendor management, or business partnership roles. In addition, BlackRock seeks to ensure that all engagements with corporate issuers, dissident

shareholders or shareholder proponents are managed consistently and without regard to BlackRock's relationship with such parties. Clients or business partners are not given special treatment or differentiated access to BIS. BIS prioritizes engagements based on factors including, but not limited to, our need for additional information to make a voting decision or our view on the likelihood that an engagement could lead to positive outcome(s) over time for the economic value of the company. Within the normal course of business, BIS may engage directly with BlackRock clients, business partners and/or third parties, and/or with employees with sales, vendor management, or business partnership roles, in discussions regarding our approach to stewardship, general corporate governance matters, client reporting needs, and/or to otherwise ensure that proxy-related client service levels are met

- Determined to engage, in certain instances, an independent third party voting service provider to make proxy voting recommendations as a further safeguard to avoid potential conflicts of interest, to satisfy regulatory compliance requirements, or as may be otherwise required by applicable law. In such circumstances, the voting service provider provides BlackRock with recommendations, in accordance with the Guidelines, as to how to vote such proxies. BlackRock uses an independent voting service provider to make proxy voting recommendations for shares of BlackRock, Inc. and companies affiliated with BlackRock, Inc. BlackRock may also use an independent voting service provider to make proxy voting recommendations for:
    - public companies that include BlackRock employees on their boards of directors
    - public companies of which a BlackRock, Inc. board member serves as a senior executive or a member of the board of directors
    - public companies that are the subject of certain transactions involving BlackRock Funds
    - public companies that are joint venture partners with BlackRock, and
    - public companies when legal or regulatory requirements compel BlackRock to use an independent voting service provider

In selecting a voting service provider, we assess several characteristics, including but not limited to: independence, an ability to analyze proxy issues and make recommendations in the best economic interest of our clients in accordance with the Guidelines, reputation for reliability and integrity, and operational capacity to accurately deliver the assigned recommendations in a timely manner. We may engage more than one voting service provider, in part to mitigate potential or perceived conflicts of interest at a single voting service provider. The Global Committee appoints and reviews the performance of the voting service providers, generally on an annual basis.

Securities lending

When so authorized, BlackRock acts as a securities lending agent on behalf of Funds. Securities lending is a well-regulated practice that contributes to capital market efficiency. It also enables funds to generate additional returns for a fund, while allowing fund providers to keep fund expenses lower.

With regard to the relationship between securities lending and proxy voting, BlackRock's approach is informed by our fiduciary responsibility to act in our clients' best interests. In most cases, BlackRock anticipates that the potential long-term value to the Fund of voting shares would be less than the potential revenue the loan may provide the Fund. However, in certain instances, BlackRock may determine, in its independent business judgment as a fiduciary, that the value of voting outweighs the securities lending revenue loss to clients and would therefore recall shares to be voted in those instances.

The decision to recall securities on loan as part of BlackRock's securities lending program in order to vote is based on an evaluation of various factors that include, but are not limited to, assessing potential securities lending revenue alongside the potential long-term value to clients of voting those securities (based on the information available at the time of recall consideration).[12] BIS works with colleagues in the Securities Lending and Risk and Quantitative Analysis teams to evaluate the costs and benefits to clients of recalling shares on loan.

Periodically, BlackRock reviews our process for determining whether to recall securities on loan in order to vote and may modify it as necessary.

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12 Recalling securities on loan can be impacted by the timing of record dates. In the United States, for example, the record date of a shareholder meeting typically falls before the proxy statements are released. Accordingly, it is not practicable to evaluate a proxy statement, determine that a vote has a material impact on a fund and recall any shares on loan in advance of the record date for the annual meeting. As a result, managers must weigh independent business judgement as a fiduciary, the benefit to a fund's shareholders of recalling loaned shares in advance of an estimated record date without knowing whether there will be a vote on matters which have a material impact on the fund (thereby forgoing potential securities lending revenue for the fund's shareholders) or leaving shares on loan to potentially earn revenue for the fund (thereby forgoing the opportunity to vote).

Voting guidelines

The issue-specific Guidelines published for each region/country in which we vote are intended to summarize BlackRock's general philosophy and approach to issues that may commonly arise in the proxy voting context in each market where we invest. The Guidelines are not intended to be exhaustive. BIS applies the Guidelines on a case-by-case basis, in the context of the individual circumstances of each company and the specific issue under review. As such, the Guidelines do not indicate how BIS will vote in every instance. Rather, they reflect our view about corporate governance issues generally, and provide insight into how we typically approach issues that commonly arise on corporate ballots.

Reporting and vote transparency

We are committed to transparency in the stewardship work we do on behalf of clients. We inform clients about our engagement and voting policies and activities through direct communication and through disclosure on our website. Each year we publish an annual report that provides a global overview of our investment stewardship engagement and voting activities and a voting spotlight that summarizes our voting over a proxy year.[13] Additionally, we make public our market-specific voting guidelines for the benefit of clients and companies with whom we engage. We also publish commentaries to share our perspective on market developments and emerging key themes.

At a more granular level, we publish quarterly our vote record for each company that held a shareholder meeting during the period, showing how we voted on each proposal and explaining any votes against management proposals or on shareholder proposals. For shareholder meetings where a vote might be high profile or of significant interest to clients, we may publish a vote bulletin after the meeting, disclosing and explaining our vote on key proposals. We also publish a quarterly list of all companies with which we engaged and the key topics addressed in the engagement meeting.

In this way, we help inform our clients about the work we do on their behalf in promoting the governance and business models that support durable, long-term value creation.

[13] The proxy year runs from July 1 to June 30 of the proceeding calendar year.

BlackRock Investment Stewardship

Proxy voting guidelines for U.S. Securities

January 2023

BlackRock

Contents

These guidelines should be read in conjunction with the BlackRock Investment Stewardship Global Principles.

Introduction

As stewards of our clients' investments, BlackRock believes it has a responsibility to engage with management teams and/or board members on material business issues and, for those clients who have given us authority, to vote proxies in the best long-term economic interests of their assets.

The following issue-specific proxy voting guidelines (the "Guidelines") summarize BlackRock Investment Stewardship's ("BIS") philosophy and approach to engagement and voting, as well as our view of governance best practices and the roles and responsibilities of boards and directors for publicly listed U.S. companies. These Guidelines are not intended to limit the analysis of individual issues at specific companies or provide a guide to how BIS will engage and/or vote in every instance. They are to be applied with discretion, taking into consideration the range of issues and facts specific to the company, as well as individual ballot items at shareholder meetings.

Voting guidelines

These guidelines are divided into eight key themes, which group together the issues that frequently appear on the agenda of shareholder meetings:

- Boards and directors
- Auditors and audit-related issues
- Capital structure
- Mergers, acquisitions, asset sales, and other special transactions
- Executive compensation
- Material sustainability-related risks and opportunities
- General corporate governance matters
- Shareholder protections

Boards and directors

An effective and well-functioning board is critical to the economic success of the company and the protection of shareholders' interests, inducting the establishment of appropriate governance structures that facilitate oversight of management and the company's strategic initiatives. As part of their responsibilities, board members owe fiduciary duties to shareholders in overseeing the strategic direction, operations, and risk management of the company. For this reason, BIS sees engagement with and the election of directors as one of our most critical responsibilities.

Disclosure of material issues that affect the company's long-term strategy and value creation, including, when relevant, material sustainability-related factors, is essential for shareholders to appropriately understand and assess how effectively the board is identifying, managing, and mitigating risks.

Where a company has not adequately demonstrated, through actions and/or disclosures, how material issues are appropriately identified, managed, and overseen, we will consider voting against the re-election of those directors responsible for the oversight of such issues, as indicated below.

Independence

It is our view that a majority of the directors on the board should be independent to ensure objectivity in the decision-making of the board and its ability to oversee management. In addition, all members of audit, compensation, and nominating/governance committees should be independent. Our view of independence may vary from listing standards.

Common impediments to independence may include:

- Employment as a senior executive by the company or a subsidiary within the past five years
- An equity ownership in the company in excess of 20%
- Having any other interest, business, or relationship (professional or personal) which could, or could reasonably be perceived to, materially interfere with the director's ability to act in the best interests of the company and its shareholders. We may vote against directors who we do not consider to be independent, including at controlled companies, when we believe oversight could be enhanced with greater independent director representation. To signal

our concerns, we may also vote against the chair of the nominating/governance committee, or where no chair exists, the nominating/governance committee member with the longest tenure.

Oversight role of the board

The board should exercise appropriate oversight of management and the business activities of the company. Where we determine that a board has failed to do so in a way that may impede a company's long-term value, we may vote against the responsible committees and/or individual directors.

Common circumstances are illustrated below:

- Where the board has failed to facilitate quality, independent auditing or accounting practices, we may vote against members of the audit committee
- Where the company has failed to provide shareholders with adequate disclosure to conclude that appropriate strategic consideration is given to material risk factors (including, where relevant, sustainability factors), we may vote against members of the responsible committee, or the most relevant director
- Where it appears that a director has acted (at the company or at other companies) in a manner that compromises their ability to represent the best long-term economic interests of shareholders, we may vote against that individual
- Where a director has a multi-year pattern of poor attendance at combined board and applicable committee meetings, or a director has poor attendance in a single year with no disclosed rationale, we may vote against that individual. Excluding exigent circumstances, BIS generally considers attendance at less than 75% of the combined board and applicable committee meetings to be poor attendance
- Where a director serves on an excessive number of boards, which may limit their capacity to focus on each board's needs, we may vote against that individual. The following identifies the maximum number of boards on which a director may serve, before BIS considers them to be over-committed:

	Public Company Executive[14]	# Outside Public Boards[15]	Total # of Public Boards
Director A	✓	1	2
Director B		3	4

In addition, we recognize that board leadership roles may vary in responsibility and time requirements in different markets around the world. In particular, where a director maintains a Chair role of a publicly listed company in European markets, we may consider that responsibility as equal to two board commitments, consistent with our EMEA Proxy Voting Guidelines. We will take the total number of board commitments across our global policies into account for director elections.

Risk oversight

Companies should have an established process for identifying, monitoring, and managing business and material risks. Independent directors should have access to relevant management information and outside advice, as appropriate, to ensure they can properly oversee risk. We encourage companies to provide transparency around risk management, mitigation, and reporting to the board. We are particularly interested in understanding how risk oversight processes evolve in response to changes in corporate strategy and/or shifts in the business and related risk environment. Comprehensive disclosures provide investors with a sense of the company's long-term risk management practices and, more broadly, the quality of the board's oversight. In the absence of robust disclosures, we may reasonably conclude that companies are not adequately managing risk.

Board Structure

Classified board of directors/staggered terms

Directors should be re-elected annually; classification of the board generally limits shareholders' rights to regularly evaluate a board's performance and select directors. While we will typically support proposals requesting board de-classification, we may make exceptions, should the board articulate an appropriate strategic rationale for a classified board structure. This may include when a company needs consistency and stability during a time of transition, e.g., newly public companies or

14 A public company executive is defined as a Named Executive Officer (NEO) or Executive Chair.

15 In addition to the company under review.

companies undergoing a strategic restructuring. A classified board structure may also be justified at non-operating companies, e.g., closed-end funds or business development companies ("BDC"),[16] in certain circumstances. However, in these instances, boards should periodically review the rationale for a classified structure and consider when annual elections might be more appropriate.

Without a voting mechanism to immediately address concerns about a specific director, we may choose to vote against the directors up for election at the time (see "Shareholder rights" for additional detail).

Independent leadership

There are two commonly accepted structures for independent leadership to balance the CEO role in the boardroom: 1) an independent Chair; or 2) a Lead Independent director when the roles of Chair and CEO are combined, or when the Chair is otherwise not independent.

In the absence of a significant governance concern, we defer to boards to designate the most appropriate leadership structure to ensure adequate balance and independence.[17] However, BIS may vote against the most senior non-executive member of the board when appropriate independence is lacking in designated leadership roles.

In the event that the board chooses to have a combined Chair/CEO or a non-independent Chair, we support the designation of a Lead Independent director, with the ability to: 1) provide formal input into board meeting agendas; 2) call meetings of the independent directors; and 3) preside at meetings of independent directors. These roles and responsibilities should be disclosed and easily accessible.

The following table illustrates examples[18] of responsibilities under each board leadership model:

	Combined Chair/CEO or CEO + Non-independent Chair		**Separate Independent Chair**
	Chair/CEO or Non-independent Chair	Lead Independent Director	Independent Chair
Board Meetings	Authority to call full meetings of the board of directors	Attends full meetings of the board of directors Authority to call meetings of independent directors Briefs CEO on issues arising from executive sessions	Authority to call full meetings of the board of directors
Agenda	Primary responsibility for shaping board agendas, consulting with the lead independent director	Collaborates with chair/CEO to set board agenda and board information	Primary responsibility for shaping board agendas, in conjunction with CEO
Board Communications	Communicates with all directors on key issues and concerns outside of full board meetings	Facilitates discussion among independent directors on key issues and concerns outside of full board meetings, including contributing to the oversight of CEO and management succession planning	Facilitates discussion among independent directors on key issues and concerns outside of full board meetings, including contributing to the oversight of CEO and management succession planning

16 BDC is a special investment vehicle under the Investment Company Act of 1940 that is designed to facilitate capital formation for small and middle-market companies.

17 To this end, we do not view shareholder proposals asking for the separation of Chair and CEO to be a proxy for other concerns we may have at the company for which a vote against directors would be more appropriate. Rather, support for such a proposal might arise in the case of overarching and sustained governance concerns such as lack of independence or failure to oversee a material risk over consecutive years.

18 This table is for illustrative purposes only. The roles and responsibilities cited here are not all-encompassing and are noted for reference as to how these leadership positions may be defined.

CEO and management succession planning

Companies should have a robust CEO and senior management succession plan in place at the board level that is reviewed and updated on a regular basis. Succession planning should cover scenarios over both the long-term, consistent with the strategic direction of the company and identified leadership needs over time, as well as the short-term, in the event of an unanticipated executive departure. We encourage the company to explain their executive succession planning process, including where accountability lies within the boardroom for this task, without prematurely divulging sensitive information commonly associated with this exercise.

During a CEO transition, companies may elect for the departing CEO to maintain a role in the boardroom. We ask for disclosures to understand the timeframe and responsibilities of this role. In such instances, we typically look for the board to have appropriate independent leadership structures in place. (See chart above.)

Director compensation and equity programs

Compensation for directors should generally be structured to attract and retain directors, while also aligning their interests with those of shareholders. In our view, director compensation packages that are based on the company's long-term value creation and include some form of long-term equity compensation are more likely to meet this goal.

Board composition and effectiveness

Director qualifications and skills

We encourage boards to periodically review director qualifications and skills to ensure relevant experience and diverse perspectives are represented in the boardroom. To this end, performance reviews and skills assessments should be conducted by the nominating/governance committee or the Lead Independent Director. This process may include internal board evaluations; however, boards may also find it useful to periodically conduct an assessment with a third party. We encourage boards to disclose their approach to evaluations, including objectives of the evaluation; if an external party conducts the evaluation; the frequency of the evaluations; and, whether that evaluation occurs on an individual director basis.

Board term limits and director tenure

Where boards find that age limits or term limits are the most efficient and objective mechanism for ensuring periodic board refreshment, we generally defer to the board's determination in setting such limits. BIS will also consider the average board tenure to evaluate processes for board renewal. We may oppose boards that appear to have an insufficient mix of short-, medium-, and long-tenured directors.

Board diversity

As noted above, highly qualified, engaged directors with professional characteristics relevant to a company's business enhance the ability of the board to add value and be the voice of shareholders in board discussions. In our view, a strong board provides a competitive advantage to a company, providing valuable oversight and contributing to the most important management decisions that support long-term financial performance.

It is in this context that we are interested in diversity in the boardroom. We see it as a means to promoting diversity of thought and avoiding 'group think' in the board's exercise of its responsibilities to advise and oversee management. It allows boards to have deeper discussions and make more resilient decisions. We ask boards to disclose how diversity is considered in board composition, including professional characteristics, such as a director's industry experience, specialist areas of expertise and geographic location; as well as demographic characteristics such as gender, race/ ethnicity, and age.

We look to understand a board's diversity in the context of a company's domicile, market capitalization, business model, and strategy. Increasingly, we see leading boards adding members whose experience deepens the board's understanding of the company's customers, employees, and communities. Self- identified board demographic diversity can usefully be disclosed in aggregate, consistent with local law. We believe boards should aspire to meaningful diversity of membership, at least consistent with local regulatory requirements and best practices, while recognizing that building a strong, diverse board can take time.

This position is based on our view that diversity of perspective and thought—in the boardroom, in the management team and throughout the company—leads to better long-term economic outcomes for companies. Academic and other research reveals correlations between specific dimensions of diversity and effects on decision-making processes and outcomes.[19] In our experience, greater diversity in the boardroom contributes to more robust discussions and more innovative and resilient decisions. Over time, greater diversity in the boardroom can also promote greater diversity and resilience in the leadership team, and the workforce more broadly. That diversity can enable companies to develop businesses that more closely reflect and resonate with the customers and communities they serve.

In the U.S., we believe that boards should aspire to at least 30% diversity of membership,[20] and we encourage large companies, such as those in the S&P 500, to lead in achieving this standard. In our view, an informative indicator of diversity for such companies is having at least two women and a director who identifies as a member of an underrepresented group.[21] We recognize that it may take time and that companies with smaller market capitalizations and in certain sectors may face more challenges in pursuing diversity. Among these smaller companies, we look for the presence of diversity and take into consideration the progress that companies are making.

In order to help investors understand overall diversity, we look to boards to disclose:

- How diversity, including demographic factors and professional characteristics, is considered in board composition, given the company's long-term strategy and business model
- How directors' professional characteristics, which may include domain expertise such as finance or technology, and sector- or market-specific experience, are complementary and link to the company's long-term strategy
- The process by which candidates for board positions are identified, including whether professional firms or other resources outside of incumbent directors' networks are engaged to identify and/or assess candidates, and whether a diverse slate of nominees is considered for all available board nominations

To the extent that, based on our assessment of corporate disclosures, a company has not adequately explained their approach to diversity in their board composition, we may vote against members of the nominating/governance committee. Our publicly available commentary provides more information on our approach to board diversity.

Board size

We typically defer to the board in setting the appropriate size and believe that directors are generally in the best position to assess the optimal board size to ensure effectiveness. However, we may vote against the appropriate committees and/or individual directors if, in our view, the board is ineffective in its oversight, either because it is too small to allow for the necessary range of skills and experience or too large to function efficiently.

Board responsiveness and shareholder rights

Shareholder rights

Where we determine that a board has not acted in the best interests of the company's shareholders, or takes action to unreasonably limit shareholder rights, we may vote against the appropriate committees and/or individual directors. Common circumstances are illustrated below:

- The Independent Chair or Lead Independent Director and members of the nominating/governance committee, where a board implements or renews a poison pill without shareholder approval
- The Independent Chair or Lead Independent Director and members of the nominating/governance committee, where a board amends the charter/articles/bylaws and where the effect may be to entrench directors or to unreasonably reduce shareholder rights
- Members of the compensation committee where the company has repriced options without shareholder approval If a board maintains a classified structure, it is possible that the director(s) or committee members with whom we have a

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19 For a discussion on the different impacts of diversity see: McKinsey, "Diversity Wins: How Inclusion Matters", May 2022; Harvard Business Review, Diverse Teams Feel Less Comfortable – and That's Why They Perform Better, September 2016; "Do Diverse Directors Influence DEI Outcomes", September 2022

20 We take a case-by-case approach and consider the size of the board in our evaluation of overall composition and diversity. Business model, strategy, location, and company size may also impact our analysis of board diversity. We acknowledge that these factors may also play into the various elements of diversity that a board may attract. We look for disclosures from companies to help us understand their approach and do not prescribe any particular board composition.

21 Including, but not limited to, individuals who identify as Black or African American, Hispanic or Latinx, Asian, Native American or Alaska Native, or Native Hawaiian or Pacific Islander; individuals who identify as LGBTQ+; individuals who identify as underrepresented based on national, Indigenous, religious, or cultural identity; individuals with disabilities; and veterans.

particular concern may not be subject to election in the year that the concern arises. In such situations, we may register our concern by voting against the most relevant director(s) up for election.

Responsiveness to shareholders

A board should be engaged and responsive to the company's shareholders, including acknowledging voting outcomes for director elections, compensation, shareholder proposals, and other ballot items. Where we determine that a board has not substantially addressed shareholder concerns that we deem material to the business, we may vote against the responsible committees and/or individual directors. Common circumstances are illustrated below:

- The Independent Chair or Lead Independent Director, members of the nominating/governance committee, and/or the longest tenured director(s), where we observe a lack of board responsiveness to shareholders, evidence of board entrenchment, and/or failure to plan for adequate board member succession
- The chair of the nominating/governance committee, or where no chair exists, the nominating/governance committee member with the longest tenure, where board member(s) at the most recent election of directors have received against votes from more than 25% of shares voted, and the board has not taken appropriate action to respond to shareholder concerns. This may not apply in cases where BIS did not support the initial vote against such board member(s)
- The Independent Chair or Lead Independent Director and/or members of the nominating/governance committee, where a board fails to consider shareholder proposals that (1) receive substantial support, and (2) in our view, have a material impact on the business, shareholder rights, or the potential for long-term value creation

Majority vote requirements

Directors should generally be elected by a majority of the shares voted. We will normally support proposals seeking to introduce bylaws requiring a majority vote standard for director elections. Majority vote standards generally assist in ensuring that directors who are not broadly supported by shareholders are not elected to serve as their representatives. As a best practice, companies with either a majority vote standard or a plurality vote standard should adopt a resignation policy for directors who do not receive support from at least a majority of votes cast. Where the company already has a sufficiently robust majority voting process in place, we may not support a shareholder proposal seeking an alternative mechanism.

We note that majority voting may not be appropriate in all circumstances, for example, in the context of a contested election, or for majority-controlled companies or those with concentrated ownership structures.

Cumulative voting

As stated above, a majority vote standard is generally in the best long-term interests of shareholders, as it ensures director accountability through the requirement to be elected by more than half of the votes cast. As such, we will generally oppose proposals requesting the adoption of cumulative voting, which may disproportionately aggregate votes on certain issues or director candidates.

Auditors and audit-related issues

BIS recognizes the critical importance of financial statements to provide a complete and accurate portrayal of a company's financial condition. Consistent with our approach to voting on directors, we seek to hold the audit committee of the board responsible for overseeing the management of the independent auditor and the internal audit function at a company.

We may vote against the audit committee members where the board has failed to facilitate quality, independent auditing. We look to public disclosures for insight into the scope of the audit committee responsibilities, including an overview of audit committee processes, issues on the audit committee agenda, and key decisions taken by the audit committee. We take particular note of cases involving significant financial restatements or material weakness disclosures, and we look for timely disclosure and remediation of accounting irregularities.

The integrity of financial statements depends on the auditor effectively fulfilling its role. To that end, we favor an independent auditor. In addition, to the extent that an auditor fails to reasonably identify and address issues that eventually lead to a significant financial restatement, or the audit firm has violated standards of practice, we may also vote against ratification.

From time to time, shareholder proposals may be presented to promote auditor independence or the rotation of audit firms. We may support these proposals when they are consistent with our views as described above.

Capital structure proposals

Equal voting rights

In our view, shareholders should be entitled to voting rights in proportion to their economic interests. In addition, companies that have implemented dual or multiple class share structures should review these structures on a regular basis, or as company circumstances change. Companies with multiple share classes should receive shareholder approval of their capital structure on a periodic basis via a management proposal on the company's proxy. The proposal should give unaffiliated shareholders the opportunity to affirm the current structure or establish mechanisms to end or phase out controlling structures at the appropriate time, while minimizing costs to shareholders. Where companies are unwilling to voluntarily implement "one share, one vote" within a specified timeframe, or are unresponsive to shareholder feedback for change over time, we generally support shareholder proposals to recapitalize stock into a single voting class.

Blank check preferred stock

We frequently oppose proposals requesting authorization of a class of preferred stock with unspecified voting, conversion, dividend distribution, and other rights ("blank check" preferred stock) because they may serve as a transfer of authority from shareholders to the board and as a possible entrenchment device. We generally view the board's discretion to establish voting rights on a when-issued basis as a potential anti-takeover device, as it affords the board the ability to place a block of stock with an investor sympathetic to management, thereby foiling a takeover bid without a shareholder vote.

Nonetheless, we may support the proposal where the company:

- Appears to have a legitimate financing motive for requesting blank check authority
- Has committed publicly that blank check preferred shares will not be used for anti-takeover purposes
- Has a history of using blank check preferred stock for financings
- Has blank check preferred stock previously outstanding such that an increase would not necessarily provide further anti-takeover protection but may provide greater financing flexibility

Increase in authorized common shares

BIS will evaluate requests to increase authorized shares on a case-by-case basis, in conjunction with industry-specific norms and potential dilution, as well as a company's history with respect to the use of its common shares.

Increase or issuance of preferred stock

We generally support proposals to increase or issue preferred stock in cases where the company specifies the voting, dividend, conversion, and other rights of such stock and where the terms of the preferred stock appear reasonable.

Stock splits

We generally support stock splits that are not likely to negatively affect the ability to trade shares or the economic value of a share. We generally support reverse stock splits that are designed to avoid delisting or to facilitate trading in the stock, where the reverse split will not have a negative impact on share value (e.g., one class is reduced while others remain at pre-split levels). In the event of a proposal for a reverse split that would not proportionately reduce the company's authorized stock, we apply the same analysis we would use for a proposal to increase authorized stock.

Mergers, acquisitions, transactions, and other special situations

Mergers, acquisitions, and transactions

In assessing mergers, acquisitions, or other transactions – including business combinations involving Special Purpose Acquisition Companies ("SPACs") – BIS' primary consideration is the long-term economic interests of our clients as shareholders. Boards should clearly explain the economic and strategic rationale for any proposed transactions or material changes to the business. We will review a proposed transaction to determine the degree to which it has the potential to enhance long-term shareholder value. While mergers, acquisitions, asset sales, business combinations, and other special transaction proposals vary widely in scope and substance, we closely examine certain salient features in our analyses, such as:

- The degree to which the proposed transaction represents a premium to the company's trading price. We consider the share price over multiple time periods prior to the date of the merger announcement. We may consider comparable transaction analyses provided by the parties' financial advisors and our own valuation assessments. For companies facing insolvency or bankruptcy, a premium may not apply

- There should be clear strategic, operational, and/or financial rationale for the combination
- Unanimous board approval and arm's-length negotiations are preferred. We will consider whether the transaction involves a dissenting board or does not appear to be the result of an arm's-length bidding process. We may also consider whether executive and/or board members' financial interests appear likely to affect their ability to place shareholders' interests before their own, as well as measures taken to address conflicts of interest
- We prefer transaction proposals that include the fairness opinion of a reputable financial advisor assessing the value of the transaction to shareholders in comparison to recent similar transactions

Contested director elections and special situations

Contested elections and other special situations[22] are assessed on a case-by-case basis. We evaluate a number of factors, which may include: the qualifications and past performance of the dissident and management candidates; the validity of the concerns identified by the dissident; the viability of both the dissident's and management's plans; the ownership stake and holding period of the dissident; the likelihood that the dissident's strategy will produce the desired change; and whether the dissident represents the best option for enhancing long-term shareholder value.

We will evaluate the actions that the company has taken to limit shareholders' ability to exercise the right to nominate dissident director candidates, including those actions taken absent the immediate threat of a contested situation. BIS may take voting action against directors (up to and including the full board) where those actions are viewed as egregiously infringing on shareholder rights.

We will consider a variety of possible voting outcomes in contested situations, including the ability to support a mix of management and dissident nominees.

Poison pill plans

Where a poison pill is put to a shareholder vote by management, our policy is to examine these plans individually. Although we have historically opposed most plans, we may support plans that include a reasonable "qualifying offer clause." Such clauses typically require shareholder ratification of the pill and stipulate a sunset provision whereby the pill expires unless it is renewed. These clauses also tend to specify that an all-cash bid for all shares that includes a fairness opinion and evidence of financing does not trigger the pill, but forces either a special meeting at which the offer is put to a shareholder vote or requires the board to seek the written consent of shareholders, where shareholders could rescind the pill at their discretion. We may also support a pill where it is the only effective method for protecting tax or other economic benefits that may be associated with limiting the ownership changes of individual shareholders. Lastly, we look for shareholder approval of poison pill plans within one year of adoption of implementation.

Reimbursement of expenses for successful shareholder campaigns

We generally do not support shareholder proposals seeking the reimbursement of proxy contest expenses, even in situations where we support the shareholder campaign. Introducing the possibility of such reimbursement may incentivize disruptive and unnecessary shareholder campaigns.

Executive compensation

A company's board of directors should put in place a compensation structure that balances incentivizing, rewarding, and retaining executives appropriately across a wide range of business outcomes. This structure should be aligned with shareholder interests, particularly the generation of sustainable, long-term value.

The compensation committee should carefully consider the specific circumstances of the company and the key individuals the board is focused on incentivizing. We encourage companies to ensure that their compensation plans incorporate appropriate and rigorous performance metrics, consistent with corporate strategy and market practice. Performance-based compensation should include metrics that are relevant to the business and stated strategy and/or risk mitigation efforts. Goals, and the processes used to set these goals, should be clearly articulated and appropriately rigorous. We use third party

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22 Special situations are broadly defined as events that are non-routine and differ from the normal course of business for a company's shareholder meeting, involving a solicitation other than by management with respect to the exercise of voting rights in a manner inconsistent with management's recommendation. These may include instances where shareholders nominate director candidates, oppose the view of management and/or the board on mergers, acquisitions, or other transactions, etc.

research, in addition to our own analysis, to evaluate existing and proposed compensation structures. We hold members of the compensation committee, or equivalent board members, accountable for poor compensation practices and/or structures.

There should be a clear link between variable pay and company performance that drives sustained value creation for our clients as shareholders. Where compensation structures provide for a front-loaded[23] award, we look for appropriate structures (including vesting and/or holding periods) that motivate sustained performance for shareholders over a number of years. We generally do not favor programs focused on awards that require performance levels to be met and maintained for a relatively short time period for payouts to be earned, unless there are extended vesting and/or holding requirements.

Compensation structures should generally drive outcomes that align the pay of the executives with performance of the company and the value received by shareholders. When evaluating performance, we examine both executive teams' efforts, as well as outcomes realized by shareholders. Payouts to executives should reflect both the executive's contributions to the company's ongoing success, as well as exogenous factors that impacted shareholder value. Where discretion has been used by the compensation committee, we look for disclosures relating to how and why the discretion was used and how the adjusted outcome is aligned with the interests of shareholders. While we believe special awards[24] should be used sparingly, we acknowledge that there may be instances when such awards are appropriate. When evaluating these awards, we consider a variety of factors, including the magnitude and structure of the award, the scope of award recipients, the alignment of the grant with shareholder value, and the company's historical use of such awards, in addition to other company-specific circumstances.

We acknowledge that the use of peer group evaluation by compensation committees can help calibrate competitive pay; however, we are concerned when the rationale for increases in total compensation is solely based on peer benchmarking.

We support incentive plans that foster the sustainable achievement of results – both financial and non-financial – consistent with the company's strategic initiatives. Compensation committees should guard against contractual arrangements that would entitle executives to material compensation for early termination of their contract. Finally, pension contributions and other deferred compensation arrangements should be reasonable in light of market practices. Our publicly available commentary provides more information on our approach to executive compensation.

Where executive compensation appears excessive relative to the performance of the company and/or compensation paid by peers, or where an equity compensation plan is not aligned with shareholders' interests, we may vote against members of the compensation committee.

"Say on Pay" advisory resolutions

In cases where there is a "Say on Pay" vote, BIS will respond to the proposal as informed by our evaluation of compensation practices at that particular company and in a manner that appropriately addresses the specific question posed to shareholders. Where we conclude that a company has failed to align pay with performance, we will vote against the management compensation proposal and relevant compensation committee members.

Frequency of "Say on Pay" advisory resolutions

BIS will generally support annual advisory votes on executive compensation. It is our view that shareholders should have the opportunity to express feedback on annual incentive programs and changes to long-term compensation before multiple cycles are issued. Where a company has failed to implement a "Say on Pay" advisory vote within the frequency period that received the most support from shareholders or a "Say on Pay" resolution is omitted without explanation, BIS may vote against members of the compensation committee.

Clawback proposals

We generally favor prompt recoupment from any senior executive whose compensation was based on faulty financial reporting or deceptive business practices. We also favor prompt recoupment from any senior executive whose behavior caused material financial harm to shareholders, material reputational risk to the company, or resulted in a criminal proceeding, even if such actions did not ultimately result in a material restatement of past results. This includes, but is not limited to, settlement agreements arising from such behavior and paid for directly by the company. We typically support shareholder proposals on these matters unless the company already has a robust clawback policy that sufficiently addresses our concerns.

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23 Front-loaded awards are generally those that accelerate the grant of multiple years' worth of compensation in a single year.

24 "Special awards" refers to awards granted outside the company's typical compensation program.

Employee stock purchase plans

Employee stock purchase plans ("ESPP") are an important part of a company's overall human capital management strategy and can provide performance incentives to help align employees' interests with those of shareholders. The most common form of ESPP qualifies for favorable tax treatment under Section 423 of the Internal Revenue Code. We will typically support qualified ESPP proposals.

Equity compensation plans

BIS supports equity plans that align the economic interests of directors, managers, and other employees with those of shareholders. Boards should establish policies prohibiting the use of equity awards in a manner that could disrupt the intended alignment with shareholder interests, such as the excessive pledging or heading of stock. We may support shareholder proposals requesting the establishment of such policies.

Our evaluation of equity compensation plans is based on a company's executive pay and performance relative to peers and whether the plan plays a significant role in a pay-for-performance disconnect. We generally oppose plans that contain "evergreen" provisions, which allow for automatic annual increases of shares available for grant without requiring further shareholder approval; we note that the aggregate impacts of such increases are difficult to predict and may lead to significant dilution. We also generally oppose plans that allow for repricing without shareholder approval. We may oppose plans that provide for the acceleration of vesting of equity awards even in situations where an actual change of control may not occur. We encourage companies to structure their change of control provisions to require the termination of the covered employee before acceleration or special payments are triggered (commonly referred to as "double trigger" change of control provisions).

Golden parachutes

We generally view golden parachutes as encouragement to management to consider transactions that might be beneficial to shareholders. However, a large potential payout under a golden parachute arrangement also presents the risk of motivating a management team to support a sub-optimal sale price for a company.

When determining whether to support or oppose an advisory vote on a golden parachute plan, BIS may consider several factors, including:

- Whether we determine that the triggering event is in the best interests of shareholders
- Whether management attempted to maximize shareholder value in the triggering event
- The percentage of total premium or transaction value that will be transferred to the management team, rather than shareholders, as a result of the golden parachute payment
- Whether excessively large excise tax gross-up payments are part of the pay-out
- Whether the pay package that serves as the basis for calculating the golden parachute payment was reasonable in light of performance and peers
- Whether the golden parachute payment will have the effect of rewarding a management team that has failed to effectively manage the company It may be difficult to anticipate the results of a plan until after it has been triggered; as a result, BIS may vote against a golden parachute proposal even if the golden parachute plan under review was approved by shareholders when it was implemented.

We may support shareholder proposals requesting that implementation of such arrangements require shareholder approval.

Option exchanges

There may be legitimate instances where underwater options create an overhang on a company's capital structure and a repricing or option exchange may be warranted. We will evaluate these instances on a case-by-case basis. BIS may support a request to reprice or exchange underwater options under the following circumstances:

- The company has experienced significant stock price decline as a result of macroeconomic trends, not individual company performance
- Directors and executive officers are excluded; the exchange is value neutral or value creative to shareholders; tax, accounting, and other technical considerations have been fully contemplated
- There is clear evidence that absent repricing, employee incentives, retention, and/or recruiting may be impacted BIS may

also support a request to exchange underwater options in other circumstances, if we determine that the exchange is in the best interests of shareholders.

Supplemental executive retirement plans

BIS may support shareholder proposals requesting to put extraordinary benefits contained in supplemental executive retirement plans ("SERP") to a shareholder vote unless the company's executive pension plans do not contain excessive benefits beyond what is offered under employee- wide plans.

Material sustainability-related risks and opportunities

It is our view that well-run companies, where appropriate, effectively evaluate and manage material sustainability-related risks and opportunities[25] as a core component of their long-term value creation for shareholder and business strategy. At the board level, appropriate governance structures and responsibilities allow for effective oversight of the strategic implementation of material sustainability issues.

When assessing how to vote – including on the election of directors and relevant shareholder proposals – robust disclosures are essential for investors to understand, where appropriate, how companies are integrating material sustainability risks and opportunities across their business and strategic, long-term planning. Where a company has failed to appropriately provide robust disclosures and evidence of effective business practices, BIS may express concerns through our engagement and voting. As part of this consideration, we encourage companies to produce sustainability-related disclosures sufficiently in advance of their annual meeting so that the disclosures can be considered in relevant vote decisions.

We encourage disclosures aligned with the reporting framework developed by the Task Force on Climate-related Financial Disclosures (TCFD), supported by industry-specific metrics, such as those identified by the Sustainability Accounting Standards Board (SASB), now part of the International Sustainability Standards Board (ISSB) under the International Financial Reporting Standards (IFRS) Foundation.[26] While the TCFD framework was developed to support climate-related risk disclosures, the four pillars of the TCFD – governance, strategy, risk management, and metrics and targets – are a useful way for companies to disclose how they identify, assess, manage, and oversee a variety of sustainability-related risks and opportunities. SASB's[27] industry-specific metrics are beneficial in helping companies identify key performance indicators ("KPIs") across various dimensions of sustainability that are considered to be financially material. We recognize that some companies may report using different standards, which may be required by regulation, or one of a number of private standards. In such cases, we ask that companies highlight the metrics that are industry- or company-specific.

We look to companies to:

- Disclose the identification, assessment, management, and oversight of material sustainability- related risks and opportunities in accordance with the four pillars of TCFD
- Publish material, investor-relevant, industry-specific metrics and rigorous targets, aligned with SASB (ISSB) or comparable sustainability reporting standards

Companies should also disclose any material supranational standards adopted, the industry initiatives in which they participate, any peer group benchmarking undertaken, and any assurance processes to help investors understand their approach to sustainable and responsible business conduct.

Climate risk

25 By material sustainability-related risks and opportunities, we mean the drivers of risk and value creation in a company's business model that have an environmental or social dependency or impact. Examples of environmental issues include, but are not limited to, water use, land use, waste management, and climate risk. Examples of social issues include, but are not limited to, human capital management, impacts on the communities in which a company operates, customer loyalty, and relationships with regulators. It is our view that well-run companies will effectively evaluate and manage material sustainability-related risks and opportunities relevant to their businesses. Governance is the core means by which boards can oversee the creation of durable, long-term value. Appropriate risk oversight of business-relevant and material sustainability-related considerations is a component of a sound governance framework.

26 The International Financial Reporting Standards (IFRS) Foundation announced in November 2021 the formation of an International Sustainability Standards Board (ISSB) to develop a comprehensive global baseline of high-quality sustainability disclosure standards to meet investors' information needs. SASB standards will over time be adapted to ISSB standards but are the reference reporting tool in the meantime.

27 The ISSB has committed to build upon the SASB standards, which identify material, sustainability-related disclosures across sectors. SASB Standards can be used to provide a baseline of investor-focused sustainability disclosure and to implement the principles-based framework recommended by the TCFD, which is also incorporated into the ISSB's Climate Exposure Draft. Similarly, SASB Standards enable robust implementation of the Integrated Reporting Framework, providing the comparability sought by investors.

It is our view that climate change has become a key factor in many companies' long-term prospects. As such, as long-term investors, we are interested in understanding how companies may be impacted by material climate-related risks and opportunities—just as we seek to understand other business-relevant risks and opportunities—and how these factors are considered within their strategy in a manner that is consistent with the company's business model and sector. Specifically, we look for companies to disclose strategies that they have in place that mitigate and are resilient to any material risks to their long-term business model associated with a range of climate-related scenarios, including a scenario in which global warming is limited to well below 2°C, and considering global ambitions to achieve a limit of 1.5°C.[28] It is, of course, up to each company to define their own strategy: that is not the role of BlackRock or other investors.

BIS recognizes that climate change can be challenging for many companies, as they seek to drive long-term value by mitigating risks and capturing opportunities. A growing number of companies, financial institutions, as well as governments, have committed to advancing decarbonization in line with the Paris Agreement. There is growing consensus that companies can benefit from the more favorable macro-economic environment under an orderly, timely, and equitable global energy transition.[29] Yet, the path ahead is deeply uncertain and uneven, with different parts of the economy moving at different speeds.[30] Many companies are asking what their role should be in contributing to an orderly and equitable transition—in ensuring a reliable energy supply and energy security and in protecting the most vulnerable from energy price shocks and economic dislocation. In this context, we encourage companies to include in their disclosures a business plan for how they intend to deliver long-term financial performance through a transition to global net zero carbon emissions, consistent with their business model and sector.

We look to companies to disclose short-, medium-, and long-term targets, ideally science-based targets where these are available for their sector, for Scope 1 and 2 greenhouse gas emissions (GHG) reductions and to demonstrate how their targets are consistent with the long-term economic interests of their shareholders. Many companies have an opportunity to use and contribute to the development of low carbon energy sources and technologies that will be essential to decarbonizing the global economy over time. We also recognize that continued investment in traditional energy sources, including oil and gas, is required to maintain an orderly and equitable transition—and that divestiture of carbon-intensive assets is unlikely to contribute to global emissions reductions. We encourage companies to disclose how their capital allocation to various energy sources is consistent with their strategy.

At this stage, we view Scope 3 emissions differently from Scopes 1 and 2, given methodological complexity, regulatory uncertainty, concerns about double-counting, and lack of direct control by companies. While we welcome any disclosures and commitments companies choose to make regarding Scope 3 emissions, we recognize that these are provided on a good-faith basis as methodology develops. Our publicly available commentary provides more information on our approach to climate risk and the global energy transition.

Natural capital

The management of nature-related factors is increasingly a core component of some companies' ability to generate sustainable, long-term financial returns for shareholders, particularly where a company's strategy is heavily reliant on the availably of natural capital, or whose supply chains are exposed to locations with nature-related risks. We look for such companies to disclose[31] how they consider their reliance and use of natural capital, including appropriate risk oversight and relevant metrics and targets, to understand how these factors are integrated into strategy. We will evaluate these disclosures to inform our view of how a company is managing material nature-related risks and opportunities, as well as in our assessment of relevant shareholder proposals. Our publicly available commentary provides more information on our approach to natural capital.

Key stakeholder interests

In order to deliver long-term value for shareholders, companies should also consider the interests of their key stakeholders. While stakeholder groups may vary across industries, they are likely to include employees; business partners (such as suppliers and distributors); clients and consumers; government and regulators; and the constituents of the communities in which a company operates. Companies that build strong relationships with their key stakeholders are more likely to meet

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28 The global aspiration to achieve a net-zero global economy by 2050 is reflective of aggregated efforts; governments representing over 90% of GDP have committed to move to net-zero over the coming decades. In determining how to vote on behalf of clients who have authorized us to do so, we look to companies only to address issues within their control and do not anticipate that they will address matters that are the domain of public policy.

29 For example, BlackRock's Capital Markets Assumptions anticipate 25 points of cumulative economic gains over a 20-year period in an orderly transition as compared to the alternative. This better macro environment will support better economic growth, financial stability, job growth, productivity, as well as ecosystem stability and health outcomes.

30 https://www.blackrock.com/corporate/literature/whitepaper/bii-managing-the-net-zero-transition-february-2022.pdf

31 While guidance is still under development for a unified disclosure framework related to natural capital, the emerging recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD), may prove useful to some companies.

their own strategic objectives, while poor relationships may create adverse impacts that expose a company to legal, regulatory, operational, and reputational risks.

Companies should effectively oversee and mitigate material risks related to stakeholders with appropriate due diligence processes and board oversight. Where we determine that company is not appropriately considering their key stakeholder interests in a way that poses material financial risk to the company and its shareholders, we may vote against relevant directors or support shareholder proposals related to these topics. Our publicly available commentary provides more information on our approach.

Conversely, we note that some shareholder proposals seek to address topics that are clearly within the purview of certain stakeholders. For example, we recognize that topics around taxation and tax reporting are within the domain of local, state, and federal authorities. BIS will generally not support these proposals.

Human capital management

A company's approach to human capital management ("HCM") is a critical factor in fostering an inclusive, diverse, and engaged workforce, which contributes to business continuity, innovation, and long-term value creation. Consequently, we ask companies to demonstrate a robust approach to HCM and provide shareholders with disclosures to understand how their approach aligns with their stated strategy and business model.

Clear and consistent disclosures on these matters are critical for investors to make an informed assessment of a company's HCM practices. Companies should disclose the steps they are taking to advance diversity, equity, and inclusion; job categories and workforce demographics; and their responses to the U.S. Equal Employment Opportunity Commission's EEO-1 Survey. Where we believe a company's disclosures or practices fall short relative to the market or peers, or we are unable to ascertain the board and management's effectiveness in overseeing related risks and opportunities, we may vote against members of the appropriate committee or support relevant shareholder proposals. Our publicly available commentary provides more information on our approach to HCM.

Corporate political activities

Companies may engage in certain political activities, within legal and regulatory limits, in order to support public policy matters material to the companies' long-term strategies. These activities can also create risks, including: the potential for allegations of corruption; certain reputational risks; and risks that arise from the complex legal, regulatory, and compliance considerations associated with corporate political spending and lobbying activity. Companies that engage in political activities should develop and maintain robust processes to guide these activities and mitigate risks, including board oversight.

When depend on companies to provide accessible and clear disclosures so that investors can easily understand how their political activities support their long-term strategy, including on stated public policy priorities. When presented with shareholder proposals requesting increased disclosure on corporate political activities, BIS will evaluate publicly available information to consider how a company's lobbying and political activities may impact the company. We will also evaluate whether there is general consistency between a company's stated positions on policy matters material to their strategy and the material positions taken by significant industry groups of which they are a member. We may decide to support a shareholder proposal requesting additional disclosures if we identify a material inconsistency or feel that further transparency may clarify how the company's political activities support its long-term strategy. Our publicly available commentary provides more information on our approach to corporate political activities.

General corporate governance matters

IPO governance

Boards should disclose how the corporate governance structures adopted upon a company's initial public offering ("IPO") are in shareholders' best long-term interests. We also ask boards to conduct a regular review of corporate governance and control structures, such that boards might evolve foundational corporate governance structures as company circumstances change, without undue costs and disruption to shareholders. In our letter on unequal voting structures, we articulate our view that "one vote for one share" is the preferred structure for publicly-traded companies. We also recognize the potential benefits of dual class shares to newly public companies as they establish themselves; however, these structures should have a specific and limited duration. We will generally engage new companies on topics such as classified boards and supermajority vote provisions to amend bylaws, as we think that such arrangements may not be in the best interests of shareholders over the long-term.

We may apply a one-year grace period for the application of certain director-related guidelines (including, but not limited to, responsibilities on other public company boards and board composition concerns), during which we ask boards to take steps to bring corporate governance standards in line with our policies.

Further, if a company qualifies as an emerging growth company (an “EGC”) under the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”), we will give consideration to the NYSE and NASDAQ governance exemptions granted under the JOBS Act for the duration such a company is categorized as an EGC. An EGC should have an independent audit committee by the first anniversary of its IPO, with our standard approach to voting on auditors and audit-related issues applicable in full for an EGC on the first anniversary of its IPO.

Corporate form

Proposals to change a corporation’s form, including those to convert to a public benefit corporation (“PBC”) structure, should clearly articulate the stakeholder groups the company seeks to benefit and provide detail on how the interests of shareholders would be augmented or adversely affected with the change to a PBC. These disclosures should also include the accountability and voting mechanisms that would be available to shareholders. We generally support management proposals to convert to a PBC if our analysis indicates that shareholders’ interests are adequately protected. Corporate form shareholder proposals are evaluated on a case-by-case basis.

Exclusive forum provisions

BIS generally supports proposals to seek exclusive forum for certain shareholder litigation. In cases where a board unilaterally adopts exclusive forum provisions that we consider unfavorable to the interests of shareholders, we will vote against the Independent Chair or Lead Independent director and members of the nominating/governance committee.

Reincorporation

We will evaluate the economic and strategic rationale behind the company’s proposal to reincorporate on a case-by-case basis. In all instances, we will evaluate the changes to shareholder protections under the new charter/articles/bylaws to assess whether the move increases or decreases shareholder protections. Where we find that shareholder protections are diminished, we may support reincorporation if we determine that the overall benefits outweigh the diminished rights.

Multi-jurisdictional companies

Where a company is listed on multiple exchanges or incorporated in a country different from their primary listing, we will seek to apply the most relevant market guideline(s) to our analysis of the company’s governance structure and specific proposals on the shareholder meeting agenda. In doing so, we typically consider the governance standards of the company’s primary listing, the market standards by which the company governs themselves, and the market context of each specific proposal on the agenda. If the relevant standards are silent on the issue under consideration, we will use our professional judgment as to what voting outcome would best protect the long-term economic interests of investors. Companies should disclose the rationale for their selection of primary listing, country of incorporation, and choice of governance structures, particularly where there is conflict between relevant market governance practices.

Adjourn meeting to solicit additional votes

We generally support such proposals unless the agenda contains items that we judge to be detrimental to shareholders’ best long-term economic interests.

Bundled proposals

Shareholders should have the opportunity to review substantial governance changes individually without having to accept bundled proposals. Where several measures are grouped into one proposal, BIS may reject certain positive changes when linked with proposals that generally contradict or impede the rights and economic interests of shareholders.

Other business

We oppose voting on matters where we are not given the opportunity to review and understand those measures and carry out an appropriate level of shareholder oversight.

Shareholder protections

Amendment to charter/articles/bylaws

Shareholders should have the right to vote on key corporate governance matters, including changes to governance mechanisms and amendments to the charter/articles/bylaws. We may vote against certain directors where changes to governing documents are not put to a shareholder vote within a reasonable period of time, particularly if those changes have the potential to impact shareholder rights (see "Director elections"). In cases where a board's unilateral adoption of changes to the charter/articles/bylaws promotes cost and operational efficiency benefits for the company and its shareholders, we may support such action if it does not have a negative effect on shareholder rights or the company's corporate governance structure.

When voting on a management or shareholder proposal to make changes to the charter/articles/bylaws, we will consider in part the company's and/or proponent's publicly stated rationale for the changes; the company's governance profile and history; relevant jurisdictional laws; and situational or contextual circumstances which may have motivated the proposed changes, among other factors. We will typically support amendments to the charter/articles/bylaws where the benefits to shareholders outweigh the costs of failing to make such changes

Proxy access

It is our view that long-term shareholders should have the opportunity, when necessary and under reasonable conditions, to nominate directors on the company's proxy card.[32] Securing the right of shareholders to nominate directors without engaging in a control contest can enhance shareholders' ability to meaningfully participate in the director election process, encourage board attention to shareholder interests, and provide shareholders an effective means of directing that attention where it is lacking. Proxy access mechanisms should provide shareholders with a reasonable opportunity to use this right without stipulating overly restrictive or onerous parameters for use, and also provide assurances that the mechanism will not be subject to abuse by short-term investors, investors without a substantial investment in the company, or investors seeking to take control of the board.

In general, we support market-standardized proxy access proposals, which allow a shareholder (or group of up to 20 shareholders) holding three percent of a company's outstanding shares for at least three years the right to nominate the greater of up to two directors or 20% of the board. Where a standardized proxy access provision exists, we will generally oppose shareholder proposals requesting outlier thresholds.

Right to act by written consent

In exceptional circumstances and with sufficiently broad support, shareholders should have the opportunity to raise issues of substantial importance without having to wait for management to schedule a meeting. Accordingly, shareholders should have the right to solicit votes by written consent provided that: 1) there are reasonable requirements to initiate the consent solicitation process (in order to avoid the waste of corporate resources in addressing narrowly supported interests); and 2) shareholders receive a minimum of 50% of outstanding shares to effectuate the action by written consent.

We may oppose shareholder proposals requesting the right to act by written consent in cases where the proposal is structured for the benefit of a dominant shareholder to the exclusion of others, or if the proposal is written to discourage the board from incorporating appropriate mechanisms to avoid the waste of corporate resources when establishing a right to act by written consent. Additionally, we may oppose shareholder proposals requesting the right to act by written consent if the company already provides a shareholder right to call a special meeting that offers shareholders a reasonable opportunity to raise issues of substantial importance without having to wait for management to schedule a meeting.

Right to call a special meeting

In exceptional circumstances and with sufficiently broad support, shareholders should have the opportunity to raise issues of substantial importance without having to wait for management to schedule a meeting. Accordingly, shareholders should have the right to call a special meeting in cases where a reasonably high proportion of shareholders (typically a minimum of 15% but no higher than 25%) are required to agree to such a meeting before it is called. However, we may oppose this right in cases where the proposal is structured for the benefit of a dominant shareholder, or where a lower threshold may lead to an ineffective use of corporate resources. We generally think that a right to act via written consent is not a sufficient alternative to the right to call a special meeting.

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32 BlackRock is subject to certain regulations and laws in the United States that place restrictions and limitations on how BlackRock can interact with the companies in which we invest on behalf of our clients, including our ability to submit shareholder proposals or elect directors to the board.

Consent solicitation

While BlackRock is supportive of the shareholder rights to act by written consent and call a special meeting, BlackRock is subject to certain regulations and laws that place restrictions and limitations on how BlackRock can interact with the companies in which we invest on behalf of our clients, including our ability to participate in consent solicitations. As a result, BlackRock will generally not participate in consent solicitations or related processes. However, once an item comes to a shareholder vote, we uphold our fiduciary duty to vote in the best long-term interests of our clients, where we are authorized to do so.

Simple majority voting

We generally favor a simple majority voting requirement to pass proposals. Therefore, we will generally support the reduction or the elimination of supermajority voting requirements to the extent that we determine shareholders' ability to protect their economic interests is improved. Nonetheless, in situations where there is a substantial or dominant shareholder, supermajority voting may be protective of minority shareholder interests, and we may support supermajority voting requirements in those situations.

Virtual meetings

Shareholders should have the opportunity to participate in the annual and special meetings for the companies in which they are invested, as these meetings facilitate an opportunity for shareholders to provide feedback and hear from the board and management. While these meetings have traditionally been conducted in-person, virtual meetings are an increasingly viable way for companies to utilize technology to facilitate shareholder accessibility, inclusiveness, and cost efficiencies. Shareholders should have a meaningful opportunity to participate in the meeting and interact with the board and management in these virtual settings; companies should facilitate open dialogue and allow shareholders to voice concerns and provide feedback without undue censorship. Relevant shareholder proposals are assessed on a case-by-case basis.

Appendix B – Description of Fixed-Income Ratings

A rating is generally assigned to a fixed-income security at the time of issuance by a credit rating agency designated as a NRSRO by the SEC. While NRSROs may from time to time revise such ratings, they undertake no obligation to do so, and the ratings given to securities at issuance do not necessarily represent ratings which would be given to these securities on a particular subsequent date.

NRSROs may rate specific investments (*e.g.*, bonds), issuers (*e.g.*, corporations, governments and financial institutions) and/or programs (*e.g.*, commercial paper programs). However, certain types of investments may not be rated by NRSROs, such as certain government/sovereign obligations, US agency securities, commercial paper, time deposits at financial institutions, and derivative instruments such as credit default swaps. For these types of investments, as well as US Treasury securities (some of which are not rated), where a NRSRO has not rated the specific investment but has rated the investment's issuer, program, financial institution or underlying reference asset, BFA may consider the investment to have the same NRSRO rating as its issuer, program, financial institution or underlying reference asset, as applicable. In the case of municipal securities, where one NRSRO provides multiple ratings for the same security (*e.g.*, "underlying," "insured" and/or "enhanced" ratings), BFA may consider the security to have the highest of the multiple ratings.

New issue securities (regardless of type) may not be rated by a NRSRO at the time of their initial offering. Preliminary prospectuses or term sheets for new issue securities may include an expected rating for the security (as determined by the underwriter and/or issuer) or a NRSRO rating for the issuer of the security. If applicable, when deciding whether to purchase a new issue security that has not yet been rated by a NRSRO, BFA may attribute an expected rating to the security based on: (i) the expected rating of the security set forth in the preliminary prospectus or term sheet for the security; (ii) the NRSRO's rating for the issuer of the security set forth in the preliminary prospectus or term sheet for the security; or (iii) with respect to asset-backed securities, the rating of a prior issuance having a similar structure or the same sponsor.

Where the investment objective of a Fund is to track the performance of an index that includes credit ratings eligibility criteria as part of its index methodology, a Fund may purchase any security within the index, such security having been determined by the index provider as meeting its credit ratings eligibility criteria. The credit ratings practices of an index provider may differ from BlackRock's practices, as described above. Further, a Fund may invest, directly or indirectly, in securities that are not rated by a rating agency or securities with a credit rating that differs from the credit rating specified in its index methodology in various circumstances, including where a security is downgraded but not yet removed from an index, following the removal of a security from an index prior to its sale by the Fund or as a result of a corporate action or restructuring affecting an issuer of a security held by a Fund.

Fixed-income securities which are unrated may expose the investor to risks with respect to capacity to pay interest or repay principal which are similar to the risks of lower-rated speculative bonds. Evaluation of these securities is dependent on the investment adviser's judgment, analysis and experience in the evaluation of such securities.

Investors should note that the assignment of a rating to a security by an NRSRO may not reflect the effect of recent developments on the issuer's ability to make interest and principal payments or on the likelihood of default.

Securities deemed to be high yield are rated below Baa3 by Moody's and below BBB- by S&P Global Ratings and Fitch.

The descriptions below relate to general long-term and short-term obligations of an issuer.

Moody's Ratings

Long-Term Obligations

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

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

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

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

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

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

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

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

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

Note: Moody's appends numerical modifiers 1, 2 and 3 in 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.

Absence of Rating: Where no rating has been assigned or where a rating has been withdrawn, it may be for reasons unrelated to the creditworthiness of the issue.

Should no rating be assigned, the reason may be one of the following:

1. An application was not received or accepted.
2. The issue or issuer belongs to a group of securities or entities that are not rated as a matter of policy.
3. There is a lack of essential data pertaining to the issue or issuer.
4. The issue was privately placed, in which case the rating is not published in Moody's publications.

Withdrawal may occur if new and material circumstances arise, the effects of which preclude satisfactory analysis; if there is no longer available reasonable up-to-date data to permit a judgment to be formed; if a bond is called for redemption; or for other reasons.

Short-Term Obligations

Moody's short-term debt ratings are opinions of the ability of issuers to honor short-term financial obligations, generally with an original maturity not exceeding thirteen months.

Moody's employs the following designations to indicate the relative repayment ability of rated issuers:

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

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

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

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

US Municipal Short-Term Debt Obligations

There are three rating categories for short-term municipal obligations that are considered investment-grade and are designated as Municipal Investment Grade (MIG). In addition, those short-term obligations that are of speculative quality are designated SG, or speculative grade. MIG ratings expire at the maturity of the obligation.

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.

S&P Global Ratings

Long-Term Obligations

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 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 lead to a weakened capacity of the obligor to meet its financial commitment 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 which 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 commitment on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment 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 commitment 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 commitment 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 five business days in the absence of a stated grace period or within the earlier of the stated grace period or 30 calendar days. The D rating also will be used upon the filing of a bankruptcy petition or the taking of similar action and where default on an obligation is a virtual certainty, for example due to automatic stay provisions. An obligation's rating is lowered to D if it is subject to a distressed exchange offer.

NR: NR indicates no rating has been requested, or that there is insufficient information on which to base a rating, or that S&P Global Ratings does not rate a particular obligation as a matter of policy.

Note: 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.

Short-Term Obligations

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 commitment 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 commitment 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 lead to a weakened capacity of the obligor to meet its financial commitment 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 which 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 commitment 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. An obligation's rating is lowered to D if it is subject to a distressed exchange offer.

Municipal Short-Term Obligations

An S&P U.S. 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.

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.

Fitch Ratings

Long-Term Obligations

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.

Defaulted obligations typically are not assigned RD or D ratings, but are instead rated in the B to C rating categories, depending upon 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: The modifiers "+" or "-" may be appended to a rating to denote relative status within major rating categories. Such suffixes are not added to the AAA obligation rating category, or to corporate finance obligation ratings in the categories below CCC.

The subscript 'emr' is appended to a rating to denote embedded market risk which is beyond the scope of the rating. The designation is intended to make clear that the rating solely addresses the counterparty risk of the issuing bank. It is not meant to indicate any limitation in the analysis of the counterparty risk, which in all other respects follows published Fitch criteria for analyzing the issuing financial institution. Fitch does not rate these instruments where the principal is to any degree subject to market risk.

Short-Term Obligations (Corporate and Public Finance)

A short-term issuer or obligation rating is based in all cases on the short-term vulnerability to default of the rated entity or security stream and relates to the capacity to meet financial obligations in accordance with the documentation governing the relevant obligation. Short-Term Ratings are assigned to obligations whose initial maturity is viewed as "short-term" based on market convention. Typically, this means up to 13 months for corporate, sovereign, and structured obligations, and up to 36 months for obligations in U.S. public finance markets.

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.

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