# STATEMENT OF ADDITIONAL INFORMATION

# **BlackRock New York Municipal Opportunities Fund**

of BlackRock Multi-State Municipal Series Trust

100 Bellevue Parkway, Wilmington, Delaware 19809 • Phone No. (800) 441-7762

This Statement of Additional Information of BlackRock New York Municipal Opportunities Fund (the "Fund"), a series of BlackRock Multi-State Municipal Series Trust (the "Trust") is not a prospectus and should be read in conjunction with the Prospectuses of the Fund, dated October 27, 2023, as they may be amended or supplemented from time to time (each, a "Prospectus") which have been filed with the Securities and Exchange Commission (the "Commission" or the "SEC") and can be obtained, without charge, by calling (800) 441-7762 or by writing to the Fund at the above address. The Fund's Prospectuses are incorporated by reference into this Statement of Additional Information, and Part I of this Statement of Additional Information and the portions of Part II of this Statement of Additional Information that relate to the Fund have been incorporated by reference into the Fund's Prospectuses. The portions of Part II of this Statement of Additional Information that do not relate to the Fund do not form a part of the Fund's Statement of Additional Information, have not been incorporated by reference into the Fund's Prospectuses and should not be relied upon by investors in the Fund. The audited financial statements of the Fund are incorporated into this Statement of Additional Information by reference to the Fund's Annual Report to Shareholders for the fiscal year ended June 30, 2023 (the "Annual Report"). You may request a copy of the Annual Report at no charge by calling (800) 441-7762 between 8:00 a.m. and 6:00 p.m. Eastern time on any business day.

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 Commission, Commission staff or other authority with appropriate jurisdiction, including court interpretations, and exemptive, no-action or other relief or permission from the Commission, Commission staff or other authority.

Class	Ticker Symbol
Investor A	MENKX
Investor A1	MDNKX
Investor C	MFNKX
Institutional Shares	MANKX
Class K Shares	MKNKX

BlackRock Advisors, LLC — Manager BlackRock Investments, LLC — Distributor

The date of this Statement of Additional Information is October 27, 2023.

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#### PART I: INFORMATION ABOUT THE FUND

Part I of this Statement of Additional Information ("SAI") sets forth information about BlackRock New York Municipal Opportunities Fund (the "Fund"), a series of BlackRock Multi-State Municipal Series Trust (the "Trust"). It includes information about the Trust's Board of Trustees (the "Board" or the "Board of Trustees"), the management services provided to and the management fees paid by the Fund and information about other fees applicable to and services provided to the Fund. This Part I of this SAI should be read in conjunction with the Fund's Prospectuses and those portions of Part II of this SAI that pertain to the Fund.

## I. Investment Objective and Policies

In implementing the Fund's investment strategy, from time to time, BlackRock Advisors, LLC ("BlackRock" or the "Manager"), the Fund's investment manager, may consider and employ techniques and strategies designed to minimize and defer the U.S. federal income taxes which may be incurred by shareholders in connection with their investment in the Fund.

Set forth below is a listing of some of the types of investments and investment strategies that the Fund may use, and the risks and considerations associated with those investments and investment strategies. Please see Part II of this SAI for further information on these investments and investment strategies. Information contained in Part II about the risks and considerations associated with investments and/or investment strategies applies only to the extent the Fund makes each type of investment or uses each investment strategy. Information that does not apply to the Fund does not form a part of the Fund's SAI and should not be relied on by investors in the Fund.

Only information that is clearly identified as applicable to the Fund is considered to form a part of the Fund's SAI.

	BlackRock New York Municipal Opportunities Fund
144A Securities	X
Asset-Backed Securities	
Asset-Based Securities	
Precious Metal-Related Securities	
Borrowing and Leverage	X
Cash Flows; Expenses	
Cash Management	X
Collateralized Debt Obligations	
Collateralized Bond Obligations	
Collateralized Loan Obligations	
Commercial Paper	X
Commodity-Linked Derivative Instruments and Hybrid Instruments	
Qualifying Hybrid Instruments	
Hybrid Instruments Without Principal Protection	
Limitations on Leverage	
Counterparty Risk	
Convertible Securities	
Corporate Loans	
Direct Lending	
Credit Linked Securities	
Cyber Security Issues	X
Debt Securities	X
Inflation-Indexed Bonds	X
Investment Grade Debt Obligations	X

	BlackRock New York Municipal Opportunities Fund
High Yield Investments ("Junk Bonds")	X
Mezzanine Investments	
Pay-in-kind Bonds	X
Supranational Entities	
Depositary Receipts (ADRs, EDRs and GDRs)	
Derivatives	X
Hedging	X
Speculation	X
Risk Factors in Derivatives	X
Correlation Risk	X
Counterparty Risk	X
Credit Risk	X
Currency Risk	
Illiquidity Risk	X
Leverage Risk	X
Market Risk	X
Valuation Risk	X
Volatility Risk	X
Futures	X
Swap Agreements	X
Credit Default Swaps and Similar Instruments	X
Interest Rate Swaps, Floors and Caps	X
Total Return Swaps	X
Options	X
Options on Securities and Securities Indices	X
Call Options	X
Put Options	X
Options on Government National Mortgage Association ("GNMA") Certificates	
Options on Swaps ("Swaptions")	X
Foreign Exchange Transactions	
Spot Transactions and FX Forwards	
Currency Futures	
Currency Options	
Currency Swaps	
Distressed Securities	X
Environmental, Social and Governance ("ESG") Integration	X
Equity Securities	
Real Estate-Related Securities	
Securities of Smaller or Emerging Growth Companies	
Exchange-Traded Notes ("ETNs")	
Foreign Investments	
Foreign Investment Risks	

	BlackRock New York Municipal Opportunities Fund
Foreign Market Risk	
Foreign Economy Risk	
Currency Risk and Exchange Risk	
Governmental Supervision and Regulation/Accounting Standards	
Certain Risks of Holding Fund Assets Outside the United States	
Publicly Available Information	
Settlement Risk	
Sovereign Debt	
Withholding Tax Reclaims Risk	
Funding Agreements	
Guarantees	X
Illiquid Investments	Х
Index Funds	
Tracking Error Risk	
S&P 500 Index	
Russell Indexes	
MSCI Indexes	
FTSE Indexes	
Bloomberg Indexes	
ICE BofA Indexes	
Indexed and Inverse Securities	X
Inflation Risk	X
Initial Public Offering ("IPO") Risk	
Interfund Lending Program	X
Borrowing, to the extent permitted by the Fund's investment policies and restrictions	X
Lending, to the extent permitted by the Fund's investment policies and restrictions	
Investment in Emerging Markets	
Brady Bonds	
China Investments Risk	
Investment in Other Investment Companies	X
Exchange-Traded Funds	X
Lease Obligations	X
Life Settlement Investments	
Liquidity Risk Management	X
Master Limited Partnerships	
Merger Transaction Risk	
Money Market Obligations of Domestic Banks, Foreign Banks and Foreign Branches of U.S. Banks	X
Money Market Securities	X
Mortgage-Related Securities	X
Mortgage-Backed Securities	X

	BlackRock New York Municipal Opportunities Fund
Collateralized Mortgage Obligations ("CMOs")	X
Adjustable Rate Mortgage Securities	X
CMO Residuals	
Stripped Mortgage-Backed Securities	
Tiered Index Bonds	
TBA Commitments	X
Mortgage Dollar Rolls	
Net Interest Margin (NIM) Securities	
Municipal Investments	X
Risk Factors and Special Considerations Relating to Municipal Bonds	X
Description of Municipal Bonds	X
General Obligation Bonds	X
Revenue Bonds	X
Private Activity Bonds ("PABs")	X
Moral Obligation Bonds	X
Municipal Notes	X
Municipal Commercial Paper	X
Municipal Lease Obligations	X
Tender Option Bonds	X
Yields	X
Variable Rate Demand Obligations ("VRDOs")	X
Transactions in Financial Futures Contracts on Municipal Indexes	X
Call Rights	X
Municipal Interest Rate Swap Transactions	X
Insured Municipal Bonds	X
Build America Bonds	X
Tax-Exempt Municipal Investments	X
Participation Notes	
Portfolio Turnover Rates	X
Preferred Stock	
Tax-Exempt Preferred Shares	X
Trust Preferred Securities	X
Real Estate Investment Trusts ("REITs")	
Recent Market Events	X
Reference Rate Replacement Risk	X
Repurchase Agreements and Purchase and Sale Contracts	X
Restricted Securities	X
Reverse Repurchase Agreements	X
Rights Offerings and Warrants to Purchase	
Securities Lending	X
Short Sales	See note 1 below
Special Purpose Acquisition Companies	

	BlackRock New York Municipal Opportunities Fund
Standby Commitment Agreements	X
Stripped Securities	
Structured Notes	
Taxability Risk	X
Temporary Defensive Measures	X
U.S. Government Obligations	X
U.S. Treasury Obligations	X
U.S. Treasury Rolls	
Utility Industries	X
When-Issued Securities, Delayed Delivery Securities and Forward Commitments	X
Yields and Ratings	X
Zero Coupon Securities	X

<sup>&</sup>lt;sup>1</sup> The Fund may only make short sales "against-the-box."

The investment objective of the Fund is to provide shareholders with income that is exempt from Federal income tax and New York State and New York City personal income taxes. The investment objective of the Fund is a fundamental policy and may not be changed without a vote of a majority of the outstanding shares of the Fund. There can be no assurance that the investment objective of the Fund will be achieved. The Fund seeks to achieve its objective by investing primarily in a portfolio of investment grade obligations issued by or on behalf of New York State, its political subdivisions, agencies and instrumentalities and obligations of other qualifying issuers, such as issuers located in Puerto Rico, the U.S. Virgin Islands and Guam, that pay interest that is, in the opinion of bond counsel to the issuer, excludable from gross income for Federal income tax purposes and exempt from New York State and New York City personal income taxes. Obligations that pay interest excludable from gross income for Federal income tax purposes are referred to herein as "Municipal Bonds," and obligations that pay interest excludable from gross income for Federal income tax purposes and exempt from New York State and New York City personal income taxes are referred to as "New York Municipal Bonds." Unless otherwise indicated, references to Municipal Bonds shall be deemed to include New York Municipal Bonds. The Fund is classified as a diversified open end investment company under the Investment Company Act.

Under normal circumstances, except when acceptable securities are unavailable as determined by BlackRock or for temporary defensive purposes, the Fund will invest at least 80% of its assets in investment grade New York Municipal Bonds. For this purpose, net assets include any borrowings for investment purposes. This policy is a fundamental policy of the Fund and may not be changed without approval of a majority of the Fund's outstanding shares.

Under normal circumstances, at least 80% of the Fund's assets will be invested in Municipal Bonds that are commonly referred to as "investment grade" securities, which are obligations rated at the time of purchase within the four highest quality ratings as determined by Moody's Investors Service, Inc. ("Moody's") (currently Aaa, Aa, A and Baa), S&P Global Ratings ("S&P"), a division of S&P Global Inc., (currently AAA, AA, A and BBB) or Fitch Ratings ("Fitch") (currently AAA, AA, A and BBB). If unrated, such securities will possess creditworthiness comparable, in the opinion of the Manager, to other obligations in which the Fund may invest. Securities rated in the lowest investment grade rating category may be considered to have speculative characteristics.

The Fund may invest up to 20% of its assets in Municipal Bonds that are rated below Baa by Moody's or below BBB by S&P or Fitch or that, in the Manager's judgment, possess similar credit characteristics. Such securities, sometimes referred to as "high yield" or "junk" bonds, are predominantly speculative with respect to the capacity to pay interest and repay principal in accordance with the terms of the security and generally involve a greater volatility of price than securities in higher rating categories. The Fund may invest in debt securities that at the time of purchase are in default or that the Manager believes will be in default. Split rated bonds will be considered to have the higher credit rating. Split rated bonds are bonds that receive different ratings from two or more rating agencies.

The Fund may invest in bonds of any maturity. Under normal circumstances, the Fund seeks to maintain an average portfolio duration of zero to ten years. Duration is a mathematical calculation of the average life of a bond (or bonds in a bond fund) that serves as a useful measure of its price risk. Each year of duration represents an expected

1% change in the net asset value of a bond fund for every 1% immediate change in interest rates. For example, if a bond fund has an average duration of ten years, its net asset value would be expected to fall about 10% when interest rates rise by one percentage point, assuming all other factors remain equal. Conversely, the bond fund's net asset value would be expected to rise about 10% when interest rates fall by one percentage point, assuming all other factors remain equal. Duration, which measures price sensitivity to interest rate changes, is not necessarily equal to average maturity. The Fund's average weighted duration may vary significantly from time to time depending on the views of Fund management.

For temporary periods or to provide liquidity, the Fund has the authority to invest as much as 35% of its assets in tax-exempt or taxable money market obligations with a maturity of one year or less (such short-term obligations being referred to herein as "Temporary Investments"), except that taxable Temporary Investments shall not generally exceed 20% of the Fund's net assets.

Certain instruments in which the Fund may invest may be characterized as derivative instruments. The Fund is authorized to engage in transactions in derivatives, such as options or futures on a security or an index of securities (including, but not limited to, interest rate futures contracts, financial futures contracts and options thereon), for hedging purposes or to seek to enhance returns. The Fund may seek to actively manage interest rate risk through hedging strategies, and may seek to generate yield through liquidity, structure, credit, interest rate and duration strategies. The Fund is also authorized to invest in indexed and inverse floating rate obligations and swap agreements, including credit default swap agreements. The Fund may also invest in variable rate demand obligations ("VRDOs") and VRDOs in the form of participation interests in variable rate tax-exempt obligations held by a financial institution ("Participating VRDOs"). The Fund's hedging strategies are not fundamental policies and may be modified by the Trustees of the Trust without the approval of the Fund's shareholders.

Certain Municipal Bonds may be entitled to the benefits of letters of credit or similar credit enhancements issued by financial institutions. In such instances, the Trustees and the Manager will take into account in assessing the quality of such bonds not only the creditworthiness of the issuer of such bonds but also the creditworthiness of the financial institution that provides the credit enhancement.

The Fund may purchase Municipal Bonds issued by other states, their agencies and instrumentalities, the interest income on which is, in the opinion of bond counsel to the issuer, excludable from gross income for Federal income tax purposes, but not exempt from New York State and New York City personal income taxes. The Fund also may invest in securities not issued by or on behalf of a state or territory or by an agency or instrumentality thereof that are believed to pay interest that is excludable from gross income for Federal income tax purposes ("Non-Municipal Tax-Exempt Securities"). Non-Municipal Tax-Exempt Securities could include trust certificates or other instruments evidencing interest in one or more municipal securities. Non-Municipal Tax-Exempt Securities also may include securities issued by other investment companies that invest in New York Municipal Bonds or Municipal Bonds, to the extent such investments are permitted by the Investment Company Act. Certain Non-Municipal Tax-Exempt Securities may be characterized as derivative instruments. For purposes of the Fund's investment objective and policies, Non-Municipal Tax-Exempt Securities that pay interest that is excludable from gross income for Federal income tax purposes will be considered "Municipal Bonds" and Non-Municipal Tax-Exempt Securities that pay interest that is excludable from gross income for Federal income tax purposes and exempt from New York State and New York City personal income taxes will be considered "New York Municipal Bonds." Interest received on certain otherwise tax-exempt securities that are classified as "private activity bonds" (in general, bonds that benefit non-governmental entities) may be subject to a Federal alternative minimum tax. The percentage of the Fund's total assets invested in "private activity bonds" will vary during the year. Federal tax laws limit the types and volume of bonds the interest on which qualifies for a Federal income tax exemption. These laws and legislation that may be enacted in the future may affect the availability of Municipal Bonds for investment by the Fund.

Description of Temporary Investments — The Fund may invest in short-term tax-exempt and taxable securities subject to the limitations set forth above and in the Prospectus under "How the Fund Invests." The tax-exempt money market securities may include municipal notes, municipal commercial paper, municipal bonds with a remaining maturity of less than one year, variable rate demand notes and participations therein. Municipal notes include tax anticipation notes, bond anticipation notes, revenue anticipation notes and grant anticipation notes. Anticipation notes are sold as interim financing in anticipation of tax collection, bond sales, government grants or revenue receipts. Municipal commercial paper refers to short-term unsecured promissory notes generally issued to finance short-term credit needs. The taxable money market securities in which the Fund may invest as Temporary Investments consist of U.S. Government securities, U.S. Government agency securities, domestic bank or savings institution certificates of deposit and bankers' acceptances, short-term corporate debt securities such as commercial paper and repurchase agreements. These Temporary Investments must have a stated maturity not in excess of one

year from date of purchase. The Fund may not invest in any security issued by a commercial bank or a savings institution unless the bank or institution is organized and operating in the United States, has total assets of at least \$1 billion and is a member of the Federal Deposit Insurance Corporation ("FDIC"), except that up to 10% of total assets may be invested in certificates of deposit of smaller institutions if such certificates are fully insured by the FDIC.

Investments in Puerto Rico Municipal Securities. The Fund may invest in municipal securities issued in Puerto Rico, subject to market, economic and political conditions. Like many other U.S. states and municipalities, Puerto Rico experienced a significant downturn during the last recession. Puerto Rico continues to face significant fiscal challenges, including persistent government deficits, underfunded government retirement systems, sizable debt service obligations and a high unemployment rate. Puerto Rico has been defaulting on various debt payments since 2015. In 2016, President Obama signed the Puerto Rico Oversight, Management and Economic Stability Act ("PROMESA") into law. PROMESA established a seven-member federal oversight board and a bankruptcy restructuring mechanism for Puerto Rico to adjust its debts in the event voluntary agreements with creditors cannot be reached. On August 31, 2016, President Obama appointed the seven-member board from various lists provided by congressional leadership. Several of Puerto Rico's debt-issuing entities have been placed into the PROMESA bankruptcy, restructuring mechanism by the oversight board following failed voluntary negotiation talks. A restructuring of some or all of Puerto Rico's debt, or a further decline in market prices of Puerto Rico debt obligations, may affect a Fund investment in these securities. If the economic situation in Puerto Rico persists or worsens, the volatility, credit quality and performance of the Fund could be adversely affected.

Regulation Regarding Derivatives. The Commodity Futures Trading Commission ("CFTC") subjects advisers to registered investment companies to regulation by the CFTC if a fund that is advised by the investment 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. To the extent the Fund uses CFTC Derivatives, it intends to do so below such prescribed levels and will not market itself as a "commodity pool" or a vehicle for trading such instruments. Accordingly, BlackRock has claimed an exclusion from the definition of the term "commodity pool operator" under the Commodity Exchange Act ("CEA") pursuant to Rule 4.5 under the CEA. BlackRock is not, therefore, subject to registration or regulation as a "commodity pool operator" under the CEA in respect of the Fund.

#### **II. Investment Restrictions**

The Trust, on behalf of the Fund, has adopted restrictions and policies relating to the investment of its assets and its activities. Certain of the restrictions are fundamental policies of the Trust and may not be changed without the approval of the holders of a majority of the Fund's outstanding voting securities (which for this purpose and under the Investment Company Act, means the lesser of (i) 67% of the shares present at a meeting at which more than 50% of the outstanding shares are represented or (ii) more than 50% of the outstanding shares). The Trust has also adopted certain non-fundamental investment restrictions, which may be changed by the Board of Trustees without shareholder approval.

Set forth below are the Trust's fundamental and non-fundamental investment restrictions. Unless otherwise provided, all references below to the assets of the Fund are in terms of current market value.

Under the Trust's fundamental investment restrictions, the Fund may not:

- (1) Make any investment inconsistent with the Fund's classification as a diversified company under the Investment Company Act.
- (2) Invest more than 25% of its assets, taken at market value at the time of each investment, in the securities of issuers in any particular industry (excluding the U.S. Government and its agencies and instrumentalities). For purposes of this restriction, states, municipalities and their political subdivisions are not considered part of any industry.
  - (3) Make investments for the purpose of exercising control or management.
- (4) Purchase or sell real estate, except that, to the extent permitted by applicable law, the Fund may invest in securities directly or indirectly secured by real estate or interests therein or issued by companies that invest in real estate or interests therein.
- (5) Make loans to other persons, except that the acquisition of bonds, debentures or other corporate debt securities and investment in government obligations, commercial paper, pass-through instruments, certificates of deposit, bankers' acceptances, repurchase agreements or any similar instruments shall not be deemed to be

the making of a loan, and except further that the Fund may lend its portfolio securities, provided that the lending of portfolio securities may be made only in accordance with applicable law and the guidelines set forth in the Fund's Prospectus and Statement of Additional Information, as they may be amended from time to time.

- (6) Issue senior securities to the extent such issuance would violate applicable law.
- (7) Borrow money, except that (i) the Fund may borrow from banks (as defined in the Investment Company Act) in amounts up to 33½% of its total assets (including the amount borrowed), (ii) the Fund may, to the extent permitted by applicable law, borrow up to an additional 5% of its total assets for temporary purposes, (iii) the Fund may obtain such short-term credit as may be necessary for the clearance of purchases and sales of portfolio securities and (iv) the Fund may purchase securities on margin to the extent permitted by applicable law. The Fund may not pledge its assets other than to secure such borrowings or, to the extent permitted by the Fund's investment policies as set forth in its Prospectus and Statement of Additional Information, as they may be amended from time to time, in connection with hedging transactions, short sales, when-issued and forward commitment transactions and similar investment strategies.
- (8) Underwrite securities of other issuers, except insofar as the Fund technically may be deemed an underwriter under the Securities Act of 1933, as amended ("Securities Act") in selling portfolio securities.
- (9) Purchase or sell commodities or contracts on commodities, except to the extent that the Fund may do so in accordance with applicable law and the Fund's Prospectus and Statement of Additional Information, as they may be amended from time to time, and without registering as a commodity pool operator under the Commodity Exchange Act.

Under the Trust's non-fundamental investment restrictions, the Fund may not:

- (a) Purchase securities of other investment companies, except to the extent permitted by the Investment Company Act. As a matter of policy, however, the 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 Investment Company 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).
- (b) Make short sales of securities or maintain a short position, except to the extent permitted by the Fund's Prospectus and Statement of Additional Information, as amended from time to time, and applicable law.

For Investment Restriction (2), the SEC's staff interpretation, as set out in Investment Company Act Rel. No. 9785, is that investments in taxable securities issued by governments or political subdivisions of governments, including private activity bonds, will be considered members of a particular industry.

Except with respect to restriction (7), if a percentage restriction on the investment or use of assets set forth above is adhered to at the time a transaction is effected, later changes in percentages resulting from changing values will not be considered a violation.

## III. Information on Trustees and Officers

The Board of Trustees (the "Board") of the Trust consists of ten individuals (each a "Trustee"), eight of whom are not "interested persons" of the Trust as defined in the Investment Company Act (the "Independent Trustees"). The registered investment companies advised by the Manager or its affiliates (the "BlackRock-advised Funds") are organized into the BlackRock Multi-Asset Complex, the BlackRock Fixed-Income Complex, and the iShares Complex (each, a "BlackRock Fund Complex"). The Fund is included in the BlackRock Fund Complex referred to as the BlackRock Fixed-Income Complex. The Trustees also oversee as board members the operations of the other open-end and closed-end registered investment companies included in the BlackRock Fixed-Income Complex.

The Board has overall responsibility for the oversight of the Trust and the Fund. The Chair of the Board and the Chief Executive Officer are different people. Not only is the Chair of the Board an Independent Trustee, but also the Chair of each Board committee (each, a "Committee") is an Independent Trustee. The Board has five standing Committees: an Audit Committee, a Governance and Nominating Committee, a Compliance Committee, a Performance Oversight Committee and an Executive Committee. The role of the Chair of the Board is to preside over all meetings of the Board and to act as a liaison with service providers, officers, attorneys, and other Trustees between meetings. The Chair of each Committee performs a similar role with respect to the Committee. The Chair of the Board or a Committee may also perform such other functions as may be delegated by the Board or the Committee from time to time. The Independent Trustees meet regularly outside the presence of the Fund's

management, in executive sessions or with other service providers to the Fund. The Board has regular meetings five times a year, including a meeting to consider the approval of the Fund's investment management agreement, and, if necessary, may hold special meetings before its next regular meeting. Each Committee meets regularly to conduct the oversight functions delegated to that Committee by the Board and reports its findings 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 to allocate areas of responsibility among Committees and the Board to enhance oversight.

The Board decided to separate the roles of Chief Executive Officer from the Chair because it believes that having an independent Chair:

- increases the independent oversight of the Fund and enhances the Board's objective evaluation of the Chief Executive Officer;
- allows the Chief Executive Officer to focus on the Fund's operations instead of Board administration;
- provides greater opportunities for direct and independent communication between shareholders and the Board; and
- provides an independent spokesman for the Fund.

The Board has engaged the Manager to manage the Fund on a day-to-day basis. The Board is responsible for overseeing the Manager, other service providers, the operations of the Fund and associated risks in accordance with the provisions of the Investment Company Act, state law, other applicable laws, the Fund's charter, and the Fund's investment objective and strategies. The Board reviews, on an ongoing basis, the Fund's performance, operations, and investment strategies and techniques. The Board also conducts reviews of the Manager and its role in running the operations of the Fund.

Day-to-day risk management with respect to the Fund is the responsibility of the Manager, sub-advisers or other service providers (depending on the nature of the risk), subject to the supervision of the Manager. The Fund is subject to a number of risks, including investment, compliance, operational and valuation risks, among others. While there are a number of risk management functions performed by the Manager, sub-advisers or other service providers, as applicable, it is not possible to eliminate all of the risks applicable to the Fund. Risk oversight is part of the Board's general oversight of the Fund and is addressed as part of various Board and Committee activities. The Board, directly or through Committees, also reviews reports from, among others, management, the independent registered public accounting firm for the Fund, the Manager, sub-advisers and internal auditors for the Manager or its affiliates, as appropriate, regarding risks faced by the Fund and management's or the service provider's risk functions. The Committee system facilitates the timely and efficient consideration of matters by the Trustees and facilitates effective oversight of compliance with legal and regulatory requirements and of the Fund's activities and associated risks. The Board has approved the appointment of a Chief Compliance Officer ("CCO"), who oversees the implementation and testing of the Fund's compliance program and reports regularly to the Board regarding compliance matters for the Fund and its service providers. The Independent Trustees have engaged independent legal counsel to assist them in performing their oversight responsibilities.

Audit Committee. The Board has a standing Audit Committee composed of Catherine A. Lynch (Chair), Frank J. Fabozzi, Lorenzo A. Flores and J. Phillip Holloman, all of whom are Independent Trustees. The principal responsibilities of the Audit Committee are to assist the Board in fulfilling its oversight responsibilities relating to the accounting and financial reporting policies and practices of the Fund. The Audit Committee's responsibilities include, without limitation: (i) approving, and recommending to the full Board for approval, the selection, retention, termination and compensation of the Fund's independent registered public accounting firm (the "Independent Registered Public Accounting Firm") and evaluating the independence and objectivity of the Independent Registered Public Accounting Firm; (ii) approving all audit engagement terms and fees for the Fund; (iii) reviewing the conduct and results of each audit; (iv) reviewing any issues raised by the Fund's Independent Registered Public Accounting Firm or management regarding the accounting or financial reporting policies and practices of the Fund, its internal controls, and, as appropriate, the internal controls of certain service providers and management's response to any such issues; (v) reviewing and discussing the Fund's audited and unaudited financial statements and disclosure in the Fund's shareholder reports relating to the Fund's performance; (vi) assisting the Board's responsibilities with respect to the internal controls of the Fund and its service providers with respect to accounting and financial matters; and (vii) resolving any disagreements between the Fund's management and the Fund's Independent Registered Public Accounting Firm regarding financial reporting. The Board has adopted a written charter for the Board's Audit Committee. During the fiscal year ended June 30, 2023, the Audit Committee met nine times.

Governance and Nominating Committee. The Board has a standing Governance and Nominating Committee composed of W. Carl Kester (Chair), Cynthia L. Egan, J. Phillip Holloman, R. Glenn Hubbard and Catherine A. Lynch, all of whom are Independent Trustees. The principal responsibilities of the Governance and Nominating Committee are: (i) identifying individuals qualified to serve as Independent Trustees and recommending Board nominees that are not "interested persons" of the Fund (as defined in the Investment Company Act) for election by shareholders or appointment by the Board; (ii) advising the Board with respect to Board composition, procedures and Committees of the Board (other than the Audit Committee); (iii) overseeing periodic self-assessments of the Board and Committees of the Board (other than the Audit Committee); (iv) reviewing and making recommendations in respect to Independent Trustee compensation; (v) monitoring corporate governance matters and making recommendations in respect thereof to the Board; (vi) acting as the administrative committee with respect to Board policies and procedures, committee policies and procedures (other than the Audit Committee) and codes of ethics as they relate to the Independent Trustees; and (vii) reviewing and making recommendations to the Board in respect of Fund share ownership by the Independent Trustees. The Board has adopted a written charter for the Board's Governance and Nominating Committee met six times.

The Governance and Nominating Committee of the Board seeks to identify individuals to serve on the Board who have a diverse range of viewpoints, qualifications, experiences, backgrounds and skill sets so that the Board will be better suited to fulfill its responsibility of overseeing the Fund's activities. In so doing, the Governance and Nominating Committee reviews the size of the Board, the ages of the current Trustees and their tenure on the Board, and the skills, background and experiences of the Trustees in light of the issues facing the Fund in determining whether one or more new trustees should be added to the Board. The Board as a group strives to achieve diversity in terms of gender, race and geographic location. The Governance and Nominating Committee believes that the Trustees as a group possess the array of skills, experiences and backgrounds necessary to guide the Fund. The Trustees' biographies included herein highlight the diversity and breadth of skills, qualifications and expertise that the Trustees bring to the Fund.

The Governance and Nominating Committee may consider nominations for Trustees made by the Fund's shareholders as it deems appropriate. Under the Trust's Bylaws, shareholders must follow certain procedures to nominate a person for election as a Trustee at a shareholder meeting at which Trustees are to be elected. Under these advance notice procedures, shareholders must submit the proposed nominee by delivering a notice to the Secretary of the Fund at its principal executive offices no later than the close of business on the fifth (5th) day following the day on which notice of the date of the meeting was mailed or public disclosure of the date of the meeting was made, whichever first occurs.

The Trust's Bylaws provide that notice of a proposed nomination must include certain information about the shareholder and the nominee, as well as certain other information, including a written consent of the proposed nominee to serve if elected. Reference is made to the Trust's Bylaws for more details.

Compliance Committee. The Board has a Compliance Committee composed of Cynthia L. Egan (Chair), Stayce D. Harris, R. Glenn Hubbard and W. Carl Kester, all of whom are Independent Trustees. The Compliance Committee's purpose is to assist the Board in fulfilling its responsibility with respect to the oversight of regulatory and fiduciary compliance matters involving the Fund, the fund-related activities of BlackRock, and any sub-advisers and the Fund's other third party service providers. The Compliance Committee's responsibilities include, without limitation: (i) overseeing the compliance policies and procedures of the Fund and its service providers and recommending changes or additions to such policies and procedures; (ii) reviewing information on and, where appropriate, recommending policies concerning the Fund's compliance with applicable law; (iii) reviewing information on any significant correspondence with or other actions by regulators or governmental agencies with respect to the Fund and any employee complaints or published reports that raise concerns regarding compliance matters; and (iv) reviewing reports from, overseeing the annual performance review of, and making certain recommendations in respect of, the Fund's CCO, including, without limitation, determining the amount and structure of the CCO's compensation. The Board has adopted a written charter for the Board's Compliance Committee. During the fiscal year ended June 30, 2023, the Compliance Committee met four times.

Performance Oversight Committee. The Board has a Performance Oversight Committee composed of Frank J. Fabozzi (Chair), Cynthia L. Egan, Lorenzo A. Flores, Stayce D. Harris, J. Phillip Holloman, R. Glenn Hubbard, W. Carl Kester and Catherine A. Lynch, all of whom are Independent Trustees. The Performance Oversight Committee's purpose is to assist the Board in fulfilling its responsibility to oversee the Fund's investment performance relative to the Fund's investment objective, policies and practices. The Performance Oversight Committee's responsibilities include, without limitation: (i) reviewing the Fund's investment objective, policies and practices; (ii) recommending to the Board any required action in respect of changes in fundamental and non-fundamental investment restrictions;

(iii) reviewing information on appropriate benchmarks and competitive universes; (iv) reviewing the Fund's investment performance relative to such benchmarks; (v) reviewing information on unusual or exceptional investment matters; (vi) reviewing whether the Fund has complied with its investment policies and restrictions; and (vii) overseeing policies, procedures and controls regarding valuation of the Fund's investments. The Board has adopted a written charter for the Board's Performance Oversight Committee. During the fiscal year ended June 30, 2023, the Performance Oversight Committee met four times.

Executive Committee. The Board has an Executive Committee composed of R. Glenn Hubbard (Chair) and W. Carl Kester, both of whom are Independent Trustees, and John M. Perlowski, who serves as an interested Trustee. The principal responsibilities of the Executive Committee include, without limitation: (i) acting on routine matters between meetings of the Board; (ii) acting on such matters as may require urgent action between meetings of the Board; and (iii) exercising such other authority as may from time to time be delegated to the Executive Committee by the Board. The Board has adopted a written charter for the Board's Executive Committee. During the fiscal year ended June 30, 2023, the Executive Committee did not meet.

The Independent Trustees have adopted a statement of policy that describes the experiences, qualifications, skills and attributes that are necessary and desirable for potential Independent Trustee candidates (the "Statement of Policy"). The Board believes that each Independent Trustee satisfied, at the time he or she was initially elected or appointed a Trustee, and continues to satisfy, the standards contemplated by the Statement of Policy as well as the standards set forth in the Trust's Bylaws. Furthermore, in determining that a particular Trustee was and continues to be gualified to serve as a Trustee, the Board has considered a variety of criteria, none of which, in isolation, was controlling. The Board believes that, collectively, the Trustees have balanced and diverse experiences, skills, attributes and qualifications, which allow the Board to operate effectively in governing the Fund and protecting the interests of shareholders. Among the attributes common to all Trustees is their ability to review critically, evaluate, question and discuss information provided to them, to interact effectively with the Manager, sub-advisers, other service providers, counsel and independent auditors, and to exercise effective business judgment in the performance of their duties as Trustees. Each Trustee's ability to perform his or her duties effectively is evidenced by his or her educational background or professional training; business, consulting, public service or academic positions; experience from service as a board member of the Trust or the other funds in the BlackRock Fund Complexes (and any predecessor funds), other investment funds, public companies, or not-for-profit entities or other organizations; ongoing commitment and participation in Board and Committee meetings, as well as his or her leadership of standing and other committees throughout the years; or other relevant life experiences.

The table below discusses some of the experiences, qualifications and skills of each Trustee that support the conclusion that he or she should serve on the Board.

# **Trustees**

Independent Trustees R. Glenn Hubbard

## **Experience, Qualifications and Skills**

R. Glenn Hubbard has served in numerous roles in the field of economics, including as the Chairman of the U.S. Council of Economic Advisers of the President of the United States. Dr. Hubbard has served as the Dean of Columbia Business School, as a member of the Columbia Faculty and as a Visiting Professor at the John F. Kennedy School of Government at Harvard University, the Harvard Business School and the University of Chicago, Dr. Hubbard's experience as an adviser to the President of the United States adds a dimension of balance to the Fund's governance and provides perspective on economic issues. Dr. Hubbard's service on the boards of ADP and Metropolitan Life Insurance Company provides the Board with the benefit of his experience with the management practices of other financial companies. Dr. Hubbard's long-standing service on the boards of directors/trustees of the closed-end funds in the BlackRock Fixed-Income Complex also provides him with a specific understanding of the Fund, its operations, and the business and regulatory issues facing the Fund. Dr. Hubbard's independence from the Fund and the Manager enhances his service as Chair of the Board, Chair of the Executive Committee and a member of the Governance and Nominating Committee, the Compliance Committee and the Performance Oversight Committee.

#### **Trustees**

#### **Experience, Qualifications and Skills**

W. Carl Kester

The Board benefits from W. Carl Kester's experiences as a professor and author in finance, and his experience as the George Fisher Baker Jr. Professor of Business Administration at Harvard Business School and as Deputy Dean of Academic Affairs at Harvard Business School from 2006 through 2010 adds to the Board a wealth of expertise in corporate finance and corporate governance. Dr. Kester has authored and edited numerous books and research papers on both subject matters, including co-editing a leading volume of finance case studies used worldwide. Dr. Kester's long-standing service on the boards of directors/trustees of the closed-end funds in the BlackRock Fixed-Income Complex also provides him with a specific understanding of the Fund, its operations, and the business and regulatory issues facing the Fund. Dr. Kester's independence from the Fund and the Manager enhances his service as Vice Chair of the Board, Chair of the Governance and Nominating Committee and a member of the Executive Committee, the Compliance Committee and the Performance Oversight Committee.

Cynthia L. Egan

Cynthia L. Egan brings to the Board a broad and diverse knowledge of investment companies and the retirement industry as a result of her many years of experience as President, Retirement Plan Services, for T. Rowe Price Group, Inc. and her various senior operating officer positions at Fidelity Investments, including her service as Executive Vice President of FMR Co., President of Fidelity Institutional Services Company and President of the Fidelity Charitable Gift Fund. Ms. Egan has also served as an advisor to the U.S. Department of Treasury as an expert in domestic retirement security. Ms. Egan began her professional career at the Board of Governors of the Federal Reserve and the Federal Reserve Bank of New York. Ms. Egan is also a director of UNUM Corporation, a publicly traded insurance company providing personal risk reinsurance, and a director and Chair of the Board of The Hanover Group, a public property casualty insurance company. Ms. Egan is also the lead independent director and non-executive Vice Chair of the Board of Huntsman Corporation, a publicly traded manufacturer and marketer of chemical products. Ms. Egan's independence from the Fund and the Manager enhances her service as Chair of the Compliance Committee, and a member of the Governance and Nominating Committee and the Performance Oversight Committee.

Frank J. Fabozzi

Frank J. Fabozzi has served for over 25 years on the boards of registered investment companies. Dr. Fabozzi holds the designations of Chartered Financial Analyst and Certified Public Accountant. Dr. Fabozzi was inducted into the Fixed Income Analysts Society's Hall of Fame and is the 2007 recipient of the C. Stewart Sheppard Award and the 2015 recipient of the James R. Vertin Award, both given by the CFA Institute. The Board benefits from Dr. Fabozzi's experiences as a professor and author in the field of finance. Dr. Fabozzi's experience as a professor at various institutions, including EDHEC Business School, Yale, MIT, and Princeton, as well as Dr. Fabozzi's experience as a Professor in the Practice of Finance and Becton Fellow at the Yale University School of Management and as editor of the Journal of Portfolio Management demonstrates his wealth of expertise in the investment management and structured finance areas. Dr. Fabozzi has authored and edited numerous books and research papers on topics in investment management and financial econometrics, and his writings have focused on fixed income securities and portfolio management, many of which are considered standard references in the investment management industry. Dr. Fabozzi's long-standing service on the boards of directors/trustees of the closed-end funds in the BlackRock Fixed-Income Complex also provides him with a specific understanding of the Fund, its operations and the business and regulatory issues facing the Fund. Moreover, Dr. Fabozzi's knowledge of financial and accounting matters qualifies him to serve as a member of the Audit Committee. Dr. Fabozzi's independence from the Fund and the Manager enhances his service as Chair of the Performance Oversight Committee.

#### **Trustees**

#### **Experience, Qualifications and Skills**

Lorenzo A. Flores

The Board benefits from Lorenzo A. Flores's many years of business, leadership and financial experience in his roles at various public and private companies. In particular, Mr. Flores's service as Chief Financial Officer and Corporate Controller of Xilinx, Inc., a technology and semiconductor company that supplies programmable logic devices, and Vice Chairman of Kioxia, Inc., a manufacturer and supplier of flash memory and solid state drives, and his long experience in the technology industry allow him to provide insight to into financial, business and technology trends. Mr. Flores's knowledge of financial and accounting matters qualifies him to serve as a member of the Audit Committee. Mr. Flores's independence from the Fund and the Manager enhances his service as a member of the Performance Oversight Committee.

Stayce D. Harris

The Board benefits from Stayce D. Harris's leadership and governance experience gained during her extensive military career, including as a three-star Lieutenant General of the United States Air Force. In her most recent role, Ms. Harris reported to the Secretary and Chief of Staff of the Air Force on matters concerning Air Force effectiveness, efficiency and the military discipline of active duty, Air Force Reserve and Air National Guard forces. Ms. Harris's experience on governance matters includes oversight of inspection policy and the inspection and evaluation system for all Air Force nuclear and conventional forces; oversight of Air Force counterintelligence operations and service on the Air Force Intelligence Oversight Panel; investigation of fraud, waste and abuse; and oversight of criminal investigations and complaints resolution programs. Ms. Harris is also a director of The Boeing Company. Ms. Harris's independence from the Fund and the Manager enhances her service as a member of the Compliance Committee and the Performance Oversight Committee.

J. Phillip Holloman

The Board benefits from J. Phillip Holloman's many years of business and leadership experience as an executive, director and advisory board member of various public and private companies. In particular, Mr. Holloman's service as President and Chief Operating Officer of Cintas Corporation and director of PulteGroup, Inc. and Rockwell Automation Inc. allows him to provide insight into business trends and conditions. Mr. Holloman's knowledge of financial and accounting matters qualifies him to serve as a member of the Audit Committee. Mr. Holloman's independence from the Fund and the Manager enhances his service as a member of the Governance and Nominating Committee and the Performance Oversight Committee.

Catherine A. Lynch

Catherine A. Lynch, who served as the Chief Executive Officer and Chief Investment Officer of the National Railroad Retirement Investment Trust, benefits the Board by providing business leadership and experience and a diverse knowledge of pensions and endowments. Ms. Lynch is also a trustee of PennyMac Mortgage Investment Trust, a specialty finance company that invests primarily in mortgage-related assets. Ms. Lynch also holds the designation of Chartered Financial Analyst. Ms. Lynch's knowledge of financial and accounting matters qualifies her to serve as Chair of the Audit Committee. Ms. Lynch's independence from the Fund and the Manager enhances her service as a member of the Governance and Nominating Committee and the Performance Oversight Committee.

Interested Trustees
Robert Fairbairn

Robert Fairbairn has more than 25 years of experience with BlackRock, Inc. and over 30 years of experience in finance and asset management. In particular, Mr. Fairbairn's positions as Vice Chairman of BlackRock, Inc., Member of BlackRock's Global Executive and Global Operating Committees and Co-Chair of BlackRock's Human Capital Committee provide the Board with a wealth of practical business knowledge and leadership. In addition, Mr. Fairbairn has global investment management and oversight experience through his former positions as Global Head of BlackRock's Retail and iShares® businesses, Head of BlackRock's Global Client Group, Chairman of BlackRock's international businesses and his previous oversight over BlackRock's Strategic Partner Program and Strategic Product Management Group. Mr. Fairbairn also serves as a board member for the funds in the BlackRock Multi-Asset Complex.

#### **Trustees**

John M. Perlowski

#### **Experience, Qualifications and Skills**

John M. Perlowski's experience as Managing Director of BlackRock, Inc. since 2009, as the Head of BlackRock Global Accounting and Product Services since 2009, and as President and Chief Executive Officer of the Fund provides him with a strong understanding of the Fund, its operations, and the business and regulatory issues facing the Fund. Mr. Perlowski's prior position as Managing Director and Chief Operating Officer of the Global Product Group at Goldman Sachs Asset Management, and his former service as Treasurer and Senior Vice President of the Goldman Sachs Mutual Funds and as Director of the Goldman Sachs Offshore Funds provides the Board with the benefit of his experience with the management practices of other financial companies. Mr. Perlowski also serves as a board member for the funds in the BlackRock Multi-Asset Complex. Mr. Perlowski's experience with BlackRock enhances his service as a member of the Executive Committee.

# **Biographical Information**

Certain biographical and other information relating to the Trustees is set forth below, including their address and year of birth, principal occupations for at least the last five years, length of time served, total number of registered investment companies and investment portfolios overseen in the BlackRock-advised Funds and any currently held public company and other investment company directorships.

Name and Year of Birth <sup>1,2</sup>	Position(s) Held (Length of Service) <sup>3</sup>	Principal Occupation(s) During Past Five Years	Number of BlackRock- Advised Registered Investment Companies ("RICs") Consisting of Investment Portfolios ("Portfolios") Overseen	Public Company and Other Investment Company Directorships Held During Past Five Years
Independent Trustees	Objective of the	De con Onlare his Desirons a Onlare Liferen 2004	70 DIO inting of	ADD (data and
R. Glenn Hubbard 1958	Chair of the Board (Since 2022) and Trustee (Since 2019)	Dean, Columbia Business School from 2004 to 2019; Faculty member, Columbia Business School since 1988.	70 RICs consisting of 104 Portfolios	ADP (data and information services) from 2004 to 2020; Metropolitan Life Insurance Company (insurance); TotalEnergies SE (multi-energy)
W. Carl Kester <sup>4</sup> 1951	Vice Chair of the Board (Since 2022) and Trustee (Since 2019)	Baker Foundation Professor and George Fisher Baker Jr. Professor of Business Administration, Emeritus, Harvard Business School since 2022; George Fisher Baker Jr. Professor of Business Administration, Harvard Business School from 2008 to 2022; Deputy Dean for Academic Affairs from 2006 to 2010; Chairman of the Finance Unit, from 2005 to 2006; Senior Associate Dean and Chairman of the MBA Program from 1999 to 2005; Member of the faculty of Harvard Business School since 1981.	72 RICs consisting of 106 Portfolios	None
Cynthia L. Egan 1955	Trustee (Since 2019)	Advisor, U.S. Department of the Treasury from 2014 to 2015; President, Retirement Plan Services, for T. Rowe Price Group, Inc. from 2007 to 2012; executive positions within Fidelity Investments from 1989 to 2007.	70 RICs consisting of 104 Portfolios	Unum (insurance); The Hanover Insurance Group (Board Chair); Huntsman Corporation (Lead Independent Director and non- Executive Vice Chair of the Board) (chemical products)
Frank J. Fabozzi <sup>4</sup> 1948	Trustee (Since 2019)	Editor of The Journal of Portfolio Management since 1986; Professor of Finance, EDHEC Business School (France) from 2011 to 2022; Professor of Practice, Johns Hopkins University since 2021; Professor in the Practice of Finance, Yale University School of Management from 1994 to 2011 and currently a Teaching Fellow in Yale's Executive Programs; Visiting Professor, Rutgers University for the Spring 2019 semester; Visiting Professor, New York University for the 2019 academic year; Adjunct Professor of Finance, Carnegie Mellon University in fall 2020 semester.	72 RICs consisting of 106 Portfolios	None
Lorenzo A. Flores 1964	Trustee (Since 2021)	Vice Chairman, Kioxia, Inc. since 2019; Chief Financial Officer, Xilinx, Inc. from 2016 to 2019; Corporate Controller, Xilinx, Inc. from 2008 to 2016.	70 RICs consisting of 104 Portfolios	None

Name and Year of Birth <sup>1,2</sup>	Position(s) Held (Length of Service) <sup>3</sup>	Principal Occupation(s) During Past Five Years	Number of BlackRock- Advised Registered Investment Companies ("RICs") Consisting of Investment Portfolios ("Portfolios") Overseen	Public Company and Other Investment Company Directorships Held During Past Five Years
Stayce D. Harris 1959	Trustee (Since 2021)	Lieutenant General, Inspector General of the United States Air Force from 2017 to 2019; Lieutenant General, Assistant Vice Chief of Staff and Director, Air Staff, United States Air Force from 2016 to 2017; Major General, Commander, 22nd Air Force, AFRC, Dobbins Air Reserve Base, Georgia from 2014 to 2016; Pilot, United Airlines from 1990 to 2020.	70 RICs consisting of 104 Portfolios	KULR Technology Group, Inc. in 2021; The Boeing Company (airplane manufacturer)
J. Phillip Holloman 1955	Trustee (Since 2021)	President and Chief Operating Officer, Cintas Corporation from 2008 to 2018.	70 RICs consisting of 104 Portfolios	PulteGroup, Inc. (home construction); Rockwell Automation Inc. (industrial automation)
Catherine A. Lynch <sup>4</sup> 1961	Trustee (Since 2019)	Chief Executive Officer, Chief Investment Officer and various other positions, National Railroad Retirement Investment Trust from 2003 to 2016; Associate Vice President for Treasury Management, The George Washington University from 1999 to 2003; Assistant Treasurer, Episcopal Church of America from 1995 to 1999.	72 RICs consisting of 106 Portfolios	PennyMac Mortgage Investment Trust
Interested Trustees				
Robert Fairbairn⁵ 1965	Trustee (Since 2015)	Vice Chairman of BlackRock, Inc. since 2019; Member of BlackRock's Global Executive and Global Operating Committees; Co-Chair of BlackRock's Human Capital Committee; Senior Managing Director of BlackRock, Inc. from 2010 to 2019; oversaw BlackRock's Strategic Partner Program and Strategic Product Management Group from 2012 to 2019; Member of the Board of Managers of BlackRock Investments, LLC from 2011 to 2018; Global Head of BlackRock's Retail and iShares® businesses from 2012 to 2016.	98 RICs consisting of 273 Portfolios	None
John M. Perlowski <sup>4,5</sup> 1964	Trustee and President (Since 2015) Chief Executive Officer (Since 2010)	Managing Director of BlackRock, Inc. since 2009; Head of BlackRock Global Accounting and Product Services since 2009; Advisory Director of Family Resource Network (charitable foundation) since 2009.	100 RICs consisting of 275 Portfolios	None

Number of

The address of each Trustee is c/o BlackRock, Inc., 50 Hudson Yards, New York, New York 10001.

Each Independent Trustee holds office until his or her successor is duly elected and qualifies or until his or her earlier death, resignation, retirement or removal as provided by the Trust's by-laws or charter or statute, or until December 31 of the year in which he or she turns 75. Trustees who are "interested persons," as defined in the Investment Company Act, serve until their successor is duly elected and qualifies or until their earlier death, resignation, retirement or removal as provided by the Trust's by-laws or statute, or until December 31 of the year in which they turn 72. The Board may determine to extend the terms of Independent Trustees on a case-by-case basis, as appropriate.

Following the combination of Merrill Lynch Investment Managers, L.P. ("MLIM") and BlackRock, Inc. in September 2006, the various legacy MLIM and legacy BlackRock fund boards were realigned and consolidated into three new fund boards in 2007. Certain Independent Trustees first became members of the boards of other legacy MLIM or legacy BlackRock funds as follows: Frank J. Fabozzi, 1988; R. Glenn Hubbard, 2004; and W. Carl Kester, 1995. Certain other Independent Trustees became members of the boards of the closed-end funds in the BlackRock Fixed-Income Complex as follows: Cynthia L. Egan, 2016; and Catherine A. Lynch, 2016.

Dr. Fabozzi, Dr. Kester, Ms. Lynch and Mr. Perlowski are also trustees of the BlackRock Credit Strategies Fund and BlackRock Private Investments Fund.

Mr. Fairbairn and Mr. Perlowski are both "interested persons," as defined in the Investment Company Act, of the Trust based on their positions with BlackRock, Inc. and its affiliates. Mr. Fairbairn and Mr. Perlowski are also board members of the BlackRock Multi-Asset Complex.

Certain biographical and other information relating to the officers of the Trust who are not Trustees is set forth below, including their address and year of birth, principal occupations for at least the last five years and length of time served.

Name and Year of Birth <sup>1,2</sup> Officers Who Are Not Trustees	Position(s) Held (Length of Service)	Principal Occupation(s) During Past Five Years
Jennifer McGovern 1977	Vice President (Since 2014)	Managing Director of BlackRock, Inc. since 2016; Director of BlackRock, Inc. from 2011 to 2015; Head of Americas Product Development and Governance for BlackRock's Global Product Group since 2019; Head of Product Structure and Oversight for BlackRock's U.S. Wealth Advisory Group from 2013 to 2019.
Trent Walker 1974	Chief Financial Officer (Since 2021)	Managing Director of BlackRock, Inc. since September 2019; Executive Vice President of PIMCO from 2016 to 2019; Senior Vice President of PIMCO from 2008 to 2015; Treasurer from 2013 to 2019 and Assistant Treasurer from 2007 to 2017 of PIMCO Funds, PIMCO Variable Insurance Trust, PIMCO ETF Trust, PIMCO Equity Series, PIMCO Equity Series VIT, PIMCO Managed Accounts Trust, 2 PIMCO-sponsored interval funds and 21 PIMCO-sponsored closed-end funds.
Jay M. Fife 1970	Treasurer (Since 2007)	Managing Director of BlackRock, Inc. since 2007.
Aaron Wasserman 1974	Chief Compliance Officer (Since 2023)	Managing Director of BlackRock, Inc. since 2018; Chief Compliance Officer of the BlackRock-advised funds in the BlackRock Multi-Asset Complex, the BlackRock Fixed-Income Complex and the iShares Complex since 2023; Deputy Chief Compliance Officer for the BlackRock-advised funds in the BlackRock Multi-Asset Complex, the BlackRock Fixed-Income Complex and the iShares Complex from 2014 to 2023.
Lisa Belle 1968	Anti-Money Laundering Compliance Officer (Since 2019)	Managing Director of BlackRock, Inc. since 2019; Global Financial Crime Head for Asset and Wealth Management of JP Morgan from 2013 to 2019; Managing Director of RBS Securities from 2012 to 2013; Head of Financial Crimes for Barclays Wealth Americas from 2010 to 2012.
Janey Ahn 1975	Secretary (Since 2019)	Managing Director of BlackRock, Inc. since 2018; Director of BlackRock, Inc. from 2009 to 2017.

<sup>&</sup>lt;sup>1</sup> The address of each Officer is c/o BlackRock, Inc., 50 Hudson Yards, New York, New York 10001.

## **Share Ownership**

Information relating to each Trustee's share ownership in the Fund and in all BlackRock-advised Funds that are currently overseen by the respective Trustee ("Supervised Funds") as of December 31, 2022 is set forth in the chart below. Amounts shown may include shares as to which a Trustee has indirect beneficial ownership, such as through participation in certain family accounts, 529 college savings plan interests, or similar arrangements where the Trustee has beneficial economic interest but not a direct ownership interest.

Name	Dollar Range of Equity Securities in the Fund	Aggregate Dollar Range of Equity Securities in Supervised Funds*
Independent Trustees		
Cynthia L. Egan	None	Over \$100,000
Frank J. Fabozzi	None	Over \$100,000
Lorenzo A. Flores	None	Over \$100,000
Stayce D. Harris	None	Over \$100,000
J. Phillip Holloman	None	Over \$100,000
R. Glenn Hubbard	\$1 - \$10,000	Over \$100,000
W. Carl Kester	None	Over \$100,000
Catherine A. Lynch	None	Over \$100,000
Interested Trustees		
Robert Fairbairn	Over \$100,000	Over \$100,000
John M. Perlowski	None	Over \$100,000

Officers of the Trust serve at the pleasure of the Board.

As of October 3, 2023, the Trustees and officers of the Trust as a group directly or indirectly beneficially owned an aggregate of less than 1% of any class of the outstanding shares of the Fund. As of December 31, 2022, none of the Independent Trustees of the Trust or their immediate family members owned beneficially or of record any securities of the Fund's investment adviser, principal underwriter, or any person directly or indirectly controlling, controlled by, or under common control with such entities.

#### **Compensation of Trustees**

Each Trustee who is an Independent Trustee is paid an annual retainer of \$370,000 per year for his or her services as a Board member of the BlackRock-advised Funds, including the Fund, and each Independent Trustee may also receive a \$10,000 Board meeting fee for special unscheduled meetings or meetings in excess of six Board meetings held in a calendar year, together with out-of-pocket expenses in accordance with a Board policy on travel and other business expenses relating to attendance at meetings. In addition, the Chair of the Board and the Vice Chair of the Board are paid an additional annual retainer of \$100,000 and \$60,000, respectively. The Chairs of the Audit Committee, Performance Oversight Committee, Compliance Committee, and Governance and Nominating Committee are paid an additional annual retainer of \$45,000, \$37,500, \$45,000 and \$37,500, respectively. Each of the members of the Audit Committee, Compliance Committee, and Governance and Nominating Committee are paid an additional annual retainer of \$30,000, \$25,000 and \$25,000, respectively, for his or her service on such committee. The Fund will pay a pro rata portion quarterly (based on relative net assets) of the foregoing Trustee fees paid by the funds in the BlackRock Fixed-Income Complex.

The Independent Trustees have agreed that a maximum of 50% of each Independent Trustee's total compensation paid by funds in the BlackRock Fixed-Income Complex may be deferred pursuant to the BlackRock Fixed-Income Complex's deferred compensation plan. Under the deferred compensation plan, deferred amounts earn a return for the Independent Trustees as though equivalent dollar amounts had been invested in shares of certain funds in the BlackRock Fixed-Income Complex selected by the Independent Trustees. This has approximately the same economic effect for the Independent Trustees as if they had invested the deferred amounts in such funds in the BlackRock Fixed-Income Complex. The deferred compensation plan is not funded and obligations thereunder represent general unsecured claims against the general assets of a fund and are recorded as a liability for accounting purposes.

The following table sets forth the compensation paid to the Trustees by the Trust, on behalf of the Fund, for the fiscal year ended June 30, 2023 and the aggregate compensation, including deferred compensation amounts, paid to them by all BlackRock-advised Funds for the calendar year ended December 31, 2022.

<sup>\*</sup> Includes share equivalents owned under the deferred compensation plan in the Supervised Funds by certain Independent Trustees who have participated in the deferred compensation plan of the Supervised Funds.

Name <sup>1</sup>	Compensation from the Fund	Annual Benefits Upon Retirement	Aggregate Compensation from the Fund and Other BlackRock-Advised Funds <sup>2,3</sup>
Independent Trustees:			
Cynthia L. Egan	\$2,106	None	\$465,000
Frank J. Fabozzi	\$1,988	None	\$497,500
Lorenzo A. Flores	\$1,826	None	\$400,000
Stayce D. Harris	\$1,805	None	\$395,000
J. Phillip Holloman⁴	\$1,946	None	\$415,453
R. Glenn Hubbard	\$2,342	None	\$520,000
W. Carl Kester	\$2,331	None	\$587,500
Catherine A. Lynch <sup>5</sup>	\$2,139	None	\$520,453
Karen P. Robards <sup>6</sup>	None	None	\$212,500
Interested Trustees:			
Robert Fairbairn	None	None	None
John M. Perlowski	None	None	None

For the number of BlackRock-advised Funds from which each Trustee receives compensation see the Biographical Information Chart beginning on page I-15.

## IV. Management, Advisory and Other Service Arrangements

The Trust, on behalf of the Fund, has entered into a management agreement with BlackRock, (the "Management Agreement"), pursuant to which BlackRock receives for its services to the Fund a fee based on the Fund's average daily net assets.

BlackRock has contractually agreed to waive the management fee with respect to any portion of the Fund's assets estimated to be attributable to investments in other equity and fixed-income mutual funds and exchange-traded funds managed by BlackRock or its affiliates that have a contractual management fee, through June 30, 2025. In addition, BlackRock has contractually agreed to waive its management fees by the amount of investment advisory fees the Fund pays to BlackRock indirectly through its investment in money market funds managed by BlackRock or its affiliates, through June 30, 2025. The contractual agreement may be terminated upon 90 days' notice by a majority of the Independent Trustees or by a vote of a majority of the outstanding voting securities of the Fund.

The Manager has contractually agreed to waive and/or reimburse fees or expenses in order to limit Total Annual Fund Operating Expenses After Fee Waivers and/or Expense Reimbursements (excluding Dividend Expense, Interest Expense, Acquired Fund Fees and Expenses and certain other Fund expenses (as defined in the Prospectuses)) as a percentage of average daily net assets to 0.75% for Investor A Shares, 1.50% for Investor C Shares, 0.50% for Institutional Shares, 0.45% for Class K Shares, and 0.60% for Investor A1 Shares through June 30, 2025. This contractual agreement may be terminated upon 90 days' notice by a majority of the Independent Trustees or by a vote of a majority of the outstanding voting securities of the Fund.

Pursuant to the Management Agreement, the Manager may from time to time, in its sole discretion to the extent permitted by applicable law, appoint one or more sub-advisers, including, without limitation, affiliates of the Manager, to perform investment advisory services with respect to the Fund. In addition, the Manager may delegate certain of its investment advisory functions under the Management Agreement to one or more of its affiliates to the extent permitted by applicable law. The Manager may terminate any or all sub-advisers or such delegation arrangements in its sole discretion at any time to the extent permitted by applicable law.

For the Independent Trustees, this amount represents the aggregate compensation earned from the funds in the BlackRock Fixed-Income Complex during the calendar year ended December 31, 2022. Of this amount, Dr. Fabozzi, Mr. Flores, Ms. Harris, Mr. Holloman, Dr. Hubbard, Dr. Kester and Ms. Lynch deferred \$74,625, \$200,000, \$197,500, \$207,726, \$260,000, \$88,125 and \$78,067, respectively, pursuant to the BlackRock Fixed-Income Complex's deferred compensation plan.

Total amount of deferred compensation payable by the BlackRock Fixed-Income Complex to Dr. Fabozzi, Mr. Flores, Ms. Harris, Mr. Holloman, Dr. Hubbard, Dr. Kester and Ms. Lynch is \$1,172,873, \$239,580, \$238,473, \$249,920, \$3,546,573, \$1,645,645 and \$425,559, respectively, as of December 31, 2022. Ms. Egan did not participate in the deferred compensation plan as of December 31, 2022.

<sup>&</sup>lt;sup>4</sup> Mr. Holloman was appointed as a member of the Governance and Nominating Committee effective May 20, 2022.

<sup>&</sup>lt;sup>5</sup> Ms. Lynch was appointed as a member of the Governance and Nominating Committee effective May 20, 2022.

<sup>6</sup> Ms. Robards retired and resigned as a Trustee of the Trust effective May 31, 2022.

The table below sets forth information about the total management fees paid by the Fund to the Manager, and the amounts waived and/or reimbursed by the Manager, for the periods indicated:

Fiscal Year Ended June 30,	Paid to the Manager	Waived by the Manager	Reimbursed by the Manager
2023	\$6,103,785	\$1,092,374	\$123,807
2022	\$7,112,389	\$ 812,501	\$ 94,898
2021	\$7,248,035	\$ 991,212	\$ 67,157

#### **Information Regarding the Portfolio Managers**

Peter Hayes, Michael Kalinoski, CFA, Kevin Maloney, CFA, Ryan McDonald, CFA, Christian Romaglino, CFA, and Sean Carney are the Fund's portfolio managers and are primarily responsible for the day-to-day management of the Fund's portfolio.

#### Other Funds and Accounts Managed

The following table sets forth information about funds and accounts other than the Fund for which the portfolio managers are primarily responsible for the day-to-day portfolio management as of June 30, 2023.

		Number of Other Accounts Managed and Assets by Account Type			Number of Other Accounts and Assets for Which Advisory Fee is Performance-Based		
Name of Portfolio Manager	Other Registered Investment Companies	Other Pooled Investment Vehicles	Other Accounts	Other Registered Investment Companies	Other Pooled Investment Vehicles	Other Accounts	
Peter Hayes*	3	0	0	0	0	0	
	\$8.68 Billion	\$0	\$0	\$0	\$0	\$0	
Michael Kalinoski, CFA	34	0	0	0	0	0	
	\$35.59 Billion	\$0	\$0	\$0	\$0	\$0	
Kevin Maloney, CFA	36	0	0	0	0	0	
	\$37.84 Billion	\$0	\$0	\$0	\$0	\$0	
Ryan McDonald, CFA	5	0	0	0	0	0	
	\$9.71 Billion	\$0	\$0	\$0	\$0	\$0	
Christian Romaglino, CFA	33	0	0	0	0	0	
	\$16.37 Billion	\$0	\$0	\$0	\$0	\$0	
Sean Carney**	0	0	0	0	0	0	
	\$0	\$0	\$0	\$0	\$0	\$0	

<sup>\*</sup> During the first quarter of 2024, Peter Hayes will retire from BlackRock, Inc., and will no longer serve as a portfolio manager of the Fund.

## Portfolio Manager Compensation Overview

The discussion below describes the portfolio managers' compensation as of June 30, 2023.

BlackRock'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.

**Base Compensation.** Generally, portfolio managers receive base compensation based on their position with the firm.

#### **Discretionary Incentive Compensation**

Discretionary incentive compensation is a function of several components: the performance of BlackRock, Inc., the performance of the portfolio manager's group within BlackRock, the investment performance, including risk-adjusted returns, of the firm's assets under management or supervision by that portfolio manager relative to predetermined benchmarks, and the individual's performance and contribution to the overall performance of these portfolios and BlackRock. In most cases, these benchmarks are the same as the benchmark or benchmarks against which the performance of the Fund or other accounts managed by the portfolio managers are measured. Among other things, BlackRock's Chief Investment Officers make a subjective determination with respect to each portfolio manager's compensation based on the performance of the Fund and other accounts managed by each portfolio manager relative to the various benchmarks. Performance of fixed income funds is measured on a pre-tax and/or

<sup>\*\*</sup> Information as of August 31, 2023.

after-tax basis over various time periods including 1-, 3- and 5-year periods, as applicable. With respect to these portfolio managers, such benchmarks for the Fund and other accounts are:

Portfolio Manager	Benchmark Sensitive Sensit
Michael Kalinoski, CFA Kevin Maloney, CFA Ryan McDonald, CFA Christian Romaglino, CFA	A combination of market-based indices (e.g., Bloomberg Municipal Bond Index), certain customized indices and certain fund industry peer groups.
Peter Hayes	A combination of market-based indices (e.g., Bloomberg Municipal Bond Index), certain customized indices and certain fund industry peer groups. Due to Portfolio Manager Peter Hayes' unique position (Portfolio Manager and Chief Investment Officer of Tax Exempt Fixed Income) his compensation does not solely reflect his role as PM of the funds managed by him. The performance of his fund(s) are included in consideration of his incentive compensation but given his unique role it is not the sole driver of compensation.
Sean Carney	A combination of market-based indices (e.g., Bloomberg Municipal Bond Index), certain customized indices and certain fund industry peer groups. Due to Portfolio Manager Sean Carney's unique position (Portfolio Manager of Tax Exempt Fixed Income) his compensation does not solely reflect his role as PM of the funds managed by him. The performance of his fund(s) are included in consideration of his incentive compensation but given his unique role it is not the sole driver of compensation.

**Distribution of Discretionary Incentive Compensation.** Discretionary incentive compensation is distributed to portfolio managers in a combination of cash, deferred BlackRock, Inc. stock awards, and/or deferred cash awards that notionally track the return of certain BlackRock investment products.

Portfolio managers receive their annual discretionary incentive compensation in the form of cash. Portfolio managers whose total compensation is above a specified threshold also receive deferred BlackRock, Inc. stock awards annually as part of their discretionary incentive compensation. Paying a portion of discretionary incentive compensation in the form of deferred BlackRock, Inc. stock puts compensation earned by a portfolio manager for a given year "at risk" based on BlackRock's ability to sustain and improve its performance over future periods. 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. Deferred BlackRock, Inc. stock awards are generally granted in the form of BlackRock, Inc. restricted stock units that vest pursuant to the terms of the applicable plan and, once vested, settle in BlackRock, Inc. common stock. The portfolio managers of this Fund have deferred BlackRock, Inc. stock awards.

For certain portfolio managers, a portion of the discretionary incentive compensation is also distributed in the form of deferred cash awards that notionally track the returns of select BlackRock 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. Only portfolio managers who manage specified products and whose total compensation is above a specified threshold are eligible to participate in the deferred cash award program.

**Other Compensation Benefits.** In addition to base salary and discretionary incentive compensation, portfolio managers may be eligible to receive or participate in one or more of the following:

Incentive Savings Plans — BlackRock, Inc. has created a variety of incentive savings plans in which BlackRock employees are eligible to participate, including a 401(k) plan, the BlackRock Retirement Savings Plan (RSP), and the BlackRock Employee Stock Purchase Plan (ESPP). The employer contribution components of the RSP include a company match equal to 50% of the first 8% of eligible pay contributed to the plan capped at \$5,000 per year, and a company retirement contribution equal to 3-5% of eligible compensation up to the Internal Revenue Service limit (\$330,000 for 2023). The RSP offers a range of investment options, including registered investment companies and collective investment funds managed by the firm. BlackRock contributions follow the investment direction set by participants for their own contributions or, absent participant investment direction, are invested into a target date fund that corresponds to, or is closest to, the year in which the participant attains age 65. The ESPP allows for investment in BlackRock common stock at a 5% discount on the fair market value of the stock on the purchase date. Annual participation in the ESPP is limited to the purchase of 1,000 shares of common stock or a dollar value of

\$25,000 based on its fair market value on the purchase date. All of the eligible portfolio managers are eligible to participate in these plans.

#### Portfolio Manager Beneficial Holdings

As of June 30, 2023, the Fund's most recently completed fiscal year end, the dollar range of securities beneficially owned by each portfolio manager in the Fund is shown below:

Portfolio Manager	Dollar Range of Equity Securities Beneficially Owned
Peter Hayes*	None
Michael Kalinoski, CFA	\$1 - \$10,000
Kevin Maloney, CFA	\$1 - \$10,000
Ryan McDonald, CFA	None
Christian Romaglino, CFA	None
Sean Carney**	None

<sup>\*</sup> During the first quarter of 2024, Peter Hayes will retire from BlackRock, Inc., and will no longer serve as a portfolio manager of the Fund.

## Portfolio Manager Potential Material Conflicts of Interest

BlackRock has built a professional working environment, firm-wide compliance culture and compliance procedures and systems designed to protect against potential incentives that may favor one account over another. BlackRock has adopted policies and procedures that address the allocation of investment opportunities, execution of portfolio transactions, personal trading by employees and other potential conflicts of interest that are designed to ensure that all client accounts are treated equitably over time. Nevertheless, BlackRock furnishes investment management and advisory services to numerous clients in addition to the Fund, and BlackRock may, consistent with applicable law, make investment recommendations to other clients or accounts (including accounts which are hedge funds or have performance or higher fees paid to BlackRock, or in which portfolio managers have a personal interest in the receipt of such fees), which may be the same as or different from those made to the Fund. In addition, BlackRock, its affiliates and significant shareholders and any officer, director, shareholder or employee may or may not have an interest in the securities whose purchase and sale BlackRock recommends to the Fund. BlackRock, or any of its affiliates or significant shareholders, or any officer, director, shareholder, employee or any member of their families may take different actions than those recommended to the Fund by BlackRock with respect to the same securities. Moreover, BlackRock may refrain from rendering any advice or services concerning securities of companies of which any of BlackRock's (or its affiliates' or significant shareholders') officers, directors or employees are directors or officers, or companies as to which BlackRock or any of its affiliates or significant shareholders or the officers, directors and employees of any of them has any substantial economic interest or possesses material nonpublic information. Certain portfolio managers also may manage accounts whose investment strategies may at times be opposed to the strategy utilized for a fund. It should also be noted that a portfolio manager may be managing hedge fund and/or long only accounts, or may be part of a team managing hedge fund and/or long only accounts, subject to incentive fees. Such portfolio managers may therefore be entitled to receive a portion of any incentive fees earned on such accounts. Currently, the portfolio managers of this Fund are not entitled to receive a portion of incentive fees of other accounts.

As a fiduciary, BlackRock owes a duty of loyalty to its clients and must treat each client fairly. When BlackRock purchases or sells securities for more than one account, the trades must be allocated in a manner consistent with its fiduciary duties. BlackRock attempts to allocate investments in a fair and equitable manner among client accounts, with no account receiving preferential treatment. To this end, BlackRock has adopted policies that are intended to ensure reasonable efficiency in client transactions and provide BlackRock with sufficient flexibility to allocate investments in a manner that is consistent with the particular investment discipline and client base, as appropriate.

## Custodian

State Street Bank and Trust Company ("State Street") has been retained to act as custodian for the Fund and is located at 1 Congress Street, Suite 1, Boston, Massachusetts 02114-2016. The custodian, among other things, maintains a custody account or accounts in the name of the Fund, receives and delivers all assets for the Fund upon purchase and upon sale or maturity, and collects and receives all income and other payments and distributions on account of the assets of the Fund.

<sup>\*\*</sup> Information as of August 31, 2023.

## Transfer Agency and Shareholders' Administrative Services

BNY Mellon Investment Servicing (US) Inc. ("BNY Mellon"), which has its principal place of business at 301 Bellevue Parkway, Wilmington, Delaware 19809, serves as the transfer and dividend disbursement agent for the Fund.

Pursuant to a Shareholders' Administrative Services Agreement, the Manager provides certain shareholder liaison services in connection with the Fund's investor service center. The Fund reimburses the Manager for its costs in maintaining the service center, which costs include, among other things, employee salaries, leasehold expenses, and other out-of-pocket expenses which are a component of the transfer agency fees in the Fund's annual report.

The following table sets forth the fees paid by the Fund to the Manager pursuant to the Shareholders' Administrative Services Agreement for the periods indicated:

Fiscal Year Ended June 30,	to the Manager	by the Manager
2023	\$ 8,469	\$5,228
2022	\$ 4,570	\$1,787
2021	\$10,302	\$4,559

## **Accounting Services**

State Street serves as the accounting services provider for the Fund. State Street maintains the books of account and other financial records (other than those maintained by the Fund's custodian); records general ledger entries; calculates daily net income; reconciles activity to the trial balance; calculates and publishes daily net asset value; prepares account balances; and provides such other accounting services as may be required. In connection with its accounting services, State Street also provides certain administration services.

Prior to May 31, 2021, the Fund also paid the Manager for certain accounting services. The table below shows the amounts paid by the Fund to State Street and the Manager for accounting services for the periods shown:

Fiscal Year Ended June 30,	Paid to State Street	Paid to to Manage	
2023	\$167,807	\$	0
2022	\$196,861	\$	0
2021	\$199,538	\$18,09	<b>)</b> 4

## **Credit Agreement**

The Trust, on behalf of the Fund, along with certain other funds managed by the Manager and its affiliates ("Participating Funds"), is a party to a 364-day, \$2.5 billion credit agreement with a group of lenders, which facility terminates on April 11, 2024 unless otherwise extended or renewed (the "Credit Agreement"). Excluding commitments designated for certain Participating Funds, the Participating Funds, including the Fund, can borrow up to an aggregate commitment amount of \$1.75 billion at any time outstanding, subject to asset coverage and other limitations as specified in the Credit Agreement. The Fund may borrow under the Credit Agreement to meet shareholder redemptions and for other lawful purposes. However, the Fund may not borrow under the Credit Agreement for leverage. The Fund may borrow up to the maximum amount allowable under its current Prospectus and SAI, subject to various other legal, regulatory or contractual limits. Borrowing results in interest expense and other fees and expenses for the Fund which may impact the Fund's net expenses. The costs of borrowing may reduce the Fund's return. The Fund is charged its pro rata share of upfront fees and commitment fees on the aggregate commitment amount based on its net assets. If the Fund borrows pursuant to the Credit Agreement, the Fund will be charged interest at a variable rate.

#### V. Information on Sales Charges and Distribution Related Expenses

Set forth below is information on sales charges (including any contingent deferred sales charges ("CDSCs")) received by the Fund, including the amounts paid to affiliates of the Manager ("Affiliates"), for each of the Fund's last three fiscal years. BlackRock Investments, LLC ("BRIL" or the "Distributor"), an affiliate of the Manager, acts as the Fund's sole distributor.

#### **Investor A and Investor A1 Sales Charge Information**

	Investor A Shares			
For the Fiscal Year Ended June 30,	Gross Sales Charges Collected	Sales Charge Retained by BRIL	Sales Charges Paid To Affiliates	CDSCs Received On Redemption of Load-Waived Shares
2023	\$54,495	\$3,708	\$3,708	\$ 44,773
2022.         2021.	\$98,269 \$99,613	\$6,864 \$6,778	\$6,864 \$6,778	\$ 57,142 \$189,834

	Investor A1 Snares				
For the Fiscal Year Ended June 30,	Gross Sales Charges Collected	Sales Charge Retained by BRIL	Sales Charges Paid To Affiliates	CDSCs Received On Redemption of Load-Waived Shares	
2023	\$0	\$0	\$0	\$0	
2022	\$0	\$0	\$0	\$0	
2021	\$0	\$0	\$0	\$0	

## **Investor C Sales Charge Information**

	Investor C Shares	
For the Fiscal Year Ended June 30,	CDSCs Received by BRIL	CDSCs Paid to Affiliates
2023	\$5,365	\$5,365
2022	\$5,084	\$5,084
2021	\$7,899	\$7,899

The table below provides information for the fiscal year ended June 30, 2023 about the 12b-1 fees the Fund paid to BRIL under the Fund's 12b-1 plans. A significant amount of the fees collected by BRIL were paid to affiliates for providing shareholder servicing activities for Investor A and Investor A1 Shares and for providing shareholder servicing and distribution-related activities and services for Investor C and Investor C1 Shares.

Class Name	Paid to BRIL
Investor A Shares	\$1,414,964
Investor A1 Shares	\$ 71,318
Investor C Shares	\$ 547.037

# VI. Computation of Offering Price Per Share

An illustration of the computation of the public offering price of the Investor A Shares of the Fund, based on the value of the Fund's Investor A Shares' net assets and number of Investor A Shares outstanding as of June 30, 2023 follows:

	Investor A Shares
Net Assets	\$533,681,805
Number of Shares Outstanding	51,380,473
Net Asset Value Per Share (net assets divided by number	
of shares outstanding)	\$10.39
Sales Charge (for Investor A Shares:	
4.25% of offering price; 4.44% of net asset value per share) <sup>1</sup>	0.46
Offering Price	<u>\$10.85</u>

<sup>&</sup>lt;sup>1</sup> Assumes maximum sales charge applicable.

The offering price for the Fund's other share classes is equal to the share class' net asset value computed as set forth above for Investor A Shares. Though not subject to a sales charge, certain share classes may be subject to

a CDSC on redemption. For more information on the purchasing and valuation of shares, please see "Purchase of Shares" and "Pricing of Shares" in Part II of this Statement of Additional Information.

#### VII. Portfolio Transactions and Brokerage

See "Portfolio Transactions and Brokerage" in Part II of this Statement of Additional Information for more information.

Information about the brokerage commissions paid by the Fund, including commissions paid to affiliates of the Manager, is set forth in the following table:

Fiscal Year Ended June 30,	Commissions Paid	to Affiliates
2023	\$86,438	\$0
2022	\$89,991	\$0
2021	\$58,368	\$0

As of June 30, 2023, the Fund held no securities of its regular brokers or dealers (as defined in Rule 10b-1 under the Investment Company Act) whose shares were purchased during the fiscal year ended June 30, 2023.

#### **Securities Lending**

The Fund conducts its securities lending pursuant to an exemptive order from the Commission permitting it to lend portfolio securities to borrowers affiliated with the Fund and to retain an affiliate of the Fund as lending agent. To the extent that the Fund engages in securities lending, BlackRock Investment Management, LLC ("BIM"), an affiliate of the Manager, acts as securities lending agent for the Fund, subject to the overall supervision of the Manager. BIM administers the lending program in accordance with guidelines approved by the Board.

To the extent the Fund engages in securities lending, the Fund retains a portion of securities lending income and remits a remaining portion to BIM as compensation for its services as securities lending agent. Securities lending income is equal to the total of income earned from the reinvestment of cash collateral (and excludes collateral investment expenses as defined below), and any fees or other payments to and from borrowers of securities. As securities lending agent, BIM bears all operational costs directly related to securities lending. The Fund is responsible for expenses in connection with the investment of cash collateral received for securities on loan (the "collateral investment expenses"). The cash collateral is invested in a private investment company managed by the Manager or its affiliates. However, BIM has agreed to cap the collateral investment expenses of the private investment company to an annual rate of 0.04%. In addition, in accordance with the exemptive order, the investment adviser to the private investment company will not charge any advisory fees with respect to shares purchased by the Fund. Such shares also will not be subject to a sales load, distribution fee or service fee. If the private investment company's weekly liquid assets fall below 30% of its total assets, BIM, as managing member of the private investment company, is permitted at any time, if it determines it to be in the best interests of the private investment company, to impose a liquidity fee of up to 2% of the value of units withdrawn or impose a redemption gate that temporarily suspends the right of withdrawal out of the private investment company. In addition, if the private investment company's weekly liquid assets fall below 10% of its total assets at the end of any business day, the private investment company will impose a liquidity fee in the default amount of 1% of the amount withdrawn, generally effective as of the next business day, unless BIM determines that a higher (not to exceed 2%) or lower fee level or not imposing a liquidity fee is in the best interests of the private investment company. The shares of the private investment company purchased by the Fund would be subject to any such liquidity fee or redemption gate imposed.

Under the securities lending program, the Fund is categorized into a specific asset class. The determination of the 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 between the Trust and BIM.

Pursuant to the current securities lending agreement: (i) if the Fund were to engage in securities lending, the Fund retains 82% of securities lending income (which excludes collateral investment expenses), and (ii) this amount can never be less than 70% of the sum of securities lending income plus collateral investment expenses.

In addition, commencing the business day following the date that the aggregate securities lending income earned across the BlackRock Fixed-Income Complex in a calendar year exceeds a specified threshold, the Fund, pursuant to the current securities lending agreement, will receive for the remainder of that calendar year securities lending income as follows: (i) If the Fund were to engage in securities lending, 85% of securities lending income

(which excludes collateral investment expenses); and (ii) this amount can never be less than 70% of the sum of securities lending income plus collateral investment expenses.

The Fund had no income and fees/compensation related to its securities lending activities during its most recent fiscal year ended June 30, 2023.

#### **VIII. Additional Information**

#### Description of Shares

The Trust is a business trust organized on August 2, 1985 under the laws of Massachusetts. On October 1, 1987, the Trust changed its name from "Merrill Lynch Multi-State Tax-Exempt Series Trust" to "Merrill Lynch Multi-State Municipal Bond Series Trust," and on December 22, 1987 the Trust again changed its name to "Merrill Lynch Multi-State Municipal Series Trust." Effective September 29, 2006, the Trust changed its name to "BlackRock Multi-State Municipal Series Trust" and the Fund changed its name to "BlackRock New York Municipal Bond Fund." Effective February 18, 2015, the Fund changed its name to "BlackRock New York Municipal Opportunities Fund." Effective on the close of business of February 24, 2020, all of the issued and outstanding Investor C1 Shares of the Fund converted into Investor A Shares of the Fund.

The Trust is an open-end management investment company comprised of separate Series, each of which is a separate portfolio offering shares to selected groups of purchasers. Each of the Series is managed independently in order to provide shareholders who are residents of the state to which such Series relates with income exempt from Federal, and in certain cases, state and local income taxes. The Trustees are authorized to create an unlimited number of Series and, with respect to each Series, to issue an unlimited number of full and fractional shares of beneficial interest, \$.10 par value per share, of different classes and to divide or combine the shares into a greater or lesser number of shares without thereby changing the proportionate beneficial interests in the Series. The Trust is presently comprised of the Fund, BlackRock New Jersey Municipal Bond Fund and BlackRock Pennsylvania Municipal Bond Fund. Shareholder approval is not required for the authorization of additional Series or classes of a Series of the Trust.

#### **Miscellaneous**

**Counsel.** Willkie Farr & Gallagher LLP, 787 Seventh Avenue, New York, New York 10019, serves as the Fund's counsel.

**Independent Registered Public Accounting Firm.** Deloitte & Touche LLP, with offices located at 200 Berkeley Street, Boston, Massachusetts 02116, serves as the Fund's independent registered public accounting firm.

#### **Principal Shareholders**

To the knowledge of the Fund, the following entities owned of record or beneficially 5% or more of a class of the Fund's shares as of October 3, 2023:

Name	Address	%	Class
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	18.59	Investor A Shares
JP Morgan Securities LLC	4 Chase Metrotech Center Brooklyn, NY 11245	17.58	Investor A Shares
Morgan Stanley Smith Barney LLC	1 New York Plaza, 12 <sup>th</sup> Floor New York, NY 10004-1901	16.70	Investor A Shares
Merrill Lynch Pierce Fenner & Smith Incorporated	4800 East Deer Lake Drive 3 <sup>rd</sup> Floor Jacksonville, FL 32246-6484	13.55	Investor A Shares
Wells Fargo Clearing Services	2801 Market Street St. Louis, MO 63103	11.20	Investor A Shares
National Financial Services LLC	499 Washington Blvd. 5 <sup>th</sup> Floor Jersey City, NJ 07310-2010	7.57	Investor A Shares
Merrill Lynch Pierce Fenner & Smith Incorporated	4800 East Deer Lake Drive 3 <sup>rd</sup> Floor Jacksonville, FL 32246-6484	65.18	Investor A1 Shares

Name	Address	<u></u>	Class
Morgan Stanley Smith Barney LLC	1 New York Plaza, 12 <sup>th</sup> Floor New York, NY 10004-1901	5.76	Investor A1 Shares
JP Morgan Securities LLC	4 Chase Metrotech Center Brooklyn, NY 11245	22.23	Investor C Shares
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	15.61	Investor C Shares
National Financial Services LLC	499 Washington Blvd. 5th Floor Jersey City, NJ 07310-2010	12.64	Investor C Shares
Wells Fargo Clearing Services	2801 Market Street St. Louis, MO 63103	11.06	Investor C Shares
Morgan Stanley Smith Barney LLC	1 New York Plaza, 12 <sup>th</sup> Floor New York, NY 10004-1901	9.84	Investor C Shares
American Enterprise Investment Services	707 2 <sup>nd</sup> Avenue South Minneapolis, MN 55402-2405	7.51	Investor C Shares
Merrill Lynch Pierce Fenner & Smith Incorporated	4800 East Deer Lake Drive 3 <sup>rd</sup> Floor Jacksonville, FL 32246-6484	6.89	Investor C Shares
Raymond James	880 Carillon Pkwy Saint Petersburg FL 33716-1102	5.10	Investor C Shares
National Financial Services LLC	499 Washington Blvd. 5 <sup>th</sup> Floor Jersey City, NJ 07310-2010	15.40	Institutional Class
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	14.52	Institutional Class
Merrill Lynch Pierce Fenner & Smith Incorporated	4800 East Deer Lake Drive 3 <sup>rd</sup> Floor Jacksonville, FL 32246-6484	13.25	Institutional Class
Charles Schwab & Co INC	101 Montgomery ST, San Francisco CA 94104-4122	11.48	Institutional Class
American Enterprise Investment Services	707 2 <sup>nd</sup> Avenue South Minneapolis, MN 55402-2405	9.05	Institutional Class
Morgan Stanley Smith Barney LLC	1 New York Plaza, 12 <sup>th</sup> Floor New York, NY 10004-1901	8.63	Institutional Class
LPL Financial	4707 Executive Drive San Diego, CA 92121-3091	7.35	Institutional Class
UBS Financial Services Inc.	1000 Harbor Blvd. Weehawken, NJ 07086-6761	5.87	Institutional Class
Edward D Jones and Co.	12555 Manchester Road St. Louis, MO 63131-3710	39.35	Class K Shares
JP Morgan Securities LLC	4 Chase Metrotech Center Brooklyn, NY 11245	30.86	Class K Shares
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	12.91	Class K Shares
Charles Schwab & Co INC	211 Main ST, San Francisco CA 94105	10.71	Class K Shares

#### **State Tax Issues**

The portion of exempt-interest dividends equal to the portion which the Fund's interest on New York Municipal Bonds bears to all of the Fund's tax-exempt interest (whether or not distributed) will be exempt from New York State and New York City personal income taxes. To the extent the Fund's distributions are derived from interest on taxable investments or from gain from the sale of investments or are attributable to the portion of the Fund's tax-exempt interest that is not derived from New York Municipal Bonds, they will constitute taxable income for New York State and New York City personal income tax purposes. Capital gain dividends paid by the Fund are treated as capital gains which are taxed at ordinary income tax rates for New York State and City personal income tax purposes. Distributions paid to a corporate shareholder from investment income, including exempt-interest dividends, and capital gains of the Fund will be subject to New York State corporate franchise and New York City corporation income tax.

#### IX. Financial Statements

The audited financial statements, financial highlights and notes thereto in the Fund's Annual Report to Shareholders for the fiscal year ended June 30, 2023 (the "2023 Annual Report") are incorporated in this SAI by reference. No other parts of the 2023 Annual Report are incorporated by reference herein. The financial statements and financial highlights included in the 2023 Annual Report have been audited by Deloitte & Touche LLP. The report of Deloitte & Touche LLP is incorporated herein by reference. Such financial statements and financial highlights have been incorporated herein in reliance upon the report of such firm given their authority as experts in accounting and auditing. Additional copies of the 2023 Annual Report may be obtained at no charge by telephoning the Distributor at the telephone number appearing on the front page of this SAI.

#### PART II

Throughout this Statement of Additional Information ("SAI"), each BlackRock-advised fund may be referred to as a "Fund" or collectively with others as the "Funds." Certain Funds may also be referred to as "Municipal Funds" if they invest certain of their assets in municipal investments described below.

Each Fund is organized either as a Maryland corporation, a Massachusetts business trust or a Delaware statutory trust. In each jurisdiction, nomenclature varies. For ease and clarity of presentation, shares of common stock and shares of beneficial interest are referred to herein as "shares" or "Common Stock," holders of shares of Common Stock are referred to as "shareholders," the trustees or directors of each Fund are referred to as "Directors," the boards of trustees/directors of each Fund are referred to as the "Board of Directors" or the "Board," BlackRock Advisors, LLC, BlackRock Fund Advisors or their respective affiliates is the investment adviser or manager of each Fund and is referred to herein as the "Manager" or "BlackRock," and the investment advisory agreement or management agreement applicable to each Fund is referred to as the "Management Agreement." Each Fund's Articles of Incorporation or Declaration of Trust, together with all amendments thereto, is referred to as its "charter." The Investment Company Act of 1940, as amended, is referred to herein as the "Investment Company Act." The Securities Act of 1933, as amended, is referred to herein as the "Securities Act." The Securities and Exchange Commission is referred to herein as the "Commission" or the "SEC."

Certain Funds are "feeder" funds (each, a "Feeder Fund") that invest all or a portion of their assets in a corresponding "master" portfolio (each, a "Master Portfolio") of a master limited liability company (each, a "Master LLC"), a mutual fund that has the same objective and strategies as the Feeder Fund. All investments are generally made at the level of the Master Portfolio. This structure is sometimes called a "master/feeder" structure. A Feeder Fund's investment results will correspond directly to the investment results of the underlying Master Portfolio in which it invests. For simplicity, this SAI uses the term "Fund" to include both a Feeder Fund and its Master Portfolio.

In addition to containing information about the Funds, Part II of this SAI contains general information about all funds in the BlackRock-advised fund complex. Certain information contained herein may not be relevant to a particular Fund.

## **INVESTMENT RISKS AND CONSIDERATIONS**

Set forth below are descriptions of some of the types of investments and investment strategies that one or more of the Funds may use, and the risks and considerations associated with those investments and investment strategies. Please see each Fund's prospectuses (the "Prospectus") and the "Investment Objective and Policies" or "Investment Objectives and Policies" section, as applicable, of Part I of this SAI for further information on each Fund's investment policies and risks. Information contained in this section about the risks and considerations associated with a Fund's investments and/or investment strategies applies only to those Funds specifically identified in Part I of this SAI as making each type of investment or using each investment strategy (each, a "Covered Fund"). Information that does not apply to a Covered Fund does not form a part of that Covered Fund's SAI and should not be relied on by investors in that Covered Fund. Only information that is clearly identified as applicable to a Covered Fund is considered to form a part of that Covered Fund's SAI.

**144A Securities.** A Fund may purchase securities that can be offered and sold only to "qualified institutional buyers" pursuant to Rule 144A under the Securities Act. See "Restricted Securities" below.

Asset-Backed Securities. Asset-backed securities are securities backed by home equity loans, installment sale contracts, credit card receivables or other assets. Asset-backed securities are "pass-through" securities, meaning that principal and interest payments — net of expenses — made by the borrower on the underlying assets (such as credit card receivables) are passed through to a Fund. The value of asset-backed securities, like that of traditional fixed-income securities, typically increases when interest rates fall and decreases when interest rates rise. However, asset-backed securities differ from traditional fixed-income securities because of their potential for prepayment. The price paid by a Fund for its asset-backed securities, the yield the Fund expects to receive from such securities and the average life of the securities are based on a number of factors, including the anticipated rate of prepayment of the underlying assets. In a period of declining interest rates, borrowers may prepay the underlying assets more quickly than anticipated, thereby reducing the yield to maturity and the average life of the asset-backed securities. 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 asset-backed securities at a premium, 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 and unscheduled prepayments will increase current and total returns and unscheduled prepayments will also 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 assets 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 longer term security. Since the value of longer-term securities generally fluctuates more widely in response to changes in interest rates than does the value of shorter-term securities, maturity extension risk could increase the volatility of the Fund. When interest rates decline, the value of an asset-backed security with prepayment features may not increase as much as that of other fixed-income securities, and, as noted above, changes in market rates of interest may accelerate or retard prepayments and thus affect maturities.

Asset-Based Securities. Certain Funds may invest in debt, preferred or convertible securities, the principal amount, redemption terms or conversion terms of which are related to the market price of some natural resource asset such as gold bullion. These securities are referred to as "asset-based securities." A Fund will purchase only asset-based securities that are rated, or are issued by issuers that have outstanding debt obligations rated, investment grade (for example, AAA, AA, A or BBB by S&P Global Ratings ("S&P") or Fitch Ratings ("Fitch"), or Baa by Moody's Investors Service, Inc. ("Moody's") or commercial paper rated A-1 by S&P or Prime-1 by Moody's) or by issuers that the Manager has determined to be of similar creditworthiness. Obligations ranked in the fourth highest rating category, while considered "investment grade," may have certain speculative characteristics and may be more likely to be downgraded than securities rated in the three highest rating categories. If an asset-based security is backed by a bank letter of credit or other similar facility, the Manager may take such backing into account in determining the creditworthiness of the issuer. While the market prices for an asset-based security and the related natural resource asset generally are expected to move in the same direction, there may not be perfect correlation in the two price movements. Asset-based securities may not be secured by a security interest in or claim on the underlying natural resource asset. The asset-based securities in which a Fund may invest may bear interest or pay preferred dividends at below market (or even relatively nominal) rates. Certain asset-based securities may be payable at maturity in cash at the stated principal amount or, at the option of the holder, directly in a stated amount of the asset to which it is related. In such instance, because no Fund presently intends to invest directly in natural resource assets, a Fund would sell the asset-based security in the secondary market, to the extent one exists, prior to maturity if the value of the stated amount of the asset exceeds the stated principal amount and thereby realize the appreciation in the underlying asset.

Precious Metal-Related Securities. A Fund may invest in the equity and other securities of companies that explore for, extract, process or deal in precious metals (e.g., gold, silver and platinum), and in asset-based securities indexed to the value of such metals. Such securities may be purchased when they are believed to be attractively priced in relation to the value of a company's precious metal-related assets or when the values of precious metals are expected to benefit from inflationary pressure or other economic, political or financial uncertainty or instability. Based on historical experience, during periods of economic or financial instability the securities of companies involved in precious metals may be subject to extreme price fluctuations, reflecting the high volatility of precious metal prices during such periods. In addition, the instability of precious metal prices may result in volatile earnings of precious metal-related companies, which may, in turn, adversely affect the financial condition of such companies. The major producers of gold include the Republic of South Africa, Russia, Canada, the United States, Brazil and Australia. Sales of gold by Russia are largely unpredictable and often relate to political and economic considerations rather than to market forces. Economic, financial, social and political factors within South Africa may significantly affect South African gold production.

**Borrowing and Leverage.** Each Fund may borrow as a temporary measure for extraordinary or emergency purposes, including to meet redemptions or to settle securities transactions. Certain Funds will not purchase securities at any time when borrowings exceed 5% of their total assets, except (a) to honor prior commitments or (b) to exercise subscription rights when outstanding borrowings have been obtained exclusively for settlements of other securities transactions.

Certain Funds may also borrow in order to make investments, to the extent disclosed in such Fund's Prospectus. The purchase of securities while borrowings are outstanding will have the effect of leveraging the Fund. Such leveraging increases the Fund's exposure to capital risk, and borrowed funds are subject to interest costs that will reduce net income. The use of leverage by a Fund creates an opportunity for greater total return, but, at the same time, creates special risks. For example, leveraging may exaggerate changes in the net asset value ("NAV") of Fund shares and in the yield on the Fund's portfolio. Although the principal of such borrowings will be fixed, the Fund's assets may change in value during the time the borrowings are outstanding. Borrowings will create interest expenses for the Fund that can exceed the income from the assets purchased with the borrowings. To the extent the income or capital appreciation derived from securities purchased with borrowed funds exceeds the interest the Fund will have to pay on the borrowings, the Fund's return will be greater than if leverage had not been used. Conversely, if the income

or capital appreciation from the securities purchased with such borrowed funds is not sufficient to cover the cost of borrowing, the return to the Fund will be less than if leverage had not been used and, therefore, the amount available for distribution to shareholders as dividends will be reduced. In the latter case, the Manager in its best judgment nevertheless may determine to maintain the Fund's leveraged position if it expects that the benefits to the Fund's shareholders of maintaining the leveraged position will outweigh the current reduced return.

Certain types of borrowings by a Fund may result in the 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 the Manager from managing a Fund's portfolio in accordance with the 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 the Fund to dispose of portfolio investments at a time when it may be disadvantageous to do so.

Each Fund may at times borrow from affiliates of the Manager, provided that the terms of such borrowings are no less favorable than those available from comparable sources of funds in the marketplace.

To the extent permitted by a Fund's investment policies and restrictions and subject to the conditions of an exemptive order issued by the SEC, as described below under "Investment Risks and Considerations—Interfund Lending Program," such Fund may borrow for temporary purposes through the Interfund Lending Program (as defined below).

Cash Flows; Expenses. The ability of each Fund to satisfy its investment objective depends to some extent on the Manager's ability to manage cash flow (primarily from purchases and redemptions and distributions from the Fund's investments). The Manager will make investment changes to a Fund's portfolio to accommodate cash flow while continuing to seek to replicate the total return of the Fund's target index. Investors should also be aware that the investment performance of each index is a hypothetical number which does not take into account brokerage commissions and other transaction costs, custody and other costs of investing, and any incremental operating costs (e.g., transfer agency and accounting costs) that will be borne by the Funds. Finally, since each Fund seeks to replicate the total return of its target index, the Manager generally will not attempt to judge the merits of any particular security as an investment.

Cash Management. Generally, the Manager will employ futures and options on futures to provide liquidity necessary to meet anticipated redemptions or for day-to-day operating purposes. However, if considered appropriate in the opinion of the Manager, a portion of a Fund's assets may be invested in certain types of instruments with remaining maturities of 397 days or less for liquidity purposes. Such instruments would consist of: (i) obligations of the U.S. Government, its agencies, instrumentalities, authorities or political subdivisions ("U.S. Government Securities"); (ii) other fixed-income securities rated Aa or higher by Moody's or AA or higher by S&P or, if unrated, of comparable quality in the opinion of the Manager; (iii) commercial paper; (iv) bank obligations, including negotiable certificates of deposit, time deposits and bankers' acceptances; and (v) repurchase agreements. At the time the Fund invests in commercial paper, bank obligations or repurchase agreements, the issuer or the issuer's parent must have outstanding debt rated Aa or higher by Moody's or AA or higher by S&P or outstanding commercial paper, bank obligations or other short-term obligations rated Prime-1 by Moody's or A-1 by S&P; or, if no such ratings are available, the instrument must be of comparable quality in the opinion of the Manager. For more information on money market instruments, see "Money Market Securities" below.

Collateralized Debt Obligations. Certain Funds may invest in collateralized debt obligations ("CDOs"), which include collateralized bond obligations ("CBOs"), collateralized loan obligations ("CLOs") and other similarly structured securities. CDOs are types of asset-backed securities. A CBO is ordinarily issued by a trust or other special purpose entity ("SPE") and is typically backed by a diversified pool of fixed-income securities (which may include high risk, below investment grade securities) held by such issuer. A CLO is ordinarily issued by a trust or other SPE and is typically collateralized by a pool of loans, which may include, among others, domestic and non-U.S. senior secured loans, senior unsecured loans, and subordinate corporate loans, including loans that may be rated below investment grade or equivalent unrated loans, held by such issuer. Investments in a CLO organized outside of the United States may not be deemed to be foreign securities if the CLO is collateralized by a pool of loans, a substantial portion of which are U.S. loans. Although certain CDOs may benefit from credit enhancement in the form of a senior-subordinate structure, over-collateralization or bond insurance, such enhancement may not always be present, and may fail to protect a Fund against the risk of loss on default of the collateral. Certain CDO issuers may use derivatives contracts to create "synthetic" exposure to assets rather than holding such assets directly, which entails the risks of derivative instruments described elsewhere in this SAI. CDOs may charge management fees and administrative expenses, which are in addition to those of a Fund.

For both CBOs and CLOs, the cash flows from the SPE are split into two or more portions, called tranches, varying in risk and yield. The riskiest portion is the "equity" tranche, which bears the first loss from defaults from the bonds or loans in the SPE and serves to protect the other, more senior tranches from default (though such protection is not complete). Since it is partially protected from defaults, a senior tranche from a CBO or CLO typically has higher ratings and lower yields than its underlying securities, and may be rated investment grade. Despite the protection from the equity tranche, CBO or CLO tranches can experience substantial losses due to actual defaults, downgrades of the underlying collateral by rating agencies, forced liquidation of the collateral pool due to a failure of coverage tests, increased sensitivity to defaults due to collateral default and disappearance of protecting tranches, market anticipation of defaults as well as investor aversion to CBO or CLO securities as a class. Interest on certain tranches of a CDO may be paid in kind or deferred and capitalized (paid in the form of obligations of the same type rather than cash), which involves continued exposure to default risk with respect to such payments.

The risks of an investment in a CDO depend largely on the type of the collateral securities and the class of the CDO in which a Fund invests. Normally, CBOs, CLOs and other CDOs are privately offered and sold, and thus are not registered under the securities laws. However, an active dealer market may exist for CDOs, allowing a CDO to qualify for Rule 144A transactions. In addition to the normal risks associated with fixed-income securities and asset-backed securities generally discussed elsewhere in this SAI, CDOs carry additional risks including, but not limited to: (i) the possibility that distributions from collateral securities will not be adequate to make interest or other payments; (ii) the risk that the collateral may default or decline in value or be downgraded, if rated by a nationally recognized statistical rating organization ("NRSRO"); (iii) a Fund may invest in tranches of CDOs that are subordinate to other tranches; (iv) the structure and complexity of the transaction and the legal documents could lead to disputes among investors regarding the characterization of proceeds; (v) the investment return achieved by the Fund could be significantly different than those predicted by financial models; (vi) the lack of a readily available secondary market for CDOs; (vii) the risk of forced "fire sale" liquidation due to technical defaults such as coverage test failures; and (viii) the CDO's manager may perform poorly.

**Commercial Paper.** Certain Funds may purchase commercial paper. Commercial paper purchasable by each Fund includes "Section 4(a)(2) paper," a term that includes debt obligations issued in reliance on the "private placement" exemption from registration afforded by Section 4(a)(2) of the Securities Act. Section 4(a)(2) paper is restricted as to disposition under the Federal securities laws, and is frequently sold (and resold) to institutional investors such as the Fund through or with the assistance of investment dealers who make a market in the Section 4(a)(2) paper, thereby providing liquidity. Certain transactions in Section 4(a)(2) paper may qualify for the registration exemption provided in Rule 144A under the Securities Act. Most Funds can purchase commercial paper rated (at the time of purchase) "A-1" by S&P or "Prime-1" by Moody's or when deemed advisable by a Fund's Manager or subadviser, "high quality" issues rated "A-2", "Prime-2" or "F-2" by S&P, Moody's or Fitch, respectively.

Commodity-Linked Derivative Instruments and Hybrid Instruments. Certain Funds seek to gain exposure to the commodities markets primarily through investments in hybrid instruments. Hybrid instruments are either equity or debt derivative securities with one or more commodity-dependent components that have payment features similar to a commodity futures contract, a commodity option contract, or a combination of both. Therefore, these instruments are "commodity-linked." They are considered "hybrid" instruments because they have both commodity-like and security-like characteristics. Hybrid instruments are derivative instruments because at least part of their value is derived from the value of an underlying commodity, futures contract, index or other readily measurable economic variable.

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

Qualifying Hybrid Instruments. Certain Funds may invest in hybrid instruments that qualify for exclusion from regulation under the Commodity Exchange Act and the regulations adopted thereunder. A hybrid instrument that qualifies for this exclusion from regulation must be "predominantly a security." A hybrid instrument is considered to be predominantly a security if (a) the issuer of the hybrid instrument receives payment in full of the purchase price of the hybrid instrument, substantially contemporaneously with delivery of the hybrid instrument; (b) the purchaser or holder of the hybrid instrument is not required to make any payment to the issuer in addition to the purchase price paid under subparagraph (a), whether as margin, settlement payment, or otherwise, during the life of the hybrid instrument or at maturity; (c) the issuer of the hybrid instrument is not subject by the terms of the instrument to mark-to-market margining requirements; and (d) the hybrid instrument is not marketed as a contract of sale of a commodity for future delivery (or option on such a contract) subject to applicable provisions of the Commodity Exchange Act. Hybrid instruments may be principal protected, partially protected, or offer no principal protection. A principal protected hybrid instrument means that the issuer will pay, at a minimum, the par value of the note at maturity. Therefore, if the commodity value to which the hybrid instrument is linked declines over the life of the note, the Fund will receive at maturity the face or stated value of the note. With a principal protected hybrid instrument, the Fund will receive at maturity the greater of the par value of the note or the increase in its value based on the underlying commodity or index. This protection is, in effect, an option whose value is subject to the volatility and price level of the underlying commodity. The Manager's decision whether to use principal protection depends in part on the cost of the protection. In addition, the protection feature depends upon the ability of the issuer to meet its obligation to buy back the security, and, therefore, depends on the creditworthiness of the issuer. With full principal protection, the Fund will receive at maturity of the hybrid instrument either the stated par value of the hybrid instrument, or potentially, an amount greater than the stated par value if the underlying commodity, index, futures contract or economic variable to which the hybrid instrument is linked has increased in value. Partially protected hybrid instruments may suffer some loss of principal if the underlying commodity, index, futures contract or economic variable to which the hybrid instrument is linked declines in value during the term of the hybrid instrument. However, partially protected hybrid instruments have a specified limit as to the amount of principal that they may lose.

Hybrid Instruments Without Principal Protection. Certain Funds may invest in hybrid instruments that offer no principal protection. At maturity, there is a risk that the underlying commodity price, futures contract, index or other economic variable may have declined sufficiently in value such that some or all of the face value of the hybrid instrument might not be returned. The Manager, at its discretion, may invest in a partially protected principal structured note or a note without principal protection. In deciding to purchase a note without principal protection, the Manager may consider, among other things, the expected performance of the underlying commodity futures contract, index or other economic variable over the term of the note, the cost of the note, and any other economic factors that the Manager believes are relevant.

Limitations on Leverage. Some of the hybrid instruments in which a Fund may invest may involve leverage. To avoid being subject to undue leverage risk, a Fund will seek to limit the amount of economic leverage it has under any one hybrid instrument that it buys and the leverage of the Fund's overall portfolio. A Fund will not invest in a hybrid instrument if, at the time of purchase: (i) that instrument's "leverage ratio" exceeds 300% of the price increase in the underlying commodity, futures contract, index or other economic variable or (ii) the Fund's "portfolio leverage ratio" exceeds 150%, measured at the time of purchase. "Leverage ratio" is the expected increase in the value of a hybrid instrument, assuming a one percent price increase in the underlying commodity, futures contract, index or other economic factor. In other words, for a hybrid instrument with a leverage factor of 150%, a 1% gain in the underlying economic variable would be expected to result in a 1.5% gain in value for the hybrid instrument. Conversely, a hybrid instrument with a leverage factor of 150% would suffer a 1.5% loss if the underlying economic variable lost 1% of its value. "Portfolio leverage ratio" is defined as the average (mean) leverage ratio of all instruments in a Fund's portfolio, weighted by the market values of such instruments or, in the case of futures contracts, their notional values. A Fund may at times or from time to time decide not to use leverage in its investments or use less leverage than may otherwise be allowable.

Counterparty Risk. A significant risk of hybrid instruments is counterparty risk. Unlike exchange-traded futures and options, which are standard contracts, hybrid instruments are customized securities, tailor-made by a specific issuer. With a listed futures or options contract, an investor's counterparty is the exchange clearinghouse. Exchange clearinghouses are capitalized by the exchange members and typically have high investment grade ratings (e.g., ratings of AAA or AA by S&P). Therefore, the risk is small that an exchange clearinghouse might be unable to meet its obligations at maturity. However, with a hybrid instrument, a Fund will take on the counterparty credit risk of the issuer. That is, at maturity of the hybrid instrument, there is a risk that the issuer may be unable to perform its obligations under the structured note.

Convertible Securities. A convertible security is a bond, debenture, note, preferred stock or other security that may be converted into or exchanged for a prescribed amount of common stock or other equity security of the same or a different issuer within a particular period of time at a specified price or formula. A convertible security entitles the holder to receive interest paid or accrued on debt or the dividend paid on preferred stock until the convertible security matures or is redeemed, converted or exchanged. Before conversion, convertible securities have characteristics similar to nonconvertible income securities in that they ordinarily provide a stable stream of income with generally higher yields than those of common stocks of the same or similar issuers, but lower yields than comparable nonconvertible securities. The value of a convertible security is influenced by changes in interest rates, with investment value declining as interest rates increase and increasing as interest rates decline. The credit standing of the issuer and other factors also may have an effect on the convertible security's investment value. Convertible securities rank senior to common stock in a corporation's capital structure but are usually subordinated to comparable nonconvertible securities. Convertible securities may be subject to redemption at the option of the issuer at a price established in the convertible security's governing instrument.

The characteristics of convertible securities make them potentially attractive investments for an investment company seeking a high total return from capital appreciation and investment income. These characteristics include the potential for capital appreciation as the value of the underlying common stock increases, the relatively high yield received from dividend or interest payments as compared to common stock dividends and decreased risks of decline in value relative to the underlying common stock due to their fixed-income nature. As a result of the conversion feature, however, the interest rate or dividend preference on a convertible security is generally less than would be the case if the securities were issued in nonconvertible form.

In analyzing convertible securities, the Manager will consider both the yield on the convertible security relative to its credit quality and the potential capital appreciation that is offered by the underlying common stock, among other things.

Convertible securities are issued and traded in a number of securities markets. Even in cases where a substantial portion of the convertible securities held by a Fund are denominated in U.S. dollars, the underlying equity securities may be quoted in the currency of the country where the issuer is domiciled. As a result, fluctuations in the exchange rate between the currency in which the debt security is denominated and the currency in which the share price is quoted will affect the value of the convertible security. With respect to convertible securities denominated in a currency different from that of the underlying equity securities, the conversion price may be based on a fixed exchange rate established at the time the security is issued, which may increase the effects of currency risk. As described below, a Fund is authorized to enter into foreign currency hedging transactions in which it may seek to reduce the effect of exchange rate fluctuations.

Apart from currency considerations, the value of convertible securities is influenced by both the yield on nonconvertible securities of comparable issuers and by the value of the underlying common stock. The value of a convertible security viewed without regard to its conversion feature (i.e., strictly on the basis of its yield) is sometimes referred to as its "investment value." To the extent interest rates change, the investment value of the convertible security typically will fluctuate. At the same time, however, the value of the convertible security will be influenced by its "conversion value," which is the market value of the underlying common stock that would be obtained if the convertible security were converted. Conversion value fluctuates directly with the price of the underlying common stock. If the conversion value of a convertible security is substantially below its investment value, the price of the convertible security increases to a point that approximates or exceeds its investment value, the price of the convertible security will be influenced principally by its conversion value. A convertible security will sell at a premium over the conversion value to the extent investors place value on the right to acquire the underlying common stock while holding a fixed-income security. The yield and conversion premium of convertible securities issued in Japan and the Euromarket are frequently determined at levels that cause the conversion value to affect their market value more than the securities' investment value.

Holders of convertible securities generally have a claim on the assets of the issuer prior to the common stockholders but may be subordinated to other debt securities of the same issuer. A convertible security may be subject to redemption at the option of the issuer at a price established in a charter provision, indenture or other governing instrument pursuant to which the convertible security was issued. If a convertible security held by a Fund is called for redemption, the Fund will be required to redeem the security, convert it into the underlying common stock or sell it to a third party. Certain convertible debt securities may provide a put option to the holder, which entitles the holder to cause the security to be redeemed by the issuer at a premium over the stated principal amount of the debt security under certain circumstances.

A Fund may also invest in synthetic convertible securities. Synthetic convertible securities may include either Cash-Settled Convertibles or Manufactured Convertibles. "Cash-Settled Convertibles" are instruments that are created by the issuer and have the economic characteristics of traditional convertible securities but may not actually permit conversion into the underlying equity securities in all circumstances. As an example, a private company may issue a Cash-Settled Convertible that is convertible into common stock only if the company successfully completes a public offering of its common stock prior to maturity and otherwise pays a cash amount to reflect any equity appreciation. "Manufactured Convertibles" are created by the Manager or another party by combining separate securities that possess one of the two principal characteristics of a convertible security, i.e., fixed-income ("fixed-income component") or a right to acquire equity securities ("convertibility component"). The fixed-income component is achieved by investing in nonconvertible fixed-income securities, such as nonconvertible bonds, preferred stocks and money market instruments. The convertibility component is achieved by investing in call options, warrants, or other securities with equity conversion features ("equity features") granting the holder the right to purchase a specified quantity of the underlying stocks within a specified period of time at a specified price or, in the case of a stock index option, the right to receive a cash payment based on the value of the underlying stock index.

A Manufactured Convertible differs from traditional convertible securities in several respects. Unlike a traditional convertible security, which is a single security that has a unitary market value, a Manufactured Convertible is comprised of two or more separate securities, each with its own market value. Therefore, the total "market value" of such a Manufactured Convertible is the sum of the values of its fixed-income component and its convertibility component.

More flexibility is possible in the creation of a Manufactured Convertible than in the purchase of a traditional convertible security. Because many corporations have not issued convertible securities, the Manager may combine a fixed-income instrument and an equity feature with respect to the stock of the issuer of the fixed-income instrument to create a synthetic convertible security otherwise unavailable in the market. The Manager may also combine a fixed-income instrument of an issuer with an equity feature with respect to the stock of a different issuer when the Manager believes such a Manufactured Convertible would better promote a Fund's objective than alternative investments. For example, the Manager may combine an equity feature with respect to an issuer's stock with a fixed-income security of a different issuer in the same industry to diversify the Fund's credit exposure, or with a U.S. Treasury instrument to create a Manufactured Convertible with a higher credit profile than a traditional convertible security issued by that issuer. A Manufactured Convertible also is a more flexible investment in that its two components may be purchased separately and, upon purchasing the separate securities, "combined" to create a Manufactured Convertible. For example, the Fund may purchase a warrant for eventual inclusion in a Manufactured Convertible while postponing the purchase of a suitable bond to pair with the warrant pending development of more favorable market conditions.

The value of a Manufactured Convertible may respond to certain market fluctuations differently from a traditional convertible security with similar characteristics. For example, in the event a Fund created a Manufactured Convertible by combining a short-term U.S. Treasury instrument and a call option on a stock, the Manufactured Convertible would be expected to outperform a traditional convertible of similar maturity that is convertible into that stock during periods when Treasury instruments outperform corporate fixed-income securities and underperform during periods when corporate fixed-income securities outperform Treasury instruments.

Corporate Loans. Certain Funds may invest in corporate loans. Corporate loans are generally non-investment grade floating rate instruments. Usually, they are freely callable at the issuer's option. Certain Funds may invest in fixed and floating rate loans ("Loans") arranged through private negotiations between a corporate borrower or a foreign sovereign entity and one or more financial institutions or institutional investors ("Lenders"). A Fund may invest in such Loans in the form of participations in Loans ("Participations") and assignments of all or a portion of Loans from third parties ("Assignments"). A Fund considers these investments to be investments in debt securities for purposes of its investment policies. Participations typically will result in the Fund having a contractual relationship only with the Lender, not with the borrower. The Fund will have the right to receive payments of principal, interest and any fees to which it is entitled only from the Lender selling the Participation and only upon receipt by the Lender of the payments from the borrower. In connection with purchasing Participations, the Fund generally will have no right to enforce compliance by the borrower with the terms of the loan agreement relating to the Loans, nor any rights of setoff against the borrower, and the Fund may not benefit directly from any collateral supporting the Loan in which it has purchased the Participation. As a result, the Fund will assume the credit risk of both the borrower and the Lender that is selling the Participation. In the event of the insolvency of the Lender selling the Participation, the Fund may be treated as a general creditor of the Lender and may not benefit from any set-off between the Lender and the borrower. The Fund will acquire Participations only if the Lender interpositioned between the Fund and the borrower is determined by the Fund's manager to be creditworthy. When the Fund purchases Assignments from Lenders, the

Fund will acquire direct rights against the borrower on the Loan, and will not have exposure to a counterparty's credit risk. The Funds may enter into Participations and Assignments on a forward commitment or "when-issued" basis, whereby a Fund would agree to purchase a Participation or Assignment at set terms in the future. For more information on forward commitments and when-issued securities, see "When-Issued Securities, Delayed Delivery Securities and Forward Commitments" below.

A Fund may have difficulty disposing of Assignments and Participations. In certain cases, the market for such instruments may lack sufficient liquidity, and therefore the Fund anticipates that in such cases such instruments could be sold only to a limited number of institutional investors. The lack of a sufficiently liquid secondary market may have an adverse impact on the value of such instruments and on the Fund's ability to dispose of particular Assignments or Participations in response to a specific economic event, such as deterioration in the creditworthiness of the borrower.

Leading financial institutions often act as agent for a broader group of Lenders, generally referred to as a syndicate. The syndicate's agent arranges the loans, holds collateral and accepts payments of principal and interest. If the agent develops financial problems, a Fund may not recover its investment or recovery may be delayed.

The Loans in which the Fund may invest are subject to the risk of loss of principal and income. Although borrowers frequently provide collateral to secure repayment of these obligations they do not always do so. If they do provide collateral, the value of the collateral may not completely cover the borrower's obligations at the time of a default. If a borrower files for protection from its creditors under the U.S. bankruptcy laws, these laws may limit a Fund's rights to its collateral. In addition, the value of collateral may erode during a bankruptcy case. In the event of a bankruptcy, the holder of a Loan may not recover its principal, may experience a long delay in recovering its investment and may not receive interest during the delay.

Transactions in corporate loans may settle on a delayed basis. As a result, the proceeds from the sale of corporate loans may not be readily available to make additional investments or to meet a Fund's redemption obligations. To the extent the extended settlement process gives rise to short-term liquidity needs, a Fund may hold additional cash, sell investments or temporarily borrow from banks and other lenders.

In certain circumstances, Loans may not be deemed to be securities under certain federal securities laws. Therefore, in the event of fraud or misrepresentation by a borrower or an arranger, Lenders and purchasers of interests in Loans, such as the Funds, may not have the protection of the anti-fraud provisions of the federal securities laws as would otherwise be available for bonds or stocks. Instead, in such cases, parties generally would rely on the contractual provisions in the Loan agreement itself and common-law fraud protections under applicable state law.

Direct Lending. The Fund may act as the originator for direct loans and engage in direct lending. Direct loans between the Fund and a borrower may not be administered by an underwriter or agent bank. The Fund may provide financing to commercial borrowers directly or through companies acquired (or created) and owned by or otherwise affiliated with the Fund. The terms of the direct loans are negotiated with borrowers in private transactions. Furthermore, a direct loan may be secured or unsecured.

In determining whether to make a direct loan, the Fund will rely primarily upon the creditworthiness of the borrower and/or any collateral for payment of interest and repayment of principal. The risks associated with direct loans are substantially similar to those associated with investing in corporate loans. In making a direct loan, the Fund is exposed to the risk that the borrower may default or become insolvent and, consequently, that the Fund will lose money on the loan. Furthermore, direct loans may subject the Fund to liquidity and interest rate risk and certain direct loans may be deemed illiquid. Direct loans are not publicly traded and may not have a secondary market. The lack of a secondary market for direct loans may have an adverse impact on the ability of the Fund to dispose of a direct loan and/or to value the direct loan.

When engaging in direct lending, the Fund's performance may depend, in part, on the ability of the Fund to originate loans on advantageous terms. In originating loans, the Fund will compete with a broad spectrum of lenders. Increased competition for, or a diminishment in the available supply of, qualifying loans could result in lower yields on such loans, which could reduce Fund performance.

As part of its lending activities, the Fund may originate loans to companies that are experiencing significant financial or business difficulties, including companies involved in bankruptcy or other reorganization and liquidation proceedings. Although the terms of such financing may result in significant financial returns to the Fund, they involve a substantial degree of risk. The level of analytical sophistication, both financial and legal, necessary for successful financing to companies experiencing significant business and financial difficulties is unusually high.

**Credit Linked Securities.** Among the income producing securities in which a Fund may invest are credit linked securities, which are issued by a limited purpose trust or other vehicle that, in turn, invests in a derivative instrument or basket of derivative instruments, such as credit default swaps, interest rate swaps and other securities, in order to provide exposure to certain fixed-income markets. For instance, a Fund may invest in credit linked securities as a cash management tool in order to gain exposure to a certain market and/or to remain fully invested when more traditional income producing securities are not available.

Like an investment in a bond, investments in these credit linked securities represent the right to receive periodic income payments (in the form of distributions) and payment of principal at the end of the term of the security.

However, these payments are conditioned on the issuer's receipt of payments from, and the issuer's potential obligations to, the counterparties to the derivative instruments and other securities in which the issuer invests. For instance, the issuer may sell one or more credit default swaps, under which the issuer would receive a stream of payments over the term of the swap agreements provided that no event of default has occurred with respect to the referenced debt obligation upon which the swap is based. If a default occurs, the stream of payments may stop and the issuer would be obligated to pay the counterparty the par (or other agreed upon value) of the referenced debt obligation. This, in turn, would reduce the amount of income and principal that a Fund would receive. A Fund's investments in these instruments are indirectly subject to the risks associated with derivative instruments, including, among others, credit risk, default or similar event risk, counterparty risk, interest rate risk, leverage risk and management risk. It is also expected that the securities will be exempt from registration under the Securities Act. Accordingly, there may be no established trading market for the securities and they may constitute illiquid investments.

Cyber Security Issues. With the increased use of technologies such as the Internet to conduct business, each Fund is susceptible to operational, information security and related risks. In general, cyber incidents can result from deliberate attacks or unintentional events. Cyber attacks include, but are not limited to, gaining unauthorized access to digital systems (e.g., through "hacking" or malicious software coding) for purposes of misappropriating assets or sensitive information, corrupting data, or causing operational disruption. Cyber attacks may also be carried out in a manner that does not require gaining unauthorized access, such as causing denial-of-service attacks on websites (i.e., efforts to make network services unavailable to intended users). Cyber security failures or breaches by a Fund's adviser, sub-adviser(s) and other service providers (including, but not limited to, Fund accountants, custodians, transfer agents and administrators), and the issuers of securities in which the Funds invest, have the ability to cause disruptions and impact business operations, potentially resulting in financial losses, interference with a Fund's ability to calculate its NAV, impediments to trading, the inability of Fund shareholders to transact business, violations of applicable privacy and other laws, regulatory fines, penalties, reputational damage, reimbursement or other compensation costs, or additional compliance costs. In addition, substantial costs may be incurred in order to prevent any cyber incidents in the future. While the Funds have established business continuity plans in the event of, and risk management systems to prevent, such cyber attacks, there are inherent limitations in such plans and systems including the possibility that certain risks have not been identified. Furthermore, the Funds cannot control the cyber security plans and systems put in place by service providers to the Funds and issuers in which the Funds invest. The Funds and their shareholders could be negatively impacted as a result.

**Debt Securities.** Debt securities, such as bonds, involve credit risk. This is the risk that the issuer will not make timely payments of principal and interest. The degree of credit risk depends on the issuer's financial condition and on the terms of the debt securities. Changes in an issuer's credit rating or the market's perception of an issuer's creditworthiness may also affect the value of a Fund's investment in that issuer. Credit risk is reduced to the extent a Fund limits its debt investments to U.S. Government Securities.

All debt securities, however, are subject to interest rate risk. This is the risk that the value of the security may fall when interest rates rise. If interest rates move sharply in a manner not anticipated by Fund management, a Fund's investments in debt securities could be adversely affected and the Fund could lose money. In general, the market price of debt securities with longer maturities will go up or down more in response to changes in interest rates than will the market price of shorter-term debt securities.

During periods of rising interest rates, the average life of certain fixed-income securities is extended because of slower than expected principal payments. This may lock in a below-market interest rate and extend the duration of these fixed-income securities, especially mortgage-related securities, making them more sensitive to changes in interest rates. As a result, in a period of rising interest rates, these securities may exhibit additional volatility and lose value. This is known as extension risk.

The value of fixed-income securities in the Funds can be expected to vary inversely with changes in prevailing interest rates. Fixed-income securities with longer maturities, which tend to produce higher yields, are subject to potentially greater capital appreciation and depreciation than securities with shorter maturities. The Funds are not restricted to any maximum or minimum time to maturity in purchasing individual portfolio securities, and the average maturity of a Fund's assets will vary.

Inflation-Indexed Bonds. Certain Funds may invest in inflation-indexed bonds, which are fixed-income securities or other instruments whose principal value is periodically adjusted according to the rate of inflation. Two structures are common. The U.S. Treasury and some other issuers use a structure that accrues inflation into the principal value of the bond. Most other issuers pay out the Consumer Price Index ("CPI") accruals as part of a semi-annual coupon.

Inflation-indexed securities issued by the U.S. Treasury have maturities of five, ten or thirty years, although it is possible that securities with other maturities will be issued in the future. The U.S. Treasury securities pay interest on a semi-annual basis, equal to a fixed percentage of the inflation-adjusted principal amount. For example, if a Fund purchased an inflation-indexed bond with a par value of \$1,000 and a 3% real rate of return coupon (payable 1.5% semi-annually), and inflation over the first six months was 1%, the mid-year par value of the bond would be \$1,010 and the first semi-annual interest payment would be \$15.15 (\$1,010 times 1.5%). If inflation during the second half of the year resulted in the whole year's inflation equaling 3%, the end-of-year par value of the bond would be \$1,030 and the second semi-annual interest payment would be \$15.45 (\$1,030 times 1.5%).

If the periodic adjustment rate measuring inflation falls, the principal value of inflation-indexed bonds will be adjusted downward, and, consequently, the interest payable on these securities (calculated with respect to a smaller principal amount) will be reduced. Repayment of the original bond principal upon maturity (as adjusted for inflation) is guaranteed in the case of U.S. Treasury inflation-indexed bonds, even during a period of deflation. However, the current market value of the bonds is not guaranteed, and will fluctuate. Certain Funds may also invest in other inflation related bonds which may or may not provide a similar guarantee. If a guarantee of principal is not provided, the adjusted principal value of the bond repaid at maturity may be less than the original principal. In addition, if the Fund purchases inflation-indexed bonds offered by foreign issuers, the rate of inflation measured by the foreign inflation index may not be correlated to the rate of inflation in the United States.

The value of inflation-indexed bonds is expected to change in response to changes in real interest rates. Real interest rates, in turn, are tied to the relationship between nominal interest rates and the rate of inflation. Therefore, if inflation were to rise at a faster rate than nominal interest rates, real interest rates might decline, leading to an increase in value of inflation-indexed bonds. In contrast, if nominal interest rates increased at a faster rate than inflation, real interest rates might rise, leading to a decrease in value of inflation-indexed bonds. There can be no assurance, however, that the value of inflation-indexed bonds will be directly correlated to changes in interest rates.

While these securities are expected to be protected from long-term inflationary trends, short-term increases in inflation may lead to a decline in value. If interest rates rise due to reasons other than inflation (for example, due to changes in currency exchange rates), investors in these securities may not be protected to the extent that the increase is not reflected in the bond's inflation measure.

In general, the measure used to determine the periodic adjustment of U.S. inflation-indexed bonds is the Consumer Price Index for Urban Consumers ("CPI-U"), which is calculated monthly by the U.S. Bureau of Labor Statistics. The CPI-U is a measurement of changes in the cost of living, made up of components such as housing, food, transportation and energy. Inflation-indexed bonds issued by a foreign government are generally adjusted to reflect a comparable inflation index, calculated by that government. There can be no assurance that the CPI-U or any foreign inflation index will accurately measure the real rate of inflation in the prices of goods and services. Moreover, there can be no assurance that the rate of inflation in a foreign country will be correlated to the rate of inflation in the United States.

Any increase in the principal amount of an inflation-indexed bond will be considered taxable ordinary income, even though investors do not receive their principal until maturity.

Investment Grade Debt Obligations. Certain Funds may invest in "investment grade securities," which are securities rated in the four highest rating categories of an NRSRO or deemed to be of equivalent quality by a Fund's Manager. Certain Funds may invest in debt securities rated Aaa by Moody's or AAA by S&P. It should be noted that debt obligations rated in the lowest of the top four ratings (i.e., "Baa" by Moody's or "BBB" by S&P) are considered to have some speculative characteristics and are more sensitive to economic change than higher rated securities. If an investment grade security of a Fund is subsequently downgraded below investment grade, the Fund's Manager will consider such an event in determining whether the Fund should continue to hold the security. Subject to its investment strategies, there is no limit on the amount of such downgraded securities a Fund may hold.

See Appendix A to this SAI for a description of applicable securities ratings.

High Yield Investments ("Junk Bonds").

Non-investment grade or "high yield" fixed-income or convertible securities commonly known to investors as "junk bonds" are debt securities that are rated below investment grade by the major rating agencies or are securities that Fund management 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 which 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 "Ba" or lower by Moody's or "BB" or lower by S&P) or will be non-rated. 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 or dividends in accordance with the terms of the obligation and may have more credit risk than higher rated securities.

The major risks in junk bond investments include the following:

- Junk bonds may be issued by less creditworthy companies. These securities are vulnerable to adverse changes
  in the issuer's industry and to general economic conditions. Issuers of junk 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 junk 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.
- Junk 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 or to receive interest payments when senior securities are in default. Thus, investors in
  high yield securities have a lower degree of protection with respect to principal and interest payments then do
  investors in higher rated securities.
- Junk bonds frequently have redemption features that permit an issuer to repurchase the security from a Fund before it matures. If an issuer redeems the junk bonds, a Fund may have to invest the proceeds in bonds with lower yields and may lose income.
- Prices of junk bonds are subject to extreme price fluctuations. Negative economic developments may have a greater impact on the prices of junk bonds than on those of other higher rated fixed-income securities.
- Junk bonds may be less liquid than higher rated fixed-income securities even under normal economic conditions. 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 junk bond market, and there may be significant differences in the prices quoted for junk bonds by the dealers, and such quotations may not be the actual prices available for a purchase or sale. Because junk bonds are less liquid than higher rated bonds, judgment may play a greater role in valuing certain of a Fund's portfolio 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 a Fund's 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 junk 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.
- The rating assigned by a rating agency evaluates the issuing agency's assessment of the safety of a non-investment grade security's principal and interest payments, but does not address market value risk. Because such ratings of the ratings agencies may not always reflect current conditions and events, in addition to using recognized rating agencies and other sources, the sub-adviser performs its own analysis of the issuers whose non-investment grade securities a Fund holds. Because of this, the Fund's performance may depend more on the sub-adviser's own credit analysis than in the case of mutual funds investing in higher-rated securities.

In selecting non-investment grade securities, the adviser or sub-adviser considers factors such as those relating to the creditworthiness of issuers, the ratings and performance of the securities, the protections afforded the securities and the diversity of the Fund. The sub-adviser continuously monitors the issuers of non-investment grade securities held by the Fund for their ability to make required principal and interest payments, as well as in an effort to control the liquidity of the Fund so that it can meet redemption requests. If a security's rating is reduced below the minimum credit rating that is permitted for a Fund, the Fund's sub-adviser will consider whether the Fund should continue to hold the security.

In the event that a Fund investing in high yield securities experiences an unexpected level of net redemptions, the Fund could be forced to sell its holdings without regard to the investment merits, thereby decreasing the assets upon which the Fund's rate of return is based.

The costs attributable to investing in the junk bond markets are usually higher for several reasons, such as higher investment research costs and higher commission costs.

Mezzanine Investments. Certain Funds, consistent with their restrictions on investing in securities of a specific credit quality, may invest in certain high yield securities known as mezzanine investments, which are subordinated debt securities which are generally issued in private placements in connection with an equity security (e.g., with attached warrants). Such mezzanine investments may be issued with or without registration rights. Similar to other high yield securities, maturities of mezzanine investments are typically seven to ten years, but the expected average life is significantly shorter at three to five years. Mezzanine investments are usually unsecured and subordinate to other obligations of the issuer.

Pay-in-kind Bonds. Certain Funds may invest in pay-in-kind, or PIK, bonds. PIK bonds are bonds which pay interest through the issuance of additional debt or equity securities. Similar to zero coupon obligations, pay-in-kind bonds also carry additional risk as holders of these types of securities realize no cash until the cash payment date unless a portion of such securities is sold and, if the issuer defaults, a Fund may obtain no return at all on its investment. The market price of pay-in-kind bonds is affected by interest rate changes to a greater extent, and therefore tends to be more volatile, than that of securities which pay interest in cash. Additionally, current U.S. federal tax law requires the holder of pay-in-kind bonds to accrue income with respect to these securities prior to the receipt of cash payments. To maintain its qualification as a regulated investment company and avoid liability for U.S. federal income and excise taxes, each Fund may be required to distribute income accrued with respect to these securities and may have to dispose of portfolio securities under disadvantageous circumstances in order to generate cash to satisfy these distribution requirements.

Supranational Entities. A Fund may invest in debt securities of supranational entities. Examples of such entities include the International Bank for Reconstruction and Development (the World Bank), the European Steel and Coal Community, the Asian Development Bank and the Inter-American Development Bank. 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 the supranational entity is unable to repay its borrowings. There is no guarantee that one or more stockholders of a 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, and a Fund may lose money on such investments.

Depositary Receipts (ADRs, EDRs and GDRs). Certain Funds may invest in the securities of foreign issuers in the form of Depositary Receipts or other securities convertible into securities of foreign issuers. Depositary Receipts may not necessarily be denominated in the same currency as the underlying securities into which they may be converted. The Fund may invest in both sponsored and unsponsored American Depositary Receipts ("ADRs"), European Depositary Receipts ("EDRs"), Global Depositary Receipts ("GDRs") and other similar global instruments. ADRs typically are issued by an American bank or trust company and evidence ownership of underlying securities issued by a foreign corporation. EDRs, which are sometimes referred to as Continental Depositary Receipts, are receipts issued in Europe, typically by foreign banks and trust companies, that evidence ownership of either foreign or domestic underlying securities. GDRs are depositary receipts structured like global debt issues to facilitate trading on an international basis. In addition to investment risks associated with the underlying issuer, Depositary Receipts expose a Fund to additional risks associated with the non-uniform terms that apply to Depositary Receipt programs, credit exposure to the depository bank and to the sponsors and other parties with whom the depository bank establishes the programs, currency risk and the risk of an illiquid market for Depositary Receipts. Unsponsored ADR, EDR and GDR programs are organized independently and without the cooperation of the issuer of the underlying securities. Unsponsored programs generally expose investors to greater risks than sponsored programs and do not provide holders with many of the shareholder benefits that come from investing in a sponsored Depositary Receipt. Available information concerning the issuer may not be as current as for sponsored ADRs, EDRs and GDRs, and the prices of unsponsored ADRs, EDRs and GDRs may be more volatile than if such instruments were sponsored by the issuer. Depositary Receipts are generally subject to the same risks as the foreign securities that they evidence or into which they may be converted. Investments in ADRs, EDRs and GDRs present additional investment considerations as described under "Foreign Investment Risks."

#### Derivatives.

General. Each Fund may use instruments referred to as derivatives, which are financial instruments that derive their value from one or more securities, commodities (such as gold or oil), currencies, interest rates, credit events or indices (a measure of value or rates, such as the S&P 500 Index or the prime lending rate). Derivatives may allow a Fund to increase or decrease the level of risk to which the Fund is exposed more quickly and efficiently than with other transactions. Certain Funds may use derivatives to maintain a portion of their long and short positions. Unless otherwise permitted, no Fund may use derivatives to gain exposure to an asset or asset class it is prohibited by its investment restrictions from purchasing directly. As described below, derivatives can be used for hedging or speculative purposes. Funds will engage in transaction-level payment netting, i.e., the payment obligations of derivatives contracts are netted against one another with the Fund receiving or paying, as the case may be, only the net amount of the two payment streams.

Hedging. Each Fund may use derivatives for hedging purposes, in which a derivative is used to offset the risks associated with other Fund holdings. Losses on other investments may be substantially reduced by gains on a derivative that reacts in an opposite manner to market movements. Although hedging may reduce losses, it may also reduce or eliminate gains. In addition, hedging may cause losses if the market moves in an unanticipated manner, or if the cost of the derivative outweighs the benefit of the hedge. The effectiveness of hedging may be reduced by correlation risk, i.e., the risk that changes in the value of the derivative will not match those of the holdings being hedged as expected by a Fund, which may result in additional losses to the Fund. The inability to close or offset derivatives could also reduce the effectiveness of a Fund's hedging. There is no assurance that a Fund's hedging will be effective. No Fund is required to use derivatives to hedge.

Speculation. Certain Funds may also use derivatives for speculative purposes to seek to enhance returns. The use of a derivative is speculative if the Fund is primarily seeking to achieve gains, rather than offset the risk of other positions. To the extent a Fund invests in a derivative for speculative purposes, the Fund will be fully exposed to the risks of loss of that derivative, which may sometimes be greater than the derivative's cost, and the potential for loss in certain cases may be unlimited.

Regulation of Derivatives.

Rule 18f-4 Under the Investment Company Act. 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 such transactions meet the Delayed-Settlement Securities Provision (as defined below under "—When-Issued Securities, Delayed Delivery Securities and Forward Commitments").

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 Fund's Board, including a majority of the independent Directors, and periodically reviews the DRMP and reports to the Fund's Board.

Rule 18f-4 provides an exception from the DRMP, VaR limit and certain other requirements if a Fund's "derivatives exposure" 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").

Dodd-Frank Regulations. The Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank"), enacted in July 2010, includes provisions that comprehensively regulate the over-the-counter ("OTC") derivatives markets for the first time. While the Commodity Futures Trading Commission ("CFTC") and other U.S. regulators have adopted many of the required Dodd-Frank regulations, certain regulations have only recently become effective and other regulations remain to be adopted. The full impact of Dodd-Frank on the Funds remains uncertain.

OTC derivatives dealers are now required to register with the CFTC as "swap dealers" and will ultimately be required to register with the SEC as "security-based swap dealers". Registered swap dealers are subject to various regulatory requirements, including, but not limited to, margin, recordkeeping, reporting, transparency, position limits, limitations on conflicts of interest, business conduct standards, minimum capital requirements and other regulatory requirements.

The CFTC requires that certain interest rate swaps and certain credit default swaps must be executed in regulated markets and be submitted for clearing to regulated clearinghouses. The SEC is also expected to impose similar requirements on certain security-based derivatives in the future. OTC derivatives trades submitted for clearing are subject to minimum initial and variation margin requirements set by the relevant clearinghouse, as well as margin requirements mandated by the CFTC, SEC and/or federal prudential regulators. In addition, futures commission merchants ("FCMs"), who act as clearing members on behalf of customers for cleared OTC derivatives and futures contracts, also have discretion to increase a Fund's margin requirements for these transactions beyond any regulatory and clearinghouse minimums subject to any restrictions on such discretion in the documentation between the FCM and the customer. These regulatory requirements may make it more difficult and costly for the Funds to enter into highly tailored or customized transactions, potentially rendering certain investment strategies impossible or not economically feasible. If a Fund decides to execute and clear cleared OTC derivatives and/or futures contracts through execution facilities, exchanges or clearinghouses, either indirectly through an executing broker, clearing member FCM or as a direct member, a Fund would be required to comply with the rules of the execution facility, exchange or clearinghouse and other applicable law.

With respect to cleared OTC derivatives and futures contracts and options on futures, a Fund will not face a clearinghouse directly but rather will do so through a FCM that is registered with the CFTC and/or SEC and that acts as a clearing member. A Fund may face the indirect risk of the failure of another clearing member customer to meet its obligations to its clearing member. Such scenario could arise due to a default by the clearing member on its obligations to the clearinghouse simultaneously with a customer's failure to meet its obligations to the clearing member.

Clearing member FCMs are required to post initial margin to the clearinghouses through which they clear their customers' cleared OTC derivatives and futures contracts, instead of using such initial margin in their businesses, as was widely permitted before Dodd-Frank. While an FCM may require its customer to post initial margin in excess of clearinghouse requirements, and certain clearinghouses may share a portion of their earnings on initial margin with their clearing members, some portion of the initial margin that is passed through to the clearinghouse does not generate earnings for the FCM. The inability of FCMs to earn the same levels of returns on initial margin for cleared OTC derivatives as they could earn with respect to non-cleared OTC derivatives may cause FCMs to charge higher fees, or provide less favorable pricing on cleared OTC derivatives than swap dealers will provide for non-cleared OTC derivatives. Furthermore, customers, including the Funds, are subject to additional fees payable to FCMs with respect to cleared OTC derivatives, which may raise the cost to Funds of clearing as compared to trading non-cleared OTC derivatives bilaterally.

With respect to uncleared swaps, swap dealers are required to collect variation margin from a Fund and may be required by applicable regulations to collect initial margin from a Fund. Both initial and variation margin may be comprised of cash and/or securities, subject to applicable regulatory haircuts. Shares of investment companies (other than certain money market funds) may not be posted as collateral under applicable regulations.

The CFTC and the U.S. commodities exchanges impose limits on the maximum net long or net short speculative positions that any person may hold or control in any particular futures or options contracts traded on U.S. commodities exchanges. For example, the CFTC has historically imposed speculative position limits on a number of agricultural commodities (e.g., corn, oats, wheat, soybeans and cotton) and United States commodities exchanges currently impose speculative position limits on many other commodities. A Fund could be required to liquidate positions it holds in order to comply with position limits or may not be able to fully implement trading instructions generated by its trading models, in order to comply with position limits. Any such liquidation or limited implementation could result in substantial costs to a Fund.

Dodd-Frank significantly expanded the CFTC's authority to impose position limits with respect to agricultural commodities and other physical commodity futures contracts, options on these futures contracts and economically equivalent swaps. In October 2020, the CFTC adopted a new set of speculative position limit rules with respect to agricultural commodities and other physical commodity futures contracts, options on these futures contracts ("core referenced futures contracts") and economically equivalent swaps. An economically equivalent swap is a swap with identical material contractual specifications, terms and conditions to a core referenced futures contract, disregarding differences with respect to any of the following: (1) lot size specifications or notional amounts, (2) post-trade risk management arrangements and (3) delivery dates for physically-settled swaps as long as these delivery dates diverge by less than one calendar day from the referenced contract's delivery date (or, for natural gas, two calendar days). A cash-settled swap could only be deemed to be economically equivalent to a cash-settled referenced contract, and a physically-settled swap could only be deemed to be economically equivalent to a physically-settled referenced contract. However, a cash-settled swap that initially did not qualify as economically equivalent due to the fact that there was no corresponding cash-settled core referenced futures contract could subsequently become an economically equivalent swap if a cash-settled futures contract market were to subsequently be developed. The CFTC's new position limits rules include an exemption from limits for bona fide hedging transactions or positions. A bona fide hedging transaction or position may exceed the applicable federal position limits if the transaction or position: (1) represents a substitute for transactions or positions made or to be made at a later time in a physical marketing channel; (2) is economically appropriate to the reduction of price risks in the conduct and management of a commercial enterprise; and (3) arises from the potential change in value of (A) assets which a person owns, produces, manufactures, processes or merchandises, or anticipates owning, producing, manufacturing, processing or merchandising; (B) liabilities which a person owes or anticipates incurring; or (C) services that a person provides or purchases, or anticipates providing or purchasing. The CFTC's new position rules set forth a list of enumerated bona fide hedges for which a market participant is not required to request prior approval from the CFTC in order to hold a bona fide hedge position above the federal position limit. However, a market participant holding an enumerated bona fide hedge position still would need to request an exemption from the relevant exchange for exchange-set limits. For non-enumerated bona fide hedge positions, a market participant may request CFTC approval which must be granted prior to exceeding the applicable federal position limit, except where there is a demonstrated sudden or unforeseen increase in bona fide hedging needs (in which case the application must be submitted within five business days after the market participant exceeds the applicable limit). The compliance dates for the CFTC's new federal speculative position limits are January 1, 2022 for the core referenced futures contracts and January 1, 2023 for economically equivalent swaps. While the ultimate effect of the final position limit rules are not yet known, these limits will likely restrict the ability of many market participants to trade in the commodities markets to the same extent as they have

in the past. These rules may, among other things, reduce liquidity, increase market volatility, limit the size and duration of positions available to market participants, and increase costs in these markets, which could adversely affect a Fund.

These new regulations and the resulting increased costs and regulatory oversight requirements may result in market participants being required or deciding to limit their trading activities, which could lead to decreased market liquidity and increased market volatility. In addition, transaction costs incurred by market participants are likely to be higher due to the increased costs of compliance with the new regulations. These consequences could adversely affect a Fund's returns.

Additional Regulation of Derivatives. Regulatory bodies outside the U.S. have also passed, proposed, or may propose in the future, legislation similar to Dodd-Frank or other legislation that could increase the costs of participating in, or otherwise adversely impact the liquidity of, participating in the commodities markets. For example, the European Market Infrastructure Regulation (Regulation (EU) No 648/2012) ("EMIR") introduced certain requirements in respect of OTC derivatives including: (i) the mandatory clearing of OTC derivative contracts declared subject to the clearing obligation; (ii) risk mitigation techniques in respect of uncleared OTC derivative contracts, including the mandatory margining of uncleared OTC derivative contracts; and (iii) reporting and recordkeeping requirements in respect of all derivatives contracts. By way of further example, the European Union Markets in Financial Instruments Directive (Directive 2014/65/EU) and Markets in Financial Instruments Regulation (Regulation (EU) No 600/2014) (together "MiFID II"), which have applied since January 3, 2018, govern the provision of investment services and activities in relation to, as well as the organized trading of, financial instruments such as shares, bonds, units in collective investment schemes and derivatives. In particular, MiFID II requires European Union Member States to apply position limits to the size of a net position a person can hold at any time in commodity derivatives traded on European Union trading venues and in "economically equivalent" OTC contracts. If the requirements of EMIR and MiFID II apply, the cost of derivatives transactions is expected to increase.

In addition, regulations adopted by global prudential regulators that are now in effect require certain prudentially regulated entities and certain of their affiliates and subsidiaries (including swap dealers) to include in their derivatives contracts and certain other financial contracts, terms that delay or restrict the rights of counterparties (such as the Funds) to terminate such contracts, foreclose upon collateral, exercise other default rights or restrict transfers of credit support in the event that the prudentially regulated entity and/or its affiliates are subject to certain types of resolution or insolvency proceedings. Similar regulations and laws have been adopted in non-U.S. jurisdictions that may apply to a Fund's counterparties located in those jurisdictions. It is possible that these new requirements, as well as potential additional related government regulation, could adversely affect a Fund's ability to terminate existing derivatives contracts, exercise default rights or satisfy obligations owed to it with collateral received under such contracts.

### Risk Factors in Derivatives.

There are significant risks that apply generally to derivatives transactions, including:

Correlation Risk — the risk that changes in the value of a derivative will not match the changes in the value of the portfolio holdings that are being hedged or of the particular market or security to which the Fund seeks exposure. There are a number of factors which may prevent a derivative instrument from achieving the desired correlation (or inverse correlation) with an underlying asset, rate or index, such as the impact of fees, expenses and transaction costs, the timing of pricing, and disruptions or illiquidity in the markets for such derivative instrument.

Counterparty Risk — the risk that a derivatives transaction counterparty will be unable or unwilling to make payments or otherwise honor its obligations to a Fund and the related risks of having concentrated exposure to such a counterparty. In particular, derivatives traded in OTC markets often are not guaranteed by an exchange or clearing corporation and often do not require payment of margin, and to the extent that the Fund has unrealized gains in such instruments or has deposited collateral with its counterparties the Fund is at risk that its counterparties will become bankrupt or otherwise fail to honor their obligations. A Fund will typically attempt to minimize counterparty risk by engaging in OTC derivatives transactions only with creditworthy entities that have substantial capital or that have provided the Fund with a third-party guaranty or other credit support.

*Credit Risk* — the risk that the reference entity in a credit default swap or similar derivative will not be able to honor its financial obligations.

*Currency Risk* — the risk that changes in the exchange rate between two currencies will adversely affect the value (in U.S. dollar terms) of a derivative.

Illiquidity Risk — the risk that certain securities or instruments may be difficult or impossible to sell at the time or at the price desired by the counterparty in connection with payments of margin, collateral, or settlement payments. There can be no assurance that a Fund will be able to unwind or offset a derivative at its desired price, in a secondary market or otherwise. It may, therefore, not be possible for the Fund to unwind its position in a derivative without incurring substantial losses (if at all). Certain OTC derivatives, including swaps and OTC options, involve substantial illiquidity risk. Illiquidity may also make it more difficult for a Fund to ascertain a market value for such derivatives. A Fund will, therefore, acquire illiquid OTC derivatives (i) if the agreement pursuant to which the instrument is purchased contains a formula price at which the instrument may be terminated or sold, or (ii) for which the Manager anticipates the Fund can receive on each business day at least two independent bids or offers, unless a quotation from only one dealer is available, in which case that dealer's quotation may be used. The illiquidity of the derivatives markets may be due to various factors, including congestion, disorderly markets, limitations on deliverable supplies, the participation of speculators, government regulation and intervention, and technical and operational or system failures. In addition, the liquidity of a secondary market in an exchange-traded derivative contract may be adversely affected by "daily price fluctuation limits" established by the exchanges which limit the amount of fluctuation in an exchange-traded contract price during a single trading day. Once the daily limit has been reached in the contract, no trades may be entered into at a price beyond the limit, thus preventing the liquidation of open positions. Prices have in the past moved beyond the daily limit on a number of consecutive trading days. If it is not possible to close an open derivative position entered into by the Fund, the Fund would continue to be required to make daily cash payments of variation margin in the event of adverse price movements. In such a situation, if the Fund has insufficient cash, it may have to sell portfolio securities to meet daily variation margin requirements at a time when it may be disadvantageous to do so.

*Index Risk* — if the derivative is linked to the performance of an index, it will be subject to the risks associated with changes in that index. If the index changes, the Fund could receive lower interest payments or experience a reduction in the value of the derivative to below the price that the Fund paid for such derivative.

Legal Risk — the risk of insufficient documentation, insufficient capacity or authority of counterparty, or legality or enforceability of a contract.

Leverage Risk — the risk that a Fund's derivatives transactions can magnify the Fund's gains and losses. Relatively small market movements may result in large changes in the value of a derivatives position and can result in losses that greatly exceed the amount originally invested.

Market Risk — the risk that changes in the value of one or more markets or changes with respect to the value of the underlying asset will adversely affect the value of a derivative. In the event of an adverse movement, a Fund may be required to pay substantial additional margin to maintain its position or the Fund's returns may be adversely affected.

*Operational Risk* — the risk related to potential operational issues, including documentation issues, settlement issues, systems failures, inadequate controls and human error.

Valuation Risk — the risk that valuation sources for a derivative will not be readily available in the market. This is possible especially in times of market distress, since many market participants may be reluctant to purchase complex instruments or quote prices for them.

Volatility Risk — the risk that the value of derivatives will fluctuate significantly within a short time period.

Types of Derivatives Transactions.

A Fund may enter into derivatives transactions in accordance with its investment guidelines and restrictions, including the following:

### Futures.

A Fund may enter into futures contracts ("futures") and options on futures contracts. Futures are standardized, exchange-traded contracts that require a purchaser to take delivery, and a seller to make delivery, of a specified amount of an asset at a specified future date and price. Upon purchasing or selling a futures contract, a Fund is required to deposit initial margin equal to a percentage (generally less than 10%) of the contract value. Futures contracts are marked to market daily for the duration of the contract, and the Fund will either post additional margin or be entitled to a payment, as applicable, based on the mark-to-market movement of the contract.

A Fund may sell a futures contract prior to the completion of its term to limit its risk of loss from a decline in the market value of portfolio holdings correlated with the futures contract. However, in the event the market value of the portfolio holdings correlated with the futures contract increases rather than decreases, a Fund will realize a loss on

the futures position and a lower return on the portfolio holdings than would have been realized without the purchase of the futures contract.

The purchase of a futures contract may provide a Fund a lower cost alternative to purchasing securities or commodities directly. In the event that such securities or commodities decline in value or a Fund determines not to complete an anticipatory hedge transaction relating to a futures contract, however, the Fund may realize a loss relating to the futures position.

Futures contracts are also subject to position limits. In order to comply with position limits, a Fund may be required to liquidate positions or may not be able to fully implement trading instructions. Any such liquidation or limited implementation could result in substantial costs to a Fund. See "—Regulation of Derivatives — Dodd-Frank Regulations" above.

A Fund is also permitted to purchase or sell call and put options on futures contracts, including financial futures and stock indices. Generally, these strategies would be used under the same market and market sector conditions (i.e., conditions relating to specific types of investments) in which the Fund entered into futures transactions. A Fund may purchase put options or write call options on futures contracts and stock indices in lieu of selling the underlying futures contract in anticipation of a decrease in the market value of its securities. Similarly, a Fund can purchase call options, or write put options on futures contracts and stock indices, as a substitute for the purchase of such futures contracts to hedge against the increased cost resulting from an increase in the market value of securities which the Fund intends to purchase.

To maintain greater flexibility, a Fund may invest in instruments which have characteristics similar to futures contracts. These instruments may take a variety of forms, such as debt securities with interest or principal payments determined by reference to the value of a security, an index of securities or a commodity at a future point in time. The risks of such investments could reflect the risks of investing in futures and securities, including volatility and illiquidity.

Futures contracts and options on futures contracts are subject to significant correlation risk, leverage risk, illiquidity risk, market risk and counterparty risk with respect to a Fund's futures broker or the clearinghouse. See "—Risk Factors in Derivatives" above.

Certain Funds may invest in futures based on carbon "allowances." Under certain regulatory regimes, a limit is set by a regulator, such as a government entity, on the total amount of specific greenhouse gases, such as CO2, that can be emitted by regulated entities, such as manufacturers or energy producers. The regulator then may issue or sell individual "emission allowances" to regulated entities, which can then be traded on the open market. Commodity futures contracts linked to the value of emission allowances are known as "carbon futures."

The price for carbon futures contracts is based on a number of factors, including the supply of and the demand for carbon futures contracts. Market conditions and expectations, position limits, collateral requirements, and other factors each can impact the supply of and demand for carbon futures contracts. The market for carbon futures contracts is still developing and may be subject to periods of illiquidity. During such times it may be difficult or impossible to buy or sell a position at the desired price. Market disruptions or volatility can also make it difficult to find a counterparty willing to transact at a reasonable price and sufficient size.

### Swap Agreements.

A Fund may enter into swap agreements for hedging purposes or speculative purposes. Swap agreements are OTC contracts entered into primarily by financial institutions and institutional investors which may or may not be cleared by a central clearinghouse. In a standard "swap" transaction, two parties agree to exchange the returns earned or realized from one or more underlying assets or rates of return, which may be adjusted for an interest factor. The gross returns to be exchanged or "swapped" between the parties are generally calculated with respect to a "notional amount," e.g., the return or increase in value of a particular dollar amount invested at a particular interest rate, in a particular foreign currency, or in a "basket" of securities representing a particular index. The notional amount of the swap agreement is only used to calculate the obligations that the parties to a swap agreement have agreed to exchange. A Fund's obligations (or rights) under a swap agreement will generally be equal only to the net amount to be paid or received under the agreement based on the relative values of the positions held by each party to the agreement. Swaps that are not cleared involve substantial counterparty risk. A Fund will typically attempt to mitigate this counterparty risk by entering into swap agreements only with creditworthy entities that have substantial capital or that have provided the Fund with a third-party guaranty or other credit support. A Fund's ability to use swap agreements may be restricted by the tax rules applicable to registered investment companies.

Credit Default Swaps and Similar Instruments. Certain Funds may enter into credit default swaps and similar instruments. Credit default swaps are standardized agreements in which the protection "buyer" pays the protection "seller" an up-front payment, or a periodic stream of payments, over the term of the contract, provided generally that no credit event on a reference obligation has occurred. If a credit event occurs, the seller generally must pay the buyer the difference between the notional amount of the contract and the value of a portfolio of securities issued by the reference entity. A Fund may be either the buyer or seller in the transaction. The Funds may enter into credit default swaps that reference the obligations of a single entity ("single-name CDS") or the obligations of entities that make up an index ("index CDS"). References to "credit default swaps" shall collectively refer to single-name CDS and index CDS.

Credit default swaps have as reference obligations one or more securities or loans that are not currently held by a Fund. In circumstances in which a Fund does not own the securities or loans that are deliverable under a credit default swap, the Fund is exposed to the risk that deliverable securities will not be available in the market, or will be available only at unfavorable prices, as would be the case in a so-called "short squeeze." In certain instances of issuer defaults or restructurings, it has been unclear under the standard industry documentation for credit default swaps whether or not a "credit event" triggering the seller's payment obligation had occurred. Certain initiatives adopted by derivatives market participants, including the International Swaps and Derivatives Association ("ISDA"), are designed to implement uniform settlement terms into standard credit default swap documentation, as well as refine the practices for the transparent conduct of the credit default swap market generally. Among these initiatives are the ISDA Credit Derivatives Determination Committee and the implementation of market-wide cash settlement protocols applicable to all market-standard credit default swaps. These initiatives are intended to reduce both the uncertainty as to the occurrence of credit events and the risk of a "short squeeze" by providing that the ISDA Credit Derivatives Determinations Committee will make determinations as to whether a credit event has occurred, establish an auction to determine a settlement price and identify the deliverable securities for purposes of the auction, although the ISDA Credit Derivatives Determinations Committee may in certain limited circumstances refrain from doing so. In the event the ISDA Credit Derivatives Determinations Committee cannot reach a timely resolution with respect to a "credit event" or otherwise does not establish a cash settlement auction, a Fund may not be able to realize the full value of the credit default swap upon a default by the reference entity. Furthermore, a Fund may enter into certain credit default swaps or similar instruments that may not be covered by these initiatives.

If a Fund is a buyer, it will lose the payments made under the terms of the credit default swap and recover nothing should no credit event occur. If a Fund is a seller and a credit event occurs, the value of any deliverable obligation received by the Fund or the amount of cash settlement received by the Fund pursuant to the relevant cash settlement auction, together with the up-front or periodic payments previously received, may be less than the amount it pays to the buyer, resulting in a loss of value to the Fund. A Fund that sells credit default swaps incurs leveraged exposure to the credit of one or more reference entities and is subject to many of the same risks it would incur if it were holding debt securities issued by the relevant reference entity. However, a Fund will not have any legal recourse against any reference entity and will not benefit from any collateral securing the reference entity's debt obligations. In the event the ISDA Credit Derivatives Determinations Committee does not establish a cash settlement auction and identify the relevant deliverable securities or loans, the credit default swap buyer will have broad discretion to select which of the reference entity's debt obligations to deliver to the Fund following a credit event and will likely choose the obligations with the lowest market value in order to maximize the payment obligations of the Fund. In addition, credit default swaps generally trade on the basis of theoretical pricing and valuation models, which may not accurately value such swap positions when established or when subsequently traded or unwound under actual market conditions.

Dodd-Frank requires that certain index CDS be executed in regulated markets and submitted for clearing to regulated clearinghouses. See "—Derivatives — Regulation of Derivatives — Dodd-Frank Regulations" above. Other single-name CDS and index CDS are permitted, although not required, to be cleared through regulated clearinghouses. The Funds clear all credit default swaps that are subject to mandatory clearing and may voluntarily clear some, but not all, of the other credit default swaps not subject to mandatory clearing. The Funds face counterparty risk with respect to the clearinghouse when entering into cleared single-name CDS and cleared index CDS. The Funds face significant counterparty risk with respect to their counterparties to non-cleared credit default swaps and similar instruments. A Fund typically will enter into non-cleared credit default swaps and similar instruments with swap dealers and creditworthy entities that have substantial capital or that have provided the Fund with a third-party guaranty or other credit support.

In addition, credit default swaps and similar instruments generally involve greater risks than if a Fund had invested in the reference obligation directly and are subject to significant credit risk, correlation risk, leverage risk, illiquidity risk and market risk. See "—Risk Factors in Derivatives" above.

Interest Rate Swaps, Floors and Caps. Certain Funds may enter into OTC derivatives in the form of interest rate swaps and interest rate caps and floors. As described in further detail below, a Fund may enter into these transactions primarily to preserve a return or spread on a particular investment or portion of its holdings, as a duration management technique, to protect against an increase in the price of securities a Fund anticipates purchasing at a later date, or for speculation to increase returns.

Dodd-Frank requires that certain interest rate swaps be executed in regulated markets and submitted for clearing to regulated clearinghouses. See "—Regulation of Derivatives — Dodd-Frank Regulations" above. Other interest rate swaps are permitted, although not required, to be cleared. Most of the interest rate swaps entered into by the Funds are cleared. The Funds face counterparty risk with respect to the clearinghouse when entering into cleared interest rate swaps.

The Funds face significant counterparty risk with respect to their counterparties to non-cleared interest rate swaps and interest rate caps and floors. The typical counterparties for a Fund's non-cleared interest rate derivatives transactions are swap dealers and other creditworthy entities that have substantial capital or that have provided the Fund with a third-party guaranty or other credit support. If the Fund's counterparty defaults on such a transaction, a Fund will have contractual remedies with respect to the transaction. The market for interest rate swaps is relatively liquid in comparison with other similar instruments traded in the interbank market. A Fund may be limited in its ability to enter into certain interest rate derivatives due to applicable income tax requirements.

Interest rate swaps are transactions in which each party makes periodic interest payments based on a fixed or variable interest rate, index or asset in return for periodic payments from its counterparty based on a different fixed or variable interest rate, index or asset.

The purchase of an interest rate floor entitles the purchaser, to the extent that a specified index falls below a predetermined interest rate, to receive payments of interest on a notional principal amount from the party selling such interest rate floor.

The purchase of an interest rate cap entitles the purchaser, to the extent that a specified index rises above a predetermined interest rate, to receive payments of interest on a notional principal amount from the party selling such interest rate cap.

A Fund may enter into an interest rate swap to effectively exchange with another party their respective commitments to pay or receive interest, e.g., an exchange of fixed rate payments for floating rate payments. For example, if a Fund holds a mortgage-backed security with an interest rate that is reset only once each year, it may swap the right to receive interest at this fixed rate for the right to receive interest at a rate that is reset every week. This would enable a Fund to offset a decline in the value of the mortgage-backed security due to rising interest rates but would also limit its ability to benefit from falling interest rates. Conversely, if a Fund holds a mortgage-backed security with an interest rate that is reset every week and it would like to lock in what it believes to be a high interest rate for one year, it may swap the right to receive interest at this variable weekly rate for the right to receive interest at a rate that is fixed for one year. Such a swap would protect the Fund from a reduction in yield due to falling interest rates and may permit the Fund to enhance its income through the positive differential between one week and one year interest rates, but would preclude it from taking full advantage of rising interest rates.

Gains from transactions in interest rate swaps distributed to shareholders will be taxable as ordinary income or, in certain circumstances, as long term capital gains to shareholders.

Interest rate swaps and interest rate caps and floors may be subject to correlation risk, leverage risk, illiquidity risk and market risk. See "—Risk Factors in Derivatives" above.

Total Return Swaps. Total return swaps are contracts in which one party agrees to make periodic payments to the other party based on the return of the assets underlying the contract in exchange for periodic payments based on a fixed or variable interest rate or the total return from different underlying assets. The return of the assets underlying the contract includes both the income generated by the asset and the change in market value of the asset. The asset underlying the contract may include a specified security, basket of securities or securities indices. Total return swaps on a specified security, basket of securities indices may sometimes be referred to as "contracts for difference."

Total return swaps may be used to obtain exposure to a security or market without owning or taking physical custody of such security or investing directly in such market. Upon entering into a total return swap, a Fund is required to deposit initial margin but the parties do not exchange the notional amount. As a result, total return swaps may effectively add leverage to the Fund's portfolio because the Fund would be subject to investment exposure on the notional amount of the swap.

Total return swaps are subject to significant correlation risk, leverage risk, illiquidity risk, market risk and counterparty risk. See "—Risk Factors in Derivatives" above.

### **Options**

Options on Securities and Securities Indices. A Fund may engage in transactions in options on individual securities, baskets of securities or securities indices, or particular measurements of value or rates, such as an index of the price of treasury securities or an index representative of short-term interest rates. Such investments may be made on exchanges and in the OTC markets. In general, exchange-traded options have standardized exercise prices and expiration dates and require the parties to post margin against their obligations, and the performance of the parties' obligations in connection with such options is guaranteed by the exchange or a related clearing corporation. OTC options have more flexible terms negotiated between the buyer and the seller, but are subject to greater credit risk. OTC options also involve greater illiquidity risk.

A Fund may also engage in transactions in options which have additional features that result in different payment structures and/or expirations (commonly referred to as exotic options). For example, barrier options are exotic options that can only be exercised (or automatically expire) if the price of the underlying asset reaches one or more predetermined levels on or before expiration. Binary options are another example of exotic options which have a fixed all-or-nothing payout if one or more predetermined conditions are met. Exotic options are typically traded in OTC markets.

There are several risks associated with transactions in options on securities and indexes. For example, there are significant differences between the securities and options markets that could result in an imperfect correlation between these markets, causing a given transaction not to achieve its objectives. In addition, a liquid secondary market for particular options, whether traded OTC or on a national securities exchange ("Exchange") may be absent for reasons which include the following: there may be insufficient trading interest in certain options; restrictions may be imposed by an Exchange on opening transactions or closing transactions or both; trading halts, suspensions or other restrictions may be imposed with respect to particular classes or series of options or underlying securities; unusual or unforeseen circumstances may interrupt normal operations on an Exchange; the facilities of an Exchange or the Options Clearing Corporation may not at all times be adequate to handle current trading volume; or one or more Exchanges could, for economic or other reasons, decide or be compelled at some future date to discontinue the trading of options (or a particular class or series of options), in which event the secondary market on that Exchange (or in that class or series of options) would cease to exist, although outstanding options that had been issued by the Options Clearing Corporation as a result of trades on that Exchange would continue to be exercisable in accordance with their terms.

Call Options. A Fund may purchase call options on any of the types of securities or instruments in which it may invest. A purchased call option gives a Fund the right to buy, and obligates the seller to sell, the underlying security at the exercise price at any time during the option period. A Fund also may purchase and sell call options on indices. Index options are similar to options on securities except that, rather than taking or making delivery of securities underlying the option at a specified price upon exercise, an index option gives the holder the right to receive cash upon exercise of the option if the level of the index upon which the option is based is greater than the exercise price of the option.

A written call option is covered if a Fund holds a call on the same security or index as the call written where the exercise price of the call held is (i) equal to or less than the exercise price of the call written, or (ii) greater than the exercise price of the call written provided the difference is maintained by the Fund in assets which are not considered illiquid investments under the Funds' Liquidity Program (as defined below) ("liquid assets") designated on the Manager's or sub-adviser's books and records to the extent required by Commission guidelines.

A Fund may write (i.e., sell) covered call options on the securities or instruments in which it may invest and to enter into closing purchase transactions with respect to certain of such options. A covered call option is an option in which a Fund, in return for a premium, gives another party a right to buy specified securities owned by the Fund at a specified future date and price set at the time of the contract. The principal reason for writing call options is the attempt to realize, through the receipt of premiums, a greater return than would be realized on the securities alone. By writing covered call options, a Fund gives up the opportunity, while the option is in effect, to profit from any price increase in the underlying security above the option exercise price. In addition, a Fund's ability to sell the underlying security will be limited while the option is in effect unless the Fund enters into a closing purchase transaction. A closing purchase transaction cancels out a Fund's position as the writer of an option by means of an offsetting purchase of an identical option prior to the expiration of the option it has written. Covered call options also serve as a partial hedge to the extent of the premium received against the price of the underlying security declining.

A Fund may write (i.e., sell) uncovered call options on securities or instruments in which it may invest but that are not currently held by the Fund. The principal reason for writing uncovered call options is to realize income without committing capital to the ownership of the underlying securities or instruments. When writing uncovered call options, a Fund must deposit and maintain sufficient margin with the broker-dealer through which it made the uncovered call option as collateral to ensure that the securities can be purchased for delivery if and when the option is exercised. During periods of declining securities prices or when prices are stable, writing uncovered calls can be a profitable strategy to increase a Fund's income with minimal capital risk. Uncovered calls are riskier than covered calls because there is no underlying security held by a Fund that can act as a partial hedge. Uncovered calls have speculative characteristics and the potential for loss is unlimited. When an uncovered call is exercised, a Fund must purchase the underlying security to meet its call obligation. There is also a risk, especially with preferred and debt securities that lack sufficient liquidity, that the securities may not be available for purchase. If the purchase price exceeds the exercise price, a Fund will lose the difference.

Put Options. A Fund may purchase put options to seek to hedge against a decline in the value of its securities or to enhance its return. By buying a put option, a Fund acquires a right to sell the underlying securities or instruments at the exercise price, thus limiting the Fund's risk of loss through a decline in the market value of the securities or instruments until the put option expires. The amount of any appreciation in the value of the underlying securities or instruments will be partially offset by the amount of the premium paid for the put option and any related transaction costs. Prior to its expiration, a put option may be sold in a closing sale transaction and profit or loss from the sale will depend on whether the amount received is more or less than the premium paid for the put option plus the related transaction costs. A closing sale transaction cancels out a Fund's position as the purchaser of an option by means of an offsetting sale of an identical option prior to the expiration of the option it has purchased. A Fund also may purchase uncovered put options.

A Fund also may write (i.e., sell) put options on the types of securities or instruments that may be held by the Fund. A Fund will receive a premium for writing a put option, which increases the Fund's return.

A Fund also may write (i.e., sell) uncovered put options on securities or instruments in which it may invest but with respect to which the Fund does not currently have a corresponding short position or has not deposited as collateral cash equal to the exercise value of the put option with the broker-dealer through which it made the uncovered put option. The principal reason for writing uncovered put options is to receive premium income and to acquire such securities or instruments at a net cost below the current market value. A Fund has the obligation to buy the securities or instruments at an agreed upon price if the price of the securities or instruments decreases below the exercise price. If the price of the securities or instruments increases during the option period, the option will expire worthless and a Fund will retain the premium and will not have to purchase the securities or instruments at the exercise price.

Options on Government National Mortgage Association ("GNMA") Certificates. The following information relates to the unique characteristics of options on GNMA Certificates. Since the remaining principal balance of GNMA Certificates declines each month as a result of mortgage payments, a Fund, as a writer of a GNMA call holding GNMA Certificates as "cover" to satisfy its delivery obligation in the event of exercise, may find that the GNMA Certificates it holds no longer have a sufficient remaining principal balance for this purpose. Should this occur, a Fund will purchase additional GNMA Certificates from the same pool (if obtainable) or other GNMA Certificates in the cash market in order to maintain its "cover."

A GNMA Certificate held by a Fund to cover an option position in any but the nearest expiration month may cease to represent cover for the option in the event of a decline in the GNMA coupon rate at which new pools are originated under the FHA/VA loan ceiling in effect at any given time. If this should occur, a Fund will no longer be covered, and the Fund will either enter into a closing purchase transaction or replace such Certificate with a certificate that represents cover. When a Fund closes its position or replaces such Certificate, it may realize an unanticipated loss and incur transaction costs.

Options on Swaps ("Swaptions"). A swaption gives a counterparty the option (but not the obligation) to enter into a new swap agreement or to shorten, extend, cancel or otherwise modify an existing swap agreement, at a designated future time on specified terms. A Fund may write (i.e., sell) and purchase put and call swaptions. Depending on the terms of the particular option agreement, a Fund will generally incur a greater degree of risk when it writes a swaption than it will incur when it purchases a swaption. When a Fund purchases a swaption, it risks losing only the amount of the premium it has paid should it decide to let the option expire unexercised. However, when a Fund writes a swaption, upon exercise of the option the Fund will become obligated according to the terms of the underlying agreement and the potential for loss may be unlimited. Certain swaptions are permitted, although not required, to be cleared.

A Fund will likely enter into these transactions to preserve a return or spread on a particular investment or portion of its portfolio or to protect against any increase in the price of securities the Fund anticipates purchasing at a later date. A Fund generally will use these transactions for hedging purposes, not for speculation.

Swaptions may be subject to correlation risk, leverage risk, illiquidity risk and market risk. See "—Risk Factors in Derivatives" above.

## Foreign Exchange Transactions.

A Fund may enter into spot foreign exchange transactions, forward foreign exchange transactions ("FX forwards") and currency swaps, purchase and sell currency options, currency futures and related options thereon (collectively, "Currency Instruments") for purposes of hedging against the decline in the value of currencies in which its portfolio holdings are denominated against the U.S. dollar or, with respect to certain Funds, to seek to enhance returns.

Such transactions could be effected to hedge with respect to foreign dollar denominated securities owned by a Fund, sold by a Fund but not yet delivered, or committed or anticipated to be purchased by a Fund. As an illustration, a Fund may use such techniques to hedge the stated value in U.S. dollars of an investment in a yen-denominated security. For example, the Fund may purchase a foreign currency put option enabling it to sell a specified amount of yen for dollars at a specified price by a future date. To the extent the hedge is successful, a loss in the value of the yen relative to the dollar will tend to be offset by an increase in the value of the put option. To offset, in whole or in part, the cost of acquiring such a put option, the Fund may also sell a call option which, if exercised, requires it to sell a specified amount of yen for dollars at a specified price by a future date (a technique called a "straddle"). By selling such a call option in this illustration, the Fund gives up the opportunity to profit without limit from increases in the relative value of the yen to the dollar. "Straddles" of the type that may be used by a Fund are considered hedging transactions. Certain Funds have a fundamental investment restriction that restricts currency option strategies.

Hedging transactions involving Currency Instruments involve substantial risks, including correlation risk. A Fund's use of Currency Instruments to effect hedging strategies is intended to reduce the volatility of the NAV of the Fund's shares; however, the use of such hedging strategies will not prevent the NAV of the Fund's shares from fluctuating. Moreover, although Currency Instruments will be used with the intention of hedging against adverse currency movements, transactions in Currency Instruments involve the risk that anticipated currency movements will not be accurately predicted and that the Fund's hedging strategies will be ineffective. To the extent that a Fund hedges against anticipated currency movements that do not occur, the Fund may realize losses and decrease its total return. Furthermore, a Fund will only engage in hedging activities from time to time and may not be engaging in hedging activities when movements in currency exchange rates actually occur.

In connection with its trading in forward foreign currency contracts, a Fund will contract with a foreign or domestic bank, or foreign or domestic securities dealer, to make or take future delivery of a specified amount of a particular currency. There are no limitations on daily price moves in such forward contracts, and banks and dealers are not required to continue to make markets in such contracts. There have been periods during which certain banks or dealers have refused to quote prices for such forward contracts or have quoted prices with an unusually wide spread between the price at which the bank or dealer is prepared to buy and that at which it is prepared to sell. Governmental imposition of currency controls might limit any such forward contract trading. With respect to its trading of forward contracts, if any, a Fund will be subject to counterparty risk. Any such failure to perform by a counterparty would deprive the Fund of any profit potential or force the Fund to cover its commitments for resale, if any, at the then market price and could result in a loss to the Fund.

It may not be possible for a Fund to hedge against currency exchange rate movements, even if correctly anticipated, in the event that (i) the currency exchange rate movement is so generally anticipated that the Fund is not able to enter into a hedging transaction at an effective price, or (ii) the currency exchange rate movement relates to a market with respect to which Currency Instruments are not available and it is not possible to engage in effective foreign currency hedging. The cost to a Fund of engaging in foreign currency transactions varies with such factors as the currencies involved, the length of the contract period and the market conditions then prevailing. Since transactions in foreign currency exchange usually are conducted on a principal basis, no fees or commissions are involved.

A Fund will not hedge a currency in excess of the aggregate market value of the securities that it owns (including receivables for unsettled securities sales), or has committed to purchase or anticipates purchasing, which are denominated in such currency.

Spot Transactions and FX Forwards. FX forwards are OTC contracts to purchase or sell a specified amount of a specified currency or multinational currency unit at a specified price and specified future date. Spot foreign exchange

transactions are similar but are settled in the current, or "spot", market. A Fund will enter into foreign exchange transactions for purposes of hedging either a specific transaction or a portfolio position, or, with respect to certain Funds, to seek to enhance returns. FX forwards involve substantial currency risk, credit risk and liquidity risk. A Fund may enter into a foreign exchange transaction for purposes of hedging a specific transaction by, for example, purchasing a currency needed to settle a security transaction or selling a currency in which the Fund has received or anticipates receiving a dividend or distribution. A Fund may enter into a foreign exchange transaction for purposes of hedging a portfolio position by selling forward a currency in which a portfolio position of the Fund is denominated or by purchasing a currency in which the Fund anticipates acquiring a portfolio position in the near future. A Fund may also hedge a currency by entering into a transaction in a Currency Instrument denominated in a currency other than the currency being hedged (a "cross-hedge"). A Fund will only enter into a cross-hedge if the Manager believes that (i) there is a demonstrably high correlation between the currency in which the cross-hedge is denominated and the currency being hedged, and (ii) executing a cross-hedge through the currency in which the cross-hedge is denominated will be significantly more cost-effective or provide substantially greater liquidity than executing a similar hedging transaction by means of the currency being hedged.

A Fund may also engage in proxy hedging transactions to reduce the effect of currency fluctuations on the value of existing or anticipated holdings of portfolio securities. Proxy hedging is often used when the currency to which the Fund is exposed is difficult to hedge, or to hedge against the U.S. dollar. Proxy hedging entails entering into a forward contract to sell a currency whose changes in value are generally considered to be linked to a currency or currencies in which some or all of the Fund's securities are, or are expected to be, denominated, and to buy U.S. dollars. Proxy hedging involves some of the same risks and considerations as other transactions with similar instruments. Currency transactions can result in losses to the Fund if the currency being hedged fluctuates in value to a degree or in a direction that is not anticipated. In addition, there is the risk that the perceived linkage between various currencies may not be present, including during the particular time that a Fund is engaging in proxy hedging.

A Fund may also cross-hedge currencies by entering into forward contracts to sell one or more currencies that are expected to decline in value relative to other currencies to which the Fund has or in which the Fund expects to have portfolio exposure. For example, a Fund may hold both Canadian government bonds and Japanese government bonds, and the Manager or sub-adviser may believe that Canadian dollars will deteriorate against Japanese yen. The Fund would sell Canadian dollars to reduce its exposure to that currency and buy Japanese yen. This strategy would be a hedge against a decline in the value of Canadian dollars, although it would expose the Fund to declines in the value of the Japanese yen relative to the U.S. dollar.

Some of the forward non-U.S. currency contracts entered into by the Funds are classified as non-deliverable forwards ("NDFs"). NDFs are cash-settled, short-term forward contracts that may be thinly traded or are denominated in non-convertible foreign currency, where the profit or loss at the time at the settlement date is calculated by taking the difference between the agreed upon exchange rate and the spot rate at the time of settlement, for an agreed upon notional amount of funds. All NDFs have a fixing date and a settlement date. The fixing date is the date at which the difference between the prevailing market exchange rate and the agreed upon exchange rate is calculated. The settlement date is the date by which the payment of the difference is due to the party receiving payment. NDFs are commonly quoted for time periods of one month up to two years, and are normally quoted and settled in U.S. dollars. They are often used to gain exposure to and/or hedge exposure to foreign currencies that are not internationally traded.

Currency Futures. A Fund may seek to enhance returns or hedge against the decline in the value of a currency through use of currency futures or options on currency futures. Currency futures are similar to forward foreign exchange transactions except that futures are standardized, exchange-traded contracts while forward foreign exchange transactions are traded in the OTC market. Currency futures involve substantial currency risk as well as the risks discussed above in "—Futures."

Currency Options. A Fund may seek to enhance returns or hedge against the decline in the value of a currency through the use of currency options. Certain Funds have fundamental investment restrictions that permit the purchase of currency options, but prohibit the writing of currency options. Currency options are similar to options on securities. For example, in consideration for an option premium the writer of a currency option is obligated to sell (in the case of a call option) or purchase (in the case of a put option) a specified amount of a specified currency on or before the expiration date for a specified amount of another currency. A Fund may engage in transactions in options on currencies either on exchanges or OTC markets. Such transactions in options may include exotic options on currencies, which are typically traded in OTC markets and have additional features that result in different payment structures and/or expirations. Where a Fund is permitted to write currency options, it may write covered call options

on up to 100% of the currencies in its portfolio. See "—Options" above. Currency options involve substantial currency risk, and may also involve credit, leverage or illiquidity risk.

Currency Swaps. A Fund may enter into currency swaps in order to protect against currency fluctuations or to hedge portfolio positions. Currency swaps are transactions in which one currency is simultaneously bought for a second currency on a spot basis and sold for the second currency on a forward basis. Currency swaps involve the exchange of the rights of a Fund and another party to make or receive payments in specified currencies, and typically require the delivery of the entire principal value of one designated currency in exchange for the other designated currency. As a result, the entire principal value of a currency swap is subject to the risk that the other party to the swap will default on its contractual delivery obligations.

**Distressed Securities.** A Fund may invest in securities, including loans purchased in the secondary market, that are the subject of bankruptcy proceedings or otherwise in default or in risk of being in default as to the repayment of principal and/or interest at the time of acquisition by the Fund or that are rated in the lower rating categories by one or more nationally recognized statistical rating organizations (for example, Ca or lower by Moody's and CC or lower by S&P or Fitch) or, if unrated, are in the judgment of the Manager of equivalent quality ("Distressed Securities"). Investment in Distressed Securities is speculative and involves significant risks.

A Fund will generally make such investments only when the Manager believes it is reasonably likely that the issuer of the Distressed Securities will make an exchange offer or will be the subject of a plan of reorganization pursuant to which the Fund will receive new securities in return for the Distressed Securities. However, there can be no assurance that such an exchange offer will be made or that such a plan of reorganization will be adopted. In addition, a significant period of time may pass between the time at which a Fund makes its investment in Distressed Securities and the time that any such exchange offer or plan of reorganization is completed. During this period, it is unlikely that a Fund will receive any interest payments on the Distressed Securities, the Fund will be subject to significant uncertainty as to whether or not the exchange offer or plan of reorganization will be completed and the Fund may be required to bear certain extraordinary expenses to protect and recover its investment. Therefore, to the extent the Fund seeks capital appreciation through investment in distressed securities, the Fund's ability to achieve current income for its shareholders may be diminished. The Fund also will be subject to significant uncertainty as to when and in what manner and for what value the obligations evidenced by the distressed securities will eventually be satisfied (e.g., through a liquidation of the obligor's assets, an exchange offer or plan of reorganization involving the distressed securities or a payment of some amount in satisfaction of the obligation). Even if an exchange offer is made or plan of reorganization is adopted with respect to Distressed Securities held by a Fund, there can be no assurance that the securities or other assets received by a Fund in connection with such exchange offer or plan of reorganization will not have a lower value or income potential than may have been anticipated when the investment was made or no value. Moreover, any securities received by a Fund upon completion of an exchange offer or plan of reorganization may be restricted as to resale. Similarly, if a Fund participates in negotiations with respect to any exchange offer or plan of reorganization with respect to an issuer of Distressed Securities, the Fund may be restricted from disposing of such securities. To the extent that a Fund becomes involved in such proceedings, the Fund may have a more active participation in the affairs of the issuer than that assumed generally by an investor. The Fund, however, will not make investments for the purpose of exercising day-to-day management of any issuer's affairs.

**Environmental, Social and Governance ("ESG") Integration**. Although a Fund does not seek to implement a specific sustainability objective, strategy or process unless disclosed in its Prospectus, Fund management will consider ESG factors as part of the investment process for the Fund. Fund management views ESG integration as the practice of incorporating financially material ESG data or information into investment processes with the objective of enhancing risk-adjusted returns. These ESG considerations will vary depending on a Fund's particular investment strategies and may include consideration of third-party research as well as consideration of proprietary BlackRock research across the ESG risks and opportunities regarding an issuer. The ESG characteristics utilized in a Fund's investment process are anticipated to evolve over time and one or more characteristics may not be relevant with respect to all issuers that are eligible for investment.

Certain of these considerations may affect a Fund's exposure to certain companies or industries. While Fund management views ESG considerations as having the potential to contribute to a Fund's long-term performance, there is no guarantee that such results will be achieved.

**Equity Securities.** Certain Funds may invest in equity securities, which include common stock and, for certain Funds, 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; general and limited partnerships and limited liability companies; and depositary receipts. Stock markets are volatile. The price of equity securities will

fluctuate and can decline and reduce the value of a portfolio investing in equities. The price of equity securities fluctuates based on changes in a company's financial condition and overall market and economic conditions. The value of equity securities purchased by the Fund could decline if the financial condition of the companies the Fund invests in decline or if overall market and economic conditions deteriorate. They may also decline due to factors that affect a particular industry or industries, such as labor shortages or increase in production costs and competitive conditions within an industry. In addition, they may decline due to general market conditions that are not specifically related to a company or industry, such as real or perceived adverse economic conditions, changes in the general outlook for corporate earnings, changes in interest or currency rates or generally adverse investor sentiment.

From time to time certain of the Funds may invest in shares of companies through initial public offerings ("IPOs"). IPOs have the potential to produce, and have in fact produced, substantial gains for certain Funds. There is no assurance that any Fund will have continued access to profitable IPOs and therefore investors should not rely on these past gains as an indication of future performance. The investment performance of a Fund during periods when it is unable to invest significantly or at all in IPOs may be lower than during periods when it is able to do so. In addition, as a Fund increases in size, the impact of IPOs on its performance will generally decrease. Securities issued in IPOs are subject to many of the same risks as investing in companies with smaller market capitalizations. Securities issued in IPOs have no trading history, and information about the companies may be available for very limited periods. In addition, the prices of securities sold in IPOs may be highly volatile or may decline shortly after the initial public offering.

The Funds may invest in companies that have relatively small market capitalizations. These organizations will normally have more limited product lines, markets and financial resources and will be dependent upon a more limited management group than larger capitalized companies. In addition, it is more difficult to get information on smaller companies, which tend to be less well known, have shorter operating histories, do not have significant ownership by large investors and are followed by relatively few securities analysts. The securities of smaller capitalized companies are often traded in the OTC markets and may have fewer market makers and wider price spreads. This may result in greater price movements and less ability to sell a Fund's investment than if the Fund held the securities of larger, more established companies.

For a discussion of the types of equity securities in which your Fund may invest and the risks associated with investing in such equity securities, see your Fund's Prospectus.

Real Estate-Related Securities. Although no Fund may invest directly in real estate, certain Funds may invest in equity securities of issuers that are principally engaged in the real estate industry. Such investments are subject to certain risks associated with the ownership of real estate and with the real estate industry in general. These risks include, among others: possible declines in the value of real estate; risks related to general and local economic conditions; possible lack of availability of mortgage funds or other limitations on access to capital; overbuilding; risks associated with leverage; market illiquidity; extended vacancies of properties; increase in competition, property taxes, capital expenditures and operating expenses; changes in zoning laws or other governmental regulation; costs resulting from the clean-up of, and liability to third parties for damages resulting from, environmental problems; tenant bankruptcies or other credit problems; casualty or condemnation losses; uninsured damages from floods, earthquakes or other natural disasters; limitations on and variations in rents, including decreases in market rates for rents; investment in developments that are not completed or that are subject to delays in completion; and changes in interest rates. To the extent that assets underlying a Fund's investments are concentrated geographically, by property type or in certain other respects, the Fund may be subject to certain of the foregoing risks to a greater extent. Investments by a Fund in securities of companies providing mortgage servicing will be subject to the risks associated with refinancings and their impact on servicing rights.

In addition, if a Fund receives rental income or income from the disposition of real property acquired as a result of a default on securities the Fund owns, the receipt of such income may adversely affect the Fund's ability to retain its tax status as a regulated investment company because of certain income source requirements applicable to regulated investment companies under the Internal Revenue Code of 1986, as amended (the "Code").

Securities of Smaller or Emerging Growth Companies. Investment in smaller or emerging growth companies involves greater risk than is customarily associated with investments in more established companies. The securities of smaller or emerging growth companies may be subject to more abrupt or erratic market movements than larger, more established companies or the market average in general. These companies may have limited product lines, markets or financial resources, or they may be dependent on a limited management group.

While smaller or emerging growth company issuers may offer greater opportunities for capital appreciation than large cap issuers, investments in smaller or emerging growth companies may involve greater risks and thus may be

considered speculative. Fund management believes that properly selected companies of this type have the potential to increase their earnings or market valuation at a rate substantially in excess of the general growth of the economy. Full development of these companies and trends frequently takes time.

Small cap and emerging growth securities will often be traded only in the OTC market or on a regional securities exchange and may not be traded every day or in the volume typical of trading on a national securities exchange. As a result, the disposition by a Fund of portfolio securities to meet redemptions or otherwise may require the Fund to make many small sales over a lengthy period of time, or to sell these securities at a discount from market prices or during periods when, in Fund management's judgment, such disposition is not desirable.

The process of selection and continuous supervision by Fund management does not, of course, guarantee successful investment results; however, it does provide access to an asset class not available to the average individual due to the time and cost involved. Careful initial selection is particularly important in this area as many new enterprises have promise but lack certain of the fundamental factors necessary to prosper. Investing in small cap and emerging growth companies requires specialized research and analysis. In addition, many investors cannot invest sufficient assets in such companies to provide wide diversification.

Small companies are generally little known to most individual investors although some may be dominant in their respective industries. Fund management believes that relatively small companies will continue to have the opportunity to develop into significant business enterprises. A Fund may invest in securities of small issuers in the relatively early stages of business development that have a new technology, a unique or proprietary product or service, or a favorable market position. Such companies may not be counted upon to develop into major industrial companies, but Fund management believes that eventual recognition of their special value characteristics by the investment community can provide above-average long-term growth to the portfolio.

Equity securities of specific small cap issuers may present different opportunities for long-term capital appreciation during varying portions of economic or securities market cycles, as well as during varying stages of their business development. The market valuation of small cap issuers tends to fluctuate during economic or market cycles, presenting attractive investment opportunities at various points during these cycles.

Smaller companies, due to the size and kinds of markets that they serve, may be less susceptible than large companies to intervention from the Federal government by means of price controls, regulations or litigation.

**Exchange-Traded Notes ("ETNs").** Certain Funds may invest in ETNs. ETNs are generally notes representing debt of the issuer, usually a financial institution. ETNs combine both aspects of bonds and exchange-traded funds ("ETFs"). An ETN's returns are based on the performance of one or more underlying assets, reference rates or indexes, minus fees and expenses. Similar to ETFs, ETNs are listed on an exchange and traded in the secondary market. However, unlike an ETF, an ETN can be held until the ETN's maturity, at which time the issuer will pay a return linked to the performance of the specific asset, index or rate ("reference instrument") to which the ETN is linked minus certain fees. Unlike regular bonds, ETNs do not make periodic interest payments, and principal is not protected.

The value of an ETN may be influenced by, among other things, time to maturity, level of supply and demand for the ETN, volatility and lack of liquidity in underlying markets, changes in the applicable interest rates, the performance of the reference instrument, changes in the issuer's credit rating and economic, legal, political or geographic events that affect the reference instrument. An ETN that is tied to a reference instrument may not replicate the performance of the reference instrument. ETNs also incur certain expenses not incurred by their applicable reference instrument. Some ETNs that use leverage may, at times, be illiquid and may be difficult to purchase or sell at a fair price. Levered ETNs are subject to the same risk as other instruments that use leverage in any form. While leverage allows for greater potential return, the potential for loss is also greater. Finally, additional losses may be incurred if the investment loses value because, in addition to the money lost on the investment, the loan still needs to be repaid.

Because the return on the ETN is dependent on the issuer's ability or willingness to meet its obligations, the value of the ETN may change due to a change in the issuer's credit rating, despite no change in the underlying reference instrument. The market value of ETN shares may differ from the value of the reference instrument. This difference in price may be due to the fact that the supply and demand in the market for ETN shares at any point in time is not always identical to the supply and demand in the market for the assets underlying the reference instrument that the ETN seeks to track.

There may be restrictions on the Fund's right to redeem its investment in an ETN, which are generally meant to be held until maturity. The Fund's decision to sell its ETN holdings may be limited by the availability of a secondary market. An investor in an ETN could lose some or all of the amount invested.

### Foreign Investments.

Foreign Investment Risks. Certain Funds may invest in foreign securities, including securities from issuers located in emerging market countries. These securities may be denominated in U.S. dollars or in a foreign currency. Investing in foreign securities involves risks not typically associated with investing in securities of companies organized and operated in the United States that can increase the chances that a Fund will lose money.

Securities issued by certain companies organized outside the United States may not be deemed to be foreign securities (but rather deemed to be U.S. securities) if (i) the company's principal operations are conducted from the U.S., (ii) the company's equity securities trade principally on a U.S. stock exchange, (iii) the company does a substantial amount of business in the U.S. or (iv) the issuer of securities is included in the Fund's primary U.S. benchmark index.

In addition to equity securities, foreign investments of the Funds may include: (a) debt obligations issued or guaranteed by foreign sovereign governments or their agencies, authorities, instrumentalities or political subdivisions, including a foreign state, province or municipality; (b) debt obligations of supranational organizations; (c) debt obligations of foreign banks and bank holding companies; (d) debt obligations of domestic banks and corporations issued in foreign currencies; (e) debt obligations denominated in the Euro; and (f) foreign corporate debt securities and commercial paper. Such securities may include loan participations and assignments, convertible securities and zero-coupon securities.

Dividends or interest on, or proceeds from the sale of, foreign securities may be subject to foreign withholding taxes.

Foreign Market Risk. Funds that may invest in foreign securities offer the potential for more diversification than a Fund that invests only in the United States because securities traded on foreign markets have often (though not always) performed differently from securities traded in the United States. However, such investments often involve risks not present in U.S. investments that can increase the chances that a Fund will lose money. In particular, a Fund is subject to the risk that, because there are generally fewer investors on foreign exchanges and a smaller number of shares traded each day, it may be difficult for the Fund to buy and sell securities on those exchanges. In addition, prices of foreign securities may fluctuate more than prices of securities traded in the United States. Investments in foreign markets may also be adversely affected by governmental actions such as the imposition of punitive taxes. In addition, economic conditions, such as volatile currency exchange rates and interest rates, political events, military action and other conditions may, without prior warning, lead to the governments of certain countries, or the U.S. Government with respect to certain countries, prohibiting or imposing substantial restrictions through capital controls and/or sanctions on foreign investing in the capital markets or certain industries in those countries. Capital controls and/or sanctions may include the prohibition of, or restrictions on, the ability to own or transfer currency, securities, derivatives or other assets and may also include retaliatory actions of one government against another government, such as seizure of assets. Any of these actions could severely impair a Fund's ability to purchase, sell, transfer. receive, deliver or otherwise obtain exposure to foreign securities and assets, including the ability to transfer the Fund's assets or income back into the United States, and could negatively impact the value and/or liquidity of such assets or otherwise adversely affect a Fund's operations, causing the Fund to decline in value. Other potential foreign market risks include exchange controls, difficulties in pricing securities, defaults on foreign government securities, difficulties in enforcing favorable legal judgments in foreign courts, and political and social conditions, such as diplomatic relations, confiscatory taxation, expropriation, limitation on the removal of funds or assets, or imposition of (or change in) exchange control regulations. Legal remedies available to investors in certain foreign countries may be less extensive than those available to investors in the United States or other foreign countries. In addition, changes in government administrations or economic or monetary policies in the U.S. or abroad could result in appreciation or depreciation of portfolio securities and could favorably or adversely affect a Fund's operations.

Foreign Economy Risk. The economies of certain foreign markets often do not compare favorably with that of the United States with respect to such issues as growth of gross national product, reinvestment of capital, resources, and balance of payments position. Certain such economies may rely heavily on particular industries or foreign capital and are more vulnerable to diplomatic developments, the imposition of economic sanctions against a particular country or countries, changes in international trading patterns, trade barriers, and other protectionist or retaliatory measures.

Currency Risk and Exchange Risk. Because foreign securities generally are denominated and pay dividends or interest in foreign currencies, the value of a Fund that invests in foreign securities as measured in U.S. dollars will be affected favorably or unfavorably by changes in exchange rates. Generally, when the U.S. dollar rises in value against a foreign currency, a security denominated in that currency loses value because the currency is worth fewer U.S.

dollars. Conversely, when the U.S. dollar decreases in value against a foreign currency, a security denominated in that currency gains value because the currency is worth more U.S. dollars. This risk, generally known as "currency risk," means that a stronger U.S. dollar will reduce returns for U.S. investors while a weak U.S. dollar will increase those returns.

Governmental Supervision and Regulation/Accounting Standards. Many foreign governments supervise and regulate stock exchanges, brokers and the sale of securities less than does the United States. Some countries may not have laws to protect investors comparable to the U.S. securities laws. For example, some foreign countries may have no laws or rules against insider trading. Insider trading occurs when a person buys or sells a company's securities based on nonpublic information about that company. Accounting standards in other countries are not necessarily the same as in the United States. If the accounting standards in another country do not require as much detail as U.S. accounting standards, it may be harder for Fund management to completely and accurately determine a company's financial condition. In addition, the U.S. Government has from time to time in the past imposed restrictions, through penalties and otherwise, on foreign investments by U.S. investors such as the Fund. If such restrictions should be reinstituted, it might become necessary for the Fund to invest all or substantially all of its assets in U.S. securities. Also, brokerage commissions and other costs of buying or selling securities often are higher in foreign countries than they are in the United States. This reduces the amount the Fund can earn on its investments.

Certain Risks of Holding Fund Assets Outside the United States. A Fund generally holds its foreign securities and cash in foreign banks and securities depositories. Some foreign banks and securities depositories may be recently organized or new to the foreign custody business. In addition, there may be limited or no regulatory oversight over their operations. Also, 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 any of their agents goes bankrupt. In addition, it is often more expensive for a Fund to buy, sell and hold securities in certain foreign markets than in the United States. The increased expense of investing in foreign markets reduces the amount a Fund can earn on its investments and typically results in a higher operating expense ratio for the Fund as compared to investment companies that invest only in the United States.

Publicly Available Information. In general, less information is publicly available with respect to foreign issuers than is available with respect to U.S. companies. Most foreign companies are also not subject to the uniform accounting and financial reporting requirements applicable to issuers in the United States. While the volume of transactions effected on foreign stock exchanges has increased in recent years, it remains appreciably below that of the New York Stock Exchange. Accordingly, a Fund's foreign investments may be less liquid than, and their prices may be more volatile than, comparable investments in securities in U.S. companies. In addition, there is generally less government supervision and regulation of securities exchanges, brokers and issuers in foreign countries than in the United States.

Settlement Risk. Settlement and clearance procedures in certain foreign markets differ significantly from those in the United States. Foreign settlement procedures and trade regulations also may involve certain risks (such as delays in payment for or delivery of securities) not typically generated by the settlement of U.S. investments.

Communications between the United States and emerging market countries may be unreliable, increasing the risk of delayed settlements or losses of security certificates in markets that still rely on physical settlement. Settlements in certain foreign countries at times have not kept pace with the number of securities transactions; these problems may make it difficult for a Fund to carry out transactions. If a Fund cannot settle or is delayed in settling a purchase of securities, it may miss attractive investment opportunities and certain of its assets may be uninvested with no return earned thereon for some period. If a Fund cannot settle or is delayed in settling a sale of securities, it may lose money if the value of the security then declines or, if it has contracted to sell the security to another party, the Fund could be liable to that party for any losses incurred.

Sovereign Debt. Investment in sovereign debt can involve a high degree of risk. The governmental entity that controls the repayment of sovereign debt may not be able or willing to repay the principal and/or interest when due in accordance with the terms of such debt. A governmental entity's willingness or ability to repay principal and interest due in a timely manner may be affected by, among other factors, its cash flow situation, the extent of its foreign reserves, the availability of sufficient foreign exchange on the date a payment is due, the relative size of the debt service burden to the economy as a whole, the governmental entity's policy towards the International Monetary Fund and the political constraints to which a governmental entity may be subject. Governmental entities may also be dependent on expected disbursements from foreign governments, multilateral agencies and others abroad to reduce principal and interest arrearages on their debt. The commitment on the part of these governments, agencies and others to make such disbursements may be conditioned on the implementation of economic reforms and/or

economic performance and the timely service of such debtor's obligations. Failure to implement such reforms, achieve such levels of economic performance or repay principal or interest when due may result in the cancellation of such third parties' commitments to lend funds to the governmental entity, which may further impair such debtor's ability or willingness to timely service its debts. Consequently, governmental entities may default on their sovereign debt.

Holders of sovereign debt may be requested to participate in the rescheduling of such debt and to extend further loans to governmental entities. In the event of a default by a governmental entity, there may be few or no effective legal remedies for collecting on such debt.

Withholding Tax Reclaims Risk. A Fund may file claims to recover foreign withholding taxes on dividend and interest income (if any) received from issuers in certain countries and capital gains on the disposition of stocks or securities where such withholding tax reclaim is possible. Whether or when a Fund will receive a withholding tax refund is within the control of the tax authorities in such countries. Where a Fund expects to recover withholding taxes, the net asset value of the Fund generally includes accruals for such tax refunds. Each Fund regularly evaluates the probability of recovery. If the likelihood of recovery materially decreases, due to, for example, a change in tax regulation or approach in the foreign country, accruals in a Fund's net asset value for such refunds may be written down partially or in full, which will adversely affect the Fund's net asset value. Shareholders in a Fund at the time an accrual is written down will bear the impact of the resulting reduction in net asset value regardless of whether they were shareholders during the accrual period. Conversely, if a Fund receives a tax refund that has not been previously accrued, shareholders in the Fund at the time of the successful recovery will benefit from the resulting increase in the Fund's net asset value. Shareholders who sold their shares prior to such time will not benefit from such increase in the Fund's net asset value.

**Funding Agreements.** Certain Funds may invest in Guaranteed Investment Contracts and similar funding agreements. In connection with these investments, a Fund makes cash contributions to a deposit fund of an insurance company's general account. The insurance company then credits to the Fund on a monthly basis guaranteed interest, which is based on an index (such as the London Interbank Offered Rate ("LIBOR")). The funding agreements provide that this guaranteed interest will not be less than a certain minimum rate. The purchase price paid for a funding agreement becomes part of the general assets of the insurance company, and the contract is paid from the general assets of the insurance company. Generally, funding agreements are not assignable or transferable without the permission of the issuing insurance companies, and an active secondary market in some funding agreements does not currently exist.

**Guarantees.** A Fund may purchase securities which contain guarantees issued by an entity separate from the issuer of the security. Generally, the guarantor of a security (often an affiliate of the issuer) will fulfill an issuer's payment obligations under a security if the issuer is unable to do so.

Illiauid Investments. Each Fund may not acquire any illiquid investment if, immediately after the acquisition, a 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 the sale or disposition significantly changing the market value of the investment. Liquid investments may become illiquid after purchase by a Fund, particularly during periods of market turmoil. There can be no assurance that a security or instrument that is deemed to be liquid when purchased will continue to be liquid for as long as it is held by a Fund, and any security or instrument held by the Fund may be deemed an illiquid investment pursuant to the Fund's liquidity risk management program. A Fund's illiquid investments may reduce the returns of the Fund because it may be difficult to sell the illiquid investments at an advantageous time or price. In addition, if a Fund is limited in its ability to sell illiquid investments during periods when shareholders are redeeming their shares, the Fund will need to sell liquid securities to meet redemption requests and illiquid securities will become a larger portion of the Fund's holdings. If illiquid investments exceed 15% of a Fund's net assets, the Liquidity Rule (as defined below) and the Liquidity Program (as defined below) will require that certain remedial actions be taken. Illiquid investments may trade at a discount from comparable liquid investments. Investment of a Fund's assets in illiquid investments may restrict the ability of the Fund to dispose of its investments in a timely fashion and for a fair price as well as its ability to take advantage of market opportunities. The risks associated with illiquidity will be particularly acute where a Fund's operations require cash, such as when the Fund redeems shares or pays dividends, and could result in the Fund borrowing to meet short-term cash requirements or incurring capital losses on the sale of illiquid investments.

#### **Index Funds**

Tracking Error Risk. A Fund may be subject to tracking error, which is the divergence of the Fund's performance from that of the Underlying Index. Tracking error may occur because of differences between the securities and other instruments held in the Fund's portfolio and those included in the Underlying Index, pricing differences (including, as applicable, differences between a security's price at the local market close and the Fund's valuation of a security at the time of calculation of the Fund's net asset value), differences in transaction costs incurred by the Fund, the Fund's holding of uninvested cash, differences in timing of the accrual of or the valuation of dividends or other distributions, interest, the requirements to maintain pass-through tax treatment, portfolio transactions carried out to minimize the distribution of capital gains to shareholders, changes to the Underlying Index or the costs to the Fund of complying with various new or existing regulatory requirements. These risks may be heightened during times of increased market volatility or other unusual market conditions. In addition, tracking error may result because the Fund incurs fees and expenses, while the Underlying Index does not.

When an issuer is introduced by an index provider into an index tracked by a Fund, BFA may conduct an analysis on such issuer's securities to identify and screen for outlier high risk behavior (such as rapid or unusual price growth that does not appear to be supported by publicly available information on the business and assets of the issuer, unusual or significant short interest or lending activity, negative sentiment, suspended trading or incorrect free-float calculations, which could be indicators of possible irregularities, miscalculations or even fraud). If it identifies such behavior, BFA may, where appropriate, alert the index provider as to the alleged issue. The index provider has sole discretion for the determination as to whether to continue to include the issuer's securities in the rebalancing of its index. If the securities continue to be included in the index, BFA may underweight or exclude such securities from a Fund's portfolio and, if it does so, such Fund will be subject to increased tracking error due to the divergence in the securities included in its portfolio from its underlying index. BFA's underweighting or excluding such securities may result in a decline in a Fund's net asset value. The application of the abovementioned analysis and screening to a Fund and its Underlying Index is in the sole discretion of BFA and its affiliates (without any guarantees). The analysis and screening may not exclude any or all high risk securities from an Underlying Index or a Fund's portfolio, and the inclusion of such securities will result in an adverse impact to the Fund's net asset value if one or more such securities declines in value.

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Indexed and Inverse Securities. A Fund may invest in securities that provide a potential return based on a particular index of value or interest rates. For example, a Fund may invest in securities that pay interest based on an index of interest rates. The principal amount payable upon maturity of certain securities also may be based on the value of the index. To the extent a Fund invests in these types of securities, the Fund's return on such securities will be subject to risk with respect to the value of the particular index: that is, if the value of the index falls, the value of the indexed securities owned by the Fund will fall. Interest and principal payable on certain securities may also be based on relative changes among particular indices. A Fund may also invest in so-called "inverse floating obligations" or "residual interest bonds" on which the interest rates vary inversely with a floating rate (which may be reset periodically by a Dutch auction, a remarketing agent, or by reference to a short-term tax-exempt interest rate index). A Fund may purchase synthetically-created inverse floating rate bonds evidenced by custodial or trust receipts. Generally, income on inverse floating rate bonds will decrease when interest rates increase, and will increase when interest rates decrease. Such securities have the effect of providing a degree of investment leverage, since they may increase or decrease in value in response to changes, as an illustration, in market interest rates at a rate that is a multiple of the rate at which fixed-rate securities increase or decrease in response to such changes. As a result, the market values of such securities will generally be more volatile than the market values of fixed-rate securities. To seek to limit the volatility of these securities, a Fund may purchase inverse floating obligations that have shorter-term maturities or that contain limitations on the extent to which the interest rate may vary. Certain investments in such obligations may be illiquid. The Manager believes that indexed and inverse floating obligations represent flexible portfolio management instruments for a Fund that allow the Fund to seek potential investment rewards, hedge other portfolio positions or vary the degree of investment leverage relatively efficiently under different market conditions. A Fund may invest in indexed and inverse securities for hedging purposes or to seek to increase returns. When used for hedging purposes, indexed and inverse securities involve correlation risk. Furthermore, where such a security includes a contingent liability, in the event of an adverse movement in the underlying index or interest rate, a Fund may be required to pay substantial additional margin to maintain the position.

The Funds may invest up to 10% of their total assets in leveraged inverse floating rate debt instruments ("inverse floaters"). Inverse floaters are securities the potential of which is inversely related to changes in interest rates. In general, the return on inverse floaters will decrease when short-term interest rates increase and increase when short-term rates decrease. Municipal tender option bonds, both taxable and tax-exempt, which may include inverse floating rate debt instruments, (including residual interests thereon) are excluded from this 10% limitation.

**Inflation Risk.** Like all mutual funds, the Funds are subject to inflation risk. Inflation risk is the risk that the present value of assets or income from investments will be less in the future as inflation decreases the value of money. As inflation increases, the present value of a Fund's assets can decline as can the value of a Fund's distributions.

Initial Public Offering ("IPO") Risk. The volume of initial public offerings and the levels at which the newly issued stocks trade in the secondary market are affected by the performance of the stock market overall. If initial public offerings are brought to the market, availability may be limited and a Fund may not be able to buy any shares at the offering price, or if it is able to buy shares, it may not be able to buy as many shares at the offering price as it would like. In addition, the prices of securities involved in initial public offerings are often subject to greater and more unpredictable price changes than more established stocks. IPOs have the potential to produce substantial gains. There is no assurance that any Fund will have access to profitable IPOs and therefore investors should not rely on any past gains from IPOs as an indication of future performance. The investment performance of a Fund during periods when it is unable to invest significantly or at all in IPOs may be lower than during periods when it is able to do so. In addition, as a Fund increases in size, the impact of IPOs on its performance will generally decrease. Securities issued in IPOs are subject to many of the same risks as investing in companies with smaller market capitalizations. Securities issued in IPOs have no trading history, and information about the companies may be available for very limited periods.

Interfund Lending Program. Pursuant to an exemptive order granted by the SEC (the "IFL Order"), a Fund, to the extent permitted by its investment policies and restrictions and subject to meeting the conditions of the IFL Order, has the ability to lend money to, and borrow money from, another Fund pursuant to a master interfund lending agreement (the "Interfund Lending Program"). Under the Interfund Lending Program, the Funds may lend or borrow

money for temporary purposes directly to or from other Funds (an "Interfund Loan"). All Interfund Loans would consist only of uninvested cash reserves that the lending Fund otherwise would invest in short-term repurchase agreements or other short-term instruments. Although Funds that are money market funds may, to the extent permitted by their investment policies, participate in the Interfund Lending Program as borrowers or lenders, they typically will not need to participate as borrowers because they are required to comply with the liquidity provisions of Rule 2a-7 under the Investment Company Act.

If a Fund has outstanding bank borrowings, any Interfund Loans to the Fund would: (a) be at an interest rate equal to or lower than that of any outstanding bank loan, (b) be secured at least on an equal priority basis with at least an equivalent percentage of collateral to loan value as any outstanding bank loan that requires collateral, (c) have a maturity no longer than any outstanding bank loan (and in any event not over seven days), and (d) provide that, if an event of default occurs under any agreement evidencing an outstanding bank loan to the Fund, that event of default will automatically (without need for action or notice by the lending Fund) constitute an immediate event of default under the interfund lending agreement, entitling the lending Fund to call the Interfund Loan immediately (and exercise all rights with respect to any collateral), and cause such call to be made if the lending bank exercises its right to call its loan under its agreement with the borrowing Fund.

A Fund may borrow on an unsecured basis through the Interfund Lending Program only if its outstanding borrowings from all sources immediately after the borrowing total 10% or less of its total assets, provided that if the Fund has a secured loan outstanding from any other lender, including but not limited to another Fund, the Fund's borrowing will be secured on at least an equal priority basis with at least an equivalent percentage of collateral to loan value as any outstanding loan that requires collateral. If a borrowing Fund's total outstanding borrowings immediately after an Interfund Loan under the Interfund Lending Program exceed 10% of its total assets, the Fund may borrow through the Interfund Lending Program on a secured basis only. A Fund may not borrow under the Interfund Lending Program or from any other source if its total outstanding borrowings immediately after the borrowing would be more than 33  $\frac{1}{3}$ % of its total assets or any lower threshold provided for by the Fund's investment restrictions.

No Fund may lend to another Fund through the Interfund Lending Program if the loan would cause the lending Fund's aggregate outstanding loans through the Interfund Lending Program to exceed 15% of its current net assets at the time of the loan. A Fund's Interfund Loans to any one Fund shall not exceed 5% of the lending Fund's net assets. The duration of Interfund Loans will be limited to the time required to receive payment for securities sold, but in no event more than seven days, and for purposes of this condition, loans effected within seven days of each other will be treated as separate loan transactions. Each Interfund Loan may be called on one business day's notice by a lending Fund and may be repaid on any day by a borrowing Fund.

The limitations described above and the other conditions of the IFL Order permitting interfund lending are designed to minimize the risks associated with interfund lending for both the lending Fund and the borrowing Fund. However, no borrowing or lending activity is without risk. When a Fund borrows money from another Fund under the Interfund Lending Program, there is a risk that the Interfund Loan could be called on one day's notice, in which case the borrowing Fund may have to seek to borrow from a bank, which would likely involve higher rates, seek an Interfund Loan from another Fund, or liquidate portfolio securities if no lending sources are available to meet its liquidity needs. Interfund Loans are subject to the risk that the borrowing Fund could be unable to repay the loan when due, and a delay in repayment could result in a lost opportunity by the lending Fund or force the lending Fund to borrow or liquidate securities to meet its liquidity needs. No Fund may borrow more than the amount permitted by its investment restrictions. There can be no assurance that an interfund loan will be available to a borrowing or lending Fund.

### Investment in Emerging Markets.

### General.

Certain Funds may invest in the securities of issuers domiciled in various countries with emerging capital markets. Unless otherwise provided in a Fund's Prospectus, a country with an emerging capital market is any country that is (i) generally recognized to be an emerging market country by the international financial community, such as the International Finance Corporation, or determined by the World Bank to have a low, middle or middle upper income economy; (ii) classified by the United Nations or its authorities to be developing; and/or (iii) included in a broad-based index that is generally representative of emerging markets. Countries with emerging markets can be found in regions such as Asia, Latin America, Eastern Europe and Africa.

Investments in the securities of issuers domiciled in countries with emerging capital markets involve certain additional risks that do not generally apply to investments in securities of issuers in more developed capital markets,

such as (i) low or non-existent trading volume, resulting in market illiquidity and increased volatility in prices for such securities, as compared to securities of comparable issuers in more developed capital markets; (ii) uncertain national policies and social, political and economic instability, increasing the potential for expropriation of assets, confiscatory taxation, high rates of inflation or unfavorable diplomatic developments; (iii) possible fluctuations in exchange rates, differing legal systems and the existence or possible imposition of exchange controls, custodial restrictions or other foreign or U.S. governmental laws or restrictions applicable to such investments; (iv) national policies that may limit a Fund's investment opportunities such as restrictions on investment in issuers or industries deemed sensitive to national interests; and (v) the lack or relatively early development of legal structures governing private and foreign investments and private property. In addition to withholding taxes on investment income, some countries with emerging markets may impose differential capital gains taxes on foreign investors.

Political and economic structures in emerging market countries may be undergoing significant evolution and rapid development, and these countries may lack the social, political and economic stability characteristic of more developed countries. In such a dynamic environment, there can be no assurance that any or all of these capital markets will continue to present viable investment opportunities for a Fund. In the past, governments of such nations have expropriated substantial amounts of private property, and most claims of the property owners have never been fully settled. There is no assurance that such expropriations will not reoccur. In such an event, it is possible that a Fund could lose the entire value of its investments in the affected market. As a result the risks described above, including the risks of nationalization or expropriation of assets, may be heightened. In addition, unanticipated political or social developments may affect the value of investments in these countries and the availability to a Fund of additional investments. The small size and inexperience of the securities markets in certain of these countries and the limited volume of trading in securities in these countries may make investments in the countries illiquid and more volatile than investments in Japan or most Western European countries.

Also, there may be less publicly available information about issuers in emerging markets than would be available about issuers in more developed capital markets, and such issuers may not be subject to accounting, auditing and financial reporting standards and requirements comparable to those to which U.S. companies are subject. In certain countries with emerging capital markets, reporting standards vary widely. As a result, traditional investment measurements used in the United States, such as price/earnings ratios, may not be applicable. Emerging market securities may be substantially less liquid than, and more volatile than, those of mature markets, and company shares may be held by a limited number of persons. This may adversely affect the timing and pricing of the Fund's acquisition or disposal of securities.

Practices in relation to settlement of securities transactions in emerging markets involve higher risks than those in developed markets, in part because a Fund will need to use brokers and counterparties that are less well capitalized, and custody and registration of assets in some countries may be unreliable. The possibility of fraud, negligence, 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 completely lost. A Fund would absorb any loss resulting from such registration problems and may have no successful claim for compensation.

Investment in non-dollar denominated securities including securities from issuers located in emerging market countries may be on either a currency hedged or unhedged basis, and the Funds may hold from time to time various foreign currencies pending investment or conversion into U.S. dollars. Some of these instruments may have the characteristics of futures contracts. In addition, certain Funds may engage in foreign currency exchange transactions to seek to protect against changes in the level of future exchange rates which would adversely affect the Fund's performance. These investments and transactions involving foreign securities, currencies, options (including options that relate to foreign currencies), futures, hedging and cross-hedging are described under "Derivatives."

Risks of Investing in Asia-Pacific Countries. In addition to the risks of foreign investing and the risks of investing in developing markets, the developing market Asia-Pacific countries in which a Fund may invest are subject to certain additional or specific risks. Certain Funds may make substantial investments in Asia-Pacific countries. In many of these markets, there is 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. Many of these markets also may be affected by developments with respect to more established markets in the region such as in Japan and Hong Kong. Brokers in developing market Asia-Pacific countries typically are fewer in number and less well capitalized than brokers in the United States. These factors, combined with the U.S. regulatory requirements for open-end investment companies and the restrictions on foreign investment discussed below, result in potentially fewer investment opportunities for a Fund and may have an adverse impact on the investment performance of the Fund.

Many of the developing market Asia-Pacific countries may be subject to a greater degree of economic, political and social instability than is the case in the United States and Western European countries. Such instability may result from, among other things: (i) authoritarian governments 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 with neighboring countries; and (v) ethnic, religious and racial disaffection. In addition, the governments of many of such countries, such as Indonesia, have a substantial role in regulating and supervising the economy. Another risk common to most such countries is that the economy is heavily export oriented and, accordingly, is dependent upon international trade. The existence of overburdened infrastructure and obsolete financial systems also presents risks in certain countries, as do environmental problems. Certain economies also depend to a significant degree upon exports of primary commodities and, therefore, are vulnerable to changes in commodity prices that, in turn, may be affected by a variety of factors.

The legal systems in certain developing market Asia-Pacific countries also may have an adverse impact on the Fund. For example, while the potential liability of a shareholder in a U.S. corporation with respect to acts of the corporation is generally limited to the amount of the shareholder's investment, the notion of limited liability is less clear in certain emerging market Asia-Pacific countries. Similarly, the rights of investors in developing market Asia-Pacific companies may be more limited than those of shareholders of U.S. corporations. It may be difficult or impossible to obtain and/or enforce a judgment in a developing market Asia-Pacific country.

Governments of many developing market Asia-Pacific countries have exercised and continue to exercise substantial influence over many aspects of the private sector. In certain cases, the government owns or controls many companies, including the largest in the country. Accordingly, government actions in the future could have a significant effect on economic conditions in developing market Asia-Pacific countries, which could affect private sector companies and a Fund itself, as well as the value of securities in the Fund's portfolio. In addition, economic statistics of developing market Asia-Pacific countries may be less reliable than economic statistics of more developed nations.

In addition to the relative lack of publicly available information about developing market Asia-Pacific issuers and the possibility that such issuers may not be subject to the same accounting, auditing and financial reporting standards as U.S. companies, inflation accounting rules in some developing market Asia-Pacific countries require companies that keep accounting records in the local currency, for both tax and accounting purposes, to restate certain assets and liabilities on the company's balance sheet in order to express items in terms of currency of constant purchasing power. Inflation accounting may indirectly generate losses or profits for certain developing market Asia-Pacific companies.

Satisfactory custodial services for investment securities may not be available in some developing Asia-Pacific countries, which may result in the Fund incurring additional costs and delays in providing transportation and custody services for such securities outside such countries.

Certain developing Asia-Pacific countries, such as the Philippines, India and Turkey, are especially large debtors to commercial banks and foreign governments.

On March 11, 2011, a powerful earthquake and resulting tsunami struck northeastern Japan causing major damage along the coast, including damage to nuclear power plants in the region. Future similar disasters, and the resulting damage, could have a severe and negative impact on a Fund's investment portfolio and, in the longer term, could impair the ability of issuers in which the Fund invests to conduct their businesses in the manner normally conducted.

Fund management may determine that, notwithstanding otherwise favorable investment criteria, it may not be practicable or appropriate to invest in a particular developing Asia-Pacific country. A Fund may invest in countries in which foreign investors, including management of the Fund, have had no or limited prior experience.

Restrictions on Foreign Investments in Asia-Pacific Countries. Some developing Asia-Pacific countries prohibit or impose substantial restrictions on investments in their capital markets, particularly their equity markets, by foreign entities such as a Fund. As illustrations, certain countries may require governmental approval prior to investments by foreign persons or limit the amount of investment by foreign persons in a particular company or limit the investment by foreign persons to only a specific class of securities of a company which may have less advantageous terms (including price and shareholder rights) than securities of the company available for purchase by nationals. There can be no assurance that a Fund will be able to obtain required governmental approvals in a timely manner. In addition, changes to restrictions on foreign ownership of securities subsequent to a Fund's purchase of such securities may

have an adverse effect on the value of such shares. Certain countries may restrict investment opportunities in issuers or industries deemed important to national interests.

The manner in which foreign investors may invest in companies in certain developing Asia-Pacific countries, as well as limitations on such investments, also may have an adverse impact on the operations of a Fund. For example, a Fund may be required in certain of such countries to invest initially through a local broker or other entity and then have the shares purchased re-registered in the name of the Fund. Re-registration may in some instances not be able to occur on a timely basis, resulting 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 been filled, depriving the Fund of the ability to make its desired investment at that time.

Substantial limitations may exist in certain countries with respect to a Fund's ability to repatriate investment income, capital or the proceeds of sales of securities by foreign investors. 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 the Fund of any restrictions on investments. It is possible that certain countries may impose currency controls or other restrictions relating to their currencies or to securities of issuers in those countries. To the extent that such restrictions have the effect of making certain investments illiquid, securities may not be available for sale to meet redemptions. Depending on a variety of financial factors, the percentage of a Fund's portfolio subject to currency controls may increase. In the event other countries impose similar controls, the portion of the Fund's assets that may be used to meet redemptions may be further decreased. Even where there is no outright restriction on repatriation of capital, the mechanics of repatriation may affect certain aspects of the operations of a Fund (for example, if funds may be withdrawn only in certain currencies and/or only at an exchange rate established by the government).

In certain countries, banks or other financial institutions may be among the leading companies or have actively traded securities available for investment. The Investment Company Act restricts a Fund's investments in any equity securities of an issuer that, in its most recent fiscal year, derived more than 15% of its revenues from "securities related activities," as defined by the rules thereunder. These provisions may restrict a Fund's investments in certain foreign banks and other financial institutions.

Political and economic structures in emerging market countries may be undergoing significant evolution and rapid development, and these countries may lack the social, political and economic stability characteristic of more developed countries. Some of these countries may have in the past failed to recognize private property rights and have at times nationalized or expropriated the assets of private companies. As a result the risks described above, including the risks of nationalization or expropriation of assets, may be heightened. In addition, unanticipated political or social developments may affect the value of investments in these countries and the availability to a Fund of additional investments in emerging market countries. The small size and inexperience of the securities markets in certain of these countries and the limited volume of trading in securities in these countries may make investments in the countries illiquid and more volatile than investments in Japan or most Western European countries. There may be little financial or accounting information available with respect to issuers located in certain emerging market countries, and it may be difficult to assess the value or prospects of an investment in such issuers.

The expense ratios of the Funds investing significantly in foreign securities can be expected to be higher than those of Funds investing primarily in domestic securities. The costs attributable to investing abroad are usually higher for several reasons, such as the higher cost of custody of foreign securities, higher commissions paid on comparable transactions on foreign markets and additional costs arising from delays in settlements of transactions involving foreign securities.

Risks of Investments in Russia. A Fund may invest a portion of its assets in securities issued by companies located in Russia. The Russian securities market suffers from a variety of problems described above in "Investment in Emerging Markets" not encountered in more developed markets. The Russian securities market is relatively new, and a substantial portion of securities transactions are privately negotiated outside of stock exchanges. The inexperience of the Russian securities market and the limited volume of trading in securities in the market may make obtaining accurate prices on portfolio securities from independent sources more difficult than in more developed markets.

Because of the recent formation of the Russian securities markets, the underdeveloped state of Russia's banking and telecommunication system and the legal and regulatory framework in Russia, settlement, clearing and registration of securities transactions are subject to additional risks. Prior to 2013, there was no central registration

system for equity share registration in Russia and registration was carried out either by the issuers themselves or by registrars located throughout Russia. These registrars may not have been subject to effective state supervision or licensed with any governmental entity. In 2013, Russia established the National Settlement Depository ("NSD") as a recognized central securities depository, and title to Russian equities is now based on the records of the NSD and not on the records of the local registrars. The implementation of the NSD is generally expected to decrease the risk of loss in connection with recording and transferring title to securities; however, loss may still occur. Additionally, issuers and registrars remain prominent in the validation and approval of documentation requirements for corporate action processing in Russia, and there remain inconsistent market standards in the Russian market with respect to the completion and submission of corporate action elections. To the extent that a Fund suffers a loss relating to title or corporate actions relating to its portfolio securities, it may be difficult for the Fund to enforce its rights or otherwise remedy the loss.

In addition, Russia also may attempt to assert its influence in the region through economic or even military measures, as it did with Georgia in the summer of 2008 and the Ukraine in 2014 and 2022. 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. Any such 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, tariffs or cyberattacks on the Russian government, Russian companies or Russian individuals, including politicians, may impact Russia's economy and Russian issuers of securities in which the Fund invests. Actual and threatened responses to such activity, including purchasing restrictions, sanctions, tariffs or cyberattacks on the Russian government or Russian companies, may impact Russia's economy and Russian issuers of securities in which the Fund invests. Actual and threatened responses to such 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 may likely have collateral impacts on such sectors globally.

Governments in the United States and many other countries (collectively, the "Sanctioning Bodies") have imposed economic sanctions, which can consist of prohibiting certain securities trades, certain private transactions in the energy sector, asset freezes and prohibition of all business, against certain Russian individuals, including politicians, and Russian corporate and banking entities. The Sanctioning Bodies, or others, could also institute broader sanctions on Russia, including banning Russia from global payments systems that facilitate cross-border payments. 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. Sanctions could also result in Russia taking counter measures or retaliatory actions which may further impair the value and liquidity of Russian securities.

Risks of Investing in Saudi Arabia. The ability of foreign investors (such as a Fund) to invest in Saudi Arabian issuers is new and untested. Such ability could be restricted or revoked by the Saudi Arabian government at any time, and unforeseen risks could materialize due to foreign ownership in such securities. In addition, the Capital Market Authority ("CMA") places investment limitations on the ownership of Saudi Arabian issuers by foreign investors. including a limitation on a Fund's ownership 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. Further, under income tax laws imposed by the Department of Zakat and Income Tax, dividends paid by a Saudi Arabian company to foreign stockholders are generally subject to a 5% withholding tax (different tax rates may apply pursuant to an applicable treaty). 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 global demand for petroleum fluctuates, Saudi Arabia may be significantly impacted.

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. 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. Current regulations in Saudi Arabian markets may require a Fund to execute trades of securities through a single broker. As a result, the Adviser will have less flexibility to choose among brokers on behalf of a Fund than is typically the case for investment managers.

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, and in some cases the most 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 the 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.

Risks of Investing in Venezuela. Investment in Venezuela may subject a Fund to legal, regulatory, political, currency, security, expropriation and/or nationalization of assets and economic risk specific to Venezuela. Venezuela is extremely well endowed with natural resources and its economy is heavily dependent on export of natural resources to key trading partners. According to the Organization of Petroleum Exporting Countries ("OPEC"), Venezuela boasts the world's largest oil reserves. According to an industry report, Venezuela also has the continent's largest natural gas reserves at an estimated 152 trillion cubic meters. Any act of terrorism, an armed

conflict or a breakdown of a key trading relationship that disrupts the production or export of natural resources will likely negatively affect the Venezuelan economy. The government continues to control key sectors of the economy, including upstream oil and gas production, and has sought to increase its role in key sectors, such as telecommunications and steel. Meanwhile, ambiguities in the investment environment remain, such as continued high levels of bureaucracy and corruption, large macroeconomic imbalances, and political and policy uncertainty. Friction continues between the governments of the U.S. and Venezuela. The U.S. has imposed economic sanctions, which consist of asset freezes and sectoral sanctions, on certain Venezuelan individuals and Venezuelan corporate entities, and on the Venezuelan government. The U.S. could also institute broader sanctions on Venezuela. These sanctions, or even the threat of further sanctions, may result in the decline of the value and liquidity of Venezuelan securities, a weakening of the bolivar or other adverse consequences to the Venezuelan economy. These sanctions impair the ability of a Fund to buy, sell, receive or deliver those securities and/or assets. Additional sanctions against Venezuela may in the future be imposed by the U.S. or other countries. These factors, among others, can have a negative impact on a Fund's investments.

Brady Bonds. Certain Funds may invest in Brady Bonds. A Fund's emerging market debt securities may include emerging market governmental debt obligations commonly referred to as Brady Bonds. Brady Bonds are securities created through the exchange of existing commercial bank loans to sovereign entities for new obligations in connection with debt restructurings under a debt restructuring plan introduced by former U.S. Secretary of the Treasury, Nicholas F. Brady (the "Brady Plan"). Brady Plan debt restructurings have been implemented in a number of countries, including: Argentina, Bolivia, Brazil, Bulgaria, Costa Rica, the Dominican Republic, Ecuador, Jordan, Mexico, Niger, Nigeria, Panama, Peru, the Philippines, Poland, Uruguay and Venezuela.

Brady Bonds may be collateralized or uncollateralized, are issued in various currencies (primarily the U.S. dollar) and are actively traded in the OTC secondary market. Brady Bonds are not considered to be U.S. Government Securities. U.S. dollar-denominated, collateralized Brady Bonds, which may be fixed rate par bonds or floating rate discount bonds, are generally collateralized in full as to principal by U.S. Treasury zero-coupon bonds having the same maturity as the Brady Bonds. Interest payments on these Brady Bonds generally are collateralized on a one-year or longer rolling-forward basis by cash or securities in an amount that, in the case of fixed rate bonds, is equal to at least one year of interest payments or, in the case of floating rate bonds, initially is equal to at least one year's interest payments based on the applicable interest rate at that time and is adjusted at regular intervals thereafter. Certain Brady Bonds are entitled to "value recovery payments" in certain circumstances, which in effect constitute supplemental interest payments but generally are not collateralized. For example, some Mexican and Venezuelan Brady Bonds include attached value recovery options, which increase interest payments if oil revenues rise. Brady Bonds are often viewed as having three or four valuation components: (i) the collateralized repayment of principal at final maturity; (ii) the collateralized interest payments; and (iv) any uncollateralized repayment of principal at maturity (the uncollateralized amounts constitute the "residual risk").

Most Mexican Brady Bonds issued to date have principal repayments at final maturity fully collateralized by U.S. Treasury zero-coupon bonds (or comparable collateral denominated in other currencies) and interest coupon payments collateralized on an 18-month rolling-forward basis by funds held in escrow by an agent for the bondholders. A significant portion of the Venezuelan Brady Bonds and the Argentine Brady Bonds issued to date have repayments at final maturity collateralized by U.S. Treasury zero-coupon bonds (or comparable collateral denominated in other currencies) and/or interest coupon payments collateralized on a 14-month (for Venezuela) or 12-month (for Argentina) rolling-forward basis by securities held by the Federal Reserve Bank of New York as collateral agent.

Brady Bonds involve various risk factors described above associated with investing in foreign securities, including the history of defaults with respect to commercial bank loans by public and private entities of countries issuing Brady Bonds. In light of the residual risk of Brady Bonds and, among other factors, the history of defaults, investments in Brady Bonds are considered speculative. There can be no assurance that Brady Bonds in which the Funds may invest will not be subject to restructuring arrangements or to requests for new credit, which may cause the Funds to suffer a loss of interest or principal on any of its holdings.

# China Investments Risk.

Investments in securities of companies domiciled in the People's Republic of China ("China" or the "PRC") involve a high degree of risk and special considerations not typically associated with investing in the U.S. securities markets. Such heightened risks include, among others, an authoritarian government, popular unrest associated with demands for improved political, economic and social conditions, the impact of regional conflict on the economy and hostile relations with neighboring countries.

Military conflicts, either in response to internal social unrest or conflicts with other countries, could disrupt economic development. The Chinese economy is vulnerable to the long-running disagreements and religious and nationalist disputes with Tibet and the Xinjiang region. Since 1997, there have been tensions between the Chinese government and many people in Hong Kong who perceive China as tightening control over Hong Kong's semiautonomous liberal political, economic, legal, and social framework. Recent protests and unrest have increased tensions even further. Due to the interconnected nature of the Hong Kong and Chinese economies, this instability in Hong Kong may cause uncertainty in the Hong Kong and Chinese markets. China has a complex territorial dispute regarding the sovereignty of Taiwan and has made threats of invasion; Taiwan-based companies and individuals are significant investors in China. Military conflict between China and Taiwan may adversely affect securities of Chinese issuers. In addition, China has strained international relations with Japan, India, Russia and other neighbors due to territorial disputes, historical animosities and other defense concerns. Additionally, China is alleged to have participated in state-sponsored cyberattacks against foreign companies and foreign governments. Actual and threatened responses to such activity and strained international relations, including purchasing restrictions, sanctions, tariffs or cyberattacks on the Chinese government or Chinese companies, may impact China's economy and Chinese issuers of securities in which a Fund invests. China could be affected by military events on the Korean peninsula or internal instability within North Korea. These situations may cause uncertainty in the Chinese market and may adversely affect the performance of the Chinese economy.

The Chinese government has implemented significant economic reforms in order to liberalize trade policy, promote foreign investment in the economy, reduce government control of the economy and develop market mechanisms. However, there can be no assurance that these reforms will continue or that they will be effective. Despite reforms and privatizations of companies in certain sectors, the Chinese government still exercises substantial influence over many aspects of the private sector and may own or control many companies. Chinese companies, such as those in the financial services or technology sectors, and potentially other sectors in the future, are subject to the risk that Chinese authorities can intervene in their operations and structure. The Chinese government continues to maintain a major role in economic policy making and investing in China involves risks of losses due to expropriation, nationalization, confiscation of assets and property, and the imposition of restrictions on foreign investments and on repatriation of capital invested.

The Chinese government may intervene in the Chinese financial markets, such as by the imposition of trading restrictions, a ban on "naked" short selling or the suspension of short selling for certain stocks. This may affect market price and liquidity of these stocks, and may have an unpredictable impact on the investment activities of the Funds. Furthermore, such market interventions may have a negative impact on market sentiment which may in turn affect the performance of the securities markets and as a result the performance of the Funds.

In addition, there is less regulation and monitoring of the securities markets and the activities of investors, brokers and other participants in China than in the United States. Accordingly, issuers of securities in China are not subject to the same degree of regulation as those in the United States with respect to such matters as insider trading rules, tender offer regulation, stockholder proxy requirements and the requirements mandating timely and accurate disclosure of information. Stock markets in China are in the process of change and further development. This may lead to trading volatility, and difficulties in the settlement and recording of transactions and interpretation and application of the relevant regulations. Custodians may not be able to offer the level of service and safe-keeping in relation to the settlement and administration of securities in China that is customary in more developed markets. In particular, there is a risk that a Fund may not be recognized as the owner of securities that are held on behalf of the Fund by a sub-custodian.

The Chinese government historically took positions that prevented the U.S. Public Company Accounting Oversight Board ("PCAOB") from inspecting the audit work and practices of accounting firms in mainland China and Hong Kong for compliance with U.S. law and professional standards. On August 26, 2022, the PCAOB signed a Statement of Protocol with the China Securities Regulatory Commission and the Ministry of Finance of the PRC, which marked the first step toward opening access for the PCAOB to inspect and investigate registered public accounting firms headquartered in mainland China and Hong Kong completely in accordance with U.S. law. However, as this development is relatively recent, the implementation of the Statement of Protocol remains to be tested. Audits performed by PCAOB-registered accounting firms in mainland China and Hong Kong may be less reliable than those performed by firms subject to PCAOB inspection. Accordingly, information about the Chinese securities in which the Funds invest may be less reliable or complete. Under amendments to the Sarbanes-Oxley Act enacted in December 2020, which requires that the PCAOB be permitted to inspect the accounting firm of a U.S.-listed Chinese issuer, Chinese companies with securities listed on U.S. exchanges may be delisted if the PCAOB is unable to inspect the accounting firm.

The Renminbi ("RMB") is currently not a freely convertible currency and is subject to foreign exchange control policies and repatriation restrictions imposed by the Chinese government. The imposition of currency controls may negatively impact performance and liquidity of the Funds as capital may become trapped in the PRC. The Funds 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 the Funds of any restrictions on investments. Investing in entities either in, or which have a substantial portion of their operations in, the PRC may require the Funds to adopt special procedures, seek local government approvals or take other actions, each of which may involve additional costs and delays to the Funds. The Fund may also incur costs in connection with conversions between U.S. dollars and RMB, as well as in connection with conversions between the two separate types of RMB, the onshore RMB ("CNY") and the offshore RMB ("CNH").

While the Chinese economy has grown rapidly in recent years, there is no assurance that this growth rate will be maintained. China may experience substantial rates of inflation or economic recessions, causing a negative effect on its economy and securities market. China's economy is heavily dependent on export growth. Reduction in spending on Chinese products and services, institution of tariffs or other trade barriers or a downturn in any of the economies of China's key trading partners may have an adverse impact on the securities of Chinese issuers. The tax laws and regulations in the PRC are subject to change, including the issuance of authoritative guidance or enforcement, possibly with retroactive effect. The interpretation, applicability and enforcement of such laws by the PRC tax authorities are not as consistent and transparent as those of more developed nations, and may vary over time and from region to region. The application and enforcement of the PRC tax rules could have a significant adverse effect on a Fund and its investors, particularly in relation to capital gains withholding tax imposed upon non-residents. In addition, the accounting, auditing and financial reporting standards and practices applicable to Chinese companies may be less rigorous, and may result in significant differences between financial statements prepared in accordance with PRC accounting standards and practices and those prepared in accordance with international accounting standards.

From time to time and in recent years, China has experienced outbreaks of infectious illnesses and the country may be subject to other public health threats, infectious illnesses, diseases or similar issues in the future. Any spread of an infectious illness, public health threat or similar issue could reduce consumer demand or economic output, result in market closures, travel restrictions or quarantines, and generally have a significant impact on the Chinese economy, which in turn could adversely affect a Fund's investments.

Risk of Investing through Stock Connect.

General. China A-shares are equity securities of companies domiciled in China that trade on Chinese stock exchanges such as the Shanghai Stock Exchange ("SSE"), the Shenzhen Stock Exchange ("SZSE") and the Beijing Stock Exchange ("BSE") ("A-shares"). Foreign investment in A-shares on the SSE and SZSE is not permitted, other than through a qualified foreign investor approved pursuant to the relevant mainland China laws and regulations as may be promulgated and/or amended from time to time ("QFI").

Investment in eligible exchange traded funds and A-shares listed and traded on the SSE or SZSE ("Stock Connect Securities") is also permitted through the Shanghai-Hong Kong Stock Connect program or the Shenzhen-Hong Kong Stock Connect program, as applicable (each, a "Stock Connect" and collectively, "Stock Connects"). Each Stock Connect is a securities trading and clearing links program established by The Stock Exchange of Hong Kong Limited ("SEHK"), the Hong Kong Securities Clearing Company Limited ("HKSCC"), the SSE or SZSE, as applicable, and China Securities Depository and Clearing Corporation Limited ("CSDCC") that aims to provide mutual stock market access between the PRC and Hong Kong by permitting investors to trade and settle shares on each market through their local securities brokers. Under Stock Connects, a Fund's trading of Stock Connect Securities listed on the SSE or SZSE, as applicable, would be effectuated through its Hong Kong broker and a securities trading service company established by SEHK.

Although no individual investment quotas or licensing requirements apply to investors in Stock Connects, trading through a Stock Connect's Northbound Trading Link is subject to daily investment quota limitations which require that buy orders for Stock Connect Securities be rejected once the daily quota is exceeded (although a Fund will be permitted to sell their Stock Connect Securities regardless of the quota). These limitations may restrict a Fund from investing in Stock Connect Securities on a timely basis, which could affect the Fund's ability to effectively pursue its investment strategy. Investment quotas are also subject to change. Investment in Stock Connect Securities through a Stock Connect is subject to trading, clearance and settlement procedures that could pose risks to a Fund. Stock Connect Securities purchased through Stock Connects generally may not be sold or otherwise transferred other than through Stock Connects in accordance with applicable rules. For example, the PRC regulations require that in order for an investor to sell any Stock Connect Securities on a certain trading day, there must be sufficient Stock Connect

Securities in the investor's account before the market opens on that day. If there are insufficient Stock Connect Securities in the investor's account, the sell order will be rejected by the SSE or SZSE, as applicable. SEHK carries out pre-trade checking on sell orders of certain stocks listed on the SSE market ("SSE Securities") or SZSE market ("SZSE Securities") of its participants (i.e., stock brokers) to ensure that this requirement is satisfied. While shares must be designated as eligible to be traded under a Stock Connect, those shares may also lose such designation, and if this occurs, such shares may be sold but cannot be purchased through a Stock Connect. In addition, Stock Connects will only operate on days when both the Chinese and Hong Kong markets are open for trading, and banking services are available in both markets on the corresponding settlement days. Therefore, an investment in Stock Connect Securities through a Stock Connect may subject a Fund to a risk of price fluctuations on days when the Chinese market is open, but a Stock Connect is not trading. Moreover, day (turnaround) trading is not permitted on the Stock Connect Securities market. If an investor buys Stock Connect Securities on day "T," the investor will only be able to sell the Stock Connect Securities on or after day T+1. Further, since all trades of Stock Connect Securities must be settled in RMB, investors must have timely access to a reliable supply of offshore RMB, which cannot be guaranteed. There is also no assurance that RMB will not be subject to devaluation. Any devaluation of RMB could adversely affect a Fund's investments. If a Fund holds a class of shares denominated in a local currency other than RMB, the Fund will be exposed to currency exchange risk if the Fund converts the local currency into RMB for investments in Stock Connect Securities. A Fund may also incur conversion costs.

Stock Connect Securities held through the nominee structure under a Stock Connect will be held through HKSCC as nominee on behalf of investors. The precise nature and rights of a Fund as the beneficial owner of the SSE Securities or SZSE Securities through HKSCC as nominee is not well defined under the PRC laws. There is a lack of a clear definition of, and distinction between, legal ownership and beneficial ownership under the PRC laws and there have been few cases involving a nominee account structure in the PRC courts. The exact nature and methods of enforcement of the rights and interests of a Fund under the PRC laws is also uncertain. In the unlikely event that HKSCC becomes subject to winding up proceedings in Hong Kong, there is a risk that the SSE Securities or SZSE Securities may not be regarded as held for the beneficial ownership of a Fund or as part of the general assets of HKSCC available for general distribution to its creditors. Notwithstanding the fact that HKSCC does not claim proprietary interests in the SSE Securities or SZSE Securities held in its omnibus stock account in the CSDCC, the CSDCC as the share registrar for SSE- or SZSE-listed companies will still treat HKSCC as one of the shareholders when it handles corporate actions in respect of such SSE Securities or SZSE Securities. HKSCC monitors the corporate actions affecting SSE Securities and SZSE Securities and keeps participants of Central Clearing and Settlement System ("CCASS") informed of all such corporate actions that require CCASS participants to take steps in order to participate in them. Investors may only exercise their voting rights by providing their voting instructions to HKSCC through participants of CCASS. All voting instructions from CCASS participants will be consolidated by HKSCC, who will then submit a combined single voting instruction to the relevant SSE- or SZSE-listed company. A Fund may suffer difficulties or delays in enforcing its rights in SSE Securities or SZSE Securities.

Hong Kong's Investor Compensation Fund is established to pay compensation to investors of any nationality who suffer pecuniary losses as a result of default of a licensed intermediary or authorized financial institution in relation to exchange-traded products in Hong Kong. For defaults occurring on or after January 1, 2020, Hong Kong's Investor Compensation Fund covers investors' losses in relation to securities (i) that are traded on the SSE or the SZSE and (ii) in respect of which an order for sale or purchase is permitted to be routed through the Northbound Trading Link of a Stock Connect. On the other hand, since a Fund carries out Northbound trading through securities brokers in Hong Kong but not PRC brokers, it is not protected by the China Securities Investor Protection Fund in the PRC.

Market participants are able to participate in Stock Connects subject to meeting certain information technology capability, risk management and other requirements as may be specified by the relevant exchange and/or clearing house. Further, the "connectivity" in Stock Connects requires routing of orders across the border of Hong Kong and the PRC. This requires the development of new information technology systems on the part of SEHK and exchange participants. There is no assurance that the systems of SEHK and market participants will function properly or will continue to be adapted to changes and developments in both markets. In the event that the relevant systems fail to function properly, trading in Stock Connect Securities through Stock Connects could be disrupted.

The Shanghai-Hong Kong Stock Connect program launched in November 2014 and the Shenzhen-Hong Kong Stock Connect program launched in December 2016 are both in their initial stages. There is no certainty as to how the current regulations will be applied or interpreted going forward, and new or revised regulations may be issued from time to time by the regulators and stock exchanges in China and Hong Kong in connection with operations, legal enforcement and cross-border trades under Stock Connects. In addition, there can be no assurance that Stock Connect will not be discontinued. A Fund may be adversely affected as a result of such changes. Furthermore, the

securities regimes and legal systems of China and Hong Kong differ significantly and issues may arise from the differences on an on-going basis. In the event that the relevant systems fail to function properly, trading in both markets through Stock Connects could be disrupted and a Fund's ability to achieve its investment objective may be adversely affected. In addition, a Fund's investments in Stock Connect Securities through Stock Connects are generally subject to Chinese securities regulations and listing rules, among other restrictions. Further, different fees, costs and taxes are imposed on foreign investors acquiring Stock Connect Securities through Stock Connects, and these fees, costs and taxes may be higher than comparable fees, costs and taxes imposed on owners of other securities providing similar investment exposure.

The Funds may also invest in Chinese companies listed on U.S. exchanges, such as ADRs or variable interest entities ("VIEs"), which are subject to the investment risks associated with the underlying Chinese issuer or operating company. Chinese operating companies listed on U.S. exchanges are often structured as VIEs. Instead of directly owning the equity securities of a Chinese company, a VIE enters into service contracts and other contracts with the Chinese company, which provide the VIE with exposure to the company. Although the VIE has no equity ownership of the Chinese operating company, the contractual arrangements permit the VIE to consolidate the Chinese operating company into its financial statements. Intervention by the Chinese government with respect to VIEs could significantly affect the Chinese operating company's performance and the enforceability of the VIE's contractual arrangements with the Chinese company.

Suspension Risk. SSE Securities and SZSE Securities may only be bought from, or sold to, a Fund at times when the relevant SSE Securities and SZSE Securities may be sold or purchased on the relevant Chinese stock exchange. The SSE Securities and SZSE Securities markets have a higher propensity for trading suspensions than many other global equity markets. Each of the SEHK, SSE and SZSE reserves the right to suspend trading of SSE Securities and SZSE Securities purchased on the Stock Connects if necessary for ensuring an orderly and fair market and ensuring that risks are managed prudently. Consent from the relevant regulator would be sought before a suspension of Northbound trading is triggered. The relevant PRC government authority may also impose "circuit breakers" and other measures to halt or suspend Northbound trading. Where a suspension in the Northbound trading through Stock Connect is effected, the Fund's ability to access the PRC market will be adversely affected. Trading suspensions in certain stocks could lead to greater market execution risk and costs for a Fund. The SSE and SZSE currently apply a daily price limit, generally set at 10% or 20%, of the amount of fluctuation permitted in the prices of the relevant SSE Securities and SZSE Securities during a single trading day. The daily price limit refers to price movements only and does not restrict trading within the relevant limit. There can be no assurance that a liquid market on an exchange will exist for any particular SSE Security or SZSE Security or for any particular time.

Risk of Investing in the China Interbank Bond Market through Bond Connect. A Fund may invest directly in the domestic bond market in the PRC (the "China Interbank Bond Market") through the northbound trading of Bond Connect ("Bond Connect"). Bond Connect is an initiative launched in July 2017 for mutual bond market access between the PRC and Hong Kong, established by the China Foreign Exchange Trade System & National Interbank Funding Centre ("CFETS"), China Central Depository & Clearing Co., Ltd ("CDCC"), Shanghai Clearing House ("SCH"), Hong Kong Exchanges and Clearing Limited ("HKEX") and Central Moneymarkets Unit ("CMU"). Under the prevailing regulations in the PRC, eligible foreign investors are allowed to invest in the bonds circulated in the China Interbank Bond Market through Bond Connect. Eligible foreign investors may submit trade requests for bonds circulated in the China Interbank Bond Market through offshore electronic bond trading platforms (such as Tradeweb), which will in turn transmit their requests for quotation to CFETS. CFETS will send the requests for quotation to a number of approved onshore dealers (including market makers and others engaged in the market making business) in the PRC. The approved onshore dealer(s) will respond to the requests for quotation via CFETS and CFETS will send their responses to those eligible foreign investors through the same offshore electronic bond trading platforms. Once the eligible foreign investor accepts the quotation, the trade is concluded on CFETS.

The settlement and custody of bonds traded in the China Interbank Bond Market under Bond Connect will be effected through the settlement and custody link between CMU, as an offshore custody agent, and CDCC and SCH, as onshore custodians and clearing institutions in the PRC. Under the settlement link, CDCC or SCH will effect gross settlement of confirmed trades onshore and CMU will process bond settlement instructions from CMU members on behalf of eligible foreign investors in accordance with its relevant rules. Since the introduction in August 2018 of delivery versus payment (DVP) settlement in respect of Bond Connect, the movement of cash and securities is carried out simultaneously on a real-time basis. Pursuant to the prevailing regulations in the PRC, CMU, as the offshore custody agent recognized by the Hong Kong Monetary Authority, will open omnibus nominee accounts with the onshore custody agent recognized by the People's Bank of China (*i.e.*, CDCC and SCH). All bonds traded by eligible foreign investors through Bond Connect will be registered in the name of CMU, which will hold such bonds as a nominee owner. Therefore, a Fund will be exposed to custody risks with respect to CMU. In the remote event of a

CDCC or SCH default, CMU's liabilities in Bond Connect bonds under its market contracts with clearing participants will be limited to assisting clearing participants in pursuing their claims against CDCC or SCH. The Fund may suffer delay in the recovery process or may not fully recover its losses from CDCC or SCH. In addition, as the relevant filings, registration with the People's Bank of China, and account opening have to be carried out by third parties, including CMU, CDCC, SCH, and CFETS, a Fund is subject to the risks of default or errors on the part of such third parties.

The precise nature and rights of a Fund as the beneficial owner of the bonds traded in the China Interbank Bond Market through CMU as nominee is not well-defined under PRC law. There is a lack of a clear definition of, and distinction between, legal ownership and beneficial ownership under PRC law and there have been few cases involving a nominee account structure in the PRC courts. The exact nature and methods of enforcement of the rights and interests of a Fund under PRC law are also uncertain.

Market volatility and potential lack of liquidity due to low trading volume of certain bonds in the China Interbank Bond Market may result in prices of certain bonds traded on such market fluctuating significantly. A Fund investing in such market is therefore subject to liquidity and volatility risks. The bid-ask spreads of the prices of such securities may be large, and a Fund may therefore incur significant costs and may suffer losses when selling such investments. The bonds traded in the China Interbank Bond Market may be difficult or impossible to sell, which may impact a Fund's ability to acquire or dispose of such securities at their expected prices.

Investing in the China Interbank Bond Market through Bond Connect is also subject to regulatory risks. The relevant rules and regulations are subject to change, which may have potential retrospective effect, and there can be no assurance that Bond Connect will not be discontinued or abolished. Furthermore, the securities regimes and legal systems of China and Hong Kong differ significantly and issues may arise based on these differences. In the event that the relevant authorities suspend account opening or trading on the China Interbank Bond Market, a Fund's ability to invest in the China Interbank Bond Market will be adversely affected and limited. In such event, the Fund's ability to achieve its investment objective will be negatively affected and, after exhausting other trading alternatives, the Fund may suffer substantial losses as a result. Further, if Bond Connect is not operating, a Fund may not be able to acquire or dispose of bonds through Bond Connect in a timely manner, which could adversely affect the Fund's performance.

Trading through Bond Connect is performed through newly developed trading platforms and operational systems. There is no assurance that such systems will function properly or will continue to be adapted to changes and developments in the market. In the event that the relevant systems fail to function properly, trading through Bond Connect may be disrupted. A Fund's ability to trade through Bond Connect (and hence to pursue its investment strategy) may therefore be adversely affected. In addition, where a Fund invests in the China Interbank Bond Market through Bond Connect, it may be subject to risks of delays inherent in the order placing and/or settlement systems.

Bond Connect trades are settled in Chinese currency, the RMB, which is currently restricted and not freely convertible. As a result, a Fund will be exposed to currency risk, and it cannot be guaranteed that investors will have timely access to a reliable supply of RMB.

Tax Risk – Withholding Income Tax Risk. According to PRC tax regulations, a 10% withholding income tax is imposed on PRC sourced dividends and interests from non-government bonds paid to a non-PRC tax resident enterprise, unless the rate is reduced under an applicable tax treaty. From a technical perspective, withholding income tax is also applicable to capital gains realized by foreign investors on the disposal of PRC equity interests.

There are however certain tax exemptions available, some temporary in nature, highlighted below.

On November 14, 2014, the Ministry of Finance ("MoF"), China Securities Regulatory Commission and the State Taxation Administration ("STA"), acting with State Council's approval, jointly released Circular 79, which temporarily exempts Qualified Foreign Institutional Investors and Renminbi Qualified Foreign Institutional Investors from tax on capital gains derived from the trading of shares and other equity interest investments on or after November 17, 2014. Subsequently, Circulars 81 and 127 were issued to temporarily exempt tax on capital gains derived from trading of A-shares through the Stock Connects. The duration of the temporary exemptions is not stated in the circulars and is subject to termination by the PRC tax authorities with or without notice.

On November 7, 2018, the MoF and STA jointly issued Circular 108, which states that foreign institutional investors are temporarily exempt from withholding income tax with respect to interest income on bonds derived from the PRC bond market from November 7, 2018 to November 6, 2021. On November 22, 2021, the MoF and STA issued Public Notice 34 to extend the temporary exemption from November 7, 2021 to December 31, 2025.

Value Added Tax ("VAT") Risk.

From May 1, 2016, VAT applies to certain income derived by the Fund, including PRC sourced interest income on non-government bonds and trading gains.

There are however certain tax exemptions available, some temporary in nature, highlighted below.

VAT exemptions currently apply to capital gains from trading of Qualified Foreign Institutional Investors and Renminbi Qualified Foreign Institutional Investors products, A-shares traded on the Stock Connects and debt securities traded in the China Interbank Bond Market.

On November 7, 2018, the MoF and SAT jointly issued Circular 108 which states that foreign institutional investors are temporarily exempt from VAT with respect to interest income on bonds derived from the PRC bond market from November 7, 2018 to November 6, 2021. On November 22, 2021, the MoF and STA issued Public Notice 34 to extend the temporary exemption from November 7, 2021 to December 31, 2025.

Any changes in PRC tax law, future clarifications thereof, and/or subsequent retroactive enforcement by the PRC tax authorities may result in a loss which could be material to the Fund. There is a risk the PRC tax authorities may withdraw the temporary tax exemptions in the future and seek to collect taxes realized on the sale of A-shares or PCR sourced interest income on non-government bonds received by the Fund without giving any prior notice. If the tax exemptions are withdrawn, any taxes may be directly borne by or indirectly passed on to the Fund and may result in a substantial impact to its Net Asset Value. As with any Net Asset Value adjustment, investors may be advantaged or disadvantaged depending on when the investors purchased/subscribed and/or sold/redeemed the Units of the Fund. There will be no retrospective restatement of the Fund's Net Asset Value.

The Manager will keep the provisioning policy for tax liability under review and may, in its discretion from time to time, make a provision for potential tax liabilities if in its opinion such provision is warranted or as further clarified by the PRC in notifications.

Investment in Other Investment Companies. Each Fund may, subject to applicable law, invest in other investment companies (including investment companies managed by BlackRock and its affiliates), including money market funds and ETFs, which are typically open-end funds or unit investment trusts listed on a stock exchange. Under Section 12(d)(1)(A) of the Investment Company Act, however, a Fund may invest up to 10% of its total assets in securities of other investment companies (measured at the time of such investment). In addition, under Section 12(d)(1)(A) of the Investment Company Act a Fund may not acquire securities of an investment company if such acquisition would cause the Fund to own more than 3% of the total outstanding voting stock of such investment company and a Fund may not invest in another investment company if such investment would cause more than 5% of the value of the Fund's total assets to be invested in securities of such investment company. (These limits do not restrict a Feeder Fund from investing all of its assets in shares of its Master Portfolio.) In addition to the restrictions on investing in other investment companies discussed above, under Section 12(d)(1)(C) of the Investment Company Act a Fund may not invest in a registered closed-end investment company if such investment would cause the Fund and other BlackRock-advised investment companies to own more than 10% of the total outstanding voting stock of such closed-end investment company. Pursuant to Section 12(d)(1)(G) of the Investment Company Act, these percentage limitations do not apply to investments in affiliated investment companies, including ETFs, subject to certain conditions. In addition, a Fund may be able to rely on certain rules under the Investment Company Act to invest in shares of money market funds or other investment companies beyond the statutory limits noted above, but subject to certain conditions.

As with other investments, investments in other investment companies are subject to market and selection risk.

Shares of investment companies, such as closed-end fund investment companies, that trade on an exchange may at times be acquired at market prices representing premiums to their NAVs. In addition, investment companies held by a Fund that trade on an exchange could trade at a discount from NAV, and such discount could increase while the Fund holds the shares. If the market price of shares of an exchange-traded investment company decreases below the price that the Fund paid for the shares and the Fund were to sell its shares of such investment company at a time when the market price is lower than the price at which it purchased the shares, the Fund would experience a loss.

In addition, if a Fund acquires shares in investment companies, including affiliated investment companies, shareholders would bear both their proportionate share of expenses in the Fund and, indirectly, the expenses of such investment companies. Such expenses, both at the Fund level and acquired investment company level, would include management and advisory fees, unless such fees have been waived by BlackRock. Please see the relevant Fund's Prospectus to determine whether any such management and advisory fees have been waived by BlackRock.

Investments by a Fund in wholly owned investment entities created under the laws of certain countries will not be deemed an investment in other investment companies. Pursuant to guidance issued by the staff of the Commission, fees and expenses of money market funds used for the investment of cash collateral received in connection with loans of Fund securities are not treated as "acquired fund fees and expenses," which are fees and expenses charged by other investment companies and pooled investment vehicles in which a Fund invests a portion of its assets.

To the extent shares of a Fund are held by another fund, the ability of the Fund itself to purchase other funds may be limited. In addition, a fund-of-funds (*e.g.*, an investment company that seeks to meet its investment objective by investing significantly in other investment companies) may be limited in its ability to purchase underlying funds if such underlying funds themselves own shares of underlying funds.

A number of publicly traded closed-end investment companies have been organized to facilitate indirect foreign investment in developing countries, and certain of such countries, such as Thailand, South Korea, Chile and Brazil, have specifically authorized such funds. There also are investment opportunities in certain of such countries in pooled vehicles that resemble open-end investment companies. The restrictions on investments in securities of investment companies set forth above may limit opportunities for a Fund to invest indirectly in certain developing countries.

**Lease Obligations.** A Fund may hold participation certificates in a lease, an installment purchase contract, or a conditional sales contract ("lease obligations"). The Manager will monitor the credit standing of each borrower and each entity providing credit support and/or a put option relating to lease obligations.

Life Settlement Investments. A Fund may invest in life settlements, which are sales to third parties, such as the Fund, of existing life insurance contracts for more than their cash surrender value but less than the net benefits to be paid under the policies. When a Fund acquires such a contract, it pays the policy premiums in return for the expected receipt of the net benefit as the beneficiary under the policy. Investments in these contracts involve certain risks, including liquidity risk, credit risk of the insurance company, and inaccurate estimations of life expectancy of the insured individuals (viators). These policies may be considered illiquid because they are bought and sold in a secondary market through life settlement agents. Also, in the event of a bankruptcy of the insurance carrier for a policy, the Fund may receive reduced or no benefits under the contract. A Fund seeks to minimize credit risk by investing in policies issued by a diverse range of highly-rated insurance carriers. Furthermore, a Fund may encounter losses on its investments if there is an inaccurate estimation of the life expectancies of viators. A Fund intends to reduce this life expectancy risk by investing only in contracts where the life expectancy was reviewed by an experienced actuary, as well as by diversifying its investments across viators of varying ages and medical profiles. In addition, it is unclear whether the income from life settlements is qualifying income for purposes of the Internal Revenue Service (the "IRS") 90% gross income test a Fund must satisfy each year to qualify as a regulated investment company. A Fund intends to monitor its investments to ensure that the Fund remains qualified as a regulated investment company.

Liquidity Risk Management. Rule 22e-4 under the Investment Company Act (the "Liquidity Rule") requires openend funds, such as the Funds, to adopt a liquidity risk management program and enhance disclosures regarding fund liquidity. As required by the Liquidity Rule, the Funds have implemented a liquidity risk management program (the "Liquidity Program"), and the Boards of Directors of the Funds, including a majority of the independent Directors, have appointed the Manager as the liquidity risk program administrator of the Liquidity Program. Under the Liquidity Program, the Manager 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 the Fund without significant dilution of the remaining investors' interests in the Fund. The liquidity of a Fund's portfolio investments is determined based on relevant market, trading and investment-specific considerations under the Liquidity Program. 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.

Master Limited Partnerships. Certain Funds may invest in publicly traded master limited partnerships ("MLPs") which are limited partnerships or limited liability companies taxable as partnerships. MLPs may derive income and gains from the exploration, development, mining or production, processing, refining, transportation (including pipelines transporting gas, oil, or products thereof), or the marketing of any mineral or natural resources. MLPs generally have two classes of owners, the general partner and limited partners. When investing in an MLP, a Fund intends to purchase publicly traded common units issued to limited partners of the MLP. The general partner is typically owned by a major energy company, an investment fund, the direct management of the MLP or is an entity owned by one or more of such parties. The general partner may be structured as a private or publicly traded

corporation or other entity. The general partner typically controls the operations and management of the MLP through an up to 2% equity interest in the MLP plus, in many cases, ownership of common units and subordinated units. Limited partners own the remainder of the partnership, through ownership of common units, and have a limited role in the partnership's operations and management.

MLPs are typically structured such that common units and general partner interests have first priority to receive quarterly cash distributions up to an established minimum amount ("minimum quarterly distributions" or "MQD"). Common and general partner interests also accrue arrearages in distributions to the extent the MQD is not paid. Once common and general partner interests have been paid, subordinated units receive distributions of up to the MQD; however, subordinated units do not accrue arrearages. Distributable cash in excess of the MQD paid to both common and subordinated units is distributed to both common and subordinated units generally on a pro rata basis. The general partner is also eligible to receive incentive distributions if the general partner operates the business in a manner which results in distributions paid per common unit surpassing specified target levels. As the general partner increases cash distributions to the limited partners, the general partner receives an increasingly higher percentage of the incremental cash distributions. A common arrangement provides that the general partner can reach a tier where it receives 50% of every incremental dollar paid to common and subordinated unit holders. These incentive distributions encourage the general partner to streamline costs, increase capital expenditures and acquire assets in order to increase the partnership's cash flow and raise the quarterly cash distribution in order to reach higher tiers. Such results benefit all security holders of the MLP.

MLP common units represent a limited partnership interest in the MLP. Common units are listed and traded on U.S. securities exchanges, with their value fluctuating predominantly based on prevailing market conditions and the success of the MLP. Certain Funds intend to purchase common units in market transactions. Unlike owners of common stock of a corporation, owners of common units have limited voting rights and have no ability to annually elect directors. In the event of liquidation, common units have preference over subordinated units, but not over debt or preferred units, to the remaining assets of the MLP.

**Merger Transaction Risk.** A Fund may buy stock of the target company in an announced merger transaction prior to the consummation of such transaction. In that circumstance, a Fund would expect to receive an amount (whether in cash, stock of the acquiring company or a combination of both) in excess of the purchase price paid by the Fund for the target company's stock. However, a Fund is subject to the risk that the merger transaction may be canceled, delayed or restructured, in which case a Fund's holding of the target company's stock may not result in any profit for the Fund and may lose significant value.

Money Market Obligations of Domestic Banks, Foreign Banks and Foreign Branches of U.S. Banks. Certain Funds may purchase bank obligations, such as certificates of deposit, notes, bankers' acceptances and time deposits, including instruments issued or supported by the credit of U.S. or foreign banks or savings institutions having total assets at the time of purchase in excess of \$1 billion. These obligations may be general obligations of the parent bank or may be limited to the issuing branch or subsidiary by the terms of a specific obligation or by government regulation. The assets of a bank or savings institution will be deemed to include the assets of its domestic and foreign branches for purposes of a Fund's investment policies. Investments in short-term bank obligations may include obligations of foreign banks and domestic branches of foreign banks, and also foreign branches of domestic banks.

To the extent consistent with their investment objectives, a Fund may invest in debt obligations of domestic or foreign corporations and banks, and may acquire commercial obligations issued by Canadian corporations and Canadian counterparts of U.S. corporations, as well as Europaper, which is U.S. dollar-denominated commercial paper of a foreign issuer.

**Money Market Securities.** Certain Funds may invest in a broad range of short-term, high quality, U.S. dollar-denominated instruments, such as government, bank, commercial and other obligations that are available in the money markets. In particular, the Funds may invest in:

- (a) U.S. dollar-denominated obligations issued or supported by the credit of U.S. or foreign banks or savings institutions with total assets in excess of \$1 billion (including obligations of foreign branches of such banks);
- (b) high quality commercial paper and other obligations issued or guaranteed by U.S. and foreign corporations and other issuers rated (at the time of purchase) A-2 or higher by S&P, Prime-2 or higher by Moody's or F-2 or higher by Fitch, as well as high quality corporate bonds rated (at the time of purchase) A or higher by those rating agencies;
- (c) unrated notes, paper and other instruments that are of comparable quality to the instruments described in (b) above as determined by the Fund's Manager;

- (d) asset-backed securities (including interests in pools of assets such as mortgages, installment purchase obligations and credit card receivables);
- (e) securities issued or guaranteed as to principal and interest by the U.S. Government or by its agencies or authorities and related custodial receipts;
- (f) dollar-denominated securities issued or guaranteed by foreign governments or their political subdivisions, agencies or authorities;
- (g) funding agreements issued by highly-rated U.S. insurance companies;
- (h) securities issued or guaranteed by state or local governmental bodies;
- (i) repurchase agreements relating to the above instruments;
- municipal bonds and notes whose principal and interest payments are guaranteed by the U.S. Government or one of its agencies or authorities or which otherwise depend directly or indirectly on the credit of the United States;
- (k) fixed and variable rate notes and similar debt instruments rated MIG-2, VMIG-2 or Prime-2 or higher by Moody's, SP-2 or A-2 or higher by S&P, or F-2 or higher by Fitch;
- (I) tax-exempt commercial paper and similar debt instruments rated Prime-2 or higher by Moody's, A-2 or higher by S&P, or F-2 or higher by Fitch;
- (m) municipal bonds rated A or higher by Moody's, S&P or Fitch;
- (n) unrated notes, paper or other instruments that are of comparable quality to the instruments described above, as determined by the Fund's Manager under guidelines established by the Board; and
- (o) municipal bonds and notes which are guaranteed as to principal and interest by the U.S. Government or an agency or instrumentality thereof or which otherwise depend directly or indirectly on the credit of the United States.

#### Mortgage-Related Securities.

Mortgage-Backed Securities. Mortgage-backed securities 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" monthly payments made by borrowers on the residential or commercial mortgage loans that underlie the securities (net of any fees paid to the issuer or guarantor of the securities). Mortgage-backed securities 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.

Mortgage-backed securities 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 mortgage-backed securities 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. Mortgage-backed securities are "pass-through" securities, meaning that principal and interest payments made by the borrower on the underlying mortgages are passed through to a Fund. The value of mortgage-backed securities, like that of traditional fixed-income securities, typically increases when interest rates fall and decreases when interest rates rise. However, mortgage-backed securities differ from traditional fixed-income securities because of their potential for prepayment without penalty. The price paid by a Fund for its mortgage-backed securities, the yield the 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 mortgage-backed securities. 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 mortgage-backed securities 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 the Fund. Under certain interest rate and prepayment scenarios, a Fund may fail to recoup fully its investment in mortgage-backed securities notwithstanding any direct or indirect governmental or agency guarantee.

There are currently three types of mortgage pass-through securities: (1) those issued by the U.S. government or one of its agencies or instrumentalities, such as the Government National Mortgage Association ("Ginnie Mae"), the Federal National Mortgage Association ("Frendie Mae") and the Federal Home Loan Mortgage Corporation ("Freddie Mac"); (2) those issued by private issuers that represent an interest in or are collateralized by pass-through securities issued or guaranteed by the U.S. government or one of its agencies or instrumentalities; and (3) those issued by private issuers that represent an interest in or are collateralized by whole mortgage loans or pass-through securities without a government guarantee but that usually have some form of private credit enhancement. All of these three types of securities are considered "mortgage-related securities" for purposes of BATS: Series A Portfolio's fundamental investment restriction relating to concentration.

Ginnie Mae is a wholly owned U.S. government corporation within the Department of Housing and Urban Development. Ginnie Mae is authorized to guarantee, with 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 Federal Housing Administration ("FHA")-insured or Veterans' Administration ("VA")-guaranteed mortgages. Pass-through certificates guaranteed by Ginnie Mae (such certificates are also known as "Ginnie Maes") are guaranteed as to the timely payment of principal and interest by Ginnie Mae, whose guarantee is backed by the full faith and credit of the United States. Ginnie Mae certificates also are supported by the authority of Ginnie Mae to borrow funds from the U.S. Treasury Department to make payments under its guarantee. Mortgage-related securities issued by Fannie Mae include Fannie Mae guaranteed Mortgage Pass-Through Certificates (also known as "Fannie Maes"), which are guaranteed as to timely payment of principal and interest by Fannie Mae. They are not backed by or entitled to the full faith and credit of the United States, but are supported by the right of Fannie Mae to borrow from the U.S. Treasury Department. Fannie Mae was established as a federal agency in 1938 and in 1968 was chartered by Congress as a private shareholder-owned company. Mortgage-related securities issued by Freddie Mac include Freddie Mac Mortgage Participation Certificates (also known as "Freddie Macs" or "PCs"). Freddie Mac is a stockholder-owned corporation chartered by Congress in 1970. Freddie Macs are not guaranteed by the United States or by any Federal Home Loan Banks and do not constitute a debt or obligation of the United States or of any Federal Home Loan Bank. Freddie Macs entitle the holder to timely payment of interest, which is guaranteed by Freddie Mac. Freddie Mac guarantees either ultimate collection or timely payment of all principal payments on the underlying mortgage loans. 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. On September 6, 2008, Director James Lockhart of the Federal Housing Finance Agency ("FHFA") appointed FHFA as conservator of both Fannie Mae and Freddie Mac. 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 insure that they continue to provide liquidity to the housing and mortgage markets.

Private mortgage pass-through securities are structured similarly to Ginnie Mae, Fannie Mae, and Freddie Mac mortgage pass-through securities and are issued by originators of and investors in mortgage loans, including depository institutions, mortgage banks, investment banks and special purpose subsidiaries of the foregoing.

Pools created by private mortgage pass-through issuers generally offer a higher rate of interest than government and government-related pools because there are no direct or indirect government or agency guarantees of payments in the private pools. However, timely payment of interest and principal of these pools may be supported by various forms of insurance or guarantees, including individual loan, title, pool and hazard insurance and letters of credit. The insurance and guarantees are issued by governmental entities, private insurers and the mortgage poolers. The insurance and guarantees and the creditworthiness of the issuers thereof will be considered in determining whether a mortgage-related security meets a Fund's investment quality standards. There can be no assurance that the private insurers or guarantors can meet their obligations under the insurance policies or guarantee arrangements. Private mortgage pass-through securities may be bought without insurance or guarantees if, through an examination of the loan experience and practices of the originator/servicers and poolers, the Manager determines that the securities meet a Fund's quality standards. Any mortgage-related securities that are issued by private issuers have some exposure to subprime loans as well as to the mortgage and credit markets generally.

In addition, mortgage-related securities that are issued by private issuers are not subject to the underwriting requirements for the underlying mortgages that are applicable to those mortgage-related securities that have a government or government-sponsored entity guarantee. As a result, the mortgage loans underlying private mortgage-

related securities may, and frequently do, have less favorable collateral, credit risk or other underwriting characteristics than government or government-sponsored mortgage-related securities and have wider variances in a number of terms including interest rate, term, size, purpose and borrower characteristics. Privately issued pools more frequently include second mortgages, high loan-to-value mortgages and manufactured housing loans. The coupon rates and maturities of the underlying mortgage loans in a private-label mortgage-related securities pool may vary to a greater extent than those included in a government guaranteed pool, and the pool may include subprime mortgage loans. Subprime loans refer to loans made to borrowers with weakened credit histories or with a lower capacity to make timely payments on their loans. For these reasons, the loans underlying these securities have had in many cases higher default rates than those loans that meet government underwriting requirements.

The risk of non-payment is greater for mortgage-related securities that are backed by mortgage pools that contain subprime loans, but a level of risk exists for all loans. Market factors adversely affecting mortgage loan repayments may include a general economic turndown, high unemployment, a general slowdown in the real estate market, a drop in the market prices of real estate, or an increase in interest rates resulting in higher mortgage payments by holders of adjustable rate mortgages.

Privately issued mortgage-related securities are not traded on an exchange and there may be a limited market for the securities, especially when there is a perceived weakness in the mortgage and real estate market sectors. Without an active trading market, mortgage-related securities held in a fund's portfolio may be particularly difficult to value because of the complexities involved in assessing the value of the underlying mortgage loans.

Collateralized Mortgage Obligations ("CMOs"). CMOs are debt obligations collateralized by residential or commercial mortgage loans or residential or commercial mortgage pass-through securities. Interest and prepaid principal are generally paid monthly. CMOs may be collateralized by whole mortgage loans or private mortgage pass-through securities but are more typically collateralized by portfolios of mortgage pass-through securities guaranteed by Ginnie Mae, Freddie Mac, or Fannie Mae. The issuer of a series of CMOs may elect to be treated as a Real Estate Mortgage Investment Conduit ("REMIC"). All future references to CMOs also include REMICs.

CMOs are structured into multiple classes, often referred to as a "tranche," each issued at a specific adjustable or fixed interest rate, and bearing a different stated maturity date and each must be fully retired no later than its final distribution date. Actual maturity and average life will depend upon the prepayment experience of the collateral, which is ordinarily unrelated to the stated maturity date. CMOs often provide for a modified form of call protection through a de facto breakdown of the underlying pool of mortgages according to how quickly the loans are repaid. Monthly payment of principal received from the pool of underlying mortgages, including prepayments, is first returned to investors holding the shortest maturity class. Investors holding the longer maturity classes usually receive principal only after the first class has been retired. An investor may be partially protected against a sooner than desired return of principal because of the sequential payments.

Certain issuers of CMOs are not considered investment companies pursuant to a rule adopted by the Commission, and a Fund may invest in the securities of such issuers without the limitations imposed by the Investment Company Act on investments by a Fund in other investment companies. In addition, in reliance on an earlier Commission interpretation, a Fund's investments in certain other qualifying CMOs, which cannot or do not rely on the rule, are also not subject to the limitation of the Investment Company Act on acquiring interests in other investment companies. In order to be able to rely on the Commission's interpretation, these CMOs must be unmanaged, fixed asset issuers, that: (1) invest primarily in mortgage-backed securities; (2) do not issue redeemable securities; (3) operate under general exemptive orders exempting them from all provisions of the Investment Company Act; and (4) are not registered or regulated under the Investment Company Act as investment companies. To the extent that a Fund selects CMOs that cannot rely on the rule or do not meet the above requirements, the Fund may not invest more than 10% of its assets in all such entities and may not acquire more than 3% of the voting securities of any single such entity.

A Fund may also invest in, among other things, parallel pay CMOs, sequential pay CMOs, and floating rate CMOs. Parallel pay CMOs are structured to provide payments of principal on each payment date to more than one class, concurrently on a proportionate or disproportionate basis. These simultaneous payments are taken into account in calculating the final distribution date of each class. Sequential pay CMOs generally pay principal to only one class at a time while paying interest to several classes. A wide variety of REMIC Certificates may be issued in the parallel pay or sequential pay structures. These securities include accrual certificates (also known as "Z-Bonds"), which only accrue interest at a specified rate until all other certificates having an earlier final distribution date have been retired and are converted thereafter to an interest-paying security. Floating rate CMOs are securities whose coupon rate fluctuates according to some formula related to an existing market index or rate. Typical indices would include the eleventh district cost-of-funds index ("COFI"), LIBOR, one-year Treasury yields, and ten-year Treasury yields.

Classes of CMOs also include planned amortization classes ("PACs") and targeted amortization classes ("TACs"). PAC bonds generally require payments of a specified amount of principal on each payment date. The scheduled principal payments for PAC Certificates generally have the highest priority on each payment date after interest due has been paid to all classes entitled to receive interest currently. Shortfalls, if any, are added to the amount payable on the next payment date. The PAC Certificate payment schedule is taken into account in calculating the final distribution date of each class of PAC. In order to create PAC tranches, one or more tranches generally must be created that absorb most of the volatility in the underlying mortgage assets. These tranches (often called "supports" or "companion" tranches) tend to have market prices and yields that are more volatile than the PAC classes.

TACs are similar to PACs in that they require that specified amounts of principal be applied on each payment date to one or more classes of REMIC Certificates. A PAC's payment schedule, however, remains in effect as long as prepayment rates on the underlying mortgages do not exceed certain ranges. In contrast, a TAC provides investors with protection, to a certain level, against either faster than expected or slower than expected prepayment rates, but not both. TACs thus provide more cash flow stability than a regular sequential paying class, but less than a PAC. TACs also tend to have market prices and yields that are more volatile than PACs.

Adjustable Rate Mortgage Securities. Adjustable rate mortgage securities ("ARMs") are pass-through securities collateralized by mortgages with adjustable rather than fixed rates. ARMs eligible for inclusion in a mortgage pool generally provide for a fixed initial mortgage interest rate for a set number of scheduled monthly payments. After that schedule of payments has been completed, the interest rates are subject to periodic adjustment based on changes to a designated benchmark index.

ARMs contain maximum and minimum rates beyond which the mortgage interest rate may not vary over the lifetime of the security. In addition, certain ARMs provide for additional limitations on the maximum amount by which the mortgage interest rate may adjust for any single adjustment period. In the event that market rates of interest rise more rapidly to levels above that of the ARM's maximum rate, the ARM's coupon may represent a below market rate of interest. In these circumstances, the market value of the ARM security will likely have fallen.

Certain ARMs contain limitations on changes in the required monthly payment. In the event that a monthly payment is not sufficient to pay the interest accruing on an ARM, any such excess interest is added to the principal balance of the mortgage loan, which is repaid through future monthly payments. If the monthly payment for such an instrument exceeds the sum of the interest accrued at the applicable mortgage interest rate and the principal payment required at such point to amortize the outstanding principal balance over the remaining term of the loan, the excess is then used to reduce the outstanding principal balance of the ARM.

CMO Residuals. CMO residuals are derivative mortgage securities issued by agencies or instrumentalities of the U.S. government or by private originators of, or investors in, mortgage loans, including savings and loan associations, homebuilders, mortgage banks, commercial banks, investment banks, and special purpose entities of the foregoing. The cash flow generated by the mortgage assets underlying a series of CMOs is applied first to make required payments of principal and interest on the CMOs and second to pay the related administrative expenses of the issuer. The residual in a CMO structure generally represents the interest in any excess cash flow remaining after making the foregoing payments. Each payment of such excess cash flow to a holder of the related CMO residual represents income and/or a return of capital. The amount of residual cash flow resulting from a CMO will depend on, among other things, the characteristics of the mortgage assets, the coupon rate of each class of CMO, prevailing interest rates, the amount of administrative expenses and the prepayment experience on the mortgage assets. In part, the yield to maturity on the CMO residuals is extremely sensitive to prepayments on the related underlying mortgage assets, in the same manner as an interest-only ("IO") class of stripped mortgage-related securities. In addition, if a series of a CMO includes a class that bears interest at an adjustable rate, the yield to maturity on the related CMO residual will also be extremely sensitive to changes in the level of the index upon which interest rate adjustments are based. In certain circumstances, a Fund may fail to recoup fully its initial investment in a CMO residual.

CMO residuals are generally purchased and sold by institutional investors through one or more investment banking firms acting as brokers or dealers. The CMO residual market has developed relatively recently and CMO residuals may not have the liquidity of more established securities trading in other markets. Transactions in CMO residuals are generally completed only after careful review of the characteristics of the securities in question. In addition, CMO residuals may or, pursuant to an exemption therefrom, may not have been registered under the Securities Act. Residual interests generally are junior to, and may be significantly more volatile than, "regular" CMO and REMIC interests.

Stripped Mortgage-Backed Securities. A Fund may invest in stripped mortgage-backed securities ("SMBSs")

issued by agencies or instrumentalities of the United States. SMBSs are derivative multi-class mortgage-backed securities. SMBS arrangements commonly involve two classes of securities that receive different proportions of the interest and principal distributions on a pool of mortgage assets. A common variety of SMBS is where one class (the principal only or PO class) receives some of the interest and most of the principal from the underlying assets, while the other class (the interest only or IO class) receives most of the interest and the remainder of the principal. In the most extreme case, the IO class receives all of the interest, while the PO class receives all of the principal. While a Fund may purchase securities of a PO class, a Fund is more likely to purchase the securities of an IO class. The yield to maturity of an IO class is extremely sensitive to the rate of principal payments (including prepayments) on the related underlying assets, and a rapid rate of principal payments in excess of that considered in pricing the securities will have a material adverse effect on an IO security's yield to maturity. If the underlying mortgage assets experience greater than anticipated payments of principal, a Fund may fail to recoup fully its initial investment in IOs. In addition, there are certain types of IOs that represent the interest portion of a particular class as opposed to the interest portion of the entire pool. The sensitivity of this type of IO to interest rate fluctuations may be increased because of the characteristics of the principal portion to which they relate. As a result of the above factors, a Fund generally will purchase IOs only as a component of so called "synthetic" securities. This means that purchases of IOs will be matched with certain purchases of other securities, such as POs, inverse floating rate CMOs or fixed rate securities; as interest rates fall, presenting a greater risk of unanticipated prepayments of principal, the negative effect on a Fund because of its holdings of IOs should be diminished somewhat because of the increased yield on the inverse floating rate CMOs or the increased appreciation on the POs or fixed rate securities.

Tiered Index Bonds. Tiered index bonds are relatively new forms of mortgage-related securities. The interest rate on a tiered index bond is tied to a specified index or market rate. So long as this index or market rate is below a predetermined "strike" rate, the interest rate on the tiered index bond remains fixed. If, however, the specified index or market rate rises above the "strike" rate, the interest rate of the tiered index bond will decrease. Thus, under these circumstances, the interest rate on a tiered index bond, like an inverse floater, will move in the opposite direction of prevailing interest rates, with the result that the price of the tiered index bond may be considerably more volatile than that of a fixed-rate bond.

TBA Commitments. Certain Funds may enter into "to be announced" or "TBA" commitments. TBA commitments are forward agreements for the purchase or sale of securities, including mortgage-backed securities for a fixed price, with payment and delivery on an agreed upon future settlement date. The specific securities to be delivered are not identified at the trade date. However, delivered securities must meet specified terms, including issuer, rate and mortgage terms. When the Fund enters into a TBA commitment for the sale of mortgage-backed securities for a fixed price, with payment and delivery on an agreed upon future settlement date (which may be referred to as having a short position in such TBA securities), the Fund may or may not hold the types of mortgage-backed securities required to be delivered. See "—When-Issued Securities, Delayed Delivery Securities and Forward Commitments" below.

Mortgage Dollar Rolls. Certain Funds may invest in mortgage dollar rolls. In a mortgage dollar roll transaction, a Fund sells mortgage-backed securities for delivery in the current month and simultaneously contracts to repurchase substantially similar securities on a specified future date. The securities that are repurchased will bear the same interest rate and a similar maturity as those sold, but pools of mortgages collateralizing those securities may have different prepayment histories than those sold. During the period between the sale and repurchase, a Fund will not be entitled to receive interest and principal payments on the securities sold. Proceeds of the sale will be invested in additional instruments for the Fund, and the income from these investments will generate income for the Fund. If such income does not exceed the income, capital appreciation and gain or loss that would have been realized on the securities sold as part of the dollar roll, the use of this technique will diminish the investment performance of a Fund compared with what the performance would have been without the use of dollar rolls.

Each mortgage dollar roll transaction is accounted for as a sale or purchase of a portfolio security and a subsequent purchase or sale of a substantially similar security in the forward market. Transactions in mortgage dollar rolls may increase trading costs and portfolio turnover.

In the event the buyer of the securities under a mortgage dollar roll files for bankruptcy or becomes insolvent, a Fund's use of the proceeds of the current sale portion of the transaction may be restricted pending a determination by the other party, or its trustee or receiver, whether to enforce the Fund's obligation to purchase the similar securities in the forward transaction.

A Fund may engage in dollar roll transactions to enhance return. Successful use of mortgage dollar rolls may depend upon the Manager's ability to correctly predict interest rates and prepayments. Dollar rolls involve the risk that the market value of the securities subject to a Fund's forward purchase commitment may decline below, or the

market value of the securities subject to a Fund's forward sale commitment may increase above, the exercise price of the forward commitment. Dollar rolls are speculative techniques that can be deemed to involve leverage. There is no assurance that dollar rolls can be successfully employed.

Rule 18f-4 under the Investment Company Act permits a Fund to enter into when-issued or forward-settling securities (e.g., dollar rolls and firm and standby commitments, including TBA commitments) and non-standard settlement cycle securities notwithstanding the limitation on the issuance of senior securities in Section 18 of the Investment Company Act, provided that the transaction meets the Delayed-Settlement Securities Provision (as defined below under "—When-Issued Securities, Delayed Delivery Securities and Forward Commitments"). If a when-issued, forward-settling or non-standard settlement cycle security does not satisfy the Delayed-Settlement Securities Provision, then it is treated as a Derivatives Transaction under Rule 18f-4. See "—Derivatives — Regulation of Derivatives — Rule 18f-4 under the Investment Company Act" above.

Net Interest Margin (NIM) Securities. A Fund may invest in net interest margin ("NIM") securities. These securities are derivative interest-only mortgage securities structured off home equity loan transactions. NIM securities receive any "excess" interest computed after paying coupon costs, servicing costs and fees and any credit losses associated with the underlying pool of home equity loans. Like traditional stripped mortgage-backed securities, the yield to maturity on a NIM security is sensitive not only to changes in prevailing interest rates but also to the rate of principal payments (including prepayments) on the underlying home equity loans. NIM securities are highly sensitive to credit losses on the underlying collateral and the timing in which those losses are taken.

#### Municipal Investments.

Certain Funds may invest in obligations issued by or on behalf of states, territories and possessions of the United States and the District of Columbia and their political subdivisions, agencies and instrumentalities, the payments from which, in the opinion of bond counsel to the issuer, are excludable from gross income for U.S. federal income tax purposes ("Municipal Bonds"). Certain of the Municipal Funds may also invest in Municipal Bonds that pay interest excludable from gross income for purposes of state and local income taxes of the designated state and/ or allow the value of a Fund's shares to be exempt from state and local taxes of the designated state ("State Municipal Bonds"). The Municipal Funds may also invest in securities not issued by or on behalf of a state or territory or by an agency or instrumentality thereof, if the Manager believes such securities to pay interest excludable from gross income for purposes of U.S. federal income tax and state and local income taxes of the designated state and/ or state and local personal property taxes of the designated state ("Non-Municipal Tax-Exempt Securities"). Non-Municipal Tax-Exempt Securities could include trust certificates or other instruments evidencing interest in one or more long term municipal securities. Non-Municipal Tax-Exempt Securities also may include securities issued by other investment companies that invest in municipal bonds, to the extent such investments are permitted by applicable law. Non-Municipal Tax-Exempt Securities that pay interest excludable from gross income for U.S. federal income tax purposes will be considered "Municipal Bonds" for purposes of a Municipal Fund's investment objective and policies. Non-Municipal Tax-Exempt Securities that pay interest excludable from gross income for purposes of U.S. federal income tax and state and local income taxes of a designated state and/or allow the value of a Fund's shares to be exempt from state and local personal property taxes of that state will be considered "State Municipal Bonds" for purposes of the investment objective and policies of each of California Municipal Opportunities Fund, New Jersey Municipal Bond Fund, New York Municipal Opportunities Fund and Pennsylvania Municipal Bond Fund.

Risk Factors and Special Considerations Relating to Municipal Bonds. The risks and special considerations involved in investment in Municipal Bonds vary with the types of instruments being acquired. Investments in Non-Municipal Tax-Exempt Securities may present similar risks, depending on the particular product. Certain instruments in which a Fund may invest may be characterized as derivatives.

The value of Municipal Bonds generally may be affected by uncertainties in the municipal markets as a result of legislation or litigation, including legislation or litigation that changes the taxation of Municipal Bonds or the rights of Municipal Bond holders in the event of a bankruptcy. Municipal bankruptcies are rare and certain provisions of the U.S. Bankruptcy Code governing such bankruptcies are unclear. Further, the application of state law to Municipal Bond issuers could produce varying results among the states or among Municipal Bond issuers within a state. These uncertainties could have a significant impact on the prices of the Municipal Bonds in which a Fund invests.

#### Description of Municipal Bonds.

Municipal Bonds include debt obligations issued to obtain funds for various public purposes, including the construction of a wide range of public facilities, refunding of outstanding obligations and obtaining funds for general operating expenses and loans to other public institutions and facilities. In addition, certain types of bonds are issued by or on behalf of public authorities to finance various privately owned or operated facilities, including certain

facilities for the local furnishing of electric energy or gas, sewage facilities, solid waste disposal facilities and other specialized facilities. Such obligations are included within the term Municipal Bonds if the interest paid thereon is excluded from gross income for U.S. federal income tax purposes and any applicable state and local taxes. Other types of private activity bonds, the proceeds of which are used for the construction, equipment or improvement of privately operated industrial or commercial facilities, may constitute Municipal Bonds, although the current U.S. federal tax laws place substantial limitations on the size of such issues. The interest on Municipal Bonds may bear a fixed rate or be payable at a variable or floating rate. The two principal classifications of Municipal Bonds are "general obligation" and "revenue" or "special obligation" bonds, which latter category includes private activity bonds ("PABs") (or "industrial development bonds" under pre-1986 law).

General Obligation Bonds. General obligation bonds are secured by the issuer's pledge of its full faith, credit and taxing power for the payment of principal and interest. The taxing power of any governmental entity may be limited, however, by provisions of its state constitution or laws, and an entity's creditworthiness will depend on many factors, including potential erosion of its tax base due to population declines, natural disasters, declines in the state's industrial base or inability to attract new industries, economic limits on the ability to tax without eroding the tax base, state legislative proposals or voter initiatives to limit ad valorem real property taxes and the extent to which the entity relies on federal or state aid, access to capital markets or other factors beyond the state's or entity's control. Accordingly, the capacity of the issuer of a general obligation bond as to the timely payment of interest and the repayment of principal when due is affected by the issuer's maintenance of its tax base.

Revenue Bonds. 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 tax or other specific revenue source such as payments from the user of the facility being financed; accordingly, the timely payment of interest and the repayment of principal in accordance with the terms of the revenue or special obligation bond is a function of the economic viability or such facility or such revenue source.

Revenue bonds issued by state or local agencies to finance the development of low-income, multi-family housing involve special risks in addition to those associated with municipal bonds generally, including that the underlying properties may not generate sufficient income to pay expenses and interest costs. Such bonds are generally non-recourse against the property owner, may be junior to the rights of others with an interest in the properties, may pay interest that changes based in part on the financial performance of the property, may be prepayable without penalty and may be used to finance the construction of housing developments which, until completed and rented, do not generate income to pay interest. Increases in interest rates payable on senior obligations may make it more difficult for issuers to meet payment obligations on subordinated bonds.

*PABs.* PABs are, in most cases, tax-exempt securities issued by states, municipalities or public authorities to provide funds, usually through a loan or lease arrangement, to a private entity for the purpose of financing construction or improvement of a facility to be used by the entity. Such bonds are secured primarily by revenues derived from loan repayments or lease payments due from the entity, which may or may not be guaranteed by a parent company or otherwise secured. PABs generally are not secured by a pledge of the taxing power of the issuer of such bonds. Therefore, an investor should understand that repayment of such bonds generally depends on the revenues of a private entity and be aware of the risks that such an investment may entail. The continued ability of an entity to generate sufficient revenues for the payment of principal and interest on such bonds will be affected by many factors including the size of the entity, its capital structure, demand for its products or services, competition, general economic conditions, government regulation and the entity's dependence on revenues for the operation of the particular facility being financed.

Moral Obligation Bonds. "Moral obligation" bonds are normally issued by special purpose public authorities. If an issuer of moral obligation bonds is unable to meet its obligations, the repayment of such bonds becomes a moral commitment but not a legal obligation of the state or municipality that created the special purpose public authority that issued the bonds.

*Municipal Notes.* Municipal notes are shorter term municipal debt obligations. They may provide interim financing in anticipation of tax collection, bond sales or revenue receipts. If there is a shortfall in the anticipated proceeds, repayment on the note may be delayed or the note may not be fully repaid, and a Fund may lose money.

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

Municipal Lease Obligations. Also included within the general category of Municipal Bonds are 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 (hereinafter collectively called "lease obligations") relating to such equipment, land or facilities. Municipal leases, like other municipal debt obligations, are subject to the risk of non-payment. Although lease obligations do not constitute general obligations of the issuer for which the issuer's unlimited taxing power is pledged, a lease obligation is frequently backed by the issuer's covenant to budget for, appropriate and make the payments due under the lease obligation. However, certain lease obligations contain "non-appropriation" clauses, which provide that the issuer has no obligation to make lease or installment purchase payments in future years unless money is appropriated for such purpose on a yearly basis. Although "non-appropriation" lease obligations are secured by the leased property, disposition of the property in the event of foreclosure might prove difficult. These securities represent a type of financing that has not yet developed the depth of marketability associated with more conventional securities. Certain investments in lease obligations may be illiquid.

The ability of issuers of municipal leases to make timely lease payments may be adversely impacted in general economic downturns and as relative governmental cost burdens are allocated and reallocated among federal, state and local governmental units. Such non-payment would result in a reduction of income to a Fund, and could result in a reduction in the value of the municipal lease experiencing non-payment and a potential decrease in the NAV of a Fund. Issuers of municipal securities might seek protection under the bankruptcy laws. In the event of bankruptcy of such an issuer, a Fund could experience delays and limitations with respect to the collection of principal and interest on such municipal leases and a Fund may not, in all circumstances, be able to collect all principal and interest to which it is entitled. To enforce its rights in the event of a default in lease payments, a Fund might take possession of and manage the assets securing the issuer's obligations on such securities, which may increase a Fund's operating expenses and adversely affect the NAV of a Fund. When the lease contains a non-appropriation clause, however, the failure to pay would not be a default and a Fund would not have the right to take possession of the assets. Any income derived from a Fund's ownership or operation of such assets may not be tax-exempt. In addition, a Fund's intention to qualify as a "regulated investment company" under the Code, may limit the extent to which a Fund may exercise its rights by taking possession of such assets, because as a regulated investment company a Fund is subject to certain limitations on its investments and on the nature of its income.

Tender Option Bonds. Certain Funds may invest in residual inverse floating rate interest tender option bonds ("TOB Residuals"), which are derivative interests in Municipal Bonds. The TOB Residuals in which the Funds will invest pay interest or income that, in the opinion of counsel to the issuer, is exempt from regular U.S. federal income tax. BlackRock will not conduct its own analysis of the tax status of the interest or income paid by TOB Residuals held by the Funds, but will rely on the opinion of counsel to the issuer. Although volatile, TOB Residuals typically offer the potential for yields exceeding the yields available on fixed rate Municipal Bonds with comparable credit quality. The Funds may invest in TOB Residuals for the purpose of using economic leverage.

TOB Residuals represent beneficial interests in a special purpose trust formed for the purpose of holding Municipal Bonds contributed by one or more funds (a "TOB Trust"). A TOB Trust typically issues two classes of beneficial interests: short-term floating rate interests ("TOB Floaters"), which are sold to third party investors, and TOB Residuals, which are generally issued to the fund(s) that transferred Municipal Bonds to the TOB Trust. The Funds may invest in both TOB Floaters and TOB Residuals. TOB Floaters may have first priority on the cash flow from the Municipal Bonds held by the TOB Trust and are enhanced with a liquidity support arrangement from a third party Liquidity Provider (defined below) which allows holders to tender their position at par (plus accrued interest). A Fund, as a holder of TOB Residuals, is paid the residual cash flow from the TOB Trust. A Fund that contributes the Municipal Bonds to the TOB Trust is paid the cash received by the TOB Trust from the sale of the TOB Floaters, less certain transaction costs, and typically will invest the cash to purchase additional Municipal Bonds or other investments permitted by its investment policies. If a Fund ever purchases all or a portion of the TOB Floaters sold by the TOB Trust, it may surrender those TOB Floaters together with a proportionate amount of TOB Residuals to the TOB Trust in exchange for a proportionate amount of the Municipal Bonds owned by the TOB Trust.

Other BlackRock-advised funds may contribute Municipal Bonds to a TOB Trust into which a Fund has contributed Municipal Bonds. If multiple BlackRock-advised funds participate in the same TOB Trust, the economic rights and obligations under the TOB Residual will generally be shared among the funds ratably in proportion to their participation in the TOB Trust.

The Municipal Bonds transferred to a TOB Trust typically are high grade Municipal Bonds. In certain cases, when Municipal Bonds transferred are lower grade Municipal Bonds, the TOB Trust transaction includes a credit enhancement feature that provides for the timely payment of principal and interest on the bonds to the TOB Trust by a credit enhancement provider. The TOB Trust would be responsible for the payment of the credit enhancement fee and a Fund, as a TOB Residual holder, would be responsible for reimbursement of any payments of principal and

interest made by the credit enhancement provider.

The TOB Residuals held by a Fund generally provide the Fund with the right to cause the holders of a proportional share of the TOB Floaters to tender their notes to the TOB Trust at par plus accrued interest. Thereafter, the Fund may withdraw a corresponding share of the Municipal Bonds from the TOB Trust. This transaction, in effect, creates exposure for the Fund to the entire return of the Municipal Bonds in the TOB Trust, with a net cash investment by the Fund that is less than the value of the Municipal Bonds in the TOB Trust. This multiplies the positive or negative impact of the Municipal Bonds' return within the Fund (thereby creating leverage). The leverage within a TOB Trust depends on the value of the Municipal Bonds deposited in the TOB Trust relative to the value of the TOB Floaters it issues.

A Fund may invest in highly leveraged TOB Residuals. A TOB Residual generally is considered highly leveraged if the principal amount of the TOB Floaters issued by the related TOB Trust exceeds 75% of the principal amount of the Municipal Bonds owned by the TOB Trust.

The TOB Trust may be collapsed without the consent of a Fund upon the occurrence of tender option termination events ("TOTEs") and mandatory termination events ("MTEs"), as defined in the TOB Trust agreements. TOTEs include the bankruptcy or default of the issuer of the Municipal Bonds held in the TOB Trust, a substantial downgrade in the credit quality of the issuer of the Municipal Bonds held in the TOB Trust, failure of any scheduled payment of principal or interest on the Municipal Bonds, and a judgment or ruling that interest on the Municipal Bonds is subject to U.S. federal income taxation. MTEs may include, among other things, a failed remarketing of the TOB Floaters, the inability of the TOB Trust to obtain renewal of the liquidity support agreement, and a substantial decline in the market value of the Municipal Bonds held in the TOB Trust. Upon the occurrence of a TOTE or an MTE, a TOB Trust would be liquidated with the proceeds applied first to any accrued fees owed to the trustee of the TOB Trust, the remarketing agent of the TOB Floaters and the Liquidity Provider (defined below). In the case of an MTE, after the payment of fees, the holders of the TOB Residual holders (i.e., the Fund). In contrast, in the case of a TOTE, after payment of fees, the holders of TOB Floaters and the TOB Residual holders would be paid pro rata in proportion to the respective face values of their certificates.

A Fund may invest in a TOB Trust on either a non-recourse and recourse basis. TOB Trusts are typically supported by a liquidity facility provided by a third-party bank or other financial institution (the "Liquidity Provider") that allows the holders of the TOB Floaters to tender their TOB Floaters in exchange for payment of par plus accrued interest on any business day (subject to the non-occurrence of a TOTE described above). Depending on the structure of the TOB Trust, the Liquidity Provider may purchase the tendered TOB Floaters, or the TOB Trust may draw upon a loan from the Liquidity Provider to purchase the tendered TOB Floaters.

When a Fund invests in TOB Trusts on a non-recourse basis, and the Liquidity Provider is required to make a payment under the liquidity facility, the Liquidity Provider will typically liquidate all or a portion of the Municipal Bonds held in the TOB Trust and then fund the balance, if any, of the amount owed under the liquidity facility over the liquidation proceeds (the "Liquidation Shortfall"). If a Fund invests in a TOB Trust on a recourse basis, it will typically enter into a reimbursement agreement with the Liquidity Provider pursuant to which the Fund is required to reimburse the Liquidity Provider the amount of any Liquidation Shortfall. As a result, if the Fund invests in a recourse TOB Trust, the Fund will bear the risk of loss with respect to any Liquidation Shortfall. If multiple BlackRock-advised funds participate in any such TOB Trust, these losses will be shared ratably, in proportion to their participation in the TOB Trust.

Under accounting rules, Municipal Bonds of a Fund that are deposited into a TOB Trust are investments of the Fund and are presented on the Fund's Schedule of Investments and outstanding TOB Floaters issued by a TOB Trust are presented as liabilities in the Fund's Statement of Assets and Liabilities. Interest income from the underlying Municipal Bonds is recorded by a Fund on an accrual basis. Interest expense incurred on the TOB Floaters and other expenses related to remarketing, administration, trustee and other services to a TOB Trust are reported as expenses of a Fund. In addition, under accounting rules, loans made to a TOB Trust sponsored by a Fund may be presented as loans of the Fund in the Fund's financial statements even if there is no recourse to the Fund's assets.

For TOB Floaters, generally, the interest rate earned will be based upon the market rates for Municipal Bonds with maturities or remarketing provisions that are comparable in duration to the periodic interval of the tender option. Since the tender option feature has a shorter term than the final maturity or first call date of the underlying Municipal Bonds deposited in the TOB Trust, the holder of the TOB Floaters relies upon the terms of the agreement with the financial institution furnishing the liquidity facility as well as the credit strength of that institution. The risk associated with TOB Floaters, however, may be increased in the current market environment as a result of recent downgrades to the credit ratings, and thus the perceived reliability and creditworthiness, of many major financial institutions, some

of which sponsor and/or provide liquidity support to TOB Trusts. This in turn may reduce the desirability of TOB Floaters as investments, which could impair the viability or availability of TOB Trusts.

Rule 18f-4 under the Investment Company Act permits a Fund to enter into TOB Trust transactions, reverse repurchase agreements and similar financing transactions (e.g., borrowed bonds) notwithstanding the limitation on the issuance of senior securities in Section 18 of the Investment Company Act, provided that the 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 "—Derivatives — Regulation of Derivatives — Rule 18f-4 under the Investment Company Act" above.

Recent Developments in the TOB Trust Market. On December 10, 2013, regulators published final rules implementing section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Volcker Rule"), which prohibit banking entities from engaging in proprietary trading of certain instruments and limit such entities' investments in, and relationships with, "covered funds", as defined in the Volcker Rule. The Volcker Rule precludes banking entities and their affiliates from sponsoring TOB Trusts as such Trusts have been structured prior to the effective date of the Volcker Rule. Banking entities subject to the Volcker Rule were required to fully comply by July 21, 2015, with respect to investments in and relationships with TOB Trusts that were not in place prior to December 31, 2013, and by July 21, 2017, with respect to investments in and relationships with TOB Trusts that were in place prior to December 31, 2013. As a result, TOB Trusts may need to be restructured or unwound.

In response to the restrictions imposed by the Volcker Rule, market participants have developed a new structure for TOB Trusts designed to ensure that no banking entity is sponsoring the TOB Trust for purposes of the Volcker Rule. Specifically, a Fund will establish, structure and "sponsor" the TOB Trusts in which it holds TOB Residuals. In such a structure, certain responsibilities that previously belonged to the sponsor bank will be performed by, or on behalf of, a Fund. A Fund may utilize service providers in meeting these responsibilities. This structure remains untested. It is possible that regulators could take positions that could limit the market for such newly structured TOB Trust transactions or a Fund's ability to hold TOB Residuals. Under the new TOB Trust structure, a Fund will have certain additional duties and responsibilities, which may give rise to certain additional risks including, but not limited to, compliance, securities law and operational risks.

Service providers to a TOB Trust, such as administrators, liquidity providers, trustees, and remarketing agents, would be acting at the direction of, and as agent of, the Fund as the TOB Residual holder. Similar to the current tender option bond structure, a Fund would deposit Municipal Bonds into the TOB Trust in exchange for TOB Residuals, the TOB Trust would then issue and sell TOB Floaters to third party investors, and the proceeds of the sale of the TOB Floaters would be distributed to such TOB Residual holders (i.e., the Fund). Tendered TOB Floaters would continue to be supported by a remarketing agent and a liquidity facility. However, the remarketing agent is not anticipated to purchase tendered TOB Floaters for its own account in the event of a failed remarketing, which may increase the likelihood that a TOB Trust will need to be collapsed and liquidated in order to purchase the tendered TOB Floaters. In the event of a failed remarketing of TOB Floaters, the Liquidity Provider, at its option, may advance a loan to the TOB Trust the proceeds of which would be used by the TOB Trust to purchase the tendered TOB Floaters. The Liquidity Provider is not obligated to advance such a loan. The TOB Trust would be the borrower with respect to any such loan. Any loans made by a Liquidity Provider will be secured by the purchased TOB Floaters held by the TOB Trust.

Similar to the current structure for TOB Trusts, a Fund may hold either non-recourse TOB Residuals or recourse TOB Residuals under the new structure. In the event of a Liquidation Shortfall, there would generally be no contractual recourse to the Fund's assets if the Fund holds a non-recourse TOB Residual. However, as described above, a Fund would bear the risk of loss with respect to any Liquidation Shortfall if it holds a recourse TOB Residual.

The SEC and various federal banking and housing agencies adopted credit risk retention rules for securitizations (the "Risk Retention Rules"), which took effect in December 2016. The Risk Retention Rules require the sponsor of a TOB Trust to retain at least 5% of the credit risk of the underlying assets supporting the TOB Trust's Municipal Bonds. The Risk Retention Rules may adversely affect the Fund's ability to engage in TOB Trust transactions or increase the costs of such transactions in certain circumstances.

TOB Trust transactions constitute an important component of the municipal bond market. Accordingly, implementation of the Volcker Rule may adversely impact the municipal market, including through reduced demand for and liquidity of municipal bonds and increased financing costs for municipal issuers. Any such developments could adversely affect the Funds. The ultimate impact of these rules on the TOB market and the overall municipal market is not yet certain.

Yields. Yields on Municipal Bonds are dependent on a variety of factors, including the general condition of the

money market and of the municipal bond market, the size of a particular offering, the financial condition of the issuer, the maturity of the obligation and the rating of the issue. The ability of a Fund to achieve its investment objective is also dependent on the continuing ability of the issuers of the securities in which the Fund invests to meet their obligations for the payment of interest and principal when due. There are variations in the risks involved in holding Municipal Bonds, both within a particular classification and between classifications, depending on numerous factors. Furthermore, the rights of owners of Municipal Bonds and the obligations of the issuer of such Municipal Bonds may be subject to applicable bankruptcy, insolvency and similar laws and court decisions affecting the rights of creditors generally and to general equitable principles, which may limit the enforcement of certain remedies.

Variable Rate Demand Obligations ("VRDOs"). 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 periodic intervals 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 SIFMA Index.

Because of the interest rate adjustment formula on VRDOs, 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 the Fund's shareholders will have a reduced risk of capital depreciation.

Transactions in Financial Futures Contracts on Municipal Indexes. The Municipal Funds and certain other funds deal in financial futures contracts based on a long-term municipal bond index developed by the Chicago Board of Trade ("CBT") and The Bond Buyer (the "Municipal Bond Index"). The Municipal Bond Index is comprised of 40 tax-exempt municipal revenue and general obligation bonds. Each bond included in the Municipal Bond Index must be rated A or higher by Moody's or S&P and must have a remaining maturity of 19 years or more. Twice a month new issues satisfying the eligibility requirements are added to, and an equal number of old issues are deleted from, the Municipal Bond Index. The value of the Municipal Bond Index is computed daily according to a formula based on the price of each bond in the Municipal Bond Index, as evaluated by six dealer-to-dealer brokers.

The Municipal Bond Index futures contract is traded only on the CBT. Like other contract markets, the CBT assures performance under futures contracts through a clearing corporation, a nonprofit organization managed by the exchange membership that is also responsible for handling daily accounting of deposits or withdrawals of margin.

The particular municipal bonds comprising the index underlying the Municipal Bond Index financial futures contract may vary from the bonds held by a Municipal Fund. As a result, a Municipal Fund's ability to hedge effectively all or a portion of the value of its Municipal Bonds through the use of such financial futures contracts will depend in part on the degree to which price movements in the index underlying the financial futures contract correlate with the price movements of the Municipal Bonds held by the Fund. The correlation may be affected by disparities in the average maturity, ratings, geographical mix or structure of a Municipal Fund's investments as compared to those comprising the Municipal Bond Index and general economic or political factors. In addition, the correlation between movements in the value of the Municipal Bond Index may be subject to change over time as additions to and deletions from the Municipal Bond Index alter its structure. The correlation between futures contracts on U.S. Government Securities and the Municipal Bonds held by a Municipal Fund may be adversely affected by similar factors and the risk of imperfect correlation between movements in the prices of such futures contracts and the prices of Municipal Bonds held by a Municipal Fund may be greater. Municipal Bond Index futures contracts were approved for trading in 1986. Trading in such futures contracts may tend to be less liquid than trading in other futures contracts. The trading of futures contracts also is subject to certain market risks, such as inadequate trading activity, which could at times make it difficult or impossible to liquidate existing positions.

Call Rights. A Fund may purchase a Municipal Bond issuer's right to call all or a portion of such Municipal Bond for mandatory tender for purchase (a "Call Right"). A holder of a Call Right may exercise such right to require a mandatory tender for the purchase of related Municipal Bonds, subject to certain conditions. A Call Right that is not exercised prior to maturity of the related Municipal Bond will expire without value. The economic effect of holding both the Call Right and the related Municipal Bond is identical to holding a Municipal Bond as a non-callable security. Certain investments in such obligations may be illiquid.

Municipal Interest Rate Swap Transactions. In order to hedge the value of a Fund against interest rate fluctuations or to enhance a Fund's income, a Fund may enter into interest rate swap transactions such as Municipal Market Data AAA Cash Curve swaps ("MMD Swaps") or Securities Industry and Financial Markets Association

Municipal Swap Index swaps ("SIFMA Swaps"). To the extent that a Fund enters into these transactions, the Fund expects to do so primarily to preserve a return or spread on a particular investment or portion of its portfolio or to protect against any increase in the price of securities the Fund anticipates purchasing at a later date. A Fund intends to use these transactions primarily as a hedge rather than as a speculative investment. However, a Fund also may invest in MMD Swaps and SIFMA Swaps to enhance income or gain or to increase the Fund's yield, for example, during periods of steep interest rate yield curves (i.e., wide differences between short term and long term interest rates).

A Fund may purchase and sell SIFMA Swaps in the SIFMA swap market. In a SIFMA Swap, a Fund exchanges with another party their respective commitments to pay or receive interest (e.g., an exchange of fixed rate payments for floating rate payments linked to the SIFMA Municipal Swap Index). Because the underlying index is a tax-exempt index, SIFMA Swaps may reduce cross-market risks incurred by a Fund and increase a Fund's ability to hedge effectively. SIFMA Swaps are typically quoted for the entire yield curve, beginning with a seven day floating rate index out to 30 years. The duration of a SIFMA Swap is approximately equal to the duration of a fixed-rate Municipal Bond with the same attributes as the swap (e.g., coupon, maturity, call feature).

A Fund may also purchase and sell MMD Swaps, also known as MMD rate locks. An MMD Swap permits a Fund to lock in a specified municipal interest rate for a portion of its portfolio to preserve a return on a particular investment or a portion of its portfolio as a duration management technique or to protect against any increase in the price of securities to be purchased at a later date. By using an MMD Swap, a Fund can create a synthetic long or short position, allowing the Fund to select the most attractive part of the yield curve. An MMD Swap is a contract between a Fund and an MMD Swap provider pursuant to which the parties agree to make payments to each other on a notional amount, contingent upon whether the Municipal Market Data AAA General Obligation Scale is above or below a specified level on the expiration date of the contract. For example, if a Fund buys an MMD Swap and the Municipal Market Data AAA General Obligation Scale is below the specified level on the expiration date, the counterparty to the contract will make a payment to the Fund equal to the specified level minus the actual level, multiplied by the notional amount of the contract. If the Municipal Market Data AAA General Obligation Scale is above the specified level on the expiration date, a Fund will make a payment to the counterparty equal to the actual level minus the specified level, multiplied by the notional amount of the contract.

In connection with investments in SIFMA and MMD Swaps, there is a risk that municipal yields will move in the opposite direction than anticipated by a Fund, which would cause the Fund to make payments to its counterparty in the transaction that could adversely affect the Fund's performance. A Fund has no obligation to enter into SIFMA or MMD Swaps and may not do so.

Insured Municipal Bonds. Bonds purchased by a Fund may be covered by insurance that guarantees that interest payments on the bond will be made on time and the principal will be repaid when the bond matures. Either the issuer of the bond or the Fund purchases the insurance. Insurance is expected to protect the Fund against losses caused by a bond issuer's failure to make interest or principal payments. However, insurance does not protect the Fund or its shareholders against losses caused by declines in a bond's market value. Also, the Fund cannot be certain that any insurance company does not make these payments. In addition, if the Fund purchases the insurance, it may pay the premiums, which will reduce the Fund's yield. The Fund seeks to use only insurance companies with claims paying ability, financial strength, or equivalent ratings of at least investment grade. However, if insurance from insurers with these ratings is not available, the Fund may use insurance companies with lower ratings or stop purchasing insurance or insured bonds. If a bond's insurer fails to fulfill its obligations or loses its credit rating, the value of the bond could drop.

Build America Bonds. If a Fund holds Build America Bonds, the Fund may be eligible to receive a U.S. federal income tax credit; however, the issuer of a Build America Bond may instead elect to receive a cash payment directly from the federal government in lieu of holders such as the fund receiving a tax credit. The interest on Build America Bonds is taxable for U.S. federal income tax purposes. If the Fund does receive tax credits from Build America Bonds or other tax credit bonds on one or more specified dates during the fund's taxable year, and the Fund satisfies the minimum distribution requirement, the Fund may elect for U.S. federal income tax purposes to pass through to shareholders tax credits otherwise allowable to the Fund for that year with respect to such bonds. A tax credit bond is defined in the Code as a "qualified tax credit bond" (which includes a qualified forestry conservation bond, a new clean renewable energy bond, a qualified energy conservation bond, or a qualified zone academy bond, each of which must meet certain requirements specified in the Code), a "Build America Bond" (which includes certain qualified bonds issued before January 1, 2011) or certain other specified bonds. If the Fund were to so elect, a shareholder would be required to include in income and would be entitled to claim as a tax credit an amount equal to a proportionate share of such credits, and such amount would be subject to withholding provisions of the Code.

Certain limitations may apply on the extent to which the credit may be claimed.

Tax-Exempt Municipal Investments. Certain Funds may hold tax-exempt municipal investments which may be in the form of tender option bonds, variable rate demand obligations, participations, beneficial interests in a trust, partnership interests or other forms. These investments are described in greater detail above in this section. Some of the structures used by certain Funds include interests in long-term fixed-rate municipal debt obligations, held by a trustee or custodian, that are coupled with tender option, demand and other features when the tax-exempt municipal investments are created. Together, these features entitle the holder of the interest to tender (or put) the underlying municipal debt obligation to a third party at periodic intervals and to receive the principal amount thereof.

In some cases, municipal debt obligations are represented by custodial receipts evidencing rights to receive specific future interest payments, principal payments, or both, on the underlying securities held by the custodian. Under such arrangements, the holder of the custodial receipt has the option to tender the underlying securities at their face value to the sponsor (e.g., a Fund, or a bank or broker-dealer or other financial institution), which is paid periodic fees equal to the difference between the securities' fixed coupon rate and the rate that would cause the securities, coupled with the tender option, to trade at par on the date of a rate adjustment.

A participation interest gives the Fund an undivided interest in a Municipal Bond in the proportion the Fund's participation bears to the total principal amount of the Municipal Bond, and typically provides for a repurchase feature for all or any part of the full principal amount of the participation interest, plus accrued interest. Trusts and partnerships are typically used to convert long-term fixed rate high quality bonds of a single state or municipal issuer into variable or floating rate demand instruments.

The Municipal Bond Funds may hold participation interests and custodial receipts for municipal debt obligations which give the holder the right to receive payment of principal subject to the conditions described above. The IRS has not ruled on whether the interest received on tax-exempt municipal investments in the form of participation interests or custodial receipts is tax-exempt, and accordingly, purchases of any such interests or receipts are based on the opinions of counsel to the sponsors of such derivative securities. Neither a Fund nor its investment adviser or sub-advisers will review the proceedings related to the creation of any tax-exempt municipal investments or the basis for such opinions.

**Participation Notes.** A Fund may buy participation notes from a bank or broker-dealer ("issuer") that entitle the Fund to a return measured by the change in value of an identified underlying security or basket of securities (collectively, the "underlying security"). Participation notes are typically used when a direct investment in the underlying security is restricted due to country-specific regulations.

The Fund is subject to counterparty risk associated with each issuer. Investment in a participation note is not the same as investment in the constituent shares of the company. A participation note represents only an obligation of the issuer to provide the Fund the economic performance equivalent to holding shares of an underlying security. A participation note does not provide any beneficial or equitable entitlement or interest in the relevant underlying security. In other words, shares of the underlying security are not in any way owned by the Fund. However each participation note synthetically replicates the economic benefit of holding shares in the underlying security. Because a participation note is an obligation of the issuer, rather than a direct investment in shares of the underlying security, the Fund may suffer losses potentially equal to the full value of the participation note if the issuer fails to perform its obligations. A Fund attempts to mitigate that risk by purchasing only from issuers which BlackRock deems to be creditworthy.

The counterparty may, but is not required to, purchase the shares of the underlying security to hedge its obligation. The fund may, but is not required to, purchase credit protection against the default of the issuer. When the participation note expires or a Fund exercises the participation note and closes its position, that Fund receives a payment that is based upon the then-current value of the underlying security converted into U.S. dollars (less transaction costs). The price, performance and liquidity of the participation note are all linked directly to the underlying security. A Fund's ability to redeem or exercise a participation note generally is dependent on the liquidity in the local trading market for the security underlying the participation note.

**Portfolio Turnover Rates.** A Fund's annual portfolio turnover rate will not be a factor preventing a sale or purchase when the Manager believes investment considerations warrant such sale or purchase. Although certain Funds will use an approach to investing that is largely a passive, indexing approach, such Funds may engage in a substantial number of portfolio transactions. With respect to these Funds, the rate of portfolio turnover will be a limiting factor when the Manager considers whether to purchase or sell securities for a Fund only to the extent that the Manager will consider the impact of transaction costs on a Fund's tracking error. Portfolio turnover may vary greatly from year to year as well as within a particular year. High portfolio turnover (i.e., 100% or more) may result in

increased transaction costs to a Fund, including brokerage commissions, dealer mark-ups and other transaction costs on the sale of the securities and reinvestment in other securities. The sale of a Fund's securities may result in the recognition of capital gain or loss. Given the frequency of sales, such gain or loss will likely be short-term capital gain or loss. These effects of higher than normal portfolio turnover may adversely affect a Fund's performance.

**Preferred Stock.** Certain of the Funds may invest in preferred stocks. Preferred stock has a preference over common stock in liquidation (and generally dividends as well) but is subordinated to the liabilities of the issuer in all respects. As a general rule, the market value of preferred stock with a fixed dividend rate and no conversion element varies inversely with interest rates and perceived credit risk, while the market price of convertible preferred stock generally also reflects some element of conversion value. Because preferred stock is junior to debt securities and other obligations of the issuer, deterioration in the credit quality of the issuer will cause greater changes in the value of a preferred stock than in a more senior debt security with similar stated yield characteristics. Unlike interest payments on debt securities, preferred stock dividends are payable only if declared by the issuer's board of directors. Preferred stock also may be subject to optional or mandatory redemption provisions.

Tax-Exempt Preferred Shares. Certain Funds may invest in preferred interests of other investment funds that pay dividends that are exempt from regular U.S. federal income tax. Such funds in turn invest in municipal bonds and other assets that pay interest or make distributions that are exempt from regular U.S. federal income tax, such as revenue bonds issued by state or local agencies to fund the development of low-income, multi-family housing. Investment in such tax-exempt preferred shares involves many of the same issues as investing in other investment companies. These investments also have additional risks, including illiquid investments risk, the absence of regulation governing investment practices, capital structure and leverage, affiliated transactions and other matters, and concentration of investments in particular issuers or industries. The Municipal Bond Funds will treat investments in tax-exempt preferred shares as investments in municipal bonds.

Trust Preferred Securities. Certain of the Funds may invest in trust preferred securities. Trust preferred securities are typically issued by corporations, generally in the form of interest bearing notes with preferred securities characteristics, or by an affiliated business trust of a corporation, generally in the form of beneficial interests in subordinated debentures or similarly structured securities. The trust preferred securities market consists of both fixed and adjustable coupon rate securities that are either perpetual in nature or have stated maturity dates.

Trust preferred securities are typically junior and fully subordinated liabilities of an issuer and benefit from a guarantee that is junior and fully subordinated to the other liabilities of the guarantor. In addition, trust preferred securities typically permit an issuer to defer the payment of income for five years or more without triggering an event of default. Because of their subordinated position in the capital structure of an issuer, the ability to defer payments for extended periods of time without default consequences to the issuer, and certain other features (such as restrictions on common dividend payments by the issuer or ultimate guarantor when full cumulative payments on the trust preferred securities have not been made), these trust preferred securities are often treated as close substitutes for traditional preferred securities, both by issuers and investors.

Trust preferred securities include but are not limited to trust originated preferred securities ("TOPRS®"); monthly income preferred securities ("MIPS®"); quarterly income bond securities ("QUIBS®"); quarterly income debt securities ("QUIPS®"); quarterly income preferred securities ("QUIPS®"); corporate trust securities ("CORTS®"); public income notes ("PINES®"); and other trust preferred securities.

Trust preferred securities are typically issued with a final maturity date, although some are perpetual in nature. In certain instances, a final maturity date may be extended and/or the final payment of principal may be deferred at the issuer's option for a specified time without default. No redemption can typically take place unless all cumulative payment obligations have been met, although issuers may be able to engage in open-market repurchases without regard to whether all payments have been paid.

Many trust preferred securities are issued by trusts or other special purpose entities established by operating companies and are not a direct obligation of an operating company. At the time the trust or special purpose entity sells such preferred securities to investors, it purchases debt of the operating company (with terms comparable to those of the trust or special purpose entity securities), which enables the operating company to deduct for tax purposes the interest paid on the debt held by the trust or special purpose entity. The trust or special purpose entity is generally required to be treated as transparent for U.S. federal income tax purposes such that the holders of the trust preferred securities are treated as owning beneficial interests in the underlying debt of the operating company. Accordingly, payments on the trust preferred securities are treated as interest rather than dividends for U.S. federal income tax purposes. The trust or special purpose entity in turn would be a holder of the operating company's debt and would have priority with respect to the operating company's earnings and profits over the operating company's

common shareholders, but would typically be subordinated to other classes of the operating company's debt. Typically a preferred share has a rating that is slightly below that of its corresponding operating company's senior debt securities.

**Real Estate Investment Trusts ("REITs").** In pursuing its investment strategy, a Fund may invest in shares of REITs. REITs possess certain risks which differ from an investment in common stocks. REITs are financial vehicles that pool investor's capital to purchase or finance real estate. REITs may concentrate their investments in specific geographic areas or in specific property types, i.e., hotels, shopping malls, residential complexes and office buildings.

REITs are subject to management fees and other expenses, and so a Fund that invests in REITs will bear its proportionate share of the costs of the REITs' operations. There are three general categories of REITs: Equity REITs, Mortgage REITs and Hybrid REITs. Equity REITs invest primarily in direct fee ownership or leasehold ownership of real property; they derive most of their income from rents. Mortgage REITs invest mostly in mortgages on real estate, which may secure construction, development or long-term loans; the main source of their income is mortgage interest payments. Hybrid REITs hold both ownership and mortgage interests in real estate.

Investing in REITs involves certain unique risks in addition to those risks associated with investing in the real estate industry in general. The market value of REIT shares and the ability of the REITs to distribute income may be adversely affected by several factors, including rising interest rates, changes in the national, state and local economic climate and real estate conditions, perceptions of prospective tenants of the safety, convenience and attractiveness of the properties, the ability of the owners to provide adequate management, maintenance and insurance, the cost of complying with the Americans with Disabilities Act, increased competition from new properties, the impact of present or future environmental legislation and compliance with environmental laws, failing to maintain their exemptions from registration under the Investment Company Act, changes in real estate taxes and other operating expenses, adverse changes in governmental rules and fiscal policies, adverse changes in zoning laws and other factors beyond the control of the issuers of the REITs. In addition, distributions received by a Fund from REITs may consist of dividends, capital gains and/or return of capital. As REITs generally pay a higher rate of dividends (on a pre-tax basis) than operating companies, to the extent application of the Fund's investment strategy results in the Fund investing in REIT shares, the percentage of the Fund's dividend income received from REIT shares will likely exceed the percentage of the Fund's portfolio which is comprised of REIT shares. Ordinary REIT dividends received by the Fund and distributed to the Fund's shareholders will generally be taxable as ordinary income and will not constitute "qualified dividend income." However, for tax years beginning after December 31, 2017 and before January 1, 2026, a non-corporate taxpayer who is a direct REIT shareholder may claim a 20% "qualified business income" deduction for ordinary REIT dividends, and a regulated investment company may report dividends as eligible for this deduction to the extent the regulated investment company's income is derived from ordinary REIT dividends (reduced by allocable regulated investment company expenses). A shareholder may treat the dividends as such provided the regulated investment company and the shareholder satisfy applicable holding period requirements.

REITs (especially mortgage REITs) are also subject to interest rate risk. Rising interest rates may cause REIT investors to demand a higher annual yield, which may, in turn, cause a decline in the market price of the equity securities issued by a REIT. Rising interest rates also generally increase the costs of obtaining financing, which could cause the value of a Fund's REIT investments to decline. During periods when interest rates are declining, mortgages are often refinanced. Refinancing may reduce the yield on investments in mortgage REITs. In addition, since REITs depend on payment under their mortgage loans and leases to generate cash to make distributions to their shareholders, investments in REITs may be adversely affected by defaults on such mortgage loans or leases.

Investing in certain REITs, which often have small market capitalizations, may also involve the same risks as investing in other small capitalization companies. REITs may have limited financial resources and their securities may trade less frequently and in limited volume and may be subject to more abrupt or erratic price movements than larger company securities. Historically, small capitalization stocks, such as REITs, have been more volatile in price than the larger capitalization stocks such as those included in the S&P 500 Index. The management of a REIT may be subject to conflicts of interest with respect to the operation of the business of the REIT and may be involved in real estate activities competitive with the REIT. REITs may own properties through joint ventures or in other circumstances in which the REIT may not have control over its investments. REITs may incur significant amounts of leverage.

**Recent Market Events.** Stresses associated with the 2008 financial crisis in the United States and global economies peaked over a decade ago, but periods of unusually high volatility in the financial markets and restrictive credit conditions, sometimes limited to a particular sector or a geography, continue to recur. Some countries, including the United States, have adopted and/or are considering the adoption of more protectionist trade policies, a move away from the tighter financial industry regulations that followed the financial crisis, and/or substantially

reducing corporate taxes. The exact shape of these policies is still being considered, but the equity and debt markets may react strongly to expectations of change, which could increase volatility, especially if the market's expectations are not borne out. A rise in protectionist trade policies, and the possibility of changes to some international trade agreements, could affect the economies of many nations in ways that cannot necessarily be foreseen at the present time. In addition, geopolitical and other risks, including environmental and public health, may add to instability in world economies and markets generally. Economies and financial markets throughout the world are becoming increasingly interconnected. As a result, whether or not a Fund invests in securities of issuers located in or with significant exposure to countries experiencing economic, political and/or financial difficulties, the value and liquidity of the Fund's investments may be negatively affected by such events.

Governments and regulators may take actions that affect the regulation of the Fund or the instruments in which the Fund invests, or the issuers of such instruments, in ways that are unforeseeable. Future legislation or regulation or other governmental actions could limit or preclude the Fund's abilities to achieve its investment objectives or otherwise adversely impact an investment in the Fund. Political and diplomatic events within the United States, including a contentious domestic political environment, changes in political party control of one or more branches of the U.S. government, the U.S. government's inability at times to agree on a long-term budget and deficit reduction plan, the threat of a U.S. government shutdown, and disagreements over, or threats not to increase, the U.S. government's borrowing limit (or "debt ceiling"), as well as political and diplomatic events abroad, may affect investor and consumer confidence and may adversely impact financial markets and the broader economy, perhaps suddenly and to a significant degree. A downgrade of the ratings of U.S. government debt obligations, or concerns about the U.S. government's credit quality in general, could have a substantial negative effect on the U.S. and global economies. For example, concerns about the U.S. government's credit quality may cause increased volatility in the stock and bond markets, higher interest rates, reduced prices and liquidity of U.S. Treasury securities, and/or increased costs of various kinds of debt. Moreover, although the U.S. government has honored its credit obligations, there remains a possibility that the United States could default on its obligations. The consequences of such an unprecedented event are impossible to predict, but it is likely that a default by the United States would be highly disruptive to the U.S. and global securities markets and could significantly impair the value of the Fund's investments.

An outbreak of respiratory disease caused by a novel coronavirus (COVID-19) that was first detected in China in December 2019 developed into a global pandemic. Although vaccines have been developed and approved for use by various governments, the duration of the pandemic and its effects cannot be predicted with certainty. This pandemic has resulted in closing borders, enhanced health screenings, healthcare service preparation and delivery, quarantines, cancellations, disruptions to supply chains and customer activity, as well as general concern and uncertainty. Disruptions in markets can adversely impact a Fund and its investments. Further, certain local markets have been or may be subject to closures, and there can be no certainty regarding whether trading will continue in any local markets in which a Fund may invest, when any resumption of trading will occur or, once such markets resume trading, whether they will face further closures. Any suspension of trading in markets in which a Fund invests will have an impact on the Fund and its investments and will impact the Fund's ability to purchase or sell securities in such market. The outbreak could also impair the information technology and other operational systems upon which a Fund's service providers, including BlackRock, rely, and could otherwise disrupt the ability of employees of a Fund's service providers to perform critical tasks relating to the Fund. The impact of this outbreak has adversely affected the economies of many nations and the entire global economy and may impact individual issuers and capital markets in ways that cannot be foreseen. In the past, governmental and quasi-governmental authorities and regulators through the world have at times responded to major economic disruptions with a variety of fiscal and monetary policy changes, including direct capital infusions into companies and other issuers, new monetary policy tools, and lower interest rates. An unexpected or sudden reversal of these policies, or the ineffectiveness of such policies, is likely to increase market volatility, which could adversely affect a Fund's investments. Public health crises caused by the outbreak may exacerbate other preexisting political, social and economic risks in certain countries or globally. Other infectious illness outbreaks that may arise in the future could have similar or other unforeseen effects. The duration of this outbreak or others and their effects cannot be determined with certainty.

**Reference Rate Replacement Risk.** A Fund may be exposed to financial instruments that recently transitioned from, or continue to be tied to, the London Interbank Offered Rate (previously defined as "LIBOR") to determine payment obligations, financing terms, hedging strategies or investment value.

The United Kingdom's Financial Conduct Authority ("FCA"), which regulates LIBOR, has ceased publishing all LIBOR settings. In April 2023, however, the FCA announced that some USD LIBOR settings will continue to be published under a synthetic methodology until September 30, 2024 for certain legacy contracts. The Secured Overnight Financing Rate ("SOFR") is a broad measure of the cost of borrowing cash overnight collateralized by U.S.

Treasury securities in the repurchase agreement ("repo") market and 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 have replaced LIBOR in certain financial contracts.

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.

**Repurchase Agreements and Purchase and Sale Contracts.** Under repurchase agreements and purchase and sale contracts, the other party agrees, upon entering into the contract with a Fund, to repurchase a security sold to the Fund at a mutually agreed-upon time and price in a specified currency, thereby determining the yield during the term of the agreement.

A purchase and sale contract differs from a repurchase agreement in that the contract arrangements stipulate that securities are owned by the Fund and the purchaser receives any interest on the security paid during the period. In the case of repurchase agreements, the prices at which the trades are conducted do not reflect accrued interest on the underlying obligation; whereas, in the case of purchase and sale contracts, the prices take into account accrued interest. A Fund may enter into "tri-party" repurchase agreements. In "tri-party" repurchase agreements, an unaffiliated third-party custodian maintains accounts to hold collateral for the Fund and its counterparties and, therefore, the Fund may be subject to the credit risk of those custodians.

Some repurchase agreements and purchase and sale contracts are structured to result in a fixed rate of return insulated from market fluctuations during the term of the agreement, although such return may be affected by currency fluctuations. However, in the event of a default under a repurchase agreement or under a purchase and sale contract, instead of the contractual fixed rate, the rate of return to the Fund would be dependent upon intervening fluctuations of the market values of the securities underlying the contract and the accrued interest on those securities. In such event, the Fund would have rights against the seller for breach of contract with respect to any losses arising from market fluctuations following the default.

Both types of agreement usually cover short periods, such as less than one week, although they may have longer terms, and may be construed to be collateralized loans by the purchaser to the seller secured by the securities transferred to the purchaser. In the case of a repurchase agreement, as a purchaser, a Fund's Manager or sub-adviser will monitor the creditworthiness of the seller, and a Fund will require the seller to provide additional collateral if the market value of the securities falls below the repurchase price at any time during the term of the repurchase agreement. The Fund does not have this right to seek additional collateral as a purchaser in the case of purchase and sale contracts. The Fund's Manager or sub-adviser will mark-to-market daily the value of the securities. Securities subject to repurchase agreements (other than tri-party repurchase agreements) and purchase and sale contracts will be held by the Fund's custodian (or sub-custodian) in the Federal Reserve/Treasury book-entry system or by another authorized securities depository.

In the event of default by the seller under a repurchase agreement construed to be a collateralized loan, the underlying securities are not owned by the Fund but only constitute collateral for the seller's obligation to pay the repurchase price. Therefore, the Fund may suffer time delays and incur costs or possible losses in connection with disposition of the collateral. If the seller becomes insolvent and subject to liquidation or reorganization under applicable bankruptcy or other laws, a Fund's ability to dispose of the underlying securities may be restricted. Finally, it is possible that a Fund may not be able to substantiate its interest in the underlying securities. To minimize this risk, the securities underlying the repurchase agreement will be held by the applicable custodian at all times in an amount at least equal to the repurchase price, including accrued interest. If the seller fails to repurchase the securities, a Fund may suffer a loss to the extent proceeds from the sale of the underlying securities are less than the repurchase price.

In any repurchase transaction to which a Fund is a party, collateral for a repurchase agreement may include cash items and obligations issued by the U.S. Government or its agencies or instrumentalities. For certain Funds, however, collateral may include instruments other than cash items and obligations issued by the U.S. Government or its agencies or instrumentalities, including securities that the Fund could not hold directly under its investment

strategies without the repurchase obligation.

The type of collateral underlying repurchase agreements may also pose certain risks for a Fund. Lower quality collateral and collateral with longer maturities may be subject to greater price fluctuations than higher quality collateral and collateral with shorter maturities. 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 retain the status of an unsecured creditor of the counterparty (i.e., the position the 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.

Repurchase agreements and purchase and sale contracts may be entered into only with financial institutions that have capital of at least \$50 million or whose obligations are guaranteed by an entity that has capital of at least \$50 million.

Regulations adopted by global prudential regulators that are now in effect require certain bank-regulated counterparties and certain of their affiliates to include in certain financial contracts, including many repurchase agreements and purchase and sale contracts, terms that delay or restrict the rights of counterparties, such as a Fund, to terminate such agreements, take foreclosure action, 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 new requirements, as well as potential additional government regulation and other developments in the market, could adversely affect a Fund's ability to terminate existing repurchase agreements and purchase and sale contracts or to realize amounts to be received under such agreements.

Restricted Securities. A Fund may invest in securities that are not registered under the Securities Act (e.g., Rule 144A Securities) ("restricted securities"). Restricted securities may be sold in private placement transactions between issuers and their purchasers and may be neither listed on an exchange nor traded in other established markets. In many cases, privately placed securities may not be freely transferable under the laws of the applicable jurisdiction or due to contractual restrictions on resale. Some of these securities are new and complex, and trade only among institutions; the markets for these securities are still developing, and may not function as efficiently as established markets. As a result of the absence of a public trading market, privately placed securities may be deemed to be illiquid investments or less liquid investments and may be more difficult to value than publicly traded securities. To the extent that privately placed securities may be resold in privately negotiated transactions, the prices realized from the sales, due to lack of liquidity, could be less than those originally paid by the Fund or less than their fair market value. In addition, issuers whose securities are not publicly traded may not be subject to the disclosure and other investor protection requirements that may be applicable if their securities were publicly traded. If any privately placed securities held by a Fund are required to be registered under the securities laws of one or more jurisdictions before being resold, the Fund may be required to bear the expenses of registration. Where registration is required for restricted securities, a considerable time period may elapse between the time the Fund decides to sell the security and the time it is actually permitted to sell the security under an effective registration statement. If during such period, adverse market conditions were to develop, the Fund might obtain less favorable pricing terms than when it decided to sell the security. Transactions in restricted securities may entail other transaction costs that are higher than those for transactions in unrestricted securities. Certain of the Fund's investments in private placements may consist of direct investments and may include investments in smaller, less seasoned issuers, which may involve greater risks. These issuers may have limited product lines, markets or financial resources, or they may be dependent on a limited management group. In making investments in such securities, a Fund may obtain access to material nonpublic information, which may restrict the Fund's ability to conduct portfolio transactions in such securities.

**Reverse Repurchase Agreements.** A Fund may enter into reverse repurchase agreements with the same parties with whom it may enter into repurchase agreements. Under a reverse repurchase agreement, a Fund sells securities to another party and agrees to repurchase them at a particular date and price. A Fund may enter into a reverse repurchase agreement when it is anticipated that the interest income to be earned from the investment of the proceeds of the transaction is greater than the interest expense of the transaction.

The use of reverse repurchase agreements may be regarded as leveraging and, therefore, speculative. Furthermore, reverse repurchase agreements involve the risks that (i) the interest income earned in the investment of the proceeds will be less than the interest expense, (ii) the market value of the securities retained in lieu of sale by a Fund may decline below the price of the securities the Fund has sold but is obligated to repurchase, (iii) the

market value of the securities sold will decline below the price at which the Fund is required to repurchase them and (iv) the securities will not be returned to the Fund.

In addition, if the buyer of securities under a reverse repurchase agreement files for bankruptcy or becomes insolvent, such buyer or its trustee or receiver may receive an extension of time to determine whether to enforce a Fund's obligations to repurchase the securities and the Fund's use of the proceeds of the reverse repurchase agreement may effectively be restricted pending such decision.

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 the 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 "— Derivatives — Regulation of Derivatives — Rule 18f-4 under the Investment Company Act" above.

Additionally, regulations adopted by global prudential regulators that are now in effect require certain bank-regulated counterparties and certain of their affiliates to include in certain financial contracts, including many reverse repurchase agreements, terms that delay or restrict the rights of counterparties, such as a Fund, to terminate such agreements, take foreclosure action, 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 new requirements, as well as potential additional government regulation and other developments in the market, could adversely affect a Fund's ability to terminate existing reverse repurchase agreements or to realize amounts to be received under such agreements.

**Rights Offerings and Warrants to Purchase.** Certain Funds may participate in rights offerings and may purchase warrants, which are privileges issued by corporations enabling the owners to subscribe to and purchase a specified number of shares of the corporation at a specified price during a specified period of time. Subscription rights normally have a short life span to expiration. The purchase of rights or warrants involves the risk that a Fund could lose the purchase value of a right or warrant if the right to subscribe to additional shares is not exercised prior to the rights' and warrants' expiration. Also, the purchase of rights and/or warrants involves the risk that the effective price paid for the right and/or warrant added to the subscription price of the related security may exceed the value of the subscribed security's market price such as when there is no movement in the level of the underlying security. Buying a warrant does not make the Fund a shareholder of the underlying stock. The warrant holder has no voting or dividend rights with respect to the underlying stock. A warrant does not carry any right to assets of the issuer, and for this reason investments in warrants may be more speculative than other equity-based investments.

**Securities Lending.** Each Fund may lend portfolio securities to certain borrowers determined to be creditworthy by BlackRock, including to borrowers affiliated with BlackRock. 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 is paid 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 for 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 invested, among other things, in a private money market fund managed by an affiliate of the Manager or in registered money market funds advised by the Manager or its affiliates; such investments are subject to investment risk.

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 each 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 a 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 for dividends received by a Fund for securities loaned out by the Fund will not be considered qualified dividend income. The securities lending agent will take the tax effects on shareholders of this difference into account in connection with the 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 that are now in effect 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 a 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 new requirements, as well as potential additional government regulation and other developments in the market, could adversely affect a Fund's ability to terminate existing securities lending agreements or to realize amounts to be received under such agreements.

**Short Sales.** Certain Funds may make short sales of securities, either as a hedge against potential declines in value of a portfolio security or to realize appreciation when a security that the Fund does not own declines in value. Certain Funds have a fundamental investment restriction prohibiting short sales of securities unless they are "against-the-box." In a short sale "against-the-box," at the time of the sale, the Fund owns or has the immediate and unconditional right to acquire the identical security at no additional cost. When a Fund makes a short sale, it borrows the security sold short and delivers it to the broker-dealer through which it made the short sale. A Fund may have to pay a fee to borrow particular securities and is often obligated to turn over any payments received on such borrowed securities to the lender of the securities.

A Fund secures its obligation to replace the borrowed security by depositing collateral with the broker-dealer, usually in cash, U.S. Government Securities or other liquid securities similar to those borrowed. With respect to uncovered short positions, a Fund is required to deposit similar collateral with its custodian, if necessary, to the extent that the value of both collateral deposits in the aggregate is at all times equal to at least 100% of the current market value of the security sold short. Depending on arrangements made with the broker-dealer from which the Fund borrowed the security, regarding payment received by the Fund on such security, a Fund may not receive any payments (including interest) on its collateral deposited with such broker-dealer.

Because making short sales in securities that it does not own exposes a Fund to the risks associated with those securities, such short sales involve speculative exposure risk. A Fund will incur a loss as a result of a short sale if the price of the security increases between the date of the short sale and the date on which the Fund replaces the borrowed security. As a result, if a Fund makes short sales in securities that increase in value, it will likely underperform similar mutual funds that do not make short sales in securities. A Fund will realize a gain on a short sale if the security declines in price between those dates. There can be no assurance that a Fund will be able to close out a short sale position at any particular time or at an acceptable price. Although a Fund's gain is limited to the price at which it sold the security short, its potential loss is limited only by the maximum attainable price of the security, less the price at which the security was sold and may, theoretically, be unlimited.

A Fund may also make short sales "against the box" without being subject to such limitations.

A Fund must comply with Rule 18f-4 under the Investment Company Act with respect to its short sale borrowings, which are considered Derivatives Transactions under the Rule. See "—Derivatives — Regulation of Derivatives — Rule 18f-4 under the Investment Company Act" above.

**Special Purpose Acquisition Companies.** A Fund may invest in stock, warrants, rights and other interests issued by special purpose acquisition companies ("SPACs") or similar special purpose entities that pool funds to seek potential acquisition opportunities, including the "founder's" shares and warrants described below. A SPAC is a publicly traded company that raises investment capital via an IPO for the purpose of identifying and acquiring one or more operating businesses or assets. In connection with forming a SPAC, the SPAC's sponsors acquire "founder's" shares, generally for nominal consideration, and warrants that will result in the sponsors owning a specified

percentage (typically 20%) of the SPAC's outstanding common stock upon completion of the IPO. At the time a SPAC conducts an IPO, it has selected a management team but has not yet identified a specific acquisition opportunity. Unless and until an acquisition is completed, a SPAC generally invests its assets in U.S. government securities, money market securities and cash. If an acquisition that meets the requirements for the SPAC is not completed within a pre-established period of time, the invested funds are returned to the SPAC's public shareholders, the warrants expire, and the "founder's" shares and such warrants become worthless. Because SPACs and similar entities are in essence "blank check" companies without operating histories or ongoing business operations (other than identifying and pursuing acquisitions), the potential for the long term capital appreciation of their securities is particularly dependent on the ability of the SPAC's management to identify and complete a profitable acquisition. There is no guarantee that the SPACs in which the Fund invests will complete an acquisition or that any acquisitions completed by the SPACs in which the Fund invests will be profitable. Some SPACs may pursue acquisitions only within certain industries or regions, which may ultimately lead to an increase in the volatility of their prices following the acquisition. In addition, some of these securities may be considered illiquid and/or subject to restrictions on resale.

**Standby Commitment Agreements.** Standby commitment agreements commit a Fund, for a stated period of time, to purchase a stated amount of securities that may be issued and sold to that Fund at the option of the issuer. The price of the security is fixed at the time of the commitment. At the time of entering into the agreement, the Fund is paid a commitment fee, regardless of whether or not the security is ultimately issued. A Fund will enter into such agreements for the purpose of investing in the security underlying the commitment at a price that is considered advantageous to the Fund.

There can be no assurance that the securities subject to a standby commitment will be issued, and the value of the security, if issued, on the delivery date may be more or less than its purchase price. Since the issuance of the security underlying the commitment is at the option of the issuer, the Fund may bear the risk of a decline in the value of such security and may not benefit from an appreciation in the value of the security during the commitment period.

The purchase of a security pursuant to a standby commitment agreement and the related commitment fee will be recorded on the date on which the security can reasonably be expected to be issued, and the value of the security thereafter will be reflected in the calculation of a Fund's NAV. The cost basis of the security will be adjusted by the amount of the commitment fee. In the event the security is not issued, the commitment fee will be recorded as income on the expiration date of the standby commitment.

Standby commitments will only be entered into with dealers, banks and broker-dealers which, in the Manager's or sub-adviser's opinion, present minimal credit risks. A Fund will acquire standby commitments solely to facilitate portfolio liquidity and not to exercise its rights thereunder for trading purposes. Standby commitments will be valued at zero in determining NAV. Accordingly, where a Fund pays directly or indirectly for a standby commitment, its cost will be reflected as an unrealized loss for the period during which the commitment is held by such Fund and will be reflected as a realized gain or loss when the commitment is exercised or expires.

**Stripped Securities.** Stripped securities are created when the issuer separates the interest and principal components of an instrument and sells them as separate securities. In general, one security is entitled to receive the interest payments on the underlying assets (the interest only or "IO" security) and the other to receive the principal payments (the principal only or "PO" security). Some stripped securities may receive a combination of interest and principal payments. The yields to maturity on IOs and POs are sensitive to the expected or anticipated rate of principal payments (including prepayments) on the related underlying assets, and principal payments may have a material effect on yield to maturity. If the underlying assets experience greater than anticipated prepayments of principal, a Fund may not fully recoup its initial investment in IOs. Conversely, if the underlying assets experience less than anticipated prepayments of principal, the yield on POs could be adversely affected. Stripped securities may be highly sensitive to changes in interest rates and rates of prepayment.

**Structured Notes.** Structured notes and other related instruments purchased by a Fund are generally privately negotiated debt obligations where the principal and/or interest is determined by reference to the performance of a specific asset, benchmark asset, market or interest rate ("reference measure"). Issuers of structured notes include corporations and banks. The interest rate or the principal amount payable upon maturity or redemption may increase or decrease, depending upon changes in the value of the reference measure. The terms of a structured note may provide that, in certain circumstances, no principal is due at maturity and, therefore, may result in a loss of invested capital by a Fund. The interest and/or principal payments that may be made on a structured product may vary widely, depending on a variety of factors, including the volatility of the reference measure.

Structured notes may be positively or negatively indexed, so the appreciation of the reference measure may produce an increase or a decrease in the interest rate or the value of the principal at maturity. The rate of return on

structured notes may be determined by applying a multiplier to the performance or differential performance of reference measures. Application of a multiplier involves leverage that will serve to magnify the potential for gain and the risk of loss.

The purchase of structured notes exposes a Fund to the credit risk of the issuer of the structured product. Structured notes may also be more volatile, less liquid, and more difficult to price accurately than less complex securities and instruments or more traditional debt securities. The secondary market for structured notes could be illiquid making them difficult to sell when the Fund determines to sell them. The possible lack of a liquid secondary market for structured notes and the resulting inability of the Fund to sell a structured note could expose the Fund to losses and could make structured notes more difficult for the Fund to value accurately.

Taxability Risk. Certain of the Funds intend to minimize the payment of taxable income to shareholders by investing in tax-exempt or municipal securities in reliance at the time of purchase on an opinion of bond counsel to the issuer that the interest paid on those securities will be excludable from gross income for U.S. federal income tax purposes. Such securities, however, may be determined to pay, or have paid, taxable income subsequent to the Fund's acquisition of the securities. In that event, the IRS may demand that the Fund pay U.S. federal income taxes on the affected interest income, and, if the Fund agrees to do so, the Fund's yield could be adversely affected. In addition, the treatment of dividends previously paid or to be paid by the Fund as "exempt interest dividends" could be adversely affected, subjecting the Fund's shareholders to increased U.S. federal income tax liabilities. If the interest paid on any tax-exempt or municipal security held by the Fund is subsequently determined to be taxable, the Fund will dispose of that security as soon as reasonably practicable. In addition, future laws, regulations, rulings or court decisions may cause interest on municipal securities to be subject, directly or indirectly, to U.S. federal income taxation or interest on state municipal securities to be subject to state or local income taxation, or the value of state municipal securities to be subject to state or local income taxation, or may otherwise prevent the Fund from realizing the full current benefit of the tax-exempt status of such securities. Any such change could also affect the market price of such securities, and thus the value of an investment in the Fund.

**Temporary Defensive Measures.** As a temporary defensive measure, for example, to respond to adverse market, economic, political or other conditions, if its Manager determines that market conditions warrant, a Fund may depart from its principal investment strategies and may invest without limitation in high quality money market instruments. Certain Funds may also invest in high quality money market instruments pending investment or to meet anticipated redemption requests. High quality money market instruments include U.S. government obligations, U.S. government agency obligations, dollar denominated obligations of foreign issuers, bank obligations, including U.S. subsidiaries and branches of foreign banks, corporate obligations, commercial paper, repurchase agreements and obligations of supranational organizations. Generally, such obligations will mature within one year from the date of settlement, but may mature within two years from the date of settlement. Temporary defensive measures may affect a Fund's ability to achieve its investment objective.

**U.S.** Government **Obligations.** A Fund may purchase obligations issued or guaranteed by the U.S. Government and U.S. Government agencies and instrumentalities. Obligations of certain agencies and instrumentalities of the U.S. Government are supported by the full faith and credit of the U.S. Treasury. Others are supported by the right of the issuer to borrow from the U.S. Treasury; and still others are supported only by the credit of the agency or instrumentality issuing the obligation. No assurance can be given that the U.S. Government will provide financial support to U.S. Government-sponsored instrumentalities if it is not obligated to do so by law. Certain U.S. Treasury and agency securities may be held by trusts that issue participation certificates (such as Treasury income growth receipts and certificates of accrual on Treasury certificates). These certificates, as well as Treasury receipts and other stripped securities, represent beneficial ownership interests in either future interest payments or the future principal payments on U.S. Government obligations. These instruments are issued at a discount to their "face value" and may (particularly in the case of stripped mortgage-backed securities) exhibit greater price volatility than ordinary debt securities because of the manner in which their principal and interest are returned to investors.

Examples of the types of U.S. Government obligations that may be held by the Funds include U.S. Treasury Bills, Treasury Notes and Treasury Bonds and the obligations of the Federal Housing Administration, Farmers Home Administration, Export-Import Bank of the United States, Small Business Administration, Ginnie Mae, Fannie Mae, Federal Financing Bank, General Services Administration, Student Loan Marketing Association, Central Bank for Cooperatives, Federal Home Loan Banks, Freddie Mac, Federal Intermediate Credit Banks, Federal Land Banks, Farm Credit Banks System, Maritime Administration, Tennessee Valley Authority and Washington D.C. Armory Board. The Funds may also invest in mortgage-related securities issued or guaranteed by U.S. Government agencies and instrumentalities, including such instruments as obligations of Ginnie Mae, Fannie Mae and Freddie Mac.

U.S. Treasury Obligations. Treasury obligations may differ in their interest rates, maturities, times of issuance

and other characteristics. Obligations of U.S. Government agencies and authorities are supported by varying degrees of credit but generally are not backed by the full faith and credit of the U.S. Government. No assurance can be given that the U.S. Government will provide financial support to its agencies and authorities if it is not obligated by law to do so.

**U.S. Treasury Rolls.** Certain Funds may invest in U.S. Treasury rolls. In a U.S. Treasury roll transaction, the Fund sells a treasury security to a counterparty with a simultaneous agreement to repurchase the same security at an agreed upon price and future settlement date. U.S. Treasury roll transactions may incrementally adjust the average maturity of a Fund's portfolio and increase the interest yield on the Fund's portfolio by extending the average maturity of the portfolio in a normal yield curve environment. During the period before the settlement date of a U.S. Treasury roll, a Fund continues to earn interest on the securities it is selling; however, it does not earn interest on the securities it is purchasing until after the settlement date. A Fund could suffer an opportunity loss if the counterparty to the U.S. Treasury roll transaction failed to perform its obligations on the settlement date.

The market value of the securities that a Fund is required to purchase may decline below the agreed upon purchase price of those securities. U.S. Treasury rolls are speculative techniques that can be deemed to involve leverage. There is no assurance that U.S. Treasury rolls can be successfully employed.

Utility Industries. Risks that are intrinsic to the utility industries include difficulty in obtaining an adequate return on invested capital, difficulty in financing large construction programs during an inflationary period, restrictions on operations and increased cost and delays attributable to environmental considerations and regulation, difficulty in raising capital in adequate amounts on reasonable terms in periods of high inflation and unsettled capital markets, technological innovations that may render existing plants, equipment or products obsolete, the potential impact of natural or man-made disasters, increased costs and reduced availability of certain types of fuel, occasional reduced availability and high costs of natural gas for resale, the effects of energy conservation, the effects of a national energy policy and lengthy delays and greatly increased costs and other problems associated with the design, construction, licensing, regulation and operation of nuclear facilities for electric generation, including, among other considerations, the problems associated with the use of radioactive materials and the disposal of radioactive wastes. There are substantial differences among the regulatory practices and policies of various jurisdictions, and any given 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 or that such increases will be adequate to permit the payment of dividends on common stocks issued by a utility company. 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 the 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 climatic 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.

Utility companies in the United States and in foreign countries are generally subject to regulation. In the United States, most utility companies are regulated by state and/or federal authorities. Such regulation is intended to ensure appropriate standards of service and adequate capacity to meet public demand. Generally, prices are also regulated in the United States and in foreign countries with the intention of protecting the public while ensuring that the rate of return earned by utility companies is sufficient to allow them to attract capital in order to grow and continue to provide appropriate services. There can be no assurance that such pricing policies or rates of return will continue in the future.

The nature of regulation of the utility industries continues to evolve both in the United States and in foreign countries. In recent years, changes in regulation in the United States increasingly have allowed utility companies to provide services and products outside their traditional geographic areas and lines of business, creating new areas of competition within the industries. In some instances, utility companies are operating on an unregulated basis. Because of trends toward deregulation and the evolution of independent power producers as well as new entrants to the field of telecommunications, non-regulated providers of utility services have become a significant part of their respective industries. The Manager believes that the emergence of competition and deregulation will result in certain utility companies being able to earn more than their traditional regulated rates of return, while others may be forced to defend their core business from increased competition and may be less profitable. Reduced profitability, as well as new uses of funds (such as for expansion, operations or stock buybacks) could result in cuts in dividend payout rates. The Manager seeks to take advantage of favorable investment opportunities that may arise from these structural changes. Of course, there can be no assurance that favorable developments will occur in the future.

Foreign utility companies are also subject to regulation, although such regulations may or may not be

comparable to those in the United States. Foreign utility companies may be more heavily regulated by their respective governments than utilities in the United States and, as in the United States, generally are required to seek government approval for rate increases. In addition, many foreign utilities use fuels that may cause more pollution than those used in the United States, which may require such utilities to invest in pollution control equipment to meet any proposed pollution restrictions. Foreign regulatory systems vary from country to country and may evolve in ways different from regulation in the United States.

A Fund's investment policies are designed to enable it to capitalize on evolving investment opportunities throughout the world. For example, the rapid growth of certain foreign economies will necessitate expansion of capacity in the utility industries in those countries. Although many foreign utility companies currently are government-owned, thereby limiting current investment opportunities for a Fund, the Manager believes that, in order to attract significant capital for growth, foreign governments are likely to seek global investors through the privatization of their utility industries. Privatization, which refers to the trend toward investor ownership of assets rather than government ownership, is expected to occur in newer, faster-growing economies and in mature economies. Of course, there is no assurance that such favorable developments will occur or that investment opportunities in foreign markets will increase.

The revenues of domestic and foreign utility companies generally reflect the economic growth and development in the geographic areas in which they do business. The Manager will take into account anticipated economic growth rates and other economic developments when selecting securities of utility companies.

Electric. 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 utilities. 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.

*Telecommunications*. The telecommunications industry today includes both traditional telephone companies, with a history of broad market coverage and highly regulated businesses, and cable companies, which began as small, lightly regulated businesses focused on limited markets. Today these two historically different businesses are

converging in an industry that is trending toward larger, competitive national and international markets with an emphasis on deregulation. Companies that distribute telephone services and provide access to the telephone networks still comprise the greatest portion of this segment, but non-regulated activities such as wireless telephone services, paging, data transmission and processing, equipment retailing, computer software and hardware and internet services are becoming increasingly significant components as well. In particular, wireless and internet telephone services continue to gain market share at the expense of traditional telephone companies. The presence of unregulated companies in this industry and the entry of traditional telephone companies into unregulated or less regulated businesses provide significant investment opportunities with companies that may increase their earnings at faster rates than had been allowed in traditional regulated businesses. Still, increasing competition, technological innovations and other structural changes could adversely affect the profitability of such utilities and the growth rate of their dividends. Given mergers and proposed legislation and enforcement changes, it is likely that both traditional telephone companies and cable companies will continue to provide an expanding range of utility services to both residential, corporate and governmental customers.

Gas. Gas transmission companies and gas distribution companies are undergoing significant changes. In the United States, interstate transmission companies are regulated by the Federal Energy Regulatory Commission, which is reducing its regulation of the industry. Many companies have diversified into oil and gas exploration and development, making returns more sensitive to energy prices. In the recent decade, gas utility companies have been adversely affected by disruptions in the oil industry and have also been affected by increased concentration and competition. In the opinion of the Manager, however, environmental considerations could improve the gas industry outlook in the future. For example, natural gas is the cleanest of the hydrocarbon fuels, and this may result in incremental shifts in fuel consumption toward natural gas and away from oil and coal, even for electricity generation. However, technological or regulatory changes within the industry may delay or prevent this result.

Water. Water supply utilities are companies that collect, purify, distribute and sell water. In the United States and around the world the industry is highly fragmented because most of the supplies are owned by local authorities. Companies in this industry are generally mature and are experiencing little or no per capita volume growth. In the opinion of the Manager, there may be opportunities for certain companies to acquire other water utility companies and for foreign acquisition of domestic companies. The Manager believes that favorable investment opportunities may result from consolidation of this segment. As with other utilities, however, increased regulation, increased costs and potential disruptions in supply may adversely affect investments in water supply utilities.

Utility Industries Generally. There can be no assurance that the positive developments noted above, including those relating to privatization and changing regulation, will occur or that risk factors other than those noted above will not develop in the future.

When-Issued Securities, Delayed Delivery Securities and Forward Commitments. A Fund may purchase or sell securities that it is entitled to receive on a when-issued basis. A Fund may also purchase or sell securities on a delayed delivery basis or through a forward commitment (including on a TBA (to be announced) basis). These transactions involve the purchase or sale of securities by a Fund at an established price with payment and delivery taking place in the future. The Fund enters into these transactions to obtain what is considered an advantageous price to the Fund at the time of entering into the transaction.

Pursuant to recommendations of the Treasury Market Practices Group, which is sponsored by the Federal Reserve Bank of New York, a Fund or its counterparty generally will be required to post collateral when entering into certain forward-settling transactions, including without limitation TBA transactions.

There can be no assurance that a security purchased on a when-issued basis will be issued or that a security purchased or sold on a delayed delivery basis or through a forward commitment will be delivered. Also, the value of securities in these transactions on the delivery date may be more or less than the price paid by the Fund to purchase the securities. The Fund will lose money if the value of the security in such a transaction declines below the purchase price and will not benefit if the value of the security appreciates above the sale price during the commitment period.

If deemed advisable as a matter of investment strategy, a Fund may dispose of or renegotiate a commitment after it has been entered into, and may sell securities it has committed to purchase before those securities are delivered to the Fund on the settlement date. In these cases the Fund may realize a taxable capital gain or loss.

When a Fund engages in when-issued, TBA or forward commitment transactions, it relies on the other party to consummate the trade. Failure of such party to do so may result in the Fund's incurring a loss or missing an opportunity to obtain a price considered to be advantageous.

The market value of the securities underlying a commitment to purchase securities, and any subsequent

fluctuations in their market value, is taken into account when determining the market value of a Fund starting on the day the Fund agrees to purchase the securities. The Fund does not earn interest on the securities it has committed to purchase until they are paid for and delivered on the settlement date.

Rule 18f-4 under the Investment Company Act permits a Fund to enter into when-issued or forward-settling securities (e.g., firm and standby commitments, including TBA commitments, and dollar rolls) and non-standard settlement cycle securities notwithstanding the limitation on the issuance of senior securities in Section 18 of the Investment Company Act, provided that 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"). If a when-issued, forward-settling or non-standard settlement cycle security does not satisfy the Delayed-Settlement Securities Provision, then it is treated as a Derivatives Transaction under Rule 18f-4. See "—Derivatives — Regulation of Derivatives — Rule 18f-4 under the Investment Company Act" above.

Regulations adopted by global prudential regulators that are now in effect require certain bank-regulated counterparties and certain of their affiliates to include in certain financial contracts, including many agreements with respect to when-issued, TBA and forward commitment transactions, terms that delay or restrict the rights of counterparties, such as a 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 new requirements, as well as potential additional government regulation and other developments in the market, could adversely affect a Fund's ability to terminate existing agreements with respect to these transactions or to realize amounts to be received under such agreements.

**Yields and Ratings.** The yields on certain obligations are dependent on a variety of factors, including general market conditions, conditions in the particular market for the obligation, the financial condition of the issuer, the size of the offering, the maturity of the obligation and the ratings of the issue. The ratings of Moody's, Fitch and S&P represent their respective opinions as to the quality of the obligations they undertake to rate. Ratings, however, are general and are not absolute standards of quality. Consequently, obligations with the same rating, maturity and interest rate may have different market prices. Subsequent to its purchase by a Fund, a rated security may cease to be rated. A Fund's Manager or sub-adviser will consider such an event in determining whether the Fund should continue to hold the security.

**Zero Coupon Securities.** Zero coupon securities are securities that are sold at a discount to par value and do not pay interest during the life of the security. The discount approximates the total amount of interest the security will accrue and compound over the period until maturity at a rate of interest reflecting the market rate of the security at the time of issuance. Upon maturity, the holder of a zero coupon security is entitled to receive the par value of the security.

While interest payments are not made on such securities, holders of such securities are deemed to have received income ("phantom income") annually, notwithstanding that cash may not be received currently. The effect of owning instruments that do not make current interest payments is that a fixed yield is earned not only on the original investment but also, in effect, on all discount accretion during the life of the obligations. This implicit reinvestment of earnings at a fixed rate eliminates the risk of being unable to invest distributions at a rate as high as the implicit yield on the zero coupon bond, but at the same time eliminates the holder's ability to reinvest at higher rates in the future. For this reason, some of these securities may be subject to substantially greater price fluctuations during periods of changing market interest rates than are comparable securities that pay interest currently. Longer term zero coupon bonds are more exposed to interest rate risk than shorter term zero coupon bonds. These investments benefit the issuer by mitigating its need for cash to meet debt service, but also require a higher rate of return to attract investors who are willing to defer receipt of cash.

A Fund accrues income with respect to these securities for U.S. federal income tax and accounting purposes prior to the receipt of cash payments. Zero coupon securities may be subject to greater fluctuation in value and less liquidity in the event of adverse market conditions than comparably rated securities that pay cash interest at regular intervals.

Further, to maintain its qualification for pass-through treatment under the U.S. federal tax laws, a Fund is required to distribute income to its shareholders and, consequently, may have to dispose of other, more liquid portfolio securities under disadvantageous circumstances or may have to leverage itself by borrowing in order to generate the cash to satisfy these distributions. The required distributions may result in an increase in a Fund's exposure to zero coupon securities.

In addition to the above-described risks, there are certain other risks related to investing in zero coupon

securities. During a period of severe market conditions, the market for such securities may become even less liquid. In addition, as these securities do not pay cash interest, a Fund's investment exposure to these securities and their risks, including credit risk, will increase during the time these securities are held in the Fund's portfolio.

# Suitability (All Funds)

The economic benefit of an investment in any Fund depends upon many factors beyond the control of the Fund, the Manager and its affiliates. Each Fund should be considered a vehicle for diversification and not as a balanced investment program. The suitability for any particular investor of a purchase of shares in a Fund will depend upon, among other things, such investor's investment objectives and such investor's ability to accept the risks associated with investing in securities, including the risk of loss of principal.

## Investment Restrictions (All Funds)

See "Investment Restrictions" in Part I of each Fund's SAI for the specific fundamental and non-fundamental investment restrictions adopted by each Fund. In addition to those investment restrictions, each Fund is also subject to the restrictions discussed below.

Each Fund's investments will be limited in order to allow the Fund to qualify as a "regulated investment company" for purposes of the Code. See "Dividends and Taxes — Taxes." To qualify, among other requirements, each Fund will limit its investments so that, at the close of each quarter of the taxable year, (i) at least 50% of the market value of each Fund's assets is represented by cash, securities of other regulated investment companies, U.S. Government Securities and other securities, with such other securities limited, in respect of any one issuer, to an amount not greater in value than 5% of the Fund's assets and not greater than 10% of the outstanding voting securities of such issuer and (ii) not more than 25% of the value of its assets is invested in the securities (other than U.S. Government Securities or securities of other regulated investment companies) of any one issuer, any two or more issuers that the Fund controls and that are determined to be engaged in the same or similar trades or businesses or related trades or businesses or in the securities of one or more qualified publicly traded partnerships (i.e., partnerships that are traded on an established securities market or tradable on a secondary market, other than partnerships that derive 90% of their income from interest, dividends, capital gains and other traditionally permitted mutual fund income). For purposes of this restriction, the Municipal Funds generally will regard each state and each of its political subdivisions, agencies or instrumentalities and each multi-state agency of which the state is a member as a separate issuer. Each public authority that issues securities on behalf of a private entity generally will also be regarded as a separate issuer, except that if the security is backed only by the assets and revenues of a nongovernment entity, then the entity with the ultimate responsibility for the payment of interest and principal may be regarded as the sole issuer.

Foreign government securities (unlike U.S. Government Securities) are not exempt from the 5%, 10% and 25% diversification requirements of the Code discussed above and the securities of each foreign government issuer are considered to be obligations of a single issuer. These tax-related limitations may be changed by the Directors of a Fund to the extent necessary to comply with changes to the U.S. federal tax requirements. A Fund that is "diversified" under the Investment Company Act must satisfy the foregoing 5% and 10% requirements with respect to 75% of its total assets.

# MANAGEMENT AND OTHER SERVICE ARRANGEMENTS

#### **Directors and Officers**

See "Information on Directors and Officers, '—Biographical Information,' '— Share Ownership' and '— Compensation of Directors'" or "Information on Trustees and Officers, '—Biographical Information,' '— Share Ownership' and '— Compensation of Trustees'," as applicable, in Part I of each Fund's SAI for biographical and certain other information relating to the Directors and officers of your Fund, including Directors' compensation.

## **Management Arrangements**

Management Services. The Manager provides each Fund with investment advisory and management services. Subject to the oversight of the Board of Directors, the Manager is responsible for the actual management of a Fund's portfolio and reviews the Fund's holdings in light of its own research analysis and that from other relevant sources. The responsibility for making decisions to buy, sell or hold a particular security rests with the Manager. The Manager performs certain of the other administrative services and provides all the office space, facilities, equipment and necessary personnel for management of each Fund.

Each Feeder Fund invests all or a portion of its assets in shares of a Master Portfolio. To the extent a Feeder Fund invests all of its assets in a Master Portfolio, it does not invest directly in portfolio securities and does not require management services. For such Feeder Funds, portfolio management occurs at the Master Portfolio level.

Management Fee. Each Fund has entered into a Management Agreement with the Manager pursuant to which the Manager receives for its services to the Fund monthly compensation at an annual rate based on the average daily net assets of the Fund. For information regarding the fees paid by your Fund to the Manager for the Fund's last three fiscal years or other applicable periods, see "Management, Advisory and Other Service Arrangements" or "Management and Advisory Arrangements," as applicable, in Part I of each Fund's SAI.

For Funds that do not have an administrator, each Management Agreement obligates the Manager to provide management services and to pay all compensation of and furnish office space for officers and employees of a Fund in connection with investment and economic research, trading and investment management of the Fund, as well as the fees of all Directors of the Fund who are interested persons of the Fund. Each Fund pays all other expenses incurred in the operation of that Fund, including among other things: taxes; expenses for legal and auditing services; costs of preparing, printing and mailing proxies, shareholder reports, prospectuses and statements of additional information, except to the extent paid by BlackRock Investments, LLC ("BRIL" or the "Distributor"); charges of the custodian and sub-custodian, and the transfer agent; expenses of redemption of shares; Commission fees; expenses of registering the shares under Federal, state or foreign laws; fees and expenses of Directors who are not interested persons of a Fund as defined in the Investment Company Act; accounting and pricing costs (including the daily calculations of NAV); insurance; interest; brokerage costs; litigation and other extraordinary or non-recurring expenses; and other expenses properly payable by the Fund. Certain accounting services are provided to each Fund by State Street Bank and Trust Company ("State Street"), BNY Mellon Investment Servicing (US) Inc. ("BNY Mellon") or JPMorgan Chase Bank, N.A. ("JPM") pursuant to an agreement between State Street, BNY Mellon or JPM, as applicable, and each Fund. Each Fund pays a fee for these services. In addition, the Manager provides certain accounting services to each Fund and the Fund pays the Manager a fee for such services. The Distributor pays certain promotional expenses of the Funds incurred in connection with the offering of shares of the Funds. Certain expenses are financed by each Fund pursuant to distribution plans in compliance with Rule 12b-1 under the Investment Company Act. See "Purchase of Shares — Distribution and/or Shareholder Servicing Plans."

Sub-Advisory Fee. The Manager of certain Funds has entered into one or more sub-advisory agreements (the "Sub-Advisory Agreements") with the sub-adviser or sub-advisers identified in each such Fund's Prospectus (the "Sub-Adviser") pursuant to which the Sub-Adviser provides sub-advisory services to the Manager with respect to the Fund. For information relating to the fees, if any, paid by the Manager to the Sub-Adviser pursuant to the Sub-Advisory Agreement for the Fund's last three fiscal years or other applicable periods, see "Management, Advisory and Other Service Arrangements" or "Management and Advisory Arrangements," as applicable, in Part I of each Fund's SAI.

Organization of the Manager. BlackRock Advisors, LLC is a Delaware limited liability company and BlackRock Fund Advisors is a California corporation. Each Manager is an indirect, wholly owned subsidiary of BlackRock, Inc. BlackRock, Inc., through its subsidiaries and divisions, provides (i) investment management services to individuals and institutional investors through separate account management, non-discretionary advisory programs and commingled investment vehicles; (ii) risk management services, investment accounting and trade processing tools; (iii) transition management services, and (iv) securities lending services.

Duration and Termination. Unless earlier terminated as described below, each Management Agreement and each Sub-Advisory Agreement will remain in effect for an initial two year period and from year to year thereafter if approved annually (a) by the Board of Directors or by a vote of a majority of the outstanding voting securities of a Fund and (b) by a majority of the Directors of the Fund who are not parties to such agreement or interested persons (as defined in the Investment Company Act) of any such party. Each Management Agreement automatically terminates on assignment and may be terminated without penalty on 60 days' written notice at the option of either party thereto or by the vote of the shareholders of the applicable Fund.

# **Other Service Arrangements**

Administrative Services and Administrative Fee. Certain Funds have entered into an administration agreement (the "Administration Agreement") with an administrator identified in the Fund's Prospectus and Part I of the Fund's SAI (each an "Administrator"). For its services to a Fund, the Administrator receives monthly compensation at the annual rate set forth in each applicable Fund's Prospectus. For information regarding any administrative fees paid by your Fund to the Administrator for the periods indicated, see "Management, Advisory and Other Service Arrangements" or "Management and Advisory Arrangements," as applicable, in Part I of that Fund's SAI.

For Funds that have an Administrator, the Administration Agreement obligates the Administrator to provide certain administrative services to the Fund and to pay, or cause its affiliates to pay, for maintaining its staff and personnel and to provide office space, facilities and necessary personnel for the Fund. Each Administrator is also obligated to pay, or cause its affiliates to pay, the fees of those officers and Directors of the Fund who are affiliated persons of the Administrator or any of its affiliates.

Duration and Termination of Administration Agreement. Unless earlier terminated as described below, each Administration Agreement will continue for an initial two year period and from year to year if approved annually (a) by the Board of Directors of each applicable Fund or by a vote of a majority of the outstanding voting securities of such Fund and (b) by a majority of the Directors of the Fund who are not parties to such contract or interested persons (as defined in the Investment Company Act) of any such party. Such contract is not assignable and may be terminated without penalty on written notice at the option of either party thereto or by the vote of the shareholders of the Fund.

Transfer Agency Services. BNY Mellon Investment Servicing (US) Inc. (in this capacity, the "Transfer Agent"), a subsidiary of The Bank of New York Mellon Corporation, acts as each Fund's Transfer Agent pursuant to a Transfer Agency, Dividend Disbursing Agency and Shareholder Servicing Agency Agreement (the "Transfer Agency Agreement") with the Funds. Pursuant to the Transfer Agency Agreement, the Transfer Agent is responsible for the issuance, transfer and redemption of shares and the opening and maintenance of shareholder accounts. Each Fund pays the Transfer Agent a fee for the services it receives based on the type of account and the level of services required. Each Fund reimburses the Transfer Agent's reasonable out-of-pocket expenses and pays a fee of 0.10% of account assets for certain accounts that participate in certain fee-based programs sponsored by the Manager or its affiliates. For purposes of each Transfer Agency Agreement, the term "account" includes a shareholder account maintained directly by the Transfer Agent and any other account representing the beneficial interest of a person in the relevant share class on a recordkeeping system.

Independent Registered Public Accounting Firm. The Audit Committee of each Fund, the members of which are non-interested Directors of the Fund, has selected an independent registered public accounting firm for that Fund that audits the Fund's financial statements. Please see the inside back cover page of your Fund's Prospectus and Part I of this SAI for information on your Fund's independent registered public accounting firm.

Custodian Services. The name and address of the custodian (the "Custodian") of each Fund are provided on the inside back cover page of the Fund's Prospectus. The Custodian is responsible for safeguarding and controlling the Fund's cash and securities, handling the receipt and delivery of securities and collecting interest and dividends on the Fund's investments. The Custodian is authorized to establish separate accounts in foreign currencies and to cause foreign securities owned by the Fund to be held in its offices outside the United States and with certain foreign banks and securities depositories.

For certain Feeder Funds, the Custodian also acts as the custodian of the Master Portfolio's assets.

With respect to certain Funds, on a monthly basis the Custodian nets the Fund's daily positive and negative cash balances and calculates a credit ("custody credit") or a charge based on that net amount. The custodian fees, including the amount of any overdraft charges, may be reduced by the amount of such custody credits, and any unused credits at the end of a given month may be carried forward to a subsequent month. Any such credits unused by the end of a Fund's fiscal year will not expire. Net debits at the end of a given month are added to the Fund's custody bill and paid by the Fund.

Accounting Services. Each Fund has entered into an agreement with State Street, BNY Mellon or JPM, pursuant to which State Street, BNY Mellon or JPM provides certain accounting and administrative services to the Fund. Each Fund pays a fee for these services. State Street, BNY Mellon or JPM provides similar accounting services to the Master LLCs. The Manager or the Administrator also provides certain accounting services to each Fund and each Fund reimburses the Manager or the Administrator for these services.

See "Management, Advisory and Other Service Arrangements — Accounting Services" or "Management and Advisory Arrangements — Accounting Services," as applicable, in Part I of each Fund's SAI for information on the amounts paid by your Fund and, if applicable, Master LLC to State Street, BNY Mellon or JPM and the Manager or, if applicable, the Administrator for the periods indicated.

Distribution Expenses. Each Fund has entered into a distribution agreement with the Distributor in connection with the continuous offering of each class of shares of the Fund (the "Distribution Agreements"). The Distribution Agreements obligate the Distributor to pay certain expenses in connection with the offering of each class of shares of the Funds. After the prospectuses, statements of additional information and periodic reports have been prepared, set in type and mailed to shareholders, the Distributor pays for the printing and distribution of these documents used

in connection with the offering to dealers and investors. The Distributor also pays for other supplementary sales literature and advertising costs. Each Distribution Agreement is subject to the same renewal requirements and termination provisions as the Management Agreement described above.

#### **Code of Ethics**

Each Fund, the Manager, each Sub-Adviser and the Distributor has adopted a Code of Ethics pursuant to Rule 17j-1 under the Investment Company Act. The Code of Ethics establishes procedures for personal investing and restricts certain transactions. Employees subject to the Code of Ethics may invest in securities for their personal investment accounts, including securities that may be purchased or held by a Fund.

# **SELECTIVE DISCLOSURE OF PORTFOLIO HOLDINGS**

The Board of Directors of each Fund and the Board of Directors of the Manager have each approved Portfolio Information Distribution Guidelines (the "Policy") regarding the disclosure of each Fund's portfolio securities, as applicable, and other portfolio information. The purpose of the Policy is to ensure that (i) shareholders and prospective shareholders of the Funds have equal access to portfolio holdings and characteristics and (ii) third parties (such as consultants, intermediaries and third-party data providers) have access to such information no earlier or more frequently than shareholders and prospective shareholders.

Pursuant to the Policy, each Fund and the Manager may, under certain circumstances as set forth below, make selective disclosure with respect to a Fund's Portfolio Characteristics (as defined below) and Portfolio Holdings (as defined below). The Board of Directors of each Fund and the Board of Directors of the Manager have each approved the adoption by the Fund of the Policy, and employees of the Manager are responsible for adherence to the Policy. The Board of Directors provides ongoing oversight of the Fund's and Manager's compliance with the Policy.

Disclosure of material non-public information ("Confidential Information") about a Fund's Portfolio Holdings and/or Portfolio Characteristics is prohibited, except as provided in the Policy.

Confidential Information relating to a Fund may not be distributed to persons not employed by BlackRock unless the Fund has a legitimate business purpose for doing so and confidentiality obligations are in effect, as appropriate.

- Portfolio Holdings: "Portfolio Holdings" are a Fund's portfolio securities and other instruments, and include, but are not limited to:
  - for equity securities, information such as issuer name, CUSIP, ticker symbol, total shares and market value;
  - for fixed income securities, information such as issuer name, CUSIP, ticker symbol, coupon, maturity, current face value, market value, yield, WAL, duration and convexity;
  - for all securities, information such as quantity, SEDOL and market price as of a specific date;
  - for derivatives, indicative data including, but not limited to, pay leg, receive leg, notional amount, reset frequency and trade counterparty; and
  - for trading strategies, specific portfolio holdings, including the number of shares held, weightings of particular holdings, trading details, pending or recent transactions and portfolio management plans to purchase or sell particular securities or allocation within particular sectors.
- Portfolio Characteristics (excluding Liquidity Metrics): "Portfolio Characteristics" include, but are not limited to, sector allocation, credit quality breakdown, maturity distribution, duration and convexity measures, average credit quality, average maturity, average coupon, top 10 holdings with percent of the fund held, average market capitalization, capitalization range, risk related information (e.g., value at risk, standard deviation), ROE, P/E, P/B, P/CF, P/S and EPS.
  - Additional characteristics specific to money market funds include, but are not limited to, historical daily and weekly liquid assets (as defined under Rule 2a-7) and historical fund net inflows and outflows.
- Portfolio Characteristics Liquidity Metrics:
  - "Liquidity Metrics" which seek to ascertain a Fund's liquidity profile under BlackRock's global liquidity risk
    methodology which 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 SEC Rule 22e-4 (including SEC liquidity tiering) is not permitted unless pre-approved.

• Disclosure of Liquidity Metrics pursuant to Section 3 of the Policy should be reviewed by BlackRock's Risk and Quantitative Analysis Group and the relevant portfolio management team prior to dissemination.

Information that is non-material or that may be obtained from public sources (i.e., information that has been publicly disclosed via a filing with the SEC (e.g., a fund's annual report), through a press release or placement on a publicly-available internet website), or information derived or calculated from such public sources shall not be deemed Confidential Information.

Portfolio Holdings and Portfolio Characteristics may be disclosed in accordance with the below schedule.

**Open-End Mutual Funds (Excluding Money Market Funds)** 

	Time Periods for	Portfolio Holdings
	Prior to 20 Calendar Days After Month-End	20 Calendar Days After Month-End To Public Filing
Portfolio Holdings	Cannot disclose without non-disclosure or confidentiality agreement and Chief Compliance Officer ("CCO") approval.	May disclose to shareholders, prospective shareholders, intermediaries, consultants and third-party data providers (e.g., Lipper, Morningstar and Bloomberg), except with respect to Global Allocation funds*, BlackRock Core Bond Portfolio and BlackRock Strategic Income Opportunities Portfolio of BlackRock Funds V, BlackRock Strategic Global Bond Fund, Inc., Master Total Return Portfolio of Master Bond LLC, BlackRock Total Return V.I. Fund of BlackRock Variable Series Funds II, Inc., BlackRock Sustainable Total Return Fund of BlackRock Bond Fund, Inc. and BlackRock Unconstrained Equity Fund (each of whose portfolio holdings may be disclosed 60 calendar days after month-end). BlackRock generally discloses portfolio holdings information on the lag times established herein on its public website. If Portfolio Holdings are disclosed to one party, they must also be disclosed to all other parties requesting the same information.
	Time Periods for Por	tfolio Characteristics
Portfolio	Prior to 5 Calendar Days After Month-End	5 Calendar Days After Month-End
Characteristics (Excluding Liquidity Metrics)	Cannot disclose without non-disclosure or confidentiality agreement and CCO approval.*, **	May disclose to shareholders, prospective shareholders, intermediaries, consultants and third-party data providers (e.g., Lipper, Morningstar and Bloomberg). If Portfolio Characteristics are disclosed to one party, they must also be disclosed to all other parties requesting the same information.
Portfolio Characteristics —	Prior to 60 Calendar Days After Calendar Quarter-End	60 Calendar Days After Calendar Quarter- End
Liquidity Metrics	Cannot disclose without non-disclosure or confidentiality agreement and CCO approval.	May disclose to shareholders, prospective shareholders, intermediaries and consultants; provided portfolio management has approved. If Liquidity Metrics are disclosed to one party, they must also be disclosed to all other parties requesting the same information.

<sup>\*</sup> Global Allocation Exception: For purposes of portfolio holdings, Global Allocation funds include BlackRock Global Allocation Fund, Inc., BlackRock Global Allocation Portfolio of BlackRock Series Fund, Inc. and BlackRock Global Allocation V.I. Fund of BlackRock Variable Series Funds, Inc. Information on certain Portfolio Characteristics of BlackRock Global Allocation Portfolio and BlackRock Global Allocation V.I. Fund is available, upon request, to insurance companies that use these funds as underlying investments (and to advisers and sub-advisers of funds invested in BlackRock Global Allocation Portfolio and BlackRock Global Allocation V.I. Fund) in their variable annuity contracts and variable life insurance policies on a weekly basis (or such other period as may be determined to be appropriate). Disclosure of such characteristics of these two funds constitutes a disclosure of Confidential Information and is being made for reasons deemed appropriate by BlackRock and in accordance with the requirements set forth in these guidelines. If Portfolio Characteristics are disclosed to one party, they must also be disclosed to all other parties requesting the same information.

\*\* Strategic Income Opportunities Exception: Information on certain Portfolio Characteristics of BlackBook Strategic Income Opportunities

<sup>\*\*</sup> Strategic Income Opportunities Exception: Information on certain Portfolio Characteristics of BlackRock Strategic Income Opportunities Portfolio of BlackRock Funds V may be made available to shareholders, prospective shareholders, intermediaries, consultants and third party

data providers, upon request on a more frequent basis as may be deemed appropriate by BlackRock from time-to-time. If Portfolio Characteristics are disclosed to one party, they must also be disclosed to all other parties requesting the same information.

# Money Market Funds\*\*\*,\*\*\*\*

	Time F	Periods
	Prior to 5 Calendar Days After Month-End	5 Calendar Days After Month-End to Date of Public Filing
Portfolio Holdings	Cannot disclose without non-disclosure or confidentiality agreement and CCO approval except the following portfolio holdings information may be released as follows:  •Weekly portfolio holdings information released on the website at least one business day after week-end except:  —Other information as may be required under Rule 2a-7 (e.g., name of issuer, category of investment, principal amount, maturity dates, yields).  —For Government money market funds, daily portfolio holdings are released on the website the following business day.	May disclose to shareholders, prospective shareholders, intermediaries, consultants and third-party data providers. If portfolio holdings are disclosed to one party, they must also be disclosed to all other parties requesting the same information.
Portfolio Characteristics	Cannot disclose without non-disclosure or confidentiality agreement and CCO approval except the following information may be released on the Fund's website daily:  •Historical NAVs calculated based on market factors (e.g., marked-to-market)  •Percentage of fund assets invested in daily and weekly liquid assets (as defined under Rule 2a-7)  •Daily net inflows and outflows  •Yields, SEC yields, WAM, WAL, current assets  •Other information as may be required by Rule 2a-7	May disclose to shareholders, prospective shareholders, intermediaries, consultants and third-party data providers. If Portfolio Characteristics are disclosed to one party, they must also be disclosed to all other parties requesting the same information.

<sup>\*\*\*</sup> BlackRock Short Obligation. Fund's holdings may be disclosed in accordance with the frequency for money market funds.

Guidelines for Confidential and Non-Material Information. Confidential Information may be disclosed to the Fund's Board of Directors and its counsel, outside counsel for the Fund, the Fund's auditors and to certain third-party service providers (i.e., fund administrator, custodian, proxy voting service) for which a non-disclosure or confidentiality agreement is in place with such service providers. With respect to Confidential Information, the Fund's CCO or his or her designee may authorize the following, subject in the case of (ii) and (iii) to a confidentiality or non-disclosure arrangement:

- (i) the preparation and posting of the Fund's Portfolio Holdings and/or Portfolio Characteristics to its website on a more frequent basis than authorized above;
- (ii) the disclosure of the Fund's Portfolio Holdings to third-party service providers not noted above; and
- (iii) the disclosure of the Fund's Portfolio Holdings and/or Portfolio Characteristics to other parties for legitimate business purposes.

## Fact Sheets and Reports

- Fund Fact Sheets are available to shareholders, prospective shareholders, intermediaries and consultants on a
  monthly or quarterly basis no earlier than the fifth calendar day after the end of a month or quarter.
- Money Market Performance Reports are typically available to shareholders, prospective shareholders, intermediaries and consultants by the tenth calendar day of the month (and on a one day lag for certain

<sup>\*\*\*\*</sup> Circle Reserve Fund Exception: Information on portfolio holdings and certain portfolio characteristics of the Circle Reserve Fund may be made available to the sole shareholder of the Fund, upon request, on a more frequent basis as may be deemed appropriate by BlackRock from time-to-time.

institutional funds). They contain monthly money market Fund performance, rolling 12-month average and benchmark performance.

Other Information. The Policy shall also apply to other Confidential Information of a Fund such as performance attribution analyses or security-specific information (e.g., information about Fund holdings where an issuer has been downgraded, been acquired or declared bankruptcy).

Data on NAVs, asset levels (by total Fund and share class), accruals, yields, capital gains, dividends and fund returns (net of fees by share class) are generally available to shareholders, prospective shareholders, consultants, and third-party data providers upon request, as soon as such data is available.

Contact Information. For information about portfolio holdings and characteristics, BlackRock fund shareholders and prospective investors should call the number set out on the back cover of the Prospectus.

Compensation. Neither a Fund, a service provider nor any of their affiliated persons (as that term is defined in the Investment Company Act) shall receive compensation in any form in connection with the disclosure of information about such Fund's Portfolio Holdings or Portfolio Characteristics.

Ongoing Arrangements. The Manager has entered into ongoing agreements to provide selective disclosure of Fund Portfolio Holdings to the following persons or entities:

- 1. Fund's Board of Directors and, if necessary, independent Directors' counsel and Fund counsel.
- 2. Fund's Transfer Agent.
- 3. Fund's Custodian.
- 4. Fund's Administrator, if applicable.
- 5. Fund's independent registered public accounting firm.
- 6. Fund's accounting services provider.
- 7. Independent rating agencies Morningstar, Inc., Lipper Inc., S&P, Moody's, Fitch.
- 8. Information aggregators Markit on Demand, Thomson Financial and Bloomberg, eVestments Alliance, Informa/PSN Investment Solutions, Crane Data and iMoneyNet.
- 9. Pricing Vendors Refinitiv, ICE Data Services, Bloomberg, IHS Markit, JP Morgan Pricing-Direct, Loan Pricing Corporation, Valuation Research Corporation, Murray, Devine & Co., Inc. and WM Company PLC.
- 10. Portfolio Compliance Consultants Oracle Financial Services.
- 11. Third-party feeder funds Stock Index Fund, a series of Homestead Funds, Inc.; Transamerica Stock Index, a series of Transamerica Funds; and Alight Money Market Fund, a series of Alight Series Trust and their respective boards, sponsors, administrators and other service providers.
- 12. Affiliated feeder funds Treasury Money Market Fund (Cayman) and its board, sponsor, administrator and other service providers.
- 13. Other Investment Company Institute, Goldman Sachs Asset Management, L.P., Mizuho Asset Management Co., Ltd., Nationwide Fund Advisors, State Street Bank and Trust Company, Donnelley Financial Solutions, Inc., Silicon Valley Bank and BNY Mellon Markets.

With respect to each such arrangement, a Fund has a legitimate business purpose for the release of information. The release of the information is subject to confidential treatment to prohibit the entity from sharing with an unauthorized source or trading upon the information provided. The Funds, BlackRock and their affiliates do not receive any compensation or other consideration in connection with such arrangements.

The Funds and the Manager monitor, to the extent possible, the use of Confidential Information by the individuals or firms to which it has been disclosed. To do so, in addition to the requirements of any applicable confidentiality agreement and/or the terms and conditions of the Fund's and Manager's Codes of Ethics — all of which require persons or entities in possession of Confidential Information to keep such information confidential and not to trade on such information for their own benefit — the Manager's compliance personnel under the supervision of the Fund's CCO, monitor the Manager's securities trading desks to determine whether individuals or firms who have received Confidential Information have made any trades on the basis of that information. In addition, the Manager maintains an internal restricted list to prevent trading by the personnel of the Manager or its affiliates in securities — including securities held by a Fund — about which the Manager has Confidential Information. There can be no assurance, however, that the Fund's policies and procedures with respect to the selective disclosure of Portfolio Holdings will prevent the misuse of such information by individuals or firms that receive such information.

#### **Potential Conflicts of Interest**

Certain activities of BlackRock, Inc., BlackRock Advisors, LLC, BlackRock Fund Advisors and the other subsidiaries of BlackRock, Inc. (collectively referred to in this section as "BlackRock") and their respective directors, officers or 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 other financial services, 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, transactional, 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 Fund. 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 Fund.

When BlackRock seeks to purchase or sell the same assets for client 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.

BlackRock, on behalf of other client accounts, on the one hand, and a Fund, on the other hand, may invest in or extend credit to different parts of the capital structure of a single issuer. BlackRock may pursue rights, provide advice or engage in other activities, or refrain from pursuing rights, providing advice or engaging in other activities, on behalf of other clients with respect to an issuer in which a Fund has invested, and such actions (or refraining from action) may have a material adverse effect on the Fund. In situations in which clients of BlackRock (including the Funds) hold positions in multiple parts of the capital structure of an issuer, BlackRock may not pursue certain actions or remedies that may be available to a Fund, as a result of legal and regulatory requirements or otherwise. BlackRock addresses these and other potential conflicts of interest based on the facts and circumstances of particular situations. For example, BlackRock may determine to rely on information barriers between different business units or portfolio management teams. BlackRock may also determine to rely on the actions of similarly situated holders of loans or securities rather than, or in connection with, taking such actions itself on behalf of the 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 redemptions, 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.

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 the 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) that 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 net asset value 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 Commission 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, the underlying securities, currencies or instruments of which may be those in which a Fund invests or which may be based on the performance of the Fund. BlackRock has entered into an arrangement with Markit Indices Limited, the index provider for underlying fixed-income indexes used by certain iShares ETFs, related to derivative fixed-income products that are based on such iShares ETFs. BlackRock will receive certain payments for licensing intellectual property belonging to BlackRock and for facilitating 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. The Funds and other accounts managed by BlackRock may from time to time transact in such derivative products where permitted by the Fund's investment strategy, which could contribute to the viability 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 these derivative products could also potentially lead to greater liquidity for such products, increased purchase activity with respect to these iShares ETFs 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 the Fund. To the extent such transactions are permitted, a Fund will deal with BlackRock on an arms-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 the 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.

BlackRock Investment Management, LLC ("BIM") or BlackRock Institutional Trust Company, N.A. ("BTC"), as applicable, each an affiliate of BlackRock, 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.

As discussed in the section below entitled "Portfolio Transactions and Brokerage—Transactions in Portfolio Securities," BlackRock, unless prohibited by applicable law, may cause a Fund or account to pay a broker or dealer a commission for effecting a transaction 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. Under MiFID II, EU investment managers, including BlackRock International Limited ("BIL") which acts as a sub-adviser to certain Funds, pay for research from brokers and dealers directly out of their own resources, rather than through client commissions.

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, 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 client portfolios.

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 "Proxy Voting Policies and Procedures."

It is also possible that, from time to time, BlackRock may, subject to compliance with applicable law, purchase and hold shares of a Fund. Increasing a Fund's assets may enhance 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 redeem at any time some or all of the shares of a Fund acquired for its own accounts. A large redemption of shares of a Fund by BlackRock could significantly reduce the asset size of the Fund, which might have an adverse effect on the Fund's investment flexibility, portfolio diversification and expense ratio. BlackRock seeks to consider the effect of redemptions on a Fund and other shareholders in deciding whether to redeem its shares but is not obligated to do so and may elect not to do so.

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 and 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.

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 "Pricing of Shares — Determination of Net Asset Value" in this SAI, when market quotations are not readily available or are believed by BlackRock to be unreliable, a Fund's investments are valued at fair value by BlackRock. BlackRock has been designated as the Fund's valuation designee pursuant to Rule 2a-5 under the Investment Company Act and acts through BlackRock's Rule 2a-5 Committee (the "2a-5 Committee"), with assistance from other BlackRock pricing committees and in accordance with BlackRock'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 BlackRock deems relevant at the time of the determination, and may be based on analytical values determined by BlackRock 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 BlackRock 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 Investment Company 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 of BlackRock that are the same, different from or made at different times than positions taken for the Fund. To lessen the possibility that a Fund will be adversely affected by this personal trading, the Fund, BRIL and BlackRock each have adopted a Code of Ethics in compliance with Section 17(j) of the Investment Company Act that restricts securities trading in the personal accounts of investment professionals and others who normally come into possession of information regarding the Fund's portfolio transactions. Each Code of Ethics is also available on the EDGAR Database on the Commission'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 the Fund may in accordance with rules or guidance adopted under the Investment Company Act engage in transactions with another Fund or accounts that are affiliated with the 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 Commission. These transactions would be effected in circumstances in which BlackRock determined that it would be appropriate for the 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 the Funds wish 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, in certain emerging or international markets, or are subject to corporate or regulatory ownership restrictions, or invest in certain futures and derivative transactions, there may be limits on the aggregate amount invested by BlackRock for its 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 or certain transactions undertaken, 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. When ownership in certain securities nears an applicable threshold, BlackRock may limit purchases in such securities to the issuer's weighting in the applicable benchmark used by BlackRock to manage the 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 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 is not obligated to license its indices to any 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.

BlackRock may not serve as an Authorized Participant in the creation and redemption of BlackRock-advised ETFs.

The custody arrangement described in "Management and Other Service Arrangements" 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. 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. 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.

BlackRock may enter into contractual arrangements with third-party service providers to the 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. 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 may accrue, in whole or in part, to BlackRock.

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 affect Fund fees and expenses applicable to such client's investment in a Fund.

Present and future activities of BlackRock and its directors, officers and employees, in addition to those described in this section, may give rise to additional conflicts of interest.

### **PURCHASE OF SHARES**

Most BlackRock-advised open-end funds offer multiple classes of shares under a plan adopted under Rule 18f-3 under the Investment Company Act. Investor A Shares are sold to investors choosing the initial sales charge alternative, except that Investor A Shares of Index Funds (defined below) and BlackRock Short Obligations Fund are generally not subject to an initial sales charge, and Investor C Shares are sold to investors choosing the deferred sales charge alternative. Investor P Shares are available only to certain investors purchasing shares of Funds through registered representatives of an insurance company's broker-dealer that has entered into an agreement with the Distributor to offer such shares. Institutional Shares are sold to certain eligible investors without a sales charge. Certain Funds offer Class R Shares, which are available only to certain employer-sponsored retirement plans and are sold without a sales charge. Certain Funds offer Class G Shares, which are available only to investors on eligible platforms, which are platforms where clients invest in the Fund through a single omnibus account in the name of a financial intermediary that meets an initial investment minimum of \$2 billion. In addition, certain Funds offer Service Shares, BlackRock Shares and/or Class K Shares that are available only to certain eligible investors. Please see the appropriate Prospectus for your Fund to determine which classes are offered by your Fund and under what circumstances. Each class has different exchange privileges. See "Shareholder Services — Exchange Privilege."

The applicable offering price for purchase orders is based on the NAV of a Fund next determined after receipt of the purchase order by a dealer or other financial intermediary ("Selling Dealer") that has been authorized by the Distributor by contract to accept such orders. In addition, with respect to the affiliated underlying funds in which target date funds advised by BlackRock or its affiliates ("BlackRock Target Date Funds") invest, the applicable offering price of each affiliated underlying fund is based on the NAV of such affiliated underlying fund next determined after a purchase order is received, or deemed to be received upon receipt by a Selling Dealer, by the BlackRock Target Date Funds that allocate a portion of such purchase order to such affiliated underlying fund. As to purchase orders received by Selling Dealers or BlackRock Target Date Funds prior to the close of business on the New York Stock Exchange ("NYSE") (generally, the NYSE closes at 4:00 p.m. Eastern time), on the day the order is placed, including orders received after the close of business on the previous day, the applicable offering price is based on the NAV determined as of the close of business on the NYSE on that day. If the purchase orders are not received by the Selling Dealer or a BlackRock Target Date Fund before the close of business on the NYSE, such orders are deemed received on the next business day. It is the responsibility of brokers to transmit purchase orders and payment on a timely basis. Generally, if payment is not received within the period described in the Prospectuses, the order will be canceled, notice thereof will be given, and the broker and its customers will be responsible for any loss to the Fund or its shareholders. Orders of less than \$500 may be mailed by a broker to the Transfer Agent.

The minimum investment for the initial purchase of shares is set forth in the Prospectus for each Fund. The minimum initial investment for employees of a Fund, a Fund's Manager, Sub-Advisers or BRIL or employees of their affiliates is \$100, unless payment is made through a payroll deduction program in which case the minimum investment is \$25.

Each Fund has lower investment minimums for other categories of shareholders eligible to purchase Institutional Shares, including selected fee-based programs. Each Fund may permit a lower initial investment for certain investors if their purchase, combined with purchases by other investors received together by the Fund, meets the minimum investment requirement. Each Fund may reject any purchase order, modify or waive the minimum initial or subsequent investment requirements and suspend and resume the sale of any share class of any Fund at any time.

Financial intermediaries may, in connection with a change in account type or otherwise in accordance with a financial intermediary's policies and procedures, exchange shares of a Fund from one class of shares to another class of shares of the same Fund, provided that the exchanged shares are not subject to a contingent deferred sales charge ("CDSC") and that shareholders meet eligibility requirements of the new share class. Please speak to your financial intermediary for information about specific policies and procedures applicable to your account.

Each Fund or the Distributor may suspend the continuous offering of the Fund's shares of any class at any time in response to conditions in the securities markets or otherwise and may resume offering the shares from time to time. Any order may be rejected by a Fund or the Distributor. Neither the Distributor, the securities dealers nor other financial intermediaries are permitted to withhold placing orders to benefit themselves by a price change.

The term "purchase," as used in the Prospectus and this SAI, refers to (i) a single purchase by an individual, (ii) concurrent purchases by an individual, his or her spouse and their children purchasing shares for his, her or their own account, and (iii) single purchases by a trustee or other fiduciary purchasing shares for a single trust estate or single fiduciary account although more than one beneficiary may be involved. The term "purchase" also includes purchases by any "company," as that term is defined in the Investment Company Act, but does not include purchases by (i) any company that has not been in existence for at least six months, (ii) a company that has no purpose other than the purchase of shares of a Fund or shares of other registered investment companies at a discount, or (iii) any group of individuals whose sole organizational nexus is that its participants are credit cardholders of a company, policyholders of an insurance company, customers of either a bank or broker-dealer or clients of an investment adviser.

With certain limited exceptions, the Funds are generally available only to investors residing in the United States and may not be distributed by a foreign financial intermediary. Under this policy, in order to accept new accounts or additional investments (including by way of exchange from another Fund) into existing accounts, a Fund generally requires that (i) a shareholder that is a natural person be a U.S. citizen or resident alien, in each case residing within the United States or a U.S. territory (including APO/FPO/DPO addresses), and have a valid U.S. taxpayer identification number, and (ii) a financial intermediary or a shareholder that is an entity be domiciled in the United States and have a valid U.S. taxpayer identification number or be domiciled in a U.S. territory and have a valid U.S. taxpayer identification number or IRS Form W-8. Any existing account that is updated to reflect a non-U.S. address will also be restricted from making additional investments.

In-Kind Purchases. Payment for shares of a Fund may, at the discretion of BlackRock, be made in the form of securities that are permissible investments for the Fund and that meet the investment objective, policies and limitations of the Fund as described herein. In connection with an in-kind securities payment, the Fund may require, among other things, that the securities: (i) be valued on the day of purchase in accordance with the pricing methods used by the Fund; (ii) be accompanied by satisfactory assurance that the Fund will have good and marketable title to such securities; (iii) not be subject to any restrictions upon resale by the Fund; (iv) be in proper form for transfer to the Fund; and (v) be accompanied by adequate information concerning the basis and other tax matters relating to the securities. All dividends, interest, subscription or other rights pertaining to such securities shall become the property of the Fund engaged in the in-kind purchase transaction and must be delivered to the Fund by the investor upon receipt from the issuer. Shares purchased in exchange for securities generally cannot be redeemed until the transfer has settled.

#### **Institutional Shares**

Institutional Shares may be purchased at NAV without a sales charge. Only certain investors are eligible to purchase Institutional Shares. Investors who are eligible to purchase Institutional Shares should purchase Institutional Shares because they are not subject to any sales charge and have lower ongoing expenses than Investor A, Investor C, Investor P, Class R or Service Shares. A Fund may in its discretion waive or modify any minimum investment amount, may reject any order for any class of shares and may suspend and resume the sale of shares of any Fund at any time.

Eligible Institutional Share Investors. Institutional Shares of the Funds may be purchased by customers of broker-dealers and agents that have established a servicing relationship with the Fund on behalf of their customers. These broker-dealers and agents may impose additional or different conditions on the purchase or redemption of Fund shares by their customers and may charge their customers transaction, account or other fees on the purchase and redemption of Fund shares. Each broker-dealer or agent is responsible for transmitting to its customers a schedule of any such fees and information regarding any additional or different conditions regarding purchases and redemptions. Shareholders who are customers of such broker-dealers or agents should consult them for information regarding these fees and conditions.

Payment for Institutional Shares must normally be made in Federal funds or other funds immediately available by 4 p.m. (Eastern time) on the first business day following receipt of the order. Payment may also, in the discretion of certain Funds, be made in the form of securities that are permissible investments for such Funds. If payment for a purchase order is not received by the prescribed time, an investor may be liable for any resulting losses or expenses incurred by the Fund.

Certain of the Funds offer Institutional Shares as described in each such Fund's Prospectus. In addition, the following investors may purchase Institutional Shares: employees, officers and directors/trustees of BlackRock, Inc., BlackRock Funds, Bank of America Corporation ("BofA Corp."), Barclays PLC or their respective affiliates and immediate family members of such persons, if they open an account directly with BlackRock; individuals and "Institutional Investors" with a minimum initial investment of \$2 million who may purchase shares of a Fund through a financial intermediary that has entered into an agreement with the Distributor to purchase such shares ("Institutional Investors" include, but are not limited to, endowments, foundations, family offices, local, city, and state governmental institutions, corporations, and insurance company separate accounts); employer-sponsored retirement plans (which, for this purpose, do not include SEP IRAs, SIMPLE IRAs or SARSEPs), state sponsored 529 college savings plans, collective trust funds, investment companies or other pooled investment vehicles, unaffiliated thrifts and unaffiliated banks and trust companies, each of which may purchase shares of the Fund through a financial intermediary that has entered into an agreement with the Distributor to purchase such shares; clients investing through a self-directed IRA brokerage account program sponsored by a retirement plan record-keeper, provided that such program offers only mutual fund options and that the program maintains an account with the Fund on an omnibus basis; clients of financial intermediaries that: (i) charge such clients a fee for advisory, investment consulting, or similar services or (ii) have entered into an agreement with the Distributor to offer Institutional Shares through a no-load program or investment platform, in each case, with no minimum initial investment; clients investing through financial intermediaries that have entered into an agreement with the Distributor to offer such shares on a platform that charges a transaction based sales commission outside of the Fund, with a minimum initial investment of \$1,000; tax-qualified accounts for insurance agents that are registered representatives of an insurance company's broker-dealer that has entered into an agreement with the Distributor to offer Institutional Shares, and the family members of such persons, with a minimum initial investment of \$1,000; trust department clients of Bank of America, N.A. and its affiliates for whom they (i) act in a fiduciary capacity (excluding participant directed employee benefit plans), (ii) otherwise have investment discretion, or (iii) act as custodian for at least \$2 million in assets; and holders of certain BofA Corp. sponsored unit investment trusts (UITs) who reinvest dividends received from such UITs in shares of a Fund.

Purchase Privileges of Certain Persons. Employees, officers, directors/trustees of BlackRock, Inc., BlackRock Funds, BofA Corp. or their respective affiliates; and any trust, pension, profit-sharing or other benefit plan for such persons may purchase Institutional Shares at lower investment minimums than stated in each Fund's Prospectus. A Fund realizes economies of scale and reduction of sales-related expenses by virtue of the familiarity of these persons with the Fund. Employees, directors, and board members of other funds wishing to purchase shares of a Fund must satisfy the Fund's suitability standards.

# Initial Sales Charge Alternative — Investor A Shares

Investors who prefer an initial sales charge alternative may elect to purchase Investor A Shares. Investor A1 Shares are offered only (i) for purchase by certain employer-sponsored retirement plans and fee-based programs that have been previously approved by certain Funds, and (ii) to certain investors who currently hold Investor A1 Shares for dividend and capital gain reinvestment only. The Investor A1 initial sales charge does not apply to the transactions described in (i) and (ii). For ease of reference, Investor A, Investor A1 and Investor P (discussed below) Shares are sometimes referred to herein as "front-end load shares." Investor A Shares of Index Funds (defined below) and BlackRock Short Obligations Fund generally are not subject to an initial sales charge or front-end load.

Investors qualifying for significantly reduced initial sales charges may find the initial sales charge alternative particularly attractive because similar sales charge reductions are not available with respect to the deferred sales charges imposed in connection with investments in Investor C Shares (sometimes referred to herein as "CDSC shares"). Investors who do not qualify for reduced initial sales charges and who expect to maintain their investment for an extended period of time also may elect to purchase Investor A Shares, because over time the accumulated ongoing service and distribution fees on CDSC shares may exceed the front-end load shares' initial sales charge and service fee. Although some investors who previously purchased Institutional Shares may no longer be eligible to purchase Institutional Shares of other Funds, those previously purchased Institutional Shares, together with all BlackRock front-end load and CDSC share holdings, will count toward a right of accumulation that may qualify the investor for a reduced initial sales charge on new initial sales charge purchases. In addition, the ongoing CDSC

shares service and distribution fees will cause CDSC shares to have higher expense ratios, pay lower dividends and have lower total returns than the initial sales charge shares. The ongoing front-end load shares' service fees will cause Investor A, Investor P and Service Shares to have a higher expense ratio, pay lower dividends and have a lower total return than Institutional Shares.

See "Information on Sales Charges and Distribution Related Expenses" in Part I of each Fund's SAI for information about amounts paid to the Distributor in connection with Investor A and Investor A1 Shares for the periods indicated.

The Distributor may reallow discounts to selected securities dealers and other financial intermediaries and retain the balance over such discounts. At times the Distributor may reallow the entire sales charge to such dealers. Since securities dealers and other financial intermediaries selling front-end load shares of a Fund will receive a concession equal to most of the sales charge, they may be deemed to be underwriters under the Securities Act.

### **Initial Sales Charge — Investor P Shares**

Certain Funds offer Investor P Shares as described in each such Fund's Prospectus, Investor P Shares are available for purchase only through registered representatives of an insurance company's broker-dealer that has entered into an agreement with the Distributor to offer such shares and are subject to an initial sales charge. The ongoing front-end load shares' service fees will cause Investor P Shares to have a higher expense ratio, pay lower dividends and have a lower total return than Investor A Shares of the same Fund.

See "Information on Sales Charges and Distribution Related Expenses" in Part I of each Fund's SAI for information about amounts paid to the Distributor in connection with Investor P Shares for the periods indicated.

The Distributor may reallow discounts to selected securities dealers and other financial intermediaries and retain the balance over such discounts. At times the Distributor may reallow the entire sales charge to such dealers. Since securities dealers and other financial intermediaries selling front-end load shares of a Fund will receive a concession equal to most of the sales charge, they may be deemed to be underwriters under the Securities Act.

# **Reduced Initial Sales Charges**

Certain investors may be eligible for a reduction in or waiver of a sales load due to the nature of the investors and/or the reduced sales efforts necessary to obtain their investments. Financial intermediaries may, in connection with a change in account type or otherwise in accordance with a financial intermediary's policies and procedures, exchange shares of a Fund from one class of shares to another class of shares of the same Fund provided that the exchanged shares are not subject to a contingent deferred sales charge and that shareholders meet the eligibility requirements of the new share class. Certain sales load reductions and waivers may be available to customers of certain financial intermediaries, as described under "Intermediary-Defined Sales Charge Waiver Policies" in the Fund's Prospectus. Please speak to your financial intermediary for more information.

**Reinvested Dividends.** No sales charges are imposed upon shares issued as a result of the automatic reinvestment of dividends.

Right of Accumulation. Investors have a "right of accumulation" under which any of the following may be combined with the amount of the current purchase in determining whether an investor qualifies for a breakpoint and a reduced front-end sales charge: (i) the current value of an investor's existing Investor A, Investor A1, Investor C, Investor P, Institutional, Class K and Premier Shares in most BlackRock Funds, (ii) the current value of an investor's existing shares of certain unlisted closed-end management investment companies sponsored and advised by BlackRock or its affiliates ("Eligible Unlisted BlackRock Closed-End Funds") and (iii) the investment in the BlackRock CollegeAdvantage 529 Program by the investor or by or on behalf of the investor's spouse and children. Financial intermediaries may value current holdings of their customers differently for purposes of determining whether an investor qualifies for a breakpoint and a reduced front-end sales charge, although customers of the same financial intermediary will be treated similarly. In order to use this right, the investor must alert BlackRock to the existence of any previously purchased shares. Certain funds employ a "passive" management approach and attempt to match the performance of a target index as closely as possible before the deduction of Fund expenses ("Index Funds"). Although Investor A Shares of Index Funds and BlackRock Short Obligations Fund generally are not subject to a sales charge, an investor's existing Investor A, Investor A1, Investor C, Investor P, Institutional, Class K and Premier Shares in the Index Funds and BlackRock Short Obligations Fund may be combined with the amount of an investor's current purchase in determining whether an investor qualifies for a breakpoint and a reduced front-end sales charge.

Letter of Intent. An investor may qualify for a reduced front-end sales charge immediately by signing a "Letter of Intent" stating the investor's intention to make one or more of the following investments within the next 13 months which would, if bought all at once, qualify the investor for a reduced sales charge: (i) buy a specified amount of Investor A, Investor C, Investor P, Institutional, Class K and/or Premier Shares, (ii) make an investment in one or more Eligible Unlisted BlackRock Closed-End Funds and/or (iii) make an investment through the BlackRock CollegeAdvantage 529 Program in one or more BlackRock Funds. The initial investment must meet the minimum initial purchase requirement. The 13-month Letter of Intent period commences on the day that the Letter of Intent is received by the Fund. The market value of current holdings in the BlackRock Funds (including Investor A, Investor C, Investor P, Institutional, Class K and Premier Shares, Eligible Unlisted BlackRock Closed-End Funds and the BlackRock CollegeAdvantage 529 Program Class A and Class C Units) as of the date of commencement that are eligible under the Right of Accumulation may be counted towards the sales charge reduction. The investor must notify the Fund of (i) any current holdings in the BlackRock Funds, Eligible Unlisted BlackRock Closed-End Funds and/or the BlackRock CollegeAdvantage 529 Program that should be counted towards the sales charge reduction and (ii) any subsequent purchases that should be counted towards the Letter of Intent. During the term of the Letter of Intent, the Fund will hold Investor A Shares and/or Investor P Shares, as applicable, representing up to 5% of the indicated amount in an escrow account for payment of a higher sales load if the full amount indicated in the Letter of Intent is not purchased. If the full amount indicated is not purchased within the 13-month period, and the investor does not pay the higher sales load within 20 days, the Fund will redeem enough of the Investor A Shares and/or Investor P Shares, as applicable, held in escrow to pay the difference.

#### Placement Fees.

BlackRock may pay placement fees to dealers on purchases of Investor A and Investor P Shares of all Funds, which may depend on the policies, procedures and trading platforms of your financial intermediary.

Except as noted below, these placement fees may be up to the following amounts for Investor A Shares:

\$1 million but less than \$3 million	1.00%
\$3 million but less than \$15 million	0.50%
\$15 million and above	0.25%

With respect to Investor A Shares of BlackRock Global Allocation Fund, Inc., BlackRock Dynamic High Income Portfolio (for shares purchased prior to July 1, 2020) and BlackRock Multi-Asset Income Portfolio (for shares purchased prior to July 1, 2020) of BlackRock Funds II, BlackRock Global Long/Short Credit Fund of BlackRock Funds IV and BlackRock Event Driven Equity Fund, the placement fees may be up to the following amounts:

\$250,000 but less than \$3 million	1.00%
\$3 million but less than \$15 million	0.50%
\$15 million and above	0.25%

With respect to Investor A Shares of BlackRock Systematic Multi-Strategy Fund of BlackRock Funds IV, BlackRock Advantage CoreAlpha Bond Fund of BlackRock Funds VI, BlackRock Tactical Opportunities Fund of BlackRock Funds<sup>SM</sup>, BlackRock High Yield Bond Portfolio, BlackRock Core Bond Portfolio and BlackRock Sustainable High Yield Bond Fund of BlackRock Funds V, BlackRock U.S. Mortgage Portfolio of Managed Account Series II and BlackRock Strategic Global Bond Fund, Inc., the placement fees may be up to the following amounts:

\$1 million but less than \$3 million	0.75%
\$3 million but less than \$15 million	0.50%
\$15 million and above	0.25%

With respect to Investor A Shares of BlackRock Sustainable Advantage CoreAlpha Bond Fund of BlackRock Funds IV and BlackRock GNMA Portfolio and BlackRock Impact Mortgage Fund of BlackRock Funds V, the placement fees may be up to the following amounts:

\$1 million but less than \$3 million	0.50%
\$3 million but less than \$15 million	0.25%
\$15 million and above	0.15%

With respect to Investor A Shares of BlackRock Managed Income Fund of BlackRock Funds II, the placement fees may be up to the following amounts:

\$250,000 but less than \$3 million	00%
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\$3 million but less than \$15 million	0.25%
\$15 million and above	0.15%

With respect to Investor A Shares of BlackRock Inflation Protected Bond Portfolio of BlackRock Funds V, the placement fees may be up to the following amounts:

\$1 million but less than \$3 million	0.15%
\$3 million but less than \$15 million	0.10%
\$15 million and above	0.05%

With respect to Investor A Shares of BlackRock Low Duration Bond Portfolio, BlackRock Floating Rate Income Portfolio, BlackRock Income Fund and BlackRock Strategic Income Opportunities Portfolio of BlackRock Funds V, the placement fees may be up to the following amounts:

\$500,000 but less than \$3 million	0.75%
\$3 million but less than \$15 million	0.50%
\$15 million and above	0.25%

With respect to Investor A Shares of BlackRock Short-Term Municipal Fund of BlackRock Municipal Bond Fund, Inc. (for shares purchased prior to March 18, 2019), the placement fees may be up to the following amounts:

\$250,000 and above	0.50%

With respect to Investor A Shares of BlackRock Short-Term Municipal Fund of BlackRock Municipal Bond Fund, Inc. (for shares purchased on or after March 18, 2019 and prior to July 1, 2020), the placement fees may be up to the following amounts:

\$100,000 and above	0.25%
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With respect to Investor A Shares of BlackRock Short-Term Municipal Fund of BlackRock Municipal Bond Fund, Inc. (for shares purchased on or after July 1, 2020), the placement fees may be up to the following amounts:

With respect to Investor A Shares of BlackRock Strategic Municipal Opportunities Fund of BlackRock Municipal Series Trust, BlackRock California Municipal Opportunities Fund of BlackRock California Municipal Series Trust, BlackRock New York Municipal Opportunities Fund, BlackRock New Jersey Municipal Bond Fund and BlackRock Pennsylvania Municipal Bond Fund of BlackRock Multi-State Municipal Series Trust and BlackRock High Yield Municipal Fund and BlackRock National Municipal Fund of BlackRock Municipal Bond Fund, Inc., the placement fees may be up to the following amounts:

\$250,000 but less than \$4 million	1.00%
\$4 million but less than \$10 million	0.50%
\$10 million and above	0.25%

With respect to Investor A Shares of BlackRock Dynamic High Income Portfolio (for shares purchased on or after July 1, 2020) and BlackRock Multi-Asset Income Portfolio (for shares purchased on or after July 1, 2020) of BlackRock Funds II, BlackRock Total Return Fund of BlackRock Bond Fund, Inc., and BlackRock Sustainable Balanced Fund, Inc., the placement fees may be up to the following amounts:

\$250,000 but less than \$3 million	0.75%
\$3 million but less than \$15 million	0.50%
\$15 million and above	0.25%

With respect to Investor P Shares of BlackRock LifePath® Index 2025 Fund, BlackRock LifePath® Index 2030 Fund, BlackRock LifePath® Index 2035 Fund, BlackRock LifePath® Index 2040 Fund, BlackRock LifePath® Index 2055 Fund, BlackRock LifePath® Index 2055 Fund, BlackRock LifePath® Index 2060 Fund, BlackRock LifePath® Index 2065 Fund and BlackRock LifePath® Index Retirement Fund of BlackRock Funds III, the placement fees may be up to the following amounts:

\$1,000,000 and above	\$1,000,000 and above		0.10%
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With respect to Investor P Shares of iShares Municipal Bond Index Fund of BlackRock Funds<sup>SM</sup>, the placement fees may be up to the following amounts:

There are no placement fees for Investor P Shares of iShares MSCI EAFE International Index Fund and iShares Russell 2000 Small-Cap Index Fund of BlackRock Index Funds, Inc. and iShares S&P 500 Index Fund and iShares U.S. Aggregate Bond Index Fund of BlackRock Funds III.

For the tables above, the placement fees indicated will apply up to the indicated breakpoint (so that, for example, a sale of \$4 million worth of Investor A Shares of BlackRock Sustainable Advantage CoreAlpha Bond Fund of BlackRock Funds IV will result in a placement fee of up to 0.50% on the first \$3 million and a placement fee of 0.25% on the final \$1 million).

Other. The following persons may also buy Investor A or Investor P Shares without paying a sales charge: (a) certain employer-sponsored retirement plans (for purposes of this waiver, employer-sponsored retirement plans do not include SEP IRAs, SIMPLE IRAs or SARSEPs); (b) rollovers of current investments through certain employersponsored retirement plans provided the shares are transferred to the same BlackRock Fund as either a direct rollover, or subsequent to distribution, the rolled-over proceeds are contributed to a BlackRock IRA through an account directly with the Fund; or purchases by IRA programs that are sponsored by financial intermediary firms provided the financial intermediary firm has entered into a Class A or Investor P NAV agreement, as applicable, with respect to such program with the Distributor; (c) insurance company separate accounts; (d) registered investment advisers, trust companies and bank trust departments exercising discretionary investment authority with respect to amounts to be invested in a Fund; (e) persons participating in a fee-based program (such as a wrap account) under which they pay advisory fees to a broker-dealer or other financial institution; (f) financial intermediaries who have entered into an agreement with the Distributor and have been approved by the Distributor to offer Fund shares to self-directed investment brokerage accounts that may or may not charge a transaction fee; (g) state sponsored 529 college savings plans: (h) with respect to Investor A Shares only, accounts opened directly with a Fund that do not have a financial intermediary associated with the account; and (i) persons involuntarily liquidated from a Fund, who within 60 days of liquidation buy new shares of another BlackRock Fund (but only up to the amount that was liquidated). The following persons associated with the Funds, the Fund's Manager, Sub-Advisers, Transfer Agent, Distributor, fund accounting agents, Barclays PLC and their affiliates may buy Investor A or Investor P Shares of each of the Funds without paying a sales charge to the extent permitted by these firms including: (a) officers, directors and partners; (b) employees and retirees; (c) employees or registered representatives of firms who have entered into selling agreements to distribute shares of BlackRock-advised funds; (d) immediate family members of such persons ("immediate family members" shall be defined as the investor, the investor's spouse or domestic partner, children, parents and siblings); and (e) any trust, pension, profit-sharing or other benefit plan for any of the persons set forth in (a) through (d). Investors who qualify for any of these exemptions from the sales charge should purchase Investor A or Investor P Shares. In addition, a sales charge waiver may be available for investors exchanging Investor A Shares of one BlackRock Fund for Investor P Shares of another BlackRock Fund, or exchanging Investor P Shares of one BlackRock Fund for Investor A Shares of another BlackRock Fund, through an intermediary-processed exchange, provided that the investor had previously paid a sales charge with respect to such shares. The availability of Investor A or Investor P Shares sales charge waivers may depend upon the policies, procedures and trading platforms of your financial intermediary; consult your financial adviser.

If you invest \$1,000,000 (\$250,000 for BlackRock Dynamic High Income Portfolio, BlackRock Multi-Asset Income Portfolio and BlackRock Managed Income Fund of BlackRock Funds II, BlackRock Global Long/Short Credit Fund of BlackRock Funds IV, BlackRock Total Return Fund of BlackRock Bond Fund, Inc., BlackRock Global Allocation Fund, Inc., BlackRock High Yield Municipal Fund and BlackRock National Municipal Fund of BlackRock Municipal Bond Fund, Inc., BlackRock Short-Term Municipal Fund of BlackRock Municipal Bond Fund, Inc., BlackRock Strategic Municipal Opportunities Fund of BlackRock Municipal Series Trust, BlackRock California Municipal Opportunities Fund of BlackRock California Municipal Series Trust, BlackRock New York Municipal Opportunities Fund, BlackRock New Jersey Municipal Bond Fund and BlackRock Pennsylvania Municipal Bond Fund of BlackRock Multi-State Municipal Series Trust, BlackRock Event Driven Equity Fund and BlackRock Sustainable Balanced Fund, Inc., and \$500,000 for BlackRock Low Duration Bond Portfolio, BlackRock Floating Rate Income Portfolio, BlackRock Income Fund and BlackRock Strategic Income Opportunities Portfolio of BlackRock Funds V) or more in Investor A or Investor P Shares, as applicable, you may not pay an initial sales charge. However, if you redeem your Investor A or Investor P Shares, as applicable, within 18 months after purchase (a shorter holding period may apply depending on the Fund), you may be charged a deferred sales charge.

A deferred sales charge of up to 1.00% may apply to certain redemptions of Investor A Shares of the Index Funds and BlackRock Short Obligations Fund purchased in an exchange transaction for Investor A Shares of a portfolio advised by BlackRock or its affiliates where no initial sales charge was paid at the time of purchase of such fund (an "Investor A Load-Waived BlackRock Portfolio") as part of an investment of \$1,000,000 (lesser amounts may apply depending on the Investor A Load-Waived BlackRock Portfolio) or more. The Investor A Shares deferred sales charge is only charged upon redemptions of Investor A Shares within 18 months after you originally acquired such Investor A Shares of the Investor A Load-Waived BlackRock Portfolio (a shorter holding period may apply depending on the Investor A Load-Waived BlackRock Portfolio), unless you qualify for a waiver. There is no deferred sales charge charged on redemptions if you have owned your Investor A Shares for more than 18 months (or for a shorter holding period, as applicable) (as measured from your original purchase of Investor A Shares that you exchanged into Investor A Shares of the Index Fund or BlackRock Short Obligations Fund).

The deferred sales charge on Investor A or Investor P Shares, as applicable, is not charged in connection with: (a) redemptions of Investor A or Investor P Shares purchased through certain employer-sponsored retirement plans and rollovers of current investments in a Fund through such plans; (b) exchanges described in "Exchange Privilege" below; (c) redemptions made in connection with minimum required distributions due to the shareholder reaching age 72 from IRA and 403(b)(7) accounts; (d) certain post-retirement withdrawals from an IRA or other retirement plan if you are over 59 ½ years old and you purchased your shares prior to October 2, 2006; (e) redemptions made with respect to certain retirement plans sponsored by a Fund, BlackRock or its affiliates; (f) redemptions (i) within one year of a shareholder's death or, if later, the receipt of a certified probate settlement (including in connection with the distribution of account assets to a beneficiary of the decedent) or (ii) in connection with a shareholder's disability (as defined in the Code) subsequent to the purchase of Investor A or Investor P Shares; (g) involuntary redemptions of Investor A or Investor P Shares in accounts with low balances; (h) certain redemptions made pursuant to the Systematic Withdrawal Plan (described below); (i) redemptions related to the payment of BNY Mellon Investment Servicing Trust Company custodial IRA fees; and (j) redemptions when a shareholder can demonstrate hardship, in the absolute discretion of a Fund.

With respect to certain employer-sponsored retirement plans, if a dealer waives its right to receive a placement fee, the Fund may, at its own discretion, waive the CDSC related to purchases of \$1,000,000 (\$250,000 for BlackRock Dynamic High Income Portfolio, BlackRock Multi-Asset Income Portfolio and BlackRock Managed Income Fund of BlackRock Funds II, BlackRock Global Long/Short Credit Fund of BlackRock Funds IV, BlackRock Total Return Fund of BlackRock Bond Fund, Inc., BlackRock Global Allocation Fund, Inc., BlackRock High Yield Municipal Fund and BlackRock National Municipal Fund of BlackRock Municipal Bond Fund, Inc., BlackRock Strategic Municipal Opportunities Fund of BlackRock Municipal Series Trust, BlackRock California Municipal Opportunities Fund of BlackRock California Municipal Series Trust, BlackRock New York Municipal Opportunities Fund, BlackRock New Jersey Municipal Bond Fund and BlackRock Pennsylvania Municipal Bond Fund of BlackRock Multi-State Municipal Series Trust, BlackRock Event Driven Equity Fund and BlackRock Sustainable Balanced Fund, Inc., and \$500,000 for BlackRock Low Duration Bond Portfolio, BlackRock Floating Rate Income Portfolio, BlackRock Income Fund and BlackRock Strategic Income Opportunities Portfolio of BlackRock Funds V) or more of Investor A or Investor P Shares. This may depend upon the policies, procedures and trading platforms of your financial intermediary; consult your financial adviser.

Investor A and Investor P Shares are also available at NAV to investors that, for regulatory reasons, are required to transfer investment positions from a foreign registered investment company advised by BlackRock or its affiliates to a U.S. registered BlackRock-advised fund.

**Acquisition of Certain Investment Companies.** Investor A and Investor P Shares may be offered at NAV in connection with the acquisition of the assets of, or merger or consolidation with, a personal holding company or a public or private investment company.

**Purchases Through Certain Financial Intermediaries**. Reduced sales charges may be applicable for purchases of Investor A, Investor A1 or Investor P Shares of a Fund through certain financial advisers, selected securities dealers and other financial intermediaries that meet and adhere to standards established by the Manager from time to time.

### Deferred Sales Charge Alternative — Investor C Shares

Investors choosing the deferred sales charge alternative should consider Investor C Shares if they are uncertain as to the length of time they intend to hold their assets in a Fund. If you select Investor C Shares, you do not pay an initial sales charge at the time of purchase. A Fund will not accept a purchase order of \$500,000 or more for

Investor C Shares (may be lower on funds that have set a lower breakpoint for NAV). Your financial intermediary may set a lower maximum for Investor C Shares.

Investor C Shares are not available in accounts opened or held directly with a Fund that do not have a financial intermediary associated with the account.

If you select Investor C Shares, you do not pay an initial sales charge at the time of purchase.

The deferred sales charge alternatives may be particularly appealing to investors who do not qualify for the reduction in initial sales charges. CDSC shares are subject to ongoing service fees and distribution fees; however, these fees potentially may be offset to the extent any return is realized on the additional funds initially invested in CDSC shares.

BlackRock compensates financial advisers and other financial intermediaries for selling CDSC shares at the time of purchase from its own funds. Proceeds from the CDSC and the distribution fee are paid to the Distributor and are used by the Distributor to defray the expenses of securities dealers or other financial intermediaries related to providing distribution-related services to each Fund in connection with the sale of the CDSC shares. The combination of the CDSC and the ongoing distribution fee facilitates the ability of each Fund to sell the CDSC shares without a sales charge being deducted at the time of purchase. See "Distribution and/or Shareholder Servicing Plans" below. Imposition of the CDSC and the distribution fee on CDSC shares is limited by FINRA (as defined below) asset-based sales charge rule. See "Limitations on the Payment of Deferred Sales Charges" below.

Dealers will generally immediately receive commissions equal to 1.00% of the Investor C Shares sold by them plus ongoing fees under the Fund's Distribution and Service Plan. Dealers may not receive a commission in connection with sales of Investor C Shares to certain employer-sponsored retirement plans sponsored by the Fund, BlackRock or its affiliates, but may receive fees under the Distribution and Service Plan. These commissions and payments may be different than the reallowances, placement fees and commissions paid to dealers in connection with sales of Investor A, Investor A1 and Investor P Shares. These may depend upon the policies, procedures and trading platforms of your financial intermediary; consult your financial adviser.

Each Fund has adopted an automatic conversion feature for Investor C Shares. Effective November 23, 2020, Investor C Shares held for approximately eight years will be converted into Investor A Shares, as set forth in each Fund's Prospectus. In addition, accounts that do not have a financial intermediary associated with them are not eligible to hold Investor C Shares, and any Investor C Shares held in such accounts will be automatically converted to Investor A Shares.

### Conversion of Investor C Shares to Investor A Shares

Effective November 23, 2020 (the "Effective Date"), approximately eight years after purchase, Investor C Shares of each Fund will convert automatically into Investor A Shares of that Fund (the "Investor C 8-Year Conversion"). Certain funds (the "Predecessor Funds") were reorganized into new Funds (the "Successor Funds") pursuant to reorganizations which occurred in September 2018. The holding period for Investor C Shares of Successor Funds includes the period such shares were held in the respective Predecessor Fund. It is the financial intermediary's responsibility to ensure that the shareholder is credited with the proper holding period. As of the Effective Date, certain financial intermediaries, including group retirement recordkeeping platforms, may not have been tracking such holding periods and therefore may not be able to process such conversions. In such instances, Investor C Shares held as of the Effective Date will automatically convert to Investor A Shares approximately eight years after the Effective Date. If, as of November 23, 2028 (eight years after the Effective Date), a financial intermediary has not implemented systems or procedures to track holding periods commencing from the Effective Date, shareholders holding Investor C Shares through such financial intermediary will no longer be eligible to hold Investor C Shares and any such shares will convert to Investor A Shares as soon as reasonably practicable after such date.

In addition, accounts that do not have a financial intermediary associated with them are not eligible to hold Investor C Shares, and any Investor C Shares held in such accounts will be automatically converted into Investor A Shares (the "Investor C Direct Accounts Conversion" and together with the Investor C 8-Year Conversion, the "Investor C Conversions").

The Investor C Conversions will occur at least once each month (on the "Investor C Conversion Date") on the basis of the relative NAV of the shares of the two applicable classes on the Investor C Conversion Date, without the imposition of any sales load, fee or other charge. The Investor C Conversions will not be deemed a purchase or sale of the shares for U.S. federal income tax purposes. Shares acquired through reinvestment of dividends on Investor C Shares will also convert automatically to Investor A Shares, as set forth in each Fund's Prospectus. The Investor C

Conversion Date for dividend reinvestment shares will be calculated taking into account the length of time the shares underlying the dividend reinvestment shares were outstanding.

## Contingent Deferred Sales Charge — Investor C Shares

Investor C Shares that are redeemed within one year of purchase may be subject to a 1.00% CDSC charged as a percentage of the dollar amount subject thereto. In determining whether an Investor C Shares CDSC is applicable to a redemption, the calculation will be determined in the manner that results in the lowest possible rate being charged. The charge will be assessed on an amount equal to the lesser of the proceeds of redemption or the cost of the shares being redeemed. Accordingly, no CDSC will be imposed on increases in NAV above the initial purchase price of Investor C Shares. In addition, no CDSC will be assessed on Investor C Shares acquired through reinvestment of dividends. It will be assumed that the redemption is first of shares held for over one year or shares acquired pursuant to reinvestment of dividends and then of shares held longest during the one-year period. A transfer of shares from a shareholder's account to another account will be assumed to be made in the same order as a redemption.

See "Information on Sales Charges and Distribution Related Expenses" in Part I of each Fund's SAI for information about amounts paid to the Distributor in connection with CDSC shares for the periods indicated.

## Investor C Shares — Contingent Deferred Sales Charge Waivers and Reductions

The CDSC on Investor C Shares is not charged in connection with: (1) redemptions of Investor C Shares purchased through certain employer-sponsored retirement plans and fee-based programs previously approved by certain Funds and rollovers of current investments in the Fund through such plans; (2) exchanges described in "Exchange Privilege" below; (3) redemptions made in connection with minimum required distributions due to the shareholder reaching age 72 from IRA and 403(b)(7) accounts; (4) certain post-retirement withdrawals from an IRA or other retirement plan if you are over 59 ½ years old and you purchased your shares prior to October 2, 2006; (5) redemptions made with respect to certain retirement plans sponsored by the Fund. BlackRock or its affiliates: (6) redemptions in connection with a shareholder's death as long as the waiver request is made within one year of death or, if later, reasonably promptly following completion of probate (including in connection with the distribution of account assets to a beneficiary of the decedent) or disability (as defined in the Code) subsequent to the purchase of Investor C Shares; (7) withdrawals resulting from shareholder disability (as defined in the Code) as long as the disability arose subsequent to the purchase of the shares; (8) involuntary redemptions of Investor C Shares in accounts with low balances as described in "Redemption of Shares" below; (9) redemptions made pursuant to a systematic withdrawal plan, subject to the limitations set forth under "Systematic Withdrawal Plan" below; (10) redemptions related to the payment of BNY Mellon Investment Servicing Trust Company custodial IRA fees; and (11) redemptions when a shareholder can demonstrate hardship, in the absolute discretion of the Fund. In addition, no CDSC is charged on Investor C Shares acquired through the reinvestment of dividends or distributions.

Certain CDSC waivers and reductions on Investor C Shares may be available to customers of certain financial intermediaries, as described under "Intermediary-Defined Sales Charge Waiver Policies" in the Fund's Prospectus. Please speak to your financial intermediary for more information.

## **Class R Shares**

Certain of the Funds offer Class R Shares as described in each such Fund's Prospectus. Class R Shares are available only to certain employer-sponsored retirement plans. Class R Shares are not subject to an initial sales charge or a CDSC but are subject to an ongoing distribution fee of 0.25% per year and an ongoing service fee of 0.25% per year. Distribution fees are used to support the Fund's marketing and distribution efforts, such as compensating financial advisers and other financial intermediaries, advertising and promotion. Service fees are used to compensate securities dealers and other financial intermediaries for service activities.

If Class R Shares are held over time, these fees may exceed the maximum sales charge that an investor would have paid as a shareholder of one of the other share classes.

## **Class K Shares**

Certain Funds offer Class K Shares as described in each such Fund's Prospectus. Class K Shares are available only to (i) certain employee benefit plans, such as health savings accounts, and certain employer-sponsored retirement plans (not including SEP IRAs, SIMPLE IRAs and SARSEPs) (collectively, "Employer-Sponsored Retirement Plans"), (ii) collective trust funds, investment companies and other pooled investment vehicles, each of which may purchase shares of the Fund through a financial intermediary that has entered into an agreement with the Distributor

to purchase such shares, (iii) "Institutional Investors," which include but are not limited to, endowments, foundations, family offices, banks and bank trusts, local, city, and state governmental institutions, corporations and insurance company separate accounts, each of which may purchase shares of the Fund through a financial intermediary that has entered into an agreement with the Distributor to purchase such shares, (iv) clients of private banks that purchase shares of the Fund through a financial intermediary that has entered into an agreement with the Distributor to sell such shares; (v) fee-based advisory platforms of a financial intermediary that (a) has specifically acknowledged in a written agreement with the Distributor and/or its affiliate(s) that the financial intermediary shall offer such shares to fee-based advisory clients through an omnibus account held at the Fund or (b) transacts in the Fund's shares through another intermediary that has executed such an agreement and (vi) any other investors who met the eligibility criteria for BlackRock Shares or Class K Shares prior to August 15, 2016 and have continually held Class K Shares of the Fund or the respective Predecessor Fund in the same account since August 15, 2016. The agreement referenced in (iv) above shall appear in a supplemental agreement to any selling, sub-transfer agent, or distribution and marketing agreement.

Class K Shares are also available to employees, officers and directors/trustees of BlackRock, Inc. and BlackRock Funds and immediate family members of such persons, if they open an account directly with BlackRock. Eligible individuals who would like to convert existing holdings to Class K Shares must contact BlackRock.

### **Class G Shares**

Certain Funds offer Class G Shares, which are available only to investors on eligible platforms. Eligible platforms are those where clients invest in the Fund through a single omnibus account in the name of a financial intermediary that meets an initial investment minimum of \$2 billion. For clients investing through such eligible platforms, the Fund does not impose investment minimums on any individual investor. Financial intermediaries may impose separate eligibility requirements.

#### **Service Shares**

Certain Funds offer Service Shares, which are available only to certain investors, including: (i) certain financial institutions, such as banks and brokerage firms, acting on behalf of their customers; (ii) certain persons who were shareholders of the Compass Capital Group of Funds at the time of its combination with The PNC<sup>®</sup> Fund in 1996; and (iii) participants in the Capital Directions<sup>SM</sup> asset allocation program. Service Shares are not subject to an initial sales charge or a CDSC but are subject to an ongoing service fee as set forth in the applicable Fund's Prospectus.

## **BlackRock Shares**

Certain Funds offer BlackRock Shares, which are available only to certain investors. BlackRock Shares are offered without a sales charge to institutional and individual investors, registered investment advisers and certain fee-based programs.

## **Distribution and/or Shareholder Servicing Plans**

Each Fund has adopted a plan (each, a "Plan") pursuant to Rule 12b-1 under the Investment Company Act with respect to certain share classes that allows the Fund to pay distribution fees for the sale of its shares and shareholder servicing fees for certain services provided to its shareholders.

Pursuant to the Plans, a Fund may pay BRIL and/or BlackRock, or any other affiliate or significant shareholder of BlackRock, fees for distribution and sales support services with respect to Investor A, Investor A1, Investor C, Investor P, Service and Class R Shares. Currently, as described further below, only Investor C and Class R Shares bear the expense of distribution fees under a Plan.

Each Fund has entered into a distribution agreement with BRIL under which BRIL, as agent, offers shares of each Fund on a continuous basis. BRIL has agreed to use appropriate efforts to effect sales of the shares, but it is not obligated to sell any particular amount of shares. BRIL's principal business address is 50 Hudson Yards, New York, NY 10001. BRIL is an affiliate of BlackRock.

Pursuant to the Plans, each Fund may also pay shareholder servicing fees (also referred to as general shareholder liaison services fees) to affiliated and unaffiliated brokers, dealers, financial institutions, insurance companies, retirement plan record-keepers and other financial intermediaries (including BlackRock, BRIL and their affiliates) (collectively, "Service Organizations") for certain support services rendered by Service Organizations to their customers ("Customers") who are the beneficial owners of Investor A, Investor A1, Investor C, Investor P,

Service and Class R Shares of a Fund. Such services are intended to supplement the services provided by the Fund's Administrators and Transfer Agent to the Fund's shareholders of record.

The support services provided by Service Organizations are general shareholder liaison services, which include, but are not limited to: (i) answering Customer inquiries regarding account status and history, the manner in which purchases, exchanges and redemptions or repurchases of shares may be effected and certain other matters pertaining to the Customers' investments; and (ii) assisting Customers in designating and changing dividend options, account designations and addresses. The shareholder servicing fees payable pursuant to the Plans are paid to compensate Service Organizations for the administration and servicing of shareholder accounts and are not costs which are primarily intended to result in the sale of the Fund's shares.

Payments under the Plans are based on a percentage of average daily net assets attributable to the shares in the applicable share class regardless of the amount of expenses incurred. As a result, payments under the Plans may be more or less than expenses incurred in connection with providing distribution and/or shareholder services with respect to the related class. Information with respect to the payments under the Plans and expenses incurred in providing services with respect to the related class is presented to the Directors for their consideration quarterly. Payments under the Plans consist of the shareholder servicing fees and the distribution fees. Expenses with respect to providing distribution and/or shareholder services with respect to a class may consist of Service Organization financial adviser compensation, branch office and regional operation center selling and transaction processing expenses, advertising, sales promotion and marketing expenses. Payments under the Plans with respect to one class will not be used to finance the expenditures of another class. Sales personnel may receive different compensation for selling different classes of shares.

Each Plan is subject to the provisions of Rule 12b-1 under the Investment Company Act. In their consideration of a Plan, the Directors must consider all factors they deem relevant, including information as to the benefits of the Plan to the Fund and the related class of shareholders. In approving a Plan in accordance with Rule 12b-1, the noninterested Directors concluded that there is reasonable likelihood that the Plan will benefit the Fund and its related class of shareholders. The Plan provides, among other things, that: (i) the Board of Directors shall receive quarterly reports regarding the amounts expended under the Plan and the purposes for which such expenditures were made; (ii) the Plan will continue in effect for so long as its continuance is approved at least annually by the Board of Directors, including the directors who are not "interested persons" of the Fund (as defined in the Investment Company Act) and who have no direct or indirect financial interest in the operation of the Plan or any agreement entered into in connection with the Plan (the "12b-1 Directors"), acting in person at a meeting called for said purpose in accordance with Rule 12b-1 under the Investment Company Act; (iii) any material amendment thereto must be approved by the Board of Directors, including the 12b-1 Directors, acting in person at a meeting called for said purpose; (iv) any amendment to increase materially the costs which any class of shares may bear for distribution services pursuant to the Plan shall be effective only upon approval by a vote of a majority of the outstanding shares of such class and by a majority of the Board of Directors, including the 12b-1 Directors, acting in person at a meeting called for said purpose; and (v) while the Plan remains in effect, the selection and nomination of the Fund's Directors who are not "interested persons" of the Fund shall be committed to the discretion of the Fund's non-interested Directors. Rule 12b-1 further requires that each Fund preserve copies of each Plan and any report made pursuant to such Plan for a period of not less than six years from the date of the Plan or such report, the first two years in an easily accessible place.

Each Plan is terminable as to any class of shares without penalty at any time by a vote of a majority of the 12b-1 Directors, or by vote of the holders of a majority of the shares of such class.

See "Information on Sales Charges and Distribution Related Expenses" in Part I of each Fund's SAI for information relating to the fees paid by your Fund to the Distributor under each Plan during the Fund's most recent fiscal year.

# **Limitations on the Payment of Deferred Sales Charges**

The maximum sales charge rule in the Conduct Rules of the Financial Industry Regulatory Authority ("FINRA") imposes a limitation on certain asset-based sales charges such as the distribution fee borne by Class R Shares, and the distribution fee and the CDSC borne by the Investor C Shares. This limitation does not apply to the shareholder servicing fee. The maximum sales charge rule is applied separately to each class and limits the aggregate of distribution fee payments and CDSCs payable by a Fund to (1) 6.25% of eligible gross sales of Investor C and Class R Shares, computed separately (excluding shares issued pursuant to dividend reinvestments and exchanges), plus (2) interest on the unpaid balance for the respective class, computed separately, at the prime rate plus 1% (the unpaid balance being the maximum amount payable minus amounts received from the payment of the distribution fee

and the CDSC). See "Information on Sales Charges and Distribution Related Expenses" in Part I of each Fund's SAI for comparative information as of your Fund's most recent fiscal year end with respect to, if applicable, the Investor C and Class R Shares of your Fund.

## Other Payments by the Fund

In addition to shareholder servicing fees that a Fund may pay to a Service Organization pursuant to the Plan and fees the Fund pays to its Transfer Agent, BlackRock, on behalf of a Fund, may enter into non-Plan agreements with Service Organizations pursuant to which the Fund will pay a Service Organization for administrative, networking, recordkeeping, sub-transfer agency, sub-accounting and/or shareholder services. These non-Plan payments are generally based on either (1) a percentage of the average daily net assets of Fund shareholders serviced by a Service Organization or (2) a fixed dollar amount for each account serviced by a Service Organization. The aggregate amount of these payments may be substantial.

## **Additional Payments by BlackRock**

From time to time, BlackRock, BRIL and/or their affiliates (referred to in this section collectively as "BlackRock") may compensate Service Organizations for the sale and distribution of shares of a Fund, for services to a Fund and its shareholders and/or for data provision or technology support. A Service Organization may perform these obligations itself or may arrange for a third party to perform them. These payments, which are not made pursuant to a Plan or otherwise paid by a Fund, are referred to as "Additional Payments" herein.

Additional Payments are made from BlackRock's own assets (which may come directly or indirectly from fees paid by a Fund to BlackRock for various services, such as investment advisory services). These payments are not an additional charge to a Fund or its shareholders and do not change the price paid by shareholders for the purchase of a Fund's shares or the amount a Fund receives as proceeds from such purchases. Additional Payments made to Service Organizations are in addition to any distribution or shareholder servicing fees paid under any Plan of any Fund, any sales charges, commissions or other concessions described in the Prospectuses or this SAI, and any administrative, networking, recordkeeping, sub-transfer agency or sub-accounting fees payable by a Fund. Pursuant to applicable FINRA regulations, the details of certain of these payments, including the Service Organizations receiving such payments in connection with the sale and distribution of Fund shares, are required to be disclosed. While FINRA regulations limit the sales charges that shareholders may bear, there are no limits with regard to the amounts that BlackRock may pay out of its own assets.

Additional Payments may be made as a fixed dollar amount, may be based on the number of Customer accounts maintained by a Service Organization, may be based on a percentage of the value of shares sold to, or held by, Customers of the Service Organization involved, or may be calculated on another basis.

BlackRock negotiates Additional Payments with each Service Organization on an individual basis. Additional Payments may be different for different Service Organizations, and some Service Organizations may be paid pursuant to more than one of the calculations described above. Not all Service Organizations receive Additional Payments. Sales-based payments primarily create incentives to make new sales of shares of the Fund, and asset-based payments primarily create incentives to retain previously sold shares of the Fund. The level of payments made to these Service Organizations in any year will vary and may be limited to specific Funds or share classes. In certain cases, these payments may be subject to certain minimum payment levels.

The aggregate amount of Additional Payments made by BlackRock may be substantial and may be significant to certain Service Organizations. The categories of Additional Payments listed below are not mutually exclusive. The same Service Organization, or one or more of its affiliates, may receive payments under more than one category of Additional Payments. Such payments may be different for different Service Organizations and for different types of Funds.

# A. Distribution and Marketing Support

Additional Payments may be made by BlackRock for distribution and marketing support activities. These payments may take the form of, among other things, "due diligence" payments for a Service Organization's examination of a Fund; payments for providing extra employee training and information relating to a Fund; fees for access (in some cases on a preferential basis) to the Service Organization's registered representatives, salespersons or other personnel, including at sales meetings and conferences; "shelf space" payments for placing the Fund on the Service Organization's platform(s); "listing" fees for the placing of the Fund on a dealer's list (which may be a preferred or recommended list) of mutual funds available for purchase by its Customers or in certain sales programs from time to time; fees for providing assistance in promoting the sale of the Fund's shares (which may

include promotions in communications with the Service Organization's Customers, registered representatives, salespersons and/or other personnel); payments for the sale of shares and/or the maintenance of share balances; transaction fees (also referred to as "ticket charges"); and payments for infrastructure support. These payments normally will not exceed the sum of (a) 0.25% of such year's Fund sales by that Service Organization, and (b) 0.21% of the assets attributable to that Service Organization invested in a Fund.

#### B. Shareholder Services

Many Fund shares are owned or held by Service Organizations for the benefit of their Customers. In these situations, a Fund may not maintain accounts in the name of the Customers and Service Organizations may perform some of the functions for these Customers' accounts that the Transfer Agent would have performed if the accounts had been in the Customers' names on the Fund's books. Such services include sub-accounting services, shareholder servicing and transaction processing services and are sometimes referred to as "recordkeeping," "sub-transfer agency," "sub-accounting," "networking" and/or "administrative" services. Additional Payments may exceed amounts that would be earned on these assets by the Transfer Agent for the performance of these or similar services. These Additional Payments made by BlackRock are in addition to any transfer agent, shareholder servicing and transaction processing fees paid by a Fund, as applicable.

# C. Data Provision and Technology Support

BlackRock may make Additional Payments to Service Organizations for the provision of certain analytical or other data services relating to the Funds, such as statistical information regarding sales of the Funds, or technology support. Such Additional Payments are generally made as a fixed dollar amount, and not based on assets or sales.

## D. Service Organizations Receiving Additional Payments

As of the date of this SAI, the Service Organizations listed below, and, in some cases, certain of the Service Organization's affiliates, may be receiving one or more types of Additional Payments. This list may change over time, and BlackRock may pay Service Organizations or their affiliates additional types of Additional Payments in the future. Please contact your Service Organization to determine whether it or its affiliate currently may be receiving such payments and to obtain further information regarding any such payments.

AccuTech Systems Corporation

ADP Broker-Dealer, Inc.

Advisor Credit Exchange, LLC

Advisor Group, Inc.
Alight Solutions LLC

Allianz Life Financial Services, LLC

Allianz Life Insurance Company of New York

Allianz Life Insurance Company of North America

American Enterprise Investment Services, Inc.

American General Life Insurance Company

American United Life Insurance Company

Annuity Investors Life Insurance Company Ascensus Broker Dealer Services, Inc.

Ascensus, Inc.

Avantax Investment Services, LLC

Bancroft Capital LLC

Bank of America, N.A.

Bank of New York Mellon

Barclays Capital Inc.

Benefit Plans Administrative Services, Inc.

Benefit Trust Company

Beta Capital Securities LLC

BlackRock Advisors, LLC

BMO Capital Markets Corp.

**BNP** Paribas

BNP Paribas Investment Partners UK Limited

BNY Mellon, N.A.

BofA Securities, Inc.

BOKF, N.A.

Brighthouse Life Insurance Company

Brighthouse Life Insurance Company of NY

Broadridge Business Process Outsourcing, LLC

Brown Brothers Harriman & Co.

Cabrera Capital Markets, LLC

Cadaret Grant & Co., Inc.

Capital One, N.A.

Cetera Advisor Networks LLC

Cetera Advisors LLC

Cetera Financial Group

Cetera Financial Specialists LLC

Cetera Investment Services LLC

CF Secured, LLC

Charles Schwab & Co., Inc.

Charles Schwab Trust Bank

Chicago Mercantile Exchange Inc.
CIM Investment Management, Inc.

Citco Securities, LLC

CitiBank, National Association Citigroup Global Markets, Inc.

Citizens Bank

Citizens Business Bank

CME Shareholder Servicing LLC CMFG Life Insurance Company

Comerica Bank

Commonwealth Financial Network Computershare Trust Company Conduent HR Services, LLC CSC Trust Company of Delaware CUSO Financial Services, L.P. Delaware Life Insurance Company

Delaware Life Insurance Company of New York

Deutsche Bank AG

Deutsche Bank Trust Company Americas

Digital Retirement Solutions, Inc.

Dunham & Associates Investment Counsel, Inc.

Edward D. Jones & Co., L.P.

Empire Fidelity Investments Life Insurance Company

**Empower Annuity Insurance Company of America** 

Empower Financial Services, Inc.

Empower Life & Annuity Insurance Company of New

York

Empower Plan Services, LLC

Envestnet Asset Management, Inc.

Equitable Advisors, LLC

Equitable Life Insurance Company

E\*trade Savings Bank

Federal Deposit Insurance Corporation

Fidelity Brokerage Services LLC

Fidelity Investments Institutional Operations Company,

Inc.

Fidelity Investments Life Insurance Company

Fifth Third Securities, Inc. First Allied Securities, Inc.

First Command Financial Planning, Inc.

First Hawaiian Bank First Republic Bank

First Security Benefit Life Insurance and Annuity

Company of New York

First Symetra National Life Insurance Company of New

York

FIS Brokerage & Securities Services LLC

Forethought Life Insurance Company

**FSC Securities Corporation** 

Genworth Life and Annuity Insurance Company Genworth Life Insurance Company of New York

Global Atlantic Distributors, LLC

Goldman Sachs & Co.

Great Pacific Securities, LLC

Guardian Insurance & Annuity Co., Inc.

Hancock Whitney Bank

Hartford Funds Management Company

Hartford Securities Distribution Company, Inc.

Hazeltree Fund Services, Inc. Hightower Securities, Inc. Hilltop Securities Inc. HSBC Bank USA, N.A.

Huntington Securities, Inc.

Institutional Cash Distributors, LLC
Integrity Life Insurance Company
Investment Trust of California

J.P. Morgan Institutional Investments Inc.

J.P. Morgan Securities LLC

John Hancock Trust Company

Jefferies LLC

Jefferson National Life Insurance Company

Jefferson National Life Insurance Company of New York

John Hancock Life Insurance Company (U.S.A.)

John Hancock Life Insurance Company of New York

JPMorgan Chase Bank, N.A.

Kestra Investment Services, LLC

Lincoln Financial Advisors Corporation

Lincoln Financial Securities Corporation

Lincoln Life & Annuity Company of New York

Lincoln National Life Insurance Company

Lincoln Retirement Services LLC

Lombard International Life Assurance Company

LPL Financial LLC M&T Securities Inc.

Manufacturers and Traders Trust Company

Massachusetts Mutual Life Insurance Company

Members Life Insurance Company

Merrill Lynch, Pierce, Fenner & Smith Incorporated

Metavante Corporation

Metropolitan Life Insurance Company

Mid Atlantic Clearing & Settlement Corporation

Midland Life Insurance Company
Minnesota Life Insurance Company

Mischler Financial Group

Mizuho Securities USA Inc.

MML Investors Services, LLC

MML Distributors, LLC

Morgan Stanley & Co. LLC

Morgan Stanley Distribution, Inc.

Morgan Stanley Smith Barney LLC

MUFG Union Bank, National Association

National Financial Services LLC

National Integrity Life Insurance Company

National Life Insurance Company
Nationwide Financial Services, Inc.
Nationwide Fund Distributors LLC

Nationwide Retirement Solutions

NCB Federal Savings Bank

New England Pension Plan Systems, LLC

New York Life Insurance and Annuity Corporation

Newport Retirement Services, Inc.

NEXT Financial Group, Inc.

Northbrook Bank & Trust Company

Northern Trust Company

Northwestern Mutual Investment Services, LLC

NYLife Distributors LLC Oppenheimer & Co., Inc.

Orion Advisor Services, LLC

Pacific Life & Annuity Company

Pacific Life Insurance Company

Pacific Select Distributors, LLC Park Avenue Securities LLC

Penserra Securities LLC

Pershing LLC PFPC Inc.

Piper Jaffray & Co.

PNC Bank, National Association

PNC Capital Markets LLC

PNC Investments LLC

Principal Bank

Principal Life Insurance Company

Protective Life and Annuity Insurance Company

Protective Life Insurance Company

Pruco Life Insurance Company

Pruco Life Insurance Company of New Jersey

Prudential Annuities Distributors, Inc.

Prudential Insurance Company of America

Raymond James & Associates, Inc.

Raymond James Financial Services, Inc.

RBC Capital Markets, LLC

Regions Bank

Reliance Trust Company

Reliastar Life Insurance Company

Reliastar Life Insurance Company of New York

RiverSource Distributors, Inc.

RiverSource Life Insurance Co. of New York

RiverSource Life Insurance Company

Royal Alliance Associates, Inc.

SagePoint Financial, Inc.

Sammons Retirement Solutions, Inc.

Sanctuary Wealth Group, LLC

Santander Bank, N.A. Saturna Trust Company

Securities America, Inc.

Securities Finance Trust Company

Security Benefit Life Insurance Company

Security Financial Resources, Inc.

Security Life of Denver Insurance Company

SEI Private Trust Company

SG Americas Securities, LLC

Silicon Valley Bank

Sorrento Pacific Financial LLC

Standard Insurance Company

State Farm Life and Accident Assurance Company

State Farm Life Insurance Company State Farm VP Management Corp.

State Street Bank and Trust Company

State Street Global Markets, LLC

Stern Brothers & Co.

Stifel, Nicolaus & Company, Incorporated

Summit Brokerage Services, Inc.

**SVB** Asset Management

Symetra Life Insurance Company

Syntal Capital Partners, LLC

T. Rowe Price Retirement Plan Services, Inc.

Talcott Resolution Life and Annuity Insurance Company

Talcott Resolution Life Insurance Company

TD Ameritrade Clearing, Inc.

TD Ameritrade, Inc.

TD Prime Services (US) LLC

Teachers Insurance and Annuity Association of America

Tigress Financial Partners, LLC

TMI Trust Company

Transamerica Financial Life Insurance Company

Transamerica Life Insurance Company

Treasury Brokerage Triad Advisors, LLC

Truist Bank

U.S. Bancorp Investments, Inc.

U.S. Bank, National Association

UBATCO & Co.

UBS Financial Services, Inc.

**UBS Securities LLC** 

Ultimus Fund Solutions, LLC
UMB Bank, National Association

United States Life Insurance Company in the City of

New York

**VALIC Retirement Services Company** 

Vanguard Group, Inc.

Vanguard Marketing Corporation

Voya Financial Advisors, Inc. Voya Financial Partners, LLC

Voya Institutional Plan Services, LLC

Voya Insurance and Annuity Company

Voya Investments Distributor, LLC

Voya Retirement Insurance and Annuity Company

Waddell & Reed, Inc.

Wells Fargo Advisors, LLC

Wells Fargo Advisors Financial Network, LLC

Wells Fargo Bank, N.A.

Wells Fargo Clearing Services, LLC

Wells Fargo Investments, LLC

Wells Fargo Securities, LLC

Wilmington Trust, National Association

Woodbury Financial Services, Inc.

**ZB**, National Association

## E. Sponsorship and Other Incentive Payments and Services

In addition to the Additional Payments described above, BlackRock may contribute to various other incentive arrangements to promote the sale of shares, including hosting proprietary and financially sponsoring Service Organizations' training and educational seminars, conferences, meetings or events. BlackRock may also pay for the travel, meal, lodging and other expenses of Service Organizations and their salespersons or other personnel in connection with educational and sales promotional programs. This compensation is not included in, and is made in addition to, the Additional Payments described above. These payments may be made directly to the Service Organizations or their affiliates, or to a third party vendor, and may vary depending upon the nature of the event or the relationship and are subject to applicable laws and regulations, including the rules of applicable self-regulatory organizations, such as FINRA. BlackRock may pay Service Organizations additional types of incentive compensation in the future to the extent not prohibited by applicable laws or regulations.

Separately, BlackRock has 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 Service Organizations. BlackRock configures these tools and calculators and localizes the content for Service Organizations as part of its customary digital marketing support and promotion of the Funds or other BlackRock funds, iShares ETFs and other exchange-traded products.

#### F. Conflicts

Additional Payments made by BlackRock to a Service Organization or its affiliates or other incentive arrangements may be an important factor in the Service Organization's willingness to support the sale of a Fund and/or particular share class through its distribution system or to perform services with respect to such Fund. Additional Payments and other incentive arrangements may also be important factors in the Service Organization's willingness to recommend the BlackRock Fund complex in general.

BlackRock may be motivated to pay Additional Payments and other incentive compensation to promote the sale of Fund shares to Customers of Service Organizations and the retention of those investments by such Customers. To the extent Service Organizations sell more shares of a Fund or retain shares of a Fund in their Customers' accounts, BlackRock benefits from the incremental management and other fees paid by the Fund with respect to those assets.

Service Organizations may have financial incentives for recommending a particular Fund, share class or fund complex over another. Service Organizations may charge their Customers additional fees in connection with the purchase or redemption of Fund shares or for account-related services which are in addition to the sales and other charges described in the Fund's Prospectus and this SAI. Such charges may vary among Service Organizations but in all cases will be retained by the Service Organization and will not be remitted to a Fund or BlackRock.

Shareholders should consider whether such incentives exist when evaluating any recommendations from a Service Organization to purchase or sell shares of a Fund and when considering which share class is most appropriate. You should consult with your Service Organization, and review carefully any disclosure by the Service Organization, as to compensation received by it or its affiliates and for more information about the payments described above.

# **REDEMPTION OF SHARES**

Shares normally will be redeemed for cash upon receipt of a request in proper form, although each Fund retains the right to redeem some or all of its shares in-kind under unusual circumstances (valued in the same way as they would be valued for purposes of computing a Fund's NAV), in order to protect the interests of remaining shareholders, or to accommodate a request by a particular shareholder that does not adversely affect the interest of the remaining shareholders, by delivery of securities and other assets selected from the Fund's portfolio holdings at its discretion. In-kind payment means payment will be made in portfolio securities and other assets rather than cash. If this occurs, the redeeming shareholder might incur brokerage or other transaction costs to convert the securities and other assets to cash. In an in-kind redemption, a pro rata portion of a Fund's portfolio holdings will generally be distributed to the redeeming shareholder, but an Index Fund may, under certain circumstances, deviate from pro rata redemption if the securities and other assets to be distributed are deemed to be a fair representation of portfolio holdings and the interests of the remaining shareholders in the Index Fund are not diluted. Each Fund has elected, however, to be governed by Rule 18f-1 under the Investment Company Act so that the Fund is obligated to redeem its shares solely in cash up to the lesser of \$250,000 or 1% of its NAV during any 90-day period for any shareholder of the Fund. The redemption price is the NAV per share next determined after the initial receipt of proper notice of redemption. The value of shares of each Fund at the time of redemption may be more or less than your cost at the time of purchase, depending in part on the market value of the securities held by the Fund at such time. Except for any CDSC that may be applicable, there will be no redemption charge if your redemption request is sent directly to the Transfer Agent. If you are liquidating your holdings you will receive all dividends reinvested through the date of redemption.

The right to redeem shares may be suspended or payment upon redemption may be delayed for more than seven days only (i) for any period during which trading on the NYSE is restricted as determined by the Commission or during which the NYSE is closed (other than customary weekend and holiday closings), (ii) for any period during which an emergency exists, as defined by the Commission, as a result of which disposal of portfolio securities or determination of the NAV of a Fund is not reasonably practicable, or (iii) for such other periods as the Commission may by order permit for the protection of shareholders of the Fund. (A Fund may also suspend or postpone the recordation of the transfer of its shares upon the occurrence of any of the foregoing conditions.)

Each Fund, with other investment companies advised by the Manager, has entered into a joint committed line of credit with a syndicate of banks that is intended to provide the Fund with a temporary source of cash to be used to meet redemption requests from shareholders in extraordinary or emergency circumstances. Each Fund may also borrow from another Fund pursuant to the Interfund Lending Program in order to meet redemption requests, to the extent permitted by the Fund's investment policies and restrictions, as set forth in Part I of the Fund's SAI, and subject to the conditions of the IFL Order, as described above under "Investment Risks and Considerations—Interfund Lending Program."

Each Fund may redeem shares involuntarily to reimburse the Fund for any loss sustained by reason of the failure of a shareholder to make full payment for shares purchased by the shareholder or to collect any charge relating to a transaction effected for the benefit of a shareholder. Each Fund reserves the express right to redeem shares of the Fund involuntarily at any time if the Fund's Board of Directors determines, in its sole discretion, that failure to do so may have adverse consequences to the holders of shares in the Fund. Upon such redemption the holders of shares so redeemed shall have no further right with respect thereto other than to receive payment of the redemption price.

### Redemption

Investor A, Investor A1, Investor C, Institutional and Class R Shares

Redeem by Telephone: You may sell Investor Shares, excluding Investor P Shares, held at BlackRock by telephone request if certain conditions are met and if the amount being sold is less than (i) \$100,000 for payments by check or (ii) \$250,000 for payments through the Automated Clearing House Network ("ACH") or wire transfer. Certain redemption requests, such as those in excess of these amounts, and those where (i) the Fund does not have verified banking information on file; or (ii) the proceeds are not paid to the record owner at the record address, must be in writing with a medallion signature guarantee provided by any "eligible guarantor institution" as defined in Rule 17Ad-15 under the Securities Exchange Act of 1934 (the "Exchange Act"), whose existence and validity may be verified by the Transfer Agent through the use of industry publications. For Institutional Shares, certain redemption requests may require written instructions with a medallion signature guarantee. Call (800) 441-7762 for details. You can obtain a medallion signature guarantee stamp from a bank, securities dealer, securities broker, credit union, savings and loan association, national securities exchange or registered securities association. The three recognized medallion programs are Securities Transfer Agent Medallion Program, Stock Exchanges Medallion Program and New York Stock Exchange, Inc. Medallion Signature Program. Signature guarantees which are not a part of these programs will not be accepted. A notary public seal will not be acceptable. Generally, a properly signed written request with any required signature guarantee is all that is required for a redemption. In some cases, however, other documents may be necessary. Additional documentary evidence of authority is required by the Transfer Agent in the event redemption is requested by a corporation, partnership, trust, fiduciary, executor or administrator.

If you make a redemption request before a Fund has collected payment for the purchase of shares, the Fund may delay mailing your proceeds. This delay will usually not exceed ten days. A Fund, its Administrators and the Distributor will employ reasonable procedures to confirm that instructions communicated by telephone are genuine. Telephone redemption requests will not be honored if: (i) the accountholder is deceased, (ii) the proceeds are to be sent to someone other than the shareholder of record, (iii) a Fund does not have verified information on file, (iv) the request is by an individual other than the accountholder of record, (v) the account is held by joint tenants who are divorced, (vi) the address on the account has changed within the last 30 days or share certificates have been issued on the account, or (vii) to protect against fraud, if the caller is unable to provide the account number, the name and address registered on the account and the social security number registered on the account. The Fund and its service providers will not be liable for any loss, liability, cost or expense for acting upon telephone instructions that are reasonably believed to be genuine in accordance with such procedures. Before telephone requests will be honored, signature approval from all shareholders of record on the account must be obtained. The Fund may refuse a telephone redemption request if it believes it is advisable to do so. During periods of substantial economic or market change, telephone redemptions may be difficult to complete. Please find below alternative redemption methods.

Redemption orders for Institutional Shares placed prior to 4:00 p.m. (Eastern time) on a business day will be priced at the NAV determined that day. If redemption orders are received by 4:00 p.m. (Eastern time) on a business day, payment for redeemed Institutional Shares will normally be wired in Federal Funds on the next business day. If the Federal Reserve Bank of Philadelphia is not open on the business day following receipt of the redemption order, the redemption order will be accepted and processed the next succeeding business day when the Federal Reserve Bank of Philadelphia is open, provided that the Fund's custodian is also open for business.

**Redeem by VRU:** Investor class shares, excluding Investor P Shares, may also be redeemed by use of a Fund's automated voice response unit service ("VRU"). Payment for Investor class shares redeemed by VRU may be made for non-retirement accounts in amounts up to \$25,000, either through check, ACH or wire.

**Redeem by Internet:** Investor class shares, excluding Investor P Shares, may also be redeemed by logging onto the BlackRock website at www.blackrock.com. Proceeds from Internet redemptions may be sent via check, ACH or wire to the bank account of record. Payment for Investor class shares redeemed by Internet may be made for non-retirement accounts in amounts up to \$25,000, either through check, ACH or wire. Different maximums may apply to investors in Institutional Shares.

**Redeem in Writing:** If you hold shares with the Transfer Agent you may redeem such shares without charge by writing to BlackRock, P.O. Box 534429, Pittsburgh, Pennsylvania 15253-4429. Redemption requests delivered other than by mail should be sent to BlackRock, Attention: 534429, 500 Ross Street 154-0520, Pittsburgh, Pennsylvania 15262. If you hold share certificates issued by your Fund, the letter must be accompanied by certificates for the shares. All shareholders on the account must sign the letter. A medallion signature guarantee will generally be required but may be waived in certain limited circumstances. You can obtain a medallion signature guarantee stamp from a bank, securities dealer, securities broker, credit union, savings and loan association, national securities

exchange or registered securities association. A notary public seal will not be acceptable. If you hold stock certificates, return the certificates with the letter. Proceeds from redemptions may be sent via check, ACH or wire to the bank account of record.

Redemptions of Investor P Shares, Service Shares, Class G Shares, Class K Shares and BlackRock Shares may be made in the manner and amounts described in the Prospectuses.

The Funds or the Transfer Agent may temporarily suspend telephone transactions at any time.

If you redeem shares directly with the Transfer Agent, payments will generally be mailed within seven days of receipt of the proper notice of redemption. A Fund may delay the mailing of a redemption check until good payment (that is, cash, Federal funds or certified check drawn on a U.S. bank) has been collected for the purchase of Fund shares, which delay will usually not exceed 10 days. If your account is held directly with the Transfer Agent and contains a fractional share balance following a redemption, the fractional share balance will be automatically redeemed by the Fund.

Note on Low Balance Accounts. Because of the high cost of maintaining smaller shareholder accounts, BlackRock has set a minimum balance of \$500 in each Fund position you hold within your account ("Fund Minimum"), and may redeem the shares in your account if the NAV of those shares in your account falls below \$500 for any reason, including market fluctuation.

You will be notified that the value of your account is less than the Fund Minimum before the Fund makes any involuntary redemption. This notification will provide you with a 90 calendar day period to make an additional investment in order to bring the value of your account to at least \$500 before the Fund makes an involuntary redemption. This involuntary redemption will not charge any deferred sales charge, and may not apply to accounts of certain employer-sponsored retirement plans (not including IRAs), qualified state tuition plan (529 Plan) accounts, and select fee-based programs at your financial intermediary.

### Repurchase

A Fund normally will accept orders to repurchase shares from Selling Dealers for their customers. Shares will be priced at the NAV of the Fund next determined after receipt of the repurchase order by a Selling Dealer that has been authorized by the Distributor by contract to accept such orders. As to repurchase orders received by Selling Dealers prior to the close of business on the NYSE (generally, the NYSE closes at 4:00 p.m. Eastern time), on the day the order is placed, which includes orders received after the close of business on the previous day, the repurchase price is the NAV determined as of the close of business on the NYSE on that day. If the orders for repurchase are not received by the Selling Dealer before the close of business on the NYSE, such orders are deemed received on the next business day.

These repurchase arrangements are for your convenience and do not involve a charge by the Fund (other than any applicable CDSC or redemption fee). However, Selling Dealers may charge a processing fee in connection with such transactions. In addition, securities firms that do not have selected dealer agreements with the Distributor may impose a transaction charge for transmitting the notice of repurchase to the Fund. Each Fund reserves the right to reject any order for repurchase. A shareholder whose order for repurchase is rejected by a Fund, however, may redeem shares as set out above.

### Reinstatement Privilege — Investor A and Investor P Shares

Upon redemption of Investor A, Investor P or Institutional Shares, as applicable, shareholders may reinvest all or a portion of their redemption proceeds (after paying any applicable CDSC) in Investor A or Investor P Shares of the same or another BlackRock fund without paying a front-end sales charge. This right may be exercised within 90 days of the redemption, provided that the Investor A or Investor P Shares, as applicable, of that fund is currently open to new investors or the shareholder has a current account in that closed fund. Shares will be purchased at the NAV calculated at the close of trading on the day the request is received in good order. To exercise this privilege, the Transfer Agent must receive written notification from the shareholder of record or the registered representative of record, at the time of purchase. Investors should consult a tax advisor concerning the tax consequences of exercising this reinstatement privilege.

#### SHAREHOLDER SERVICES

Each Fund offers one or more of the shareholder services described below that are designed to facilitate investment in its shares. You can obtain more information about these services from each Fund by calling the telephone number on the cover page, or from the Distributor, your financial adviser, your selected securities dealer or other financial intermediary. Certain of these services are available only to U.S. investors.

#### **Investment Account**

If your account is maintained at the Transfer Agent (an "Investment Account") you will receive statements, at least quarterly, from the Transfer Agent. These statements will serve as confirmations for automatic investment purchases and the reinvestment of dividends. The statements also will show any other activity in your Investment Account since the last statement. You also will receive separate confirmations for each purchase or sale transaction other than automatic investment purchases and the reinvestment of dividends. If your Investment Account is held at the Transfer Agent you may make additions to it at any time by mailing a check directly to the Transfer Agent. Each Fund limits purchases by personal check to \$500,000 per trade. You may also maintain an account through a selected securities dealer or other financial intermediary. If you transfer shares out of an account maintained with a selected securities dealer or other financial intermediary, an Investment Account in your name may be opened automatically at the Transfer Agent.

You may transfer Fund shares from a selected securities dealer or other financial intermediary to another securities dealer or other financial intermediary that has entered into an agreement with the Distributor. Certain shareholder services may not be available for the transferred shares. All future trading of these assets must be coordinated by the new firm. If you wish to transfer your shares to a securities dealer or other financial intermediary that has not entered into an agreement with the Distributor, you must either (i) redeem your shares, paying any applicable CDSC or (ii) continue to maintain an Investment Account at the Transfer Agent for those shares. You also may request that the new securities dealer or other financial intermediary maintain the shares in an account at the Transfer Agent registered in the name of the securities dealer or other financial intermediary for your benefit whether the securities dealer or other financial intermediary has entered into a selected dealer agreement or not. In the interest of economy and convenience and because of the operating procedures of each Fund, share certificates will not be issued physically. Shares are maintained by each Fund on its register maintained by the Transfer Agent and the holders thereof will have the same rights and ownership with respect to such shares as if certificates had been issued.

If you are considering transferring a tax-deferred retirement account, such as an individual retirement account, from one selected securities dealer to another securities dealer or other financial intermediary, you should be aware that if the new firm will not take delivery of shares of the Fund, you must either redeem the shares (paying any applicable CDSC) so that the cash proceeds can be transferred to the account at the new firm, or you must continue to maintain a retirement account at the original selected securities dealer for those shares.

# **Exchange Privilege**

U.S. shareholders of Investor A, Investor C, Investor P, Class K, Institutional and Class G Shares of each Fund have an exchange privilege with certain other Funds. However, Investor A1 Shares may only exchange out. The minimum amount for exchanges of Investor class shares is \$1,000, although you may exchange less than \$1,000 if you already have an account in the Fund into which you are exchanging. You may only exchange into a share class and a Fund that are open to new investors or in which you have a current account if the class or fund is closed to new investors. Before effecting an exchange, you should obtain a currently effective prospectus of the fund into which you wish to make the exchange. Exercise of the exchange privilege is treated as a sale of the exchanged shares and a purchase of the acquired shares for U.S. federal income tax purposes.

Exchanges of Investor A, Investor A1, Investor P, Class K, Institutional and Class G Shares. Institutional Shares are exchangeable with Institutional Shares of other Funds. Investor A and Investor A1 Shares are exchangeable for Investor A Shares of other Funds to the extent such shares are offered by your financial intermediary. Investor P Shares are exchangeable for Investor P Shares of other Funds, to the extent such shares are offered by your financial intermediary. Class K Shares are exchangeable for Class K Shares of other Funds. Class G Shares are exchangeable for Class G Shares of other Funds.

Exchanges of Institutional Shares outstanding for Institutional Shares of a second fund or for shares of a money market fund are effected on the basis of relative NAV per Institutional Share. Exchanges of Investor A or Investor A1 Shares outstanding ("outstanding Investor A Shares") for Investor A Shares of a second fund, or for shares of a

money market fund ("new Investor A Shares") are effected on the basis of relative NAV per share. Exchanges of Investor P Shares outstanding for Investor P Shares of a second fund are effected on the basis of relative NAV per share. Exchanges of Class K Shares outstanding for Class K Shares of a second fund, or for shares of a money market fund are effected on the basis of relative NAV per share. Exchanges of Class G Shares outstanding for Class G Shares of a second fund are effected on the basis of relative NAV per share.

**Exchanges of Investor C Shares.** Shareholders of certain Funds with Investor C Shares outstanding ("outstanding Investor C Shares") may exchange their shares for Investor C Shares of a second Fund ("new Investor C Shares") or for shares of a money market fund ("new money market fund Shares") on the basis of relative NAV per share, without the payment of any CDSC. Certain Funds impose different CDSC schedules. For purposes of computing the CDSC upon redemption of new Investor C Shares or new money market fund Shares, as applicable, the time you held both the exchanged Investor C Shares and the new Investor C Shares or new money market fund Shares.

**Exchanges of Service Shares.** Service Shares can be exchanged for Service Shares of Funds that are covered by selected dealer agreements with the Distributor.

Exchanges for Shares of a Money Market Fund. You may exchange any class of Investor class shares, excluding Investor P Shares, for shares of an affiliated money market fund. If you exchange into BlackRock Summit Cash Reserves Fund ("Summit"), a series of BlackRock Financial Institutions Series Trust, you will receive one of two classes of shares: exchanges of Investor A, Investor A1 and Institutional Shares of a Fund will receive Investor A Shares of Summit and exchanges of Investor C Shares of a Fund will receive Investor C Shares of Summit. You may exchange Investor A Shares of Summit back into Investor A or Institutional Shares of a Fund, if you are eligible to hold such shares. You may exchange Investor C Shares of Summit back into Investor C Shares of a Fund and, in the event of such an exchange, the period of time that you held Investor C Shares of Summit will count toward satisfaction of the holding period requirement for purposes of reducing any CDSC. Investor C Shares of Summit are subject to a distribution fee at an annual rate of 0.75% of average daily net assets of such Investor C Shares. Exchanges of Investor C Shares of a money market fund other than Summit for Investor C Shares of a Fund will be exercised at NAV. However, a CDSC may be charged in connection with any subsequent redemption of the Investor C Shares of the Fund received in the exchange. In determining the holding period for calculating the CDSC payable on redemption of Investor C Shares of the Fund received in the exchange, the holding period of the money market fund Investor C Shares originally held will be added to the holding period of the Investor C Shares acquired through exchange.

**Exchanges by Participants in Certain Programs.** The exchange privilege may be modified with respect to certain participants in mutual fund advisory programs and other fee-based programs sponsored by the Manager, an affiliate of the Manager, or selected securities dealers or other financial intermediaries that have an agreement with the Distributor. See "Fee-Based Programs" below.

**Exercise of the Exchange Privilege.** To exercise the exchange privilege, you should contact your financial adviser or the Transfer Agent, who will advise each Fund of the exchange. If you do not hold share certificates, you may exercise the exchange privilege by wire through your securities dealer or other financial intermediary. Each Fund reserves the right to require a properly completed exchange application.

A shareholder who wishes to make an exchange may do so by sending a written request to the Fund c/o the Transfer Agent at the following address: P.O. Box 534429, Pittsburgh, Pennsylvania 15253-4429. Shareholders are automatically provided with telephone exchange privileges when opening an account, unless they indicate on the Application that they do not wish to use this privilege. To add this feature to an existing account that previously did not provide this option, a Telephone Exchange Authorization Form must be filed with the Transfer Agent. This form is available from the Transfer Agent. Once this election has been made, the shareholder may simply contact the Fund by telephone at (800) 441-7762 to request the exchange. During periods of substantial economic or market change, telephone exchanges may be difficult to complete and shareholders may have to submit exchange requests to the Transfer Agent in writing.

If the exchanging shareholder does not currently own shares of the investment portfolio whose shares are being acquired, a new account will be established with the same registration, dividend and capital gain options and broker of record as the account from which shares are exchanged, unless otherwise specified in writing by the shareholder with all signatures guaranteed by an eligible guarantor institution as defined below. In order to participate in the Automatic Investment Program or establish a Systematic Withdrawal Plan for the new account, however, an exchanging shareholder must file a specific written request.

Any share exchange must satisfy the requirements relating to the minimum initial investment requirement, and must be legally available for sale in the state of the investor's residence. For U.S. federal income tax purposes, a share exchange is a taxable event and, accordingly, a capital gain or loss may be realized. Before making an exchange request, shareholders should consult a tax or other financial adviser and should consider the investment objective, policies and restrictions of the investment portfolio into which the shareholder is making an exchange. Brokers may charge a fee for handling exchanges.

The Funds reserve the right to suspend, modify or terminate the exchange privilege at any time. Notice will be given to shareholders of any material modification or termination except where notice is not required. The Funds reserve the right to reject any telephone exchange request. Telephone exchanges may be subject to limitations as to amount or frequency, and to other restrictions that may be established from time to time to ensure that exchanges do not operate to the disadvantage of any portfolio or its shareholders.

The Funds, the Administrators and BRIL will employ reasonable procedures to confirm that instructions communicated by telephone are genuine. The Funds, the Administrators and BRIL will not be liable for any loss, liability, cost or expense for acting upon telephone instructions reasonably believed to be genuine in accordance with such procedures. By use of the exchange privilege, the investor authorizes the Fund's Transfer Agent to act on telephonic or written exchange instructions from any person representing himself to be the investor and believed by the Fund's Transfer Agent to be genuine. The records of the Fund's Transfer Agent pertaining to such instructions are binding. The exchange privilege may be modified or terminated at any time upon 60 days' notice to affected shareholders. The exchange privilege is only available in states where the exchange may legally be made.

Each Fund reserves the right to limit the number of times an investor may exercise the exchange privilege. Certain Funds may suspend the continuous offering of their shares to the general public at any time and may resume such offering from time to time. The exchange privilege is available only to U.S. shareholders in states where the exchange legally may be made. The exchange privilege may be applicable to other new mutual funds whose shares may be distributed by the Distributor.

# **Participation in Fee-Based Programs**

If you participate in certain fee-based programs offered by BlackRock or an affiliate of BlackRock, or selected securities dealers or other financial intermediaries that have agreements with the Distributor or in certain fee-based programs in which BlackRock participates, you may be able to buy Institutional Shares, including by exchanges from other share classes. Sales charges on the shares being exchanged may be reduced or waived under certain circumstances. You generally cannot transfer shares held through a fee-based program into another account. Instead, if you choose to leave the fee-based program, you may have to redeem your shares held through the program and purchase shares of another class, which may be subject to distribution and service fees. This may be a taxable event and you may pay any applicable sales charges or redemption fee. Please speak to your financial intermediary for information about specific policies and procedures applicable to your account.

Generally, upon termination of a fee-based program, the shares may be liquidated or the shares can be held in an account. In certain circumstances, when a shareholder chooses to continue to hold the shares, whatever share class was held in the program can be held after termination. Shares that have been held for less than specified periods within the program may be subject to a fee upon redemption. Shareholders that held Investor A or Institutional Shares in the program may be eligible to purchase additional shares of the respective share class of a Fund, but may be subject to upfront sales charges with respect to Investor A Shares. Additional purchases of Institutional Shares are permitted only if you have an existing position at the time of purchase or are otherwise eligible to purchase Institutional Shares. Please speak to your financial intermediary for more information.

Certain financial intermediaries may, in connection with a change in account type (for example, due to leaving a fee-based program or upon termination of the fee-based program) or otherwise in accordance with the financial intermediary's policies and procedures, exchange the share class held in the program for another share class of the same fund, provided that the exchanged shares are not subject to a sales charge and the shareholder meets the eligibility requirements of the new share class. Please speak to your financial intermediary for information about specific policies and procedures applicable to your account.

Details about the features of each fee-based program and the relevant charges, terms and conditions are included in the client agreement for each fee-based program and are available from your financial professional, selected securities dealer or other financial intermediary. Please speak to your financial intermediary for more information.

### **Retirement and Education Savings Plans**

Individual retirement accounts and other retirement and education savings plans are available from your financial intermediary. Under these plans, investments may be made in a Fund (other than a Municipal Fund) and certain of the other mutual funds sponsored by the Manager or its affiliates as well as in other securities. There may be fees associated with investing through these plans. Information with respect to these plans is available on request from your financial intermediary.

Dividends received in each of the plans referred to above are exempt from U.S. federal taxation until distributed from the plans and, in the case of Roth IRAs and education savings plans, may be exempt from taxation when distributed as well. Investors considering participation in any retirement or education savings plan should review specific tax laws relating to the plan and should consult their attorneys or tax advisors with respect to the establishment and maintenance of any such plan.

#### **Automatic Investment Plans**

Investor class shareholders and certain Service Share shareholders who were shareholders of the Compass Capital Group of Funds at the time of its combination with The PNC® Fund in 1996 may arrange for periodic investments in that Fund through automatic deductions from a checking or savings account. The minimum preauthorized investment amount is \$50. If you buy shares of a Fund through certain accounts, no minimum charge to your bank account is required. Contact your financial adviser or other financial intermediary for more information.

#### **Automatic Dividend Reinvestment Plan**

Each Fund will distribute substantially all of its net investment income and net realized capital gains, if any, to shareholders. All distributions are automatically reinvested at NAV in the form of additional full and fractional shares of the same class of shares of the relevant Fund unless a shareholder elects otherwise or as otherwise set forth in a Fund's prospectus. Such election, or any revocation thereof, must be made in writing to the Transfer Agent, and will become effective with respect to dividends paid after its receipt by the Transfer Agent.

### **Systematic Withdrawal Plans**

Shareholders may receive regular distributions from their accounts via a Systematic Withdrawal Plan ("SWP"). Upon commencement of the SWP, the account must have a current value of \$10,000 or more in a Fund. Shareholders may elect to receive automatic cash payments of \$50 or more at any interval. You may choose any day for the withdrawal. If no day is specified, the withdrawals will be processed on the 25th day of the month or, if such day is not a business day, on the prior business day and are paid promptly thereafter. An investor may utilize the SWP by completing the Systematic Withdrawal Plan Application Form which may be obtained by visiting our website at www.blackrock.com.

Shareholders should realize that if withdrawals exceed income dividends their invested principal in the account will be depleted. To participate in the SWP, shareholders must have their dividends automatically reinvested. Shareholders may change or cancel the SWP at any time, upon written notice to the Fund, or by calling the Fund at (800) 441-7762. Purchases of additional Investor A or Investor P Shares of the Fund concurrently with withdrawals may be disadvantageous to investors because of the sales charges involved and, therefore, are discouraged. No CDSC will be assessed on redemptions of Investor C Shares made through the SWP that do not exceed 12% of the original investment on an annualized basis. For example, monthly, quarterly and semi-annual SWP redemptions of Investor C Shares will not be subject to the CDSC if they do not exceed 1% (monthly), 3% (quarterly) and 6% (semi-annually), respectively, of an account's NAV on the redemption date. SWP redemptions of Investor C Shares in excess of this limit are still subject to the applicable CDSC.

For this reason, a shareholder may not participate in the Automatic Investment Plan described above (see "How to Buy, Sell, Exchange and Transfer Shares" or "How to Buy, Sell and Exchange Shares," as applicable, in the Fund's Prospectus) and the SWP at the same time.

## **Dividend Allocation Plan**

The Dividend Allocation Plan, as applicable, allows shareholders to elect to have all their dividends and any other distributions from any Eligible Fund (which means funds so designated by the Distributor from time to time) automatically invested at NAV in one other such Eligible Fund designated by the shareholder, provided the account into which the dividends and distributions are directed is initially funded with the requisite minimum amount.

#### PRICING OF SHARES

#### **Determination of Net Asset Value**

**Valuation of Shares.** The NAV for each class of shares of each Fund is generally calculated as of the close of regular trading hours on the NYSE (currently 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 Exchange 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 the Fund values such security, the last bid (long positions) or ask (short positions) price, if available, will be used as the value of such security. If a Fund holds both long and short positions in the same security, the last bid price will be applied to securities held long and the last ask price will be applied to securities sold short. If no bid or ask price is available on a day on which a Fund values such security, the prior day's price will be used, unless BlackRock 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 the 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 the 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 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 the 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 BlackRock 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. 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**

In determining the market value of portfolio investments, the Fund may employ independent third-party pricing services, which may use, without limitation, a matrix or formula method that takes into consideration market indexes, matrices, yield curves and other specified inputs and assumptions. This may result in the assets being valued at a

price different from the price that would have been determined had the matrix or formula method not been used. The price the Fund could receive upon the sale of any particular portfolio investment may differ from the 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 the Fund, and the Fund could realize a greater than expected loss or lesser than expected gain upon the sale of the investment. The 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.

Prices obtained from independent third-party pricing services, broker-dealers or market makers to value each Fund's securities and other assets and liabilities are based on information available at the time the Fund values its assets and liabilities. In the event that a pricing service quotation is revised or updated subsequent to the day on which the 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.

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 BlackRock, the 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 BlackRock 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.

Certain of the securities acquired by the Funds may be traded on foreign exchanges or OTC markets on days on which a Fund's NAV is not calculated. In such cases, the NAV of a Fund's shares may be significantly affected on days when investors can neither purchase nor redeem shares of the Fund.

Fair Value. When market quotations are not readily available or are believed by BlackRock to be unreliable, a Fund's investments are valued at fair value ("Fair Value Assets"). Fair Value Assets are valued by BlackRock in accordance with the Valuation Procedures. Pursuant to Rule 2a-5 under the Investment Company Act, the Board of Directors has designated BlackRock as the valuation designee for the respective Funds for which it serves as investment adviser. BlackRock 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 BlackRock 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 BlackRock 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 or liabilities held by the 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 BlackRock 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. For certain foreign assets, a third-party vendor supplies evaluated, systematic fair value pricing based upon the movement of a proprietary multi-factor model after the relevant foreign markets have closed. This systematic fair value pricing methodology is designed to correlate the prices of foreign assets following the close of the local markets to the price that might have prevailed as of a Fund's pricing time.

BlackRock'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, the Funds' accounting agent assists BlackRock by periodically endeavoring to confirm the prices it receives from all third-party pricing services, index providers and broker-dealers. BlackRock regularly evaluates the values assigned to the securities and other assets and liabilities of the Funds.

When determining the price for a Fair Value Asset, BlackRock 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 BlackRock deems relevant at the time of the determination, and may be based on analytical values determined by BlackRock 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 accounting principles generally accepted in the United States of America ("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.

#### **Computation of Offering Price Per Share**

See "Computation of Offering Price Per Share" in Part I of a Fund's SAI for an illustration of the computation of the offering price for shares of your Fund.

# PORTFOLIO TRANSACTIONS AND BROKERAGE

# **Transactions in Portfolio Securities**

Subject to policies established by the Board of Directors, BlackRock is primarily responsible for the execution of a Fund's portfolio transactions and the allocation of brokerage. BlackRock does not execute transactions through any particular broker or dealer, but seeks to obtain the best net results for the Fund, 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 BlackRock 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, BlackRock may select a broker based partly upon brokerage or research services provided to BlackRock and its clients, including a Fund. In return for such services, BlackRock may cause a Fund to pay a higher commission than other brokers would charge if BlackRock determines in good faith that the commission is reasonable in relation to the services provided.

In the case of Feeder Funds, because each Feeder Fund generally invests exclusively in beneficial interests of a Master Portfolio, it is expected that all transactions in portfolio securities will be entered into by the Master Portfolio.

In selecting brokers or dealers to execute portfolio transactions, the Manager and sub-advisers seek to obtain the best price and most favorable execution for a Fund, taking 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) BlackRock'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) BlackRock's knowledge of any actual or apparent operational problems of a broker or dealer.

Section 28(e) of the Exchange Act ("Section 28(e)") permits an investment adviser, under certain circumstances and, if applicable, subject to the restrictions of MiFID II as described further below, to cause an account to pay a broker or dealer a commission for effecting a transaction 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 under certain conditions. Brokerage and research services include: (1) furnishing advice as to the value of securities, including pricing and appraisal advice, credit analysis, risk measurement analysis, performance and other analysis, as well as the advisability of investing in, purchasing or selling securities, and the availability of securities or purchasers or sellers of securities; (2) furnishing analyses and reports concerning issuers, industries, securities, economic factors and trends, portfolio strategy, and the performance of accounts; and (3) effecting securities transactions and performing functions incidental to securities transactions (such as clearance, settlement, and custody). BlackRock believes that access to independent investment research is beneficial to its investment decision-making processes and, therefore, to the Funds.

BlackRock, unless prohibited by applicable law, may participate in client commission 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. BlackRock believes that research services obtained through soft dollar or commission sharing arrangements enhance its investment decision-making capabilities, thereby increasing the prospects for higher investment returns. BlackRock will engage only in soft dollar or commission sharing transactions that comply with the requirements of Section 28(e) and MiFID II. Under MiFID II, EU investment managers, including BIL, pay for any research out of their own resources and not through soft dollars or commission sharing arrangements. BlackRock regularly evaluates the soft dollar products and services utilized, as well as the overall soft dollar and commission sharing arrangements to ensure that trades are executed by firms that are regarded as best able to execute trades for client accounts, while at the same time providing access to the research and other services BlackRock views as impactful to its trading results.

BlackRock, unless prohibited by applicable law, may utilize soft dollars and related services, including research (whether prepared by the broker-dealer or prepared by a third-party and provided to BlackRock by the broker-dealer) and execution or brokerage services within applicable rules and BlackRock's policies to the extent that such permitted services do not compromise BlackRock's ability to seek to obtain best execution. In this regard, the portfolio management investment and/or trading teams may consider a variety of factors, including the degree to which the broker-dealer: (a) provides access to company management; (b) provides access to their analysts; (c) provides meaningful/insightful research notes on companies or other potential investments; (d) facilitates calls on which meaningful or insightful ideas about companies or potential investments are discussed; (e) facilitates conferences at which meaningful or insightful ideas about companies or potential investments are discussed; or (f) provides research tools such as market data, financial analysis, and other third-party related research and brokerage tools that aid in the investment process.

Research-oriented services for which BlackRock, unless prohibited by applicable law, might pay with Fund commissions may be in written form or through direct contact with individuals and may include information as to particular companies or industries and securities or groups of securities, as well as market, economic, or institutional advice and statistical information, political developments and technical market information that assists in the valuation of investments. Except as noted immediately below, research services furnished by brokers may be used in servicing some or all client accounts and not all services may be used in connection with the Fund or account that paid commissions to the broker providing such services. In some cases, research information received from brokers by mutual fund management personnel, or personnel principally responsible for BlackRock's individually managed portfolios, is not necessarily shared by and between such personnel. Any investment advisory or other fees paid by a Fund to BlackRock are not reduced as a result of BlackRock's receipt of research services. In some cases, BlackRock may receive a service from a broker that has both a "research" and a "non-research" use. When this occurs BlackRock makes a good faith allocation, under all the circumstances, between the research and nonresearch uses of the service. The percentage of the service that is used for research purposes may be paid for with client commissions, while BlackRock will use its own funds to pay for the percentage of the service that is used for non-research purposes. In making this good faith allocation, BlackRock faces a potential conflict of interest, but BlackRock believes that its allocation procedures are reasonably designed to ensure that it appropriately allocates the anticipated use of such services to their research and non-research uses.

Effective January 3, 2018 under MiFID II, investment managers in the EU, including BIL, are no longer able to use soft dollars to pay for research from brokers. Investment managers in the EU are required to either pay for research out of their own profit and loss or agree with clients to have research costs paid by clients through research payment accounts that are funded out of execution commissions or by a specific client research charge, provided that the payments for research are unbundled from the payments for execution. MiFID II restricts the use of soft dollars by sub-advisers to the Funds located in the EU, such as BIL, if applicable. BIL will pay for any research out of its own resources and not through soft dollars or commission sharing arrangements.

Payments of commissions to brokers who are affiliated persons of the Fund, or the Master Portfolio with respect to the Feeder Fund (or affiliated persons of such persons), will be made in accordance with Rule 17e-1 under the Investment Company Act. Subject to policies established by the Board of Directors of the Master Portfolio, BlackRock is primarily responsible for the execution of the Master Portfolio's portfolio transactions and the allocation of brokerage.

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 BlackRock 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).

BlackRock does not consider sales of shares of the mutual funds it advises as a factor in the selection of brokers or dealers to execute portfolio transactions for a Fund; however, whether or not a particular broker or dealer sells shares of the mutual funds advised by BlackRock neither qualifies nor disqualifies such broker or dealer to execute transactions for those mutual funds.

Each Fund anticipates that its brokerage transactions involving foreign securities generally will be conducted primarily on the principal stock exchanges of the applicable country. Foreign equity securities may be held by a Fund in the form of depositary receipts, or other securities convertible into foreign equity securities. Depositary receipts may be listed on stock exchanges, or traded in OTC markets in the United States or Europe, as the case may be. American Depositary Receipts, like other securities traded in the United States, will be subject to negotiated commission rates. Because the shares of each Fund are redeemable on a daily basis in U.S. dollars, each Fund intends to manage its portfolio so as to give reasonable assurance that it will be able to obtain U.S. dollars to the extent necessary to meet anticipated redemptions. Under present conditions, it is not believed that these considerations will have a significant effect on a Fund's portfolio strategies.

See "Portfolio Transactions and Brokerage" in the SAI for information about the brokerage commissions paid by your Fund, including commissions paid to affiliates, if any, for the periods indicated.

Each Fund may invest in certain securities traded in the OTC market and intends to deal directly with the dealers who make a market in the particular securities, except in those circumstances in which better prices and execution are available elsewhere. Under the Investment Company 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 Commission. 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 in connection with such transactions. However, an affiliated person of a Fund may serve as its broker in OTC transactions conducted on an agency basis provided that, among other things, the fee or commission received by such affiliated broker is reasonable and fair compared to the fee or commission received by non-affiliated brokers in connection with comparable transactions.

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.

Purchases of money market instruments by a Fund 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. Each money market fund intends to purchase only securities with remaining maturities of 397 days or less as determined in accordance

with the rules of the Commission. As a result, the portfolio turnover rates of a money market fund will be relatively high. However, because brokerage commissions will not normally be paid with respect to investments made by a money market fund, the turnover rates should not adversely affect the Fund's NAVs or net income.

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.

The Manager or sub-advisers may seek to obtain an undertaking from issuers of commercial paper or dealers selling commercial paper to consider the repurchase of such securities from a Fund prior to maturity at their original cost plus interest (sometimes adjusted to reflect the actual maturity of the securities), if it believes that a Fund's anticipated need for liquidity makes such action desirable. Any such repurchase prior to maturity reduces the possibility that a Fund would incur a capital loss in liquidating commercial paper, especially if interest rates have risen since acquisition of such commercial paper.

Investment decisions for each Fund and for other investment accounts managed by the Manager or sub-advisers are made independently of each other in light of differing conditions. BlackRock allocates investments among client accounts in a fair and equitable manner. A variety of factors will be considered in making such 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.

Equity securities will generally be allocated among client accounts within the same 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-ration had not occurred. All allocations of equity securities will be subject, where relevant, to share minimums established for accounts and compliance constraints.

Initial public offerings of securities may be over-subscribed and subsequently trade at a premium in the secondary market. When BlackRock 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 BlackRock's trading desk their level of interest in a particular offering with respect to eligible client accounts for which that team is responsible. Initial public offerings 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 initial public offering will be allocated among participating client accounts within each investment mandate on a pro rata basis. 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 BlackRock to be fair and equitable to clients may be used as well.

Because different accounts may have differing investment objectives and policies, BlackRock 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, BlackRock 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 BlackRock or its affiliates during the same period may 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 a Fund or other clients or funds for which BlackRock or an

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, BlackRock 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. 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 a Fund is concerned, in other cases it could be beneficial to the Fund. Transactions effected by BlackRock 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.

A Fund will not purchase securities during the existence of any underwriting or selling group relating to such securities of which BlackRock, BRIL or any affiliated person (as defined in the Investment Company Act) thereof is a member except pursuant to procedures adopted by the Board of Directors in accordance with Rule 10f-3 under the Investment Company Act. In no instance will portfolio securities be purchased from or sold to BlackRock, BRIL or any affiliated person of the foregoing entities except as permitted by Commission exemptive order or by applicable law.

#### **Portfolio Turnover**

While a Fund generally does not expect to engage in trading for short-term gains, it will effect portfolio transactions without regard to any holding period if, in Fund management's judgment, such transactions are advisable in light of a change in circumstances of a particular company or within a particular industry or in general market, economic or financial conditions. The portfolio turnover rate is calculated by dividing the lesser of a Fund's annual sales or purchases of portfolio securities (exclusive of purchases or sales of U.S. Government Securities and all other securities whose maturities at the time of acquisition were one year or less) by the monthly average value of the securities in the portfolio during the year. A high rate of portfolio turnover results in certain tax consequences, such as increased capital gain dividends and/or ordinary income dividends, and in correspondingly greater transaction costs in the form of dealer spreads and brokerage commissions, which are borne directly by a Fund.

# **DIVIDENDS AND TAXES**

# **Dividends**

Each Fund intends to distribute substantially all of its net investment income, if any. Dividends from such net investment income are paid as set forth in each Fund's Prospectus. Each Fund also intends to distribute all net realized capital gains, if any, as set forth in such Fund's Prospectus. From time to time, a Fund may declare a special distribution at or about the end of the calendar year in order to comply with U.S. federal tax requirements that certain percentages of its ordinary income and capital gains be distributed during the year. If, in any fiscal year, a Fund has net income from certain foreign currency transactions, such income will be distributed at least annually.

For information concerning the manner in which dividends may be reinvested automatically in shares of each Fund, as applicable, see "Shareholder Services — Automatic Dividend Reinvestment Plan." Shareholders may also elect in writing to receive any such dividends in cash. Dividends are taxable to shareholders, as discussed below, whether they are reinvested in shares of the Fund or received in cash. The per share dividends on front-end load shares, CDSC shares and Service Shares will be lower than the per share dividends on Institutional Shares as a result of the service, distribution and higher transfer agency fees applicable to CDSC shares, the service fees applicable to front-end load shares and Service Shares, and the service and distribution fees applicable to Class R Shares. Similarly, the per share dividends on CDSC shares as a result of the distribution fees and higher transfer agency fees applicable to CDSC shares and the distribution fees applicable to Class R Shares, and the per share dividends on CDSC shares will be lower than the per share dividends on CDSC shares will be lower than the per share dividends on CDSC shares will be lower than the per share dividends on CDSC shares as a result of the higher distribution fees and higher transfer agency fees applicable to CDSC shares.

#### **Taxes**

Each Fund intends to continue to qualify for the special tax treatment afforded to regulated investment companies under the Code. As long as a Fund so qualifies, the Fund (but not its shareholders) will not be subject to U.S. federal income tax on the part of its investment company taxable income and net realized capital gains that it distributes to its shareholders in years in which it distributes at least 90% of its investment company taxable income and at least 90% of its net tax-exempt interest income, if any, for the year. To qualify as a regulated investment company, a Fund must meet certain requirements regarding the source of its income and the composition and diversification of its assets. See Part II, "Investment Risks and Considerations—Investment Restrictions (All Funds)" for a discussion of the asset diversification requirements. In the case of a Feeder Fund, such Fund may look to the underlying assets of the Master Portfolio in which it has invested for purposes of satisfying the asset diversification requirement and various other requirements of the Code applicable to regulated investment companies.

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, by disposing of certain assets, or by paying a tax and disposing of assets. If, in any taxable year, a Fund fails one of these tests and does not timely cure the failure, the Fund will be taxed in the same manner as an ordinary corporation and distributions to its shareholders will not be deductible by the Fund in computing its taxable income. Although in general the passive loss rules of the Code do not apply to regulated investment companies, such rules do apply to a regulated investment company 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.

Each Fund intends to distribute substantially all of such income and gains. If, in any taxable year, a Fund fails to qualify as a regulated investment company under the Code, notwithstanding the availability of certain relief provisions, such Fund would be taxed in the same manner as an ordinary corporation and all distributions from earnings and profits (as determined under U.S. federal income tax principles) to its shareholders would be taxable as ordinary dividend income eligible for taxation at a reduced tax rate for non-corporate shareholders and the dividends-received deduction for corporate shareholders. However, a Municipal Fund's distributions derived from income on tax-exempt obligations, as defined herein, would no longer qualify for treatment as exempt interest. Each Fund that is a series of a regulated investment company that consists of multiple series is treated as a separate corporation for U.S. federal income tax purposes, and therefore is considered to be a separate entity in determining its treatment under the rules for regulated investment companies. Losses in one series of a regulated investment company do not offset gains in another, and the requirements (other than certain organizational requirements) for qualifying for regulated investment company status will be determined at the level of the individual series. In the following discussion, the term "Fund" means each individual series, if applicable.

The Code requires a regulated investment company to pay a nondeductible 4% excise tax to the extent the regulated investment company does not distribute, during each calendar year, at least 98% of its ordinary income, determined on a calendar year basis, and at least 98.2% of its capital gain net income, determined, in general, as if the regulated investment company's taxable year ended on October 31, plus certain undistributed amounts from the previous years. While each Fund intends to distribute its income and capital gains in the manner necessary to avoid imposition of the 4% excise tax, there can be no assurance that a sufficient amount of the Fund's taxable income and capital gains will be distributed to avoid entirely the imposition of the tax. In such event, a Fund will be liable for the tax only on the amount by which it does not meet the foregoing distribution requirements.

Net capital loss carryforwards may be applied against realized capital gains in each succeeding year, until they have been reduced to zero. In the event that the Fund were to experience an ownership change as defined under the Code, the Fund's loss carryforwards and other favorable tax attributes of the Fund, if any, may be subject to limitation.

Dividends paid by a Fund from its ordinary income or from an excess of net short-term capital gain over net long-term capital loss (together referred to as "ordinary income dividends") are taxable to shareholders as ordinary income. Distributions made from an excess of net long-term capital gain over net short-term capital loss (including gains or losses from certain transactions in futures and options) ("capital gain dividends") are taxable to shareholders as long-term capital gains, regardless of the length of time the shareholder has owned Fund shares. Distributions paid by a Fund that are reported as exempt-interest dividends will not be subject to regular U.S. federal income tax. Certain dividend income and long-term capital gains are eligible for taxation at a reduced rate that applies to non-corporate shareholders. Under these rules, the portion of ordinary income dividends constituting "qualified dividend income" when paid by a regulated investment company to a non-corporate shareholder may be taxable to such shareholder at long-term capital gain rates provided the shareholder has held the shares on which

the dividend was paid for at least 61 days during the 121-day period that begins on the date that is 60 days before the date on which the shares become ex-dividend with respect to such dividend (or, in the case of certain accumulated dividends with respect to preferred stocks, the shareholder has held the shares on which the dividend was paid for at least 91 days during the 181-day period that begins on the date that is 90 days before the date on which the shares become ex-dividend with respect to such dividend). However, to the extent a Fund's distributions are derived from income on debt securities, certain types of preferred stock treated as debt for U.S. federal income tax purposes and short-term capital gains, such distributions will not constitute "qualified dividend income." In addition, distributions that are derived from securities lending income, such as substitute dividend payments, will not constitute "qualified dividend income."

A 3.8% Medicare tax is imposed on the net investment income (which includes taxable dividends and redemption proceeds) of certain individuals, trusts and estates.

A Fund's net capital gain (the excess of net long-term capital gains over net short-term capital losses) is not subject to the 90% distribution requirement for taxation as a regulated investment company, described above. If a Fund retains net capital gain, it is subject to tax on that gain, and may designate the retained amount as undistributed capital gain in a written statement furnished to its shareholders, who will be required to include in income, as long-term capital gain, their proportionate shares of such undistributed net capital gain, will be deemed to have paid and may claim as a credit against their U.S. federal income tax liability (and as a refund to the extent it exceeds that liability) their proportionate shares of the tax paid by the Fund on that gain, and shall increase the tax basis of their shares in the Fund by the excess of the amount included in income over the amount allowed as a credit against their taxes.

Distributions in excess of a Fund's current and accumulated earnings and profits will first reduce the adjusted tax basis of a holder's shares and after such adjusted tax basis is reduced to zero, will constitute capital gains to such holder (assuming the shares are held as a capital asset). Distributions in excess of a Fund's minimum distribution requirements (or taxable income) but not in excess of a Fund's earnings and profits will be taxable to shareholders and will not constitute nontaxable returns of capital. A 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 reduce current year realized gains. In the case of a Fund with a non-calendar taxable year, a Fund's earnings and profits are allocated first to distributions made on or before December 31 of the taxable year, and then to distributions made after December 31 of the taxable year. Any loss upon the sale or exchange of Fund shares held for six months or less will be treated as long-term capital loss to the extent of any capital gain dividends received by the shareholder.

Ordinary income and capital gain dividends are taxable to shareholders even if they are reinvested in additional shares of a Fund. Distributions by a Fund, whether from ordinary income or capital gains, generally will not be eligible for the dividends received deduction allowed to corporations under the Code. If a Fund pays a dividend in January that was declared in the previous October, November or December to shareholders of record on a specified date in one of such months, then such dividend will be treated for tax purposes as being paid by the Fund and received by its shareholders on December 31 of the year in which the dividend was declared. In the case of a Fund with a non-calendar taxable year, if the Fund reports more capital gain dividends than it earns in such taxable year, then the Fund will reduce the amounts reported as capital gains. Where possible, such reduction will first be allocated to dividends made after December 31 of such taxable year. A Fund may elect to defer recognizing, until the following taxable year, certain net capital losses arising after October 31 of the current taxable year, and certain net ordinary losses arising after October 31 and/or December 31 of the current taxable year. This may have the effect of increasing the amount of dividends otherwise includible in the shareholder's income with respect to the current taxable year.

No gain or loss will be recognized by Investor C shareholders on the conversion to Investor A Shares. A shareholder's tax basis in the Investor A Shares acquired upon conversion will be the same as the shareholder's tax basis in the converted Investor C Shares and the holding period of the acquired Investor A Shares will include the holding period for the converted Investor C Shares.

If a shareholder of a Fund exercises an exchange privilege within 90 days of acquiring the shares of a Fund, but on or before January 31 of the following year, then the loss that the shareholder recognizes on the exchange will be reduced (or the gain increased) to the extent any sales charge paid on the exchanged shares reduces any sales charge the shareholder would have owed upon the purchase of the new shares in the absence of the exchange privilege. Instead, such sales charge will be treated as an amount paid for the new shares.

A loss realized on a sale or exchange of shares of a Fund will be disallowed if other substantially identical shares are acquired (whether through the automatic reinvestment of dividends or otherwise) within a 61-day period beginning 30 days before and ending 30 days after the date on which the shares are sold or exchanged. In such case, the basis of the shares acquired will be adjusted to reflect the disallowed loss.

A Fund is also generally required by law to report to each shareholder and to the IRS cost basis information for shares of the Fund acquired on or after January 1, 2012, and sold or redeemed after that date. This information includes the adjusted cost basis of the shares, the gross proceeds from disposition, and whether the gain or loss is long-term or short-term. The adjusted cost basis of shares will be based on the default cost basis reporting method selected by the Fund, unless a shareholder, before the sale or redemption, informs the Fund that it has selected a different IRS-accepted method offered by the Fund. These requirements, however, will not apply for investments through an IRA or other tax-advantaged account. Shareholders should consult their tax advisors to determine the best cost basis method for their tax situation, and to obtain more information about how these new cost basis reporting requirements apply to them. For shares of a Fund acquired before January 1, 2012, these new requirements will not apply, but the Fund will continue to report to the IRS the gross proceeds received by a shareholder from the sale or redemption of such shares.

Certain Funds may invest in derivative contracts such as options, futures contracts, forward contracts and swap agreements. The U.S. federal income tax treatment of a derivative contract may not be as favorable as a direct investment in the underlying security and may adversely affect the timing, character and amount of income the Fund realizes from its investments. As a result, a larger portion of the Fund's distributions may be treated as ordinary income rather than capital gains. In addition, section 1256 contracts held by a Fund at the end of each taxable year (and, for purposes of the 4% excise tax, certain other dates as prescribed under the Code) are generally "marked-to-market," and unrealized gains or losses are treated as though they were realized, which may increase the amount that must be distributed to meet distribution requirements and avoid the excise tax. In addition, the tax treatment of certain derivative contracts, such as swap agreements, is unsettled and may be subject to future legislation, regulation or administrative pronouncements issued by the IRS. If such future guidance limits the Fund's ability to use derivatives, the Fund may have to find other ways of achieving its investment objectives.

A provision added to the Code by the Dodd-Frank Wall Street Reform and Consumer Protection Act clarifies that certain swap agreements, including exchange-traded swap agreements, are treated as notional principal contracts rather than as section 1256 contracts. This can affect the type of income earned by such swap agreements. Although all of the income on a notional principal contract is ordinary income, only some of the income on a section 1256 contract is short-term capital gain, which is generally taxable at ordinary income rates. The rest is long-term capital gain, which may be taxable at more favorable rates than ordinary income. Recently proposed regulations interpret what types of swap agreements are to be treated as notional principal contracts rather than as section 1256 contracts. When finalized, these regulations could result in the Fund having to treat more of its income on swap agreements and more of the distributions made to shareholders as ordinary income and less as long-term capital gains.

Certain Funds may invest in zero coupon U.S. Treasury bonds and other debt securities that are issued at a discount or provide for deferred interest. Even though a Fund receives no actual interest payments on these securities, it will be deemed to receive income equal, generally, to a portion of the excess of the stated redemption price of the securities over their issue price ("original issue discount") each year that the securities are held. Since the original issue discount income earned by a Fund in a taxable year may not be represented by cash income, the Fund may have to dispose of securities, which it might otherwise have continued to hold, or borrow to generate cash in order to satisfy its distribution requirements. In addition, a Fund's investment in foreign currencies or foreign currency denominated or referenced debt securities, certain asset-backed securities and contingent payment and inflation-indexed debt instruments also may increase or accelerate the Fund's recognition of income, including the recognition of taxable income in excess of cash generated by such investments.

Ordinary income dividends paid to shareholders who are nonresident aliens or foreign entities (other than pass-through entities to the extent owned by U.S. persons) generally will be subject to a 30% U.S. withholding tax under existing provisions of the Code applicable to foreign individuals and entities unless a reduced rate of withholding or a withholding exemption is provided under applicable treaty law. Capital gain dividends paid to shareholders that are nonresident aliens or foreign entities, if and to the extent properly reported as capital gain dividends, generally will not be subject to a 30% withholding tax, unless certain exceptions apply. Dividends derived by a regulated investment company from short-term capital gains and qualified net interest income (including income from original issue discount and market discount) and paid to shareholders who are nonresident aliens or foreign entities, if and to the extent properly reported as "short-term capital gain dividends" or "interest-related dividends", respectively, generally

will not be subject to U.S. withholding tax. Where possible, the Funds intend to report such dividends as interest-related dividends or short-term capital gain dividends. However, depending on its circumstances, a Fund may report all, some or none of its potentially eligible dividends as interest-related or as short-term capital gain dividends, 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 foreign shareholder must comply with applicable certification requirements relating to its foreign 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 the Fund reports the payment as an interest-related or short-term capital gain dividend. Foreign shareholders should contact their intermediaries with respect to the application of these rules to their accounts. It is not possible to predict what portion, if any, of a Fund's distributions will be reported as interest-related dividends or short-term capital gain dividends under these rules.

Distributions to certain foreign shareholders by a Fund at least 50% of the assets of which are "U.S. real property interests" (as defined in the Code and Treasury regulations) at any time during the five-year period ending on the date of the distributions, to the extent the distributions are attributable to gains from sales or exchanges of U.S. real property interests (including shares in certain "U.S. real property holding corporations" such as certain REITs, although exceptions may apply if any class of stock of such a corporation is regularly traded on an established securities market and the Fund has held no more than 5% of such class of stock at any time during the five-year period ending on the date of the distributions), generally must be treated by such foreign shareholders as income effectively connected to a trade or business within the United States, which is generally subject to tax at the graduated rates applicable to U.S. shareholders, except for distributions to foreign shareholders that held no more than 5% of any class of stock of the Fund at any time during the previous one-year period ending on the date of the distributions. Such distributions may be subject to U.S. withholding tax and may require a foreign shareholder to file a U.S. federal income tax return. In addition, sales or redemptions of shares held by certain foreign shareholders in such a Fund generally will be subject to U.S. withholding tax and generally will require the foreign shareholder to file a U.S. federal income tax return, although exceptions may apply if more than 50% of the value of the Fund's shares are held by U.S. shareholders or the foreign shareholder selling or redeeming the shares has held no more than 5% of any class of stock of the Fund at any time during the five-year period ending on the date of the sale or redemption.

Provided that more than 50% of the value of a Fund's stock is held by U.S. shareholders, redemptions and other distributions made in the form of U.S. real property interests (including shares in certain "U.S. real property holding corporations", although exceptions may apply if any class of stock of such a corporation is regularly traded on an established securities market and the Fund has held no more than 5% of such class of stock at any time during the five-year period ending on the date of the distribution) generally will cause the Fund to recognize a portion of any unrecognized gain in the U.S. real property interests equal to the product of (i) the excess of fair market value of such U.S. real property interests over the Fund's adjusted bases in such interests and (ii) the greatest foreign ownership percentage of the Fund during the five-year period ending on the date of distribution.

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) certain foreign financial institutions and investment funds, and (ii) certain other foreign entities. To avoid withholding, foreign financial institutions and investment funds will generally either need to (a) collect and report to the IRS detailed information identifying their U.S. accounts and U.S. account holders, comply with due diligence procedures for identifying U.S. accounts and withhold tax on certain payments made to noncomplying foreign entities and account holders or (b) if an intergovernmental agreement is entered into and implementing legislation is adopted, comply with the agreement and legislation. Other foreign entities will generally either need to provide detailed information identifying each substantial U.S. owner or certify there are no such owners.

Under certain provisions of the Code, some shareholders may be subject to a 24% withholding tax on ordinary income dividends, capital gain dividends and redemption payments ("backup withholding"). Generally, shareholders subject to backup withholding will be non-corporate shareholders for whom no certified taxpayer identification number is on file with the Fund or who, to the Fund's knowledge, have furnished an incorrect number. When establishing an account, an investor must certify under penalty of perjury that such number is correct and that such investor is not otherwise subject to backup withholding. Backup withholding is not an additional tax. Any amount withheld generally may be allowed as a refund or a credit against a shareholder's U.S. federal income tax liability, provided that the required information is timely forwarded to the IRS.

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 in any single taxable year (or a greater amount in any

combination of taxable years), the shareholder must file a disclosure statement on IRS Form 8886 with the IRS. Direct shareholders of portfolio securities are in many cases exempted. 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.

Dividends and interest received and capital gains realized by a Fund may give rise to withholding and other taxes imposed by foreign countries. Tax conventions between certain foreign countries and the United States may reduce or eliminate such taxes. Shareholders of a Fund more than 50% by value of the assets of which at the close of a taxable year are foreign securities may be able to claim U.S. foreign tax credits with respect to such foreign taxes paid by the Fund, subject to certain requirements and limitations contained in the Code. For example, certain retirement accounts and certain tax-exempt organizations cannot claim foreign tax credits on investments in foreign securities held in a Fund. In addition, a foreign tax credit may be claimed with respect to withholding tax on payments with respect to a security only if the holder of the security meets certain holding period requirements. Both the shareholder and the Fund must meet these holding period requirements, and if a Fund fails to do so, it will not be able to "pass through" to shareholders the ability to claim a credit or a deduction for the related foreign taxes paid by the Fund. Further, to the extent that a Fund engages in securities lending with respect to a security paying income subject to foreign taxes, it may not be able to pass through to its shareholders the ability to take a foreign tax credit for those taxes. If a Fund satisfies the applicable requirements, such Fund will be eligible to file an election with the IRS pursuant to which shareholders of the Fund will be required to include their proportionate shares of such foreign taxes in their U.S. income tax returns as gross income, treat such proportionate shares as taxes paid by them, and deduct such proportionate shares in computing their taxable incomes or, alternatively, use them as foreign tax credits against their U.S. income taxes. No deductions for foreign taxes, however, may be claimed by noncorporate shareholders who do not itemize deductions. A shareholder that is a nonresident alien individual or a foreign corporation may be subject to U.S. withholding tax on the income resulting from a Fund's election described in this paragraph but may not be able to claim a credit or deduction against such U.S. tax for the foreign taxes treated as having been paid by such shareholder. A Fund will report annually to its shareholders the amount per share of such foreign taxes and other information needed to claim the foreign tax credit.

Certain transactions entered into by the Funds are subject to special tax rules of the Code that may, among other things, (a) affect the character of gains and losses realized, (b) disallow, suspend or otherwise limit the allowance of certain losses or deductions, and (c) accelerate the recognition of income without a corresponding receipt of cash (with which to make the necessary distributions to satisfy distribution requirements applicable to regulated investment companies). Operation of these rules could, therefore, affect the character, amount and timing of distributions to shareholders. Special tax rules also may require a Fund to mark-to-market certain types of positions in its portfolio (i.e., treat them as sold on the last day of the taxable year), and may result in the recognition of income without a corresponding receipt of cash. Funds engaging in transactions affected by these provisions intend to monitor their transactions, make appropriate tax elections and make appropriate entries in their books and records to lessen the effect of these tax rules and avoid any possible disqualification from the special treatment afforded regulated investment companies under the Code.

If a Fund invests in underlying funds, the Fund's realized losses on sales of shares of underlying funds may be indefinitely or permanently deferred as "wash sales." Distributions of short-term capital gains by underlying funds will be recognized as ordinary income by the Fund and would not be offset by the Fund's capital loss carryforwards, if any. Capital loss carryforwards of underlying funds, if any, would not offset net capital gains of the Fund. Each of these effects is caused by the Fund's expected investment in the underlying funds and may result in distributions to Fund shareholders being of higher magnitudes and less likely to qualify for lower capital gain tax rates than if the Fund were to invest otherwise.

A Fund may take certain positions through a wholly-owned (or majority-owned), foreign subsidiary (the "Subsidiary"). It is expected that the Subsidiary will be a "controlled foreign corporation" and that all of its net income will be "subpart F income" for U.S. federal income tax purposes. If that is the case, the Fund will be required to report all of the Subsidiary's net income as ordinary income regardless of whether that income would be treated differently (for example, as capital gain) at the Subsidiary level and regardless of whether that income is distributed to the Fund. (Previously taxed income will not, however, be taxable again when distributed.) If a net loss is realized by the Subsidiary in any taxable year, the loss will generally not be available to offset the Fund's other income. It is not expected that the Subsidiary will be subject to an entity-level federal tax.

If a Fund purchases shares of an investment company (or similar investment entity) organized under foreign law, the Fund will generally be treated as owning shares in a passive foreign investment company ("PFIC") for U.S. federal

income tax purposes. A Fund may be subject to U.S. federal income tax, and interest charges (at the rate applicable to tax underpayments) on tax liability treated as having been deferred with respect to certain distributions from such a company and on gain from the disposition of the shares of such a company (collectively referred to as "excess distributions"), even if such excess distributions are paid by the Fund as a dividend to its shareholders. However, a Fund may elect to "mark-to-market" at the end of each taxable year shares that it holds in PFICs. The election is made separately for each PFIC held and, once made, would be effective for all subsequent taxable years, unless revoked with consent from the IRS. Under this election, a Fund would recognize as ordinary income any increase in the value of its shares as of the close of the taxable year over their adjusted tax basis and as ordinary loss any decrease in such value, but only to the extent of previously recognized "mark-to-market" gains. By making the mark-to-market election, a Fund could avoid imposition of the interest charge with respect to excess distributions from PFICs, but in any particular year might be required to recognize income in excess of the distributions it received from PFICs.

If a Fund were to invest in a PFIC and elect to treat the PFIC as a "qualified electing fund" under the Code, in lieu of the foregoing requirements, the Fund would be required to include in income each year a portion of the ordinary earnings and net capital gains of the qualified electing fund, even if not distributed to the Fund, and such amounts would be subject to the 90% and excise tax distribution requirements described above. In order to make this election, the Fund would be required to obtain certain annual information from the PFICs in which it invests, which may be difficult or impossible to obtain.

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, 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 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.

# Municipal Funds

Each Municipal Fund intends to qualify to pay "exempt-interest dividends" as defined in Section 852(b)(5) of the Code. Under such section if, at the close of each quarter of a Fund's taxable year, at least 50% of the value of the Fund's total assets consists of obligations exempt from U.S. federal income tax ("tax-exempt obligations") under Section 103(a) of the Code (relating generally to obligations of a state or local governmental unit), the Fund shall be qualified to pay exempt-interest dividends to holders of all outstanding classes of its shares (together the "shareholders"). Exempt-interest dividends are dividends or any part thereof paid by a Fund that are attributable to interest on tax-exempt obligations and reported by the Fund as exempt-interest dividends. A Fund will allocate interest from tax-exempt obligations (as well as ordinary income, capital gains and tax preference items discussed below) among the Fund's shareholders according to a method (that it believes is consistent with the Commission rule permitting the issuance and sale of multiple classes of shares) that is based upon the gross income that is allocable to each class of shareholders during the taxable year, or such other method as the IRS may prescribe.

Exempt-interest dividends will be excludable from a shareholder's gross income for U.S. federal income tax purposes. Exempt-interest dividends are included, however, in determining the portion, if any, of a person's social security and railroad retirement benefits subject to U.S. federal income taxes. Interest on indebtedness incurred or continued to purchase or carry shares of a regulated investment company paying exempt-interest dividends, such as the Fund, will not be deductible by the investor for U.S. federal income tax purposes to the extent attributable to exempt-interest dividends. Shareholders are advised to consult their tax advisors with respect to whether exempt-interest dividends retain the exclusion under Code Section 103(a) if a shareholder would be treated as a "substantial user" or "related person" under Code Section 147(a) with respect to property financed with the proceeds of an issue of PABs, if any, held by a Fund.

Distributions in excess of a Fund's earnings and profits will first reduce the adjusted tax basis of a holder's shares and, after such adjusted tax basis is reduced to zero, will constitute capital gains to such holder (assuming the shares are held as a capital asset). Any loss upon the sale or exchange of Fund shares held for six months or less will be disallowed to the extent of any exempt-interest dividends received by the shareholder. In addition, any such loss that is not disallowed under the rule stated above will be treated as long-term capital loss to the extent of any capital gain dividends received by the shareholder.

All or a portion of a Fund's gains from the sale or redemption of tax-exempt obligations purchased at a market discount will be treated as ordinary income rather than capital gain. This rule may increase the amount of ordinary income dividends received by shareholders.

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. Absent an election by the Fund to 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.

The Code subjects interest received on certain otherwise tax-exempt securities to a federal alternative minimum tax. The alternative minimum tax applies to interest received on certain "PABs" issued after August 7, 1986. PABs are bonds that, although tax-exempt, are used for purposes other than those generally performed by governmental units and that benefit non-governmental entities (e.g., bonds used for industrial development or housing purposes). Income received on such bonds is classified as an item of "tax preference," which could subject certain investors in such bonds, including shareholders of a Fund, to a federal alternative minimum tax. A Fund will purchase such "PABs" and will report to shareholders after the close of the calendar year-end the portion of the Fund's dividends declared during the year that constitute an item of tax preference for alternative minimum tax purposes.

Each Municipal Fund may engage in interest rate swap transactions. The U.S. federal income tax rules governing the taxation of interest rate swaps are not entirely clear and may require a Fund to treat payments received under such arrangements as ordinary income and to amortize payments made under certain circumstances. Because payments received by a Fund in connection with swap transactions will be taxable rather than tax-exempt and because swap payments made by a Fund will offset both taxable and tax exempt gross income proportionately, they may result in increased taxable distributions to shareholders.

Please see Part I of your Fund's SAI for certain state tax information relevant to an investment in BlackRock California Municipal Opportunities Fund, BlackRock New Jersey Municipal Bond Fund, BlackRock New York Municipal Opportunities Fund and BlackRock Pennsylvania Municipal Bond Fund, as well as information on economic conditions within each applicable state.

In the case of a Feeder Fund, such Fund is entitled to look to the underlying assets of the Master Portfolio in which it has invested for purposes of satisfying various qualification requirements of the Code applicable to regulated investment companies. Each Master Portfolio is classified either as a partnership or a separate disregarded entity (depending on the particular Master Portfolio) for U.S. federal income tax purposes. If applicable tax provisions were to change the classification of a Master Portfolio, then the Board of Directors of a Feeder Fund would determine, in its discretion, the appropriate course of action for the Feeder Fund. One possible course of action would be to withdraw the Feeder Fund's investments from the Master Portfolio and to retain an investment manager to manage the Feeder Fund's assets in accordance with the investment policies applicable to the Feeder Fund.

Ordinary income and capital gain dividends may also be subject to state and local taxes. Certain states exempt from state income taxation dividends paid by regulated investment companies that are derived from interest on U.S. government obligations. State law varies as to whether dividend income attributable to U.S. government obligations is exempt from state income tax.

Shareholders of each Fund are urged to consult their tax advisers regarding specific questions as to federal, foreign, state or local taxes with respect to their Fund. Foreign investors should consider applicable foreign taxes in their evaluation of an investment in a Fund.

The foregoing general discussion of U.S. federal income tax consequences is based on the Code and the regulations issued thereunder as in effect on the date of this SAI. Future legislative or administrative changes or court decisions may significantly change the conclusions expressed in this discussion, and any such changes or decisions may have a retroactive effect.

# **PERFORMANCE DATA**

From time to time a Fund may include its average annual total return and other total return data, and, if applicable, yield and tax-equivalent yield in advertisements or information furnished to present or prospective shareholders. Total return, yield and tax-equivalent yield each is based on a Fund's historical performance and is not intended to indicate future performance. Average annual total return is determined separately for each class of shares in accordance with a formula specified by the Commission.

Quotations of average annual total return, before tax, for the specified periods are computed by finding the average annual compounded rates of return (based on net investment income and any realized and unrealized capital gains or losses on portfolio investments over such periods) that would equate the initial amount invested to the redeemable value of such investment at the end of each period. Average annual total return before taxes is computed assuming all dividends are reinvested and taking into account all applicable recurring and nonrecurring expenses, including the maximum sales charge, in the case of front-end load shares, and the CDSC that would be applicable to a complete redemption of the investment at the end of the specified period in the case of CDSC shares, but does not take into account taxes payable on dividends or on redemption.

Quotations of average annual total return, after taxes, on dividends for the specified periods are computed by finding the average annual compounded rates of return that would equate the initial amount invested to the ending value of such investment at the end of each period assuming payment of taxes on dividends received during such period. Average annual total return after taxes on dividends is computed assuming all dividends, less the taxes due on such dividends, are reinvested and taking into account all applicable recurring and nonrecurring expenses, including the maximum sales charge, in the case of front-end load shares and the CDSC that would be applicable to a complete redemption of the investment at the end of the specified period in the case of CDSC shares. The taxes due on dividends are calculated by applying to each dividend the highest applicable marginal U.S. federal individual income tax rates in effect on the reinvestment date for that dividend. The rates used correspond to the tax character (including eligibility for the maximum 20% tax rate applicable to qualified dividend income) of each dividend. The taxable amount and tax character of each dividend are specified by each Fund on the dividend declaration date, but may be adjusted to reflect subsequent recharacterizations of distributions. The applicable tax rates may vary over the measurement period. The effects of state and local taxes are not reflected. Applicable tax credits, such as foreign credits, are taken into account according to U.S. federal tax law. The ending value is determined assuming complete redemption at the end of the applicable periods with no tax consequences associated with such redemption.

Quotations of average annual total return, after taxes, on both dividends and redemption for the specified periods are computed by finding the average annual compounded rates of return that would equate the initial amount invested to the ending value of such investment at the end of each period assuming payment of taxes on dividends received during such period as well as on complete redemption. Average annual total return after taxes on distributions and redemption is computed assuming all dividends, less the taxes due on such dividends, are reinvested and taking into account all applicable recurring and nonrecurring expenses, including the maximum sales charge in the case of front-end load shares and the CDSC that would be applicable to a complete redemption of the investment at the end of the specified period in the case of CDSC shares and assuming, for all classes of shares, complete redemption and payment of taxes due on such redemption. The ending value is determined assuming complete redemption at the end of the applicable periods, subtracting capital gains taxes resulting from the redemption and adding the presumed tax benefit from capital losses resulting from redemption. The taxes due on dividends and on the deemed redemption are calculated by applying the highest applicable marginal U.S. federal individual income tax rates in effect on the reinvestment and/or the redemption date. The rates used correspond to the tax character (including eligibility for the maximum 20% tax rate applicable to qualified dividend income) of each component of each dividend and/or the redemption payment. The applicable tax rates may vary over the measurement period. The effects of state and local taxes are not reflected. Applicable tax credits, such as foreign tax credits, are taken into account according to federal law.

A Fund also may quote annual, average annual and annualized total return and aggregate total return performance data, both as a percentage and as a dollar amount based on a hypothetical investment of \$1,000 or some other amount, for various periods other than those noted in Part I of each Fund's SAI. Such data will be computed as described above, except that (1) as required by the periods of the quotations, actual annual, annualized or aggregate data, rather than average annual data, may be quoted and (2) the maximum applicable sales charges will not be included with respect to annual or annualized rates of return calculations. Aside from the impact on the performance data calculations of including or excluding the maximum applicable sales charges, actual annual or annualized total return data generally will be lower than average annual total return data since the average rates of return reflect compounding of return; aggregate total return data generally will be higher than average annual total return data since the aggregate rates of return reflect compounding over a longer period of time.

Yield quotations will be computed based on a 30-day period by dividing (a) the net income based on the yield of each security earned during the period by (b) the average daily number of shares outstanding during the period that were entitled to receive dividends multiplied by the maximum offering price per share on the last day of the period. Tax equivalent yield quotations will be computed by dividing (a) the part of a Fund's yield that is tax-exempt by (b) one minus a stated tax rate and adding the result to that part, if any, of the Fund's yield that is not tax-exempt.

A Fund's total return will vary depending on market conditions, the securities comprising a Fund's portfolio, a Fund's operating expenses and the amount of realized and unrealized net capital gains or losses during the period. The value of an investment in a Fund will fluctuate and an investor's shares, when redeemed, may be worth more or less than their original cost.

In order to reflect the reduced sales charges in the case of front-end load shares or the waiver of the CDSC in the case of CDSC shares applicable to certain investors, as described under "Purchase of Shares" and "Redemption of Shares," respectively, the total return data quoted by a Fund in advertisements directed to such investors may take into account the reduced, and not the maximum, sales charge or may take into account the CDSC waiver and, therefore, may reflect greater total return since, due to the reduced sales charges or the waiver of sales charges, a lower amount of expenses is deducted.

On occasion, a Fund may compare its performance to, among other things, the Fund's benchmark index indicated in the Prospectus, the Value Line Composite Index, the Dow Jones Industrial Average, or to other published indices, or to performance data published by Lipper Inc., Morningstar, Inc. ("Morningstar"), Money Magazine, U.S. News & World Report, BusinessWeek, Forbes Magazine, Fortune Magazine or other industry publications. When comparing its performance to a market index, a Fund may refer to various statistical measures derived from the historical performance of a Fund and the index, such as standard deviation and beta. As with other performance data, performance comparisons should not be considered indicative of a Fund's relative performance for any future period. In addition, from time to time a Fund may include the Fund's Morningstar risk-adjusted performance ratings assigned by Morningstar in advertising or supplemental sales literature. From time to time a Fund may quote in advertisements or other materials other applicable measures of Fund performance and may also make reference to awards that may be given to the Manager. Certain Funds may also compare their performance to composite indices developed by Fund management.

A Fund may provide information designed to help investors understand how the Fund is seeking to achieve its investment objectives. This may include information about past, current or possible economic, market, political or other conditions, descriptive information or general principles of investing such as asset allocation, diversification and risk tolerance, discussion of a Fund's portfolio composition, investment philosophy, strategy or investment techniques, comparisons of the Fund's performance or portfolio composition to that of other funds or types of investments, indices relevant to the comparison being made, or to a hypothetical or model portfolio. A Fund may also quote various measures of volatility and benchmark correlation in advertising and other materials, and may compare these measures to those of other funds or types of investments.

# PROXY VOTING POLICIES AND PROCEDURES

The Board of Directors of the Funds has delegated the voting of proxies for the Funds' securities to the Manager pursuant to the Manager's proxy voting guidelines and procedures (the "BlackRock Proxy Voting Guidelines"). Under the BlackRock Proxy Voting Guidelines, the Manager will vote proxies related to Fund securities in the best interests of the Fund and its stockholders. From time to time, a vote may present a conflict between the interests of the Fund's stockholders, on the one hand, and those of the Manager, or any affiliated person of the Fund or the Manager, on the other. The Manager maintains policies and procedures that are designed to prevent undue influence on the Manager's proxy voting activity that might stem from any relationship between the issuer of a proxy (or any dissident shareholder) and the Manager, the Manager's affiliates, a Fund or a Fund's affiliates. Most conflicts are managed through a structural separation of the Manager's Corporate Governance Group from the Manager's employees with sales and client responsibilities. In addition, the Manager maintains procedures to ensure that all engagements with corporate issuers or dissident shareholders are managed consistently and without regard to the Manager's relationship with the issuer of the proxy or dissident shareholder. In certain instances, the Manager 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. Copies of the Funds' Proxy Voting Policy and BlackRock's Global Principles are attached as Appendix B.

Information on how each Fund voted proxies relating to portfolio securities during the most recent 12-month period ended June 30 is available without charge, (i) at www.blackrock.com and (ii) on the Commission's website at http://www.sec.gov.

#### **GENERAL INFORMATION**

## **Description of Shares**

Shareholders of a Fund are entitled to one vote for each full share held and fractional votes for fractional shares held in the election of Directors and generally on other matters submitted to the vote of shareholders of the Fund. Shareholders of a class that bears distribution and/or service expenses have exclusive voting rights with respect to matters relating to such distribution and service expenditures. Voting rights are not cumulative, so that the holders of more than 50% of the shares voting in the election of Directors can, if they choose to do so, elect all the Directors of a Fund, in which event the holders of the remaining shares would be unable to elect any person as a Director.

No Fund intends to hold annual meetings of shareholders in any year in which the Investment Company Act does not require shareholders to act upon any of the following matters: (i) election of Directors; (ii) approval of a management agreement; (iii) approval of a distribution agreement; and (iv) ratification of selection of independent accountants. Shares issued are fully paid and non-assessable and have no preemptive rights. Redemption and conversion rights are discussed elsewhere herein and in each Fund's Prospectus. Each share of each class of Common Stock is entitled to participate equally in dividends and distributions declared by a Fund and in the net assets of the Fund upon liquidation or dissolution after satisfaction of outstanding liabilities.

For Funds organized as Maryland corporations, the by-laws of the Fund require that a special meeting of shareholders be held upon the written request of a minimum percentage of the outstanding shares of the Fund entitled to vote at such meeting, if they comply with applicable Maryland law.

Certain of the Funds are organized as "Massachusetts business trusts." Under Massachusetts law, shareholders of such a trust may, under certain circumstances, be held personally liable as partners for its obligations. However, the Declaration of Trust establishing a trust, a copy of which for each applicable Fund, together with all amendments thereto (the "Declaration of Trust"), is on file in the office of the Secretary of the Commonwealth of Massachusetts, contains an express disclaimer of shareholder liability for acts or obligations of the trust and provides for indemnification and reimbursement of expenses out of the trust property for any shareholder held personally liable for the obligations of the trust. The Declaration of Trust also provides that a trust may maintain appropriate insurance (for example, fidelity bond and errors and omissions insurance) for the protection of the trust, its shareholders, trustees, officers, employees and agents covering possible tort and other liabilities. Thus, the risk of a shareholder incurring financial loss on account of shareholder liability is limited to circumstances in which both inadequate insurance existed and the trust itself was unable to meet its obligations.

Certain Funds are organized as Delaware statutory trusts.

#### **Additional Information**

Under a separate agreement, BlackRock has granted certain Funds the right to use the "BlackRock" name and has reserved the right to (i) withdraw its consent to the use of such name by a Fund if the Fund ceases to retain BlackRock Advisors, LLC or BlackRock Fund Advisors, as applicable, as investment adviser and (ii) to grant the use of such name to any other company.

See "Additional Information — Principal Shareholders" in Part I of each Fund's SAI for information on the holders of 5% or more of any class of shares of your Fund.

#### **APPENDIX A**

# **Description of Bond Ratings**

A rating is generally assigned to a fixed-income security at the time of issuance by a credit rating agency designated as a nationally recognized statistical rating organization ("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, BlackRock Advisors, LLC, BlackRock Fund Advisors or their respective affiliates ("BlackRock") 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), BlackRock 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, BlackRock 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, the 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, the 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 the 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 BlackRock'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.

# A Description of Moody's Investors Service, Inc.'s ("Moody's") Global Rating Scales

Ratings assigned on Moody's global long-term and short-term rating scales are forward-looking opinions of the relative credit risks of financial obligations issued by non-financial corporates, financial institutions, structured finance vehicles, project finance vehicles, and public sector entities. Moody's defines credit risk as the risk that an entity may not meet its contractual financial obligations as they come due and any estimated financial loss in the event of default or impairment. The contractual financial obligations addressed by Moody's ratings are those that call for, without regard to enforceability, the payment of an ascertainable amount, which may vary based upon standard sources of variation (e.g., floating interest rates), by an ascertainable date. Moody's rating addresses the issuer's ability to obtain cash sufficient to service the obligation, and its willingness to pay. Moody's ratings do not address non-standard sources of variation in the amount of the principal obligation (e.g., equity indexed), absent an express

statement to the contrary in a press release accompanying an initial rating. Long-term ratings are assigned to issuers or obligations with an original maturity of one year or more and reflect both on the likelihood of a default or impairment on contractual financial obligations and the expected financial loss suffered in the event of default or impairment. Short-term ratings are assigned for obligations with an original maturity of thirteen months or less and reflect both on the likelihood of a default or impairment on contractual financial obligations and the expected financial loss suffered in the event of default or impairment. Moody's issues ratings at the issuer level and instrument level on both the long-term scale and the short-term scale. Typically, ratings are made publicly available although private and unpublished ratings may also be assigned.

Moody's differentiates structured finance ratings from fundamental ratings (i.e., ratings on nonfinancial corporate, financial institution, and public sector entities) on the global long-term scale by adding (sf) to all structured finance ratings. The addition of (sf) to structured finance ratings should eliminate any presumption that such ratings and fundamental ratings at the same letter grade level will behave the same. The (sf) indicator for structured finance security ratings indicates that otherwise similarly rated structured finance and fundamental securities may have different risk characteristics. Through its current methodologies, however, Moody's aspires to achieve broad expected equivalence in structured finance and fundamental rating performance when measured over a long period of time.

# **Description of Moody's Global Long-Term Rating Scale**

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

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

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

Baa Obligations rated Baa are judged to be medium-grade and subject to moderate credit risk and as

such may possess certain speculative characteristics.

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

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

Caa Obligations rated Caa are judged to be speculative of poor standing and are subject to very high

credit risk.

Ca Obligations rated Ca are highly speculative and are likely in, or very near, default, with some

prospect of recovery of principal and interest.

C Obligations rated C are the lowest rated and are typically in default, with little prospect for recovery

of principal or interest.

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

By their terms, hybrid securities allow for the omission of scheduled dividends, interest, or principal payments, which can potentially result in impairment if such an omission occurs. Hybrid securities may also be subject to contractually allowable write-downs of principal that could result in impairment. Together with the hybrid indicator, the long-term obligation rating assigned to a hybrid security is an expression of the relative credit risk associated with that security.

# **Description of Moody's Global Short-Term Rating Scale**

P-1 Ratings of Prime-1 reflect a superior ability to repay short-term obligations.

P-2 Ratings of Prime-2 reflect a strong ability to repay short-term obligations.

P-3 Ratings of Prime-3 reflect an acceptable ability to repay short-term obligations.

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

categories.

## Description of Moody's U.S. Municipal Short-Term Debt and Demand Obligation Ratings

## **Description of Moody's Short-Term Obligation Ratings**

Moody's uses the global short-term Prime rating scale for commercial paper issued by U.S. municipalities and nonprofits. These commercial paper programs may be backed by external letters of credit or liquidity facilities, or by an issuer's self-liquidity.

For other short-term municipal obligations, Moody's uses one of two other short-term rating scales, the Municipal Investment Grade ("MIG") and Variable Municipal Investment Grade ("VMIG") scales discussed below.

Moody's uses the MIG scale for U.S. municipal cash flow notes, bond anticipation notes and certain other short-term obligations, which typically mature in three years or less. Under certain circumstances, Moody's uses the MIG scale for bond anticipation notes with maturities of up to five years.

# MIG Scale

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.

# **Description of Moody's Demand Obligation Ratings**

In the case of variable rate demand obligations ("VRDOs"), a two-component rating is assigned. The components are a long-term rating and a short-term demand obligation rating. The long-term rating addresses the issuer's ability to meet scheduled principal and interest payments. The short-term demand obligation rating addresses the ability of the issuer or the liquidity provider to make payments associated with the purchase-price-upon-demand feature ("demand feature") of the VRDO. The short-term demand obligation rating uses the VMIG scale. VMIG ratings with liquidity support use as an input the short-term Counterparty Risk Assessment of the support provider, or the long-term rating of the underlying obligor in the absence of third party liquidity support. Transitions of VMIG ratings of demand obligations with conditional liquidity support differ from transitions on the Prime scale to reflect the risk that external liquidity support will terminate if the issuer's long-term rating drops below investment grade.

Moody's typically assigns the VMIG short-term demand obligation rating if the frequency of the demand feature is less than every three years. If the frequency of the demand feature is less than three years but the purchase price is payable only with remarketing proceeds, the short-term demand obligation rating is "NR".

# VMIG Scale

VMIG 1	This designation denotes superior credit quality. Excellent protection is afforded by the superior short-term credit strength of the liquidity provider and structural and legal protections that ensure the timely payment of purchase price upon demand.
VMIG 2	This designation denotes strong credit quality. Good protection is afforded by the strong short-term credit strength of the liquidity provider and structural and legal protections that ensure the timely payment of purchase price upon demand.
VMIG 3	This designation denotes acceptable credit quality. Adequate protection is afforded by the satisfactory short-term credit strength of the liquidity provider and structural and legal protections that ensure the timely payment of purchase price upon demand.
SG	This designation denotes speculative-grade credit quality. Demand features rated in this category may be supported by a liquidity provider that does not have a sufficiently strong short-term rating or may lack the structural or legal protections necessary to ensure the timely payment of purchase price upon demand.

## Description of S&P Global Ratings ("S&P"), a Division of S&P Global Inc., Issue Credit Ratings

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

Issue credit ratings can be either long-term or short-term. Short-term issue credit ratings are generally assigned to those obligations considered short-term in the relevant market, typically with an original maturity of no more than 365 days. Short-term issue credit ratings are also used to indicate the creditworthiness of an obligor with respect to put features on long-term obligations. S&P would typically assign a long-term issue credit rating to an obligation with an original maturity of greater than 365 days. However, the ratings S&P assigns to certain instruments may diverge from these guidelines based on market practices. Medium-term notes are assigned long-term ratings.

Issue credit ratings are based, in varying degrees, on S&P's analysis of the following considerations:

- The likelihood of payment—the capacity and willingness of the obligor to meet its financial commitments on an obligation in accordance with the terms of the obligation;
- The nature and provisions of the financial obligation, and the promise S&P imputes; and
- The protection afforded by, and relative position of, the financial obligation in the event of a bankruptcy, reorganization, or other arrangement under the laws of bankruptcy and other laws affecting creditors' rights.

An issue rating is an assessment of default risk but may incorporate an assessment of relative seniority or ultimate recovery in the event of default. Junior obligations are typically rated lower than senior obligations, to reflect lower priority in bankruptcy, as noted above. (Such differentiation may apply when an entity has both senior and subordinated obligations, secured and unsecured obligations, or operating company and holding company obligations.)

# Long-Term Issue Credit Ratings\*

AAA	An obligation rated 'AAA' has the highest rating assigned by S&P. The obligor's capacity to meet its financial commitments on the obligation is extremely strong.
AA	An obligation rated 'AA' differs from the highest-rated obligations only to a small degree. The obligor's capacity to meet its financial commitments on the obligation is very strong.
A	An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitments on the obligation is still strong.
BBB	An obligation rated 'BBB' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to weaken the obligor's capacity to meet its financial commitments on the obligation.
BB, B, CCC, CC, and C	Obligations rated 'BB', 'B', 'CCC', 'CC', and 'C' are regarded as having significant speculative characteristics. 'BB' indicates the least degree of speculation and 'C' the highest. While such obligations will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposure to adverse conditions.
ВВ	An obligation rated 'BB' is less vulnerable to nonpayment than other speculative issues. However, it faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions that could lead to the obligor's inadequate capacity to meet its financial commitments on the obligation.
В	An obligation rated 'B' is more vulnerable to nonpayment than obligations rated 'BB', but the obligor currently has the capacity to meet its financial commitments on the obligation. Adverse business,

financial commitments on the obligation.

financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its

- An obligation rated 'CCC' is currently vulnerable to nonpayment and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitments on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitments on the obligation.
- 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 expects default to be a virtual certainty, regardless of the anticipated time to default.
- C An obligation rated 'C' is currently highly vulnerable to nonpayment, and the obligation is expected to have lower relative seniority or lower ultimate recovery compared with obligations that are rated higher.
- 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 believes that such payments will be made within five business days in the absence of a stated grace period or within the earlier of the stated grace period or 30 calendar days. The 'D' rating also will be used upon the filing of a bankruptcy petition or the taking of similar action and where default on an obligation is a virtual certainty, for example due to automatic stay provisions. A rating on an obligation is lowered to 'D' if it is subject to a distressed debt restructuring.

# **Short-Term Issue Credit Ratings**

- A-1 A short-term obligation rated 'A-1' is rated in the highest category by S&P. The obligor's capacity to meet its financial commitments on the obligation is strong. Within this category, certain obligations are designated with a plus sign (+). This indicates that the obligor's capacity to meet its financial commitments on these obligations is extremely strong.
- A-2 A short-term obligation rated 'A-2' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rating categories. However, the obligor's capacity to meet its financial commitments on the obligation is satisfactory.
- A-3 A short-term obligation rated 'A-3' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to weaken an obligor's capacity to meet its financial commitments on the obligation.
- B A short-term obligation rated 'B' is regarded as vulnerable and has significant speculative characteristics. The obligor currently has the capacity to meet its financial commitments; however, it faces major ongoing uncertainties that could lead to the obligor's inadequate capacity to meet its financial commitments.
- C A short-term obligation rated 'C' is currently vulnerable to nonpayment and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitments on the obligation.
- 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 believes that such payments will be made within any stated grace period. However, any stated grace period longer than five business days will be treated as five business days. The 'D' rating also will be used upon the filing of a bankruptcy petition or the taking of a similar action and where default on an obligation is a virtual certainty, for example due to automatic stay provisions. A rating on an obligation is lowered to 'D' if it is subject to a distressed debt restructuring.

# **Description of S&P's Municipal Short-Term Note Ratings**

An S&P U.S. municipal note rating reflects S&P's opinion about the liquidity factors and market access risks unique to the notes. Notes due in three years or less will likely receive a note rating. Notes with an original maturity of more than three years will most likely receive a long-term debt rating. In determining which type of rating, if any, to assign, S&P's analysis will review the following considerations:

<sup>\*</sup>Ratings from 'AA' to 'CCC' may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the rating categories.

- Amortization schedule—the larger the final maturity relative to other maturities, the more likely it will be treated as a note; and
- Source of payment—the more dependent the issue is on the market for its refinancing, the more likely it will be treated as a note.

S&P's municipal short-term note rating symbols are as follows:

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

- SP-2 Satisfactory capacity to pay principal and interest, with some vulnerability to adverse financial and economic changes over the term of the notes.
- SP-3 Speculative capacity to pay principal and interest.
- D 'D' is assigned upon failure to pay the note when due, completion of a distressed debt restructuring, or the filing of a bankruptcy petition or the taking of similar action and where default on an obligation is a virtual certainty, for example due to automatic stay provisions.

# Description of Fitch Ratings' ("Fitch's") Credit Ratings Scales

Fitch Ratings publishes opinions on a variety of scales. The most common of these are credit ratings, but the agency also publishes ratings, scores and other relative opinions relating to financial or operational strength. For example, Fitch also provides specialized ratings of servicers of residential and commercial mortgages, asset managers and funds. In each case, users should refer to the definitions of each individual scale for guidance on the dimensions of risk covered in each assessment.

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

The terms "investment grade" and "speculative grade" have established themselves over time as shorthand to describe the categories 'AAA' to 'BBB' (investment grade) and 'BB' to 'D' (speculative grade). The terms investment grade and speculative grade are market conventions and do not imply any recommendation or endorsement of a specific security for investment purposes. Investment grade categories indicate relatively low to moderate credit risk, while ratings in the speculative categories either signal a higher level of credit risk or that a default has already occurred.

For the convenience of investors, Fitch may also include issues relating to a rated issuer that are not and have not been rated on its web page. Such issues are also denoted as 'NR'.

Credit ratings express risk in relative rank order, which is to say they are ordinal measures of credit risk and are not predictive of a specific frequency of default or loss. For information about the historical performance of ratings please refer to Fitch's Ratings Transition and Default studies which detail the historical default rates and their meaning. The European Securities and Markets Authority also maintains a central repository of historical default rates.

Fitch's credit ratings do not directly address any risk other than credit risk. In particular, ratings do not deal with the risk of a market value loss on a rated security due to changes in interest rates, liquidity and other market considerations. However, in terms of payment obligation on the rated liability, market risk may be considered to the extent that it influences the ability of an issuer to pay upon a commitment.

Ratings nonetheless do not reflect market risk to the extent that they influence the size or other conditionality of the obligation to pay upon a commitment (for example, in the case of index-linked bonds).

In the default components of ratings assigned to individual obligations or instruments, the agency typically rates to the likelihood of non-payment or default in accordance with the terms of that instrument's documentation. In limited cases, Fitch may include additional considerations (i.e. rate to a higher or lower standard than that implied in the obligation's documentation).

The primary credit rating scales can be used to provide a rating of privately issued obligations or certain note issuance programs or for private ratings. In this case the rating is not published, but only provided to the issuer or its agents in the form of a rating letter.

The primary credit rating scales may also be used to provide ratings for a more narrow scope, including interest strips and return of principal or in other forms of opinions such as credit opinions or rating assessment services. Credit opinions are either a notch- or category-specific view using the primary rating scale and omit one or more characteristics of a full rating or meet them to a different standard. Credit opinions will be indicated using a lower case letter symbol combined with either an '\*' (e.g. 'bbb+\*') or (cat) suffix to denote the opinion status. Credit opinions will be point-in-time typically but may be monitored if the analytical group believes information will be sufficiently available. Rating assessment services are a notch-specific view using the primary rating scale of how an existing or potential rating may be changed by a given set of hypothetical circumstances. While credit opinions and rating assessment services are point-in-time and are not monitored, they may have a directional watch or outlook assigned, which can signify the trajectory of the credit profile.

# **Description of Fitch's Long-Term Corporate Finance Obligations Rating Scales**

Ratings of individual securities or financial obligations of a corporate issuer address relative vulnerability to default on an ordinal scale. In addition, for financial obligations in corporate finance, a measure of recovery given default on that liability is also included in the rating assessment. This notably applies to covered bonds ratings, which incorporate both an indication of the probability of default and of the recovery given a default of this debt instrument. On the contrary, Ratings of debtor-in-possession ("DIP") obligations incorporate the expectation of full repayment.

The relationship between the issuer scale and obligation scale assumes a generic historical average recovery. Individual obligations can be assigned ratings higher, lower, or the same as that entity's issuer rating or issuer default rating ("IDR"), based on their relative ranking, relative vulnerability to default or based on explicit Recovery Ratings.

As a result, individual obligations of entities, such as corporations, are assigned ratings higher, lower, or the same as that entity's issuer rating or IDR, except DIP obligation ratings that are not based off an IDR. At the lower end of the ratings scale, Fitch publishes explicit Recovery Ratings in many cases to complement issuer and obligation ratings.

Fitch long-term obligations rating scales are as follows:

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.
В	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.
С	Exceptionally High Levels of Credit Risk. 'C' indicates exceptionally high levels of credit risk.

Within rating categories, Fitch may use modifiers. The modifiers "+" or "-" may be appended to a rating to denote relative status within major rating categories.

For example, the rating category 'AA' has three notch-specific rating levels ('AA+'; 'AA-'; each a rating level). Such suffixes are not added to 'AAA' ratings and ratings below the 'CCC' category. For the short-term rating category of 'F1', a '+' may be appended.

# Description of Fitch's Short-Term Ratings Assigned to Issuers and Obligations

A short-term issuer or obligation rating is based in all cases on the short-term vulnerability to default of the rated entity and relates to the capacity to meet financial obligations in accordance with the documentation governing the relevant obligation. Short-term deposit ratings may be adjusted for loss severity. Short-term ratings are assigned to obligations whose initial maturity is viewed as "short term" based on market convention. Typically, this means up to 13 months for corporate, sovereign, and structured obligations and up to 36 months for obligations in U.S. public finance markets.

Fitch short-term ratings are as follows:

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.
В	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.
С	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.

#### **APPENDIX B**

#### **BlackRock**

# 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

Last Review Date: August 25, 2023
Applies to the following types of Funds registered under the 1940 Act:
□ Open-End Mutual Funds (including money market funds)
☐ Money Market Funds
☐ Closed-End Funds
☐ Other

# **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** 

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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

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.

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**

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,<sup>2</sup> 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:

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.

- Establishing an appropriate corporate governance structure
- Supporting and overseeing management in setting long-term strategic goals and applicable measures of valuecreation 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
- Overseeing the financial resilience of the company, the integrity of financial statements, and the robustness of a company's Enterprise Risk Management<sup>3</sup> 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 a 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

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).

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.

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.<sup>4</sup> 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.

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.

#### **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.

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. 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. 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

<sup>&</sup>lt;sup>5</sup> 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.

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.

scenario in which global warming is limited to well below 2°C, considering global ambitions to achieve a limit of 1.5°C.<sup>7</sup> 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.<sup>8</sup> Yet the path ahead is deeply uncertain and uneven, with different parts of the economy moving at different speeds.<sup>9</sup> 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 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

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.

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.

<sup>&</sup>lt;sup>9</sup> BlackRock, "Managing the net-zero transition", February 2022.

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. Ocmpanies 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.

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.

<sup>&</sup>lt;sup>10</sup> Corporate form refers to the legal structure by which a business is organized.

#### 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.<sup>11</sup> When BlackRock votes on behalf of our clients, we carefully 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.

To learn more visit https://www.blackrock.com/corporate/about-us/investment-stewardship/blackrock-voting-choice.

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 or directors 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:

- o public companies that include BlackRock employees on their boards of directors
- o public companies of which a BlackRock, Inc. board member serves as a senior executive or a member of the board of directors
- o public companies that are the subject of certain transactions involving BlackRock Funds
- o public companies that are joint venture partners with BlackRock, and
- o 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). 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.

### **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.

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).

### 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. 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.

<sup>&</sup>lt;sup>13</sup> The proxy year runs from July 1 to June 30 of the proceeding calendar year.

#### **APPENDIX C**

### 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 September 14, 2023 with respect to the City and June 9, 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 8.3 million as of July 2022, 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 above, 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 2022 Financial Plan"), which was consistent with the City's capital and expense budgets as adopted for the 2023 fiscal year. Subsequently, the June 2022 Financial Plan was modified during the 2022 fiscal year. On June 30, 2023, the City submitted to the Control Board the financial plan for the 2024 through 2027 fiscal years, which is consistent with the City's capital and expense budgets as adopted for the 2024 fiscal year, and a further modification to the June 2022 Financial Plan with respect to the 2023 fiscal year (together, 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 \$5.08 billion, \$6.84 billion and \$7.90 billion in fiscal years 2025, 2026 and 2027, respectively. The June 2022 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 2022 Financial Plan, increases in projected net revenues of \$5.99 billion, \$3.25 billion, \$3.07 billion and \$3.18 billion in fiscal years 2023 through 2026, respectively. Changes in projected revenues include: (i) increases in real property tax revenues of \$205 million, \$691 million, \$219 million and \$476 million in fiscal years 2023 through 2026, respectively; (ii) increases in personal income tax revenues of \$1.92 billion, \$99 million, \$663 million and \$853 million in fiscal years 2023 through 2026, respectively; (iii) increases in business tax revenues of \$1.56 billion, \$1.15 billion, \$935 million and \$539 million in fiscal years 2023 through 2026, respectively; (iv) increases in sales tax revenues of \$921 million, \$801 million, \$897 million and \$951 million in fiscal years 2023 through 2026, respectively; (v) decreases in real estate transaction tax revenues of \$192 million, \$348 million, \$348 million and \$310 million in fiscal years 2023 through 2026, respectively; (vi) decreases in State School Tax Relief Program ("STAR Program") revenues of \$6 million in each of

fiscal years 2023 through 2026; (vii) increases in hotel tax revenues of \$174 million, \$46 million, \$30 million and \$35 million in fiscal years 2023 through 2026, respectively; (viii) increases in other tax revenues of \$61 million, \$311 million, \$358 million and \$403 million in fiscal years 2023 through 2026, respectively; and (ix) an increase in tax audit revenue of \$579 million in fiscal year 2023

Changes in projected revenues also include (i) net increases in non-tax revenues of \$649 million, \$355 million, \$181 million and \$96 million in fiscal years 2023 through 2026, respectively; (ii) an increase in unrestricted aid of \$37 million in fiscal year 2023; and (iii) increases in revenues included in the Program to Eliminate the Gap (the "PEG") of \$74 million, \$161 million, \$138 million and \$138 million in fiscal years 2023 through 2026, respectively.

The Financial Plan also reflects, since the June 2022 Financial Plan, net increases in projected net expenditures of \$510 million, \$4.52 billion, \$4.43 billion and \$6.03 billion in fiscal years 2023 through 2026, respectively. Changes in projected expenditures include: (i) increases in agency expenses of \$1.50 billion, \$2.22 billion, \$1.27 billion and \$1.29 billion in fiscal years 2023 through 2026, respectively; (ii) an increase in expenses related to certain City Council initiatives of \$528 million in fiscal year 2024; (iii) increased costs of providing services to asylum seekers of \$1.01 billion, \$2.20 billion (including \$465 million resulting from an expected reduction in anticipated federal aid in fiscal year 2024), and \$710 million in fiscal years 2023 through 2025, respectively; (iv) decreases in agency expenses included in the PEG of \$1.47 billion, \$2.56 billion, \$2.54 billion and \$2.52 billion in fiscal years 2023 through 2026, respectively; (v) increased expenses of \$435 million, \$557 million and \$572 million in fiscal years 2024 through 2026, respectively, relating to the State fiscal year 2024 Budget (the "State 2024 Budget"); (vi) decreases of \$75 million, \$520 million and \$293 million in fiscal years 2023 through 2025, respectively, reflecting reimbursements of expenditures with federal aid; (vii) increases in labor expenses of \$2.29 billion, \$1.68 billion, \$3.10 billion and \$4.02 billion in fiscal years 2023 through 2026, respectively; (viii) decreases in debt service included in the PEG of \$256 million, \$330 million, \$344 million and \$354 million in fiscal years 2023 through 2026, respectively; (ix) decreased pension contributions of \$305 million in fiscal year 2023 and increased pension contributions of \$861 million, \$1.97 billion and \$3.02 billion in fiscal years 2024 through 2026, respectively; (x) a decrease in the general reserve of \$1.54 billion in fiscal year 2023; (xi) a decrease in the capital stabilization reserve of \$250 million in fiscal year 2023; and (xii) a decrease of \$400 million in fiscal year 2023 reflecting a re-estimate of prior years' expenses and receivables.

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 2022 Financial Plan, provision of \$5.48 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 assumes total federal categorical grants of \$11.92 billion, \$10.32 billion, \$7.82 billion, \$7.05 billion and \$7.03 billion in fiscal years 2023 through 2027, respectively.

On October 7, 2022, the Mayor declared a State of Emergency as a result of the increase in arrival of asylum seekers from Central and South America. The arrival of asylum seekers is placing a strain on the City's resources. The full costs to the City of providing services to asylum seekers during the Financial Plan period are not known at this time. Using data available as of April 2023, the City projected that the crisis would cost \$1.4 billion in fiscal year 2023, \$2.9 billion in fiscal year 2024 and \$1 billion in fiscal year 2025. The projected costs through fiscal year 2025 are fully reflected in the Financial Plan with funding coming from a combination of State, City and federal sources. The Financial Plan reflects State funding for asylum seekers of \$438 million, \$562 million and \$290 million in fiscal years 2023, 2024 and 2025, respectively, \$1 billion of which is included in the State 2024 Budget. The Financial Plan reflects \$135 million in federal funds for costs related to asylum seekers in fiscal year 2024, all of which has been allocated, with no federal funding reflected in fiscal years 2025 and beyond. Since May 2023, following the expiration of Title 42, a federal policy that regulated asylum seeker migration at the US-Mexico border, arrivals have increased at a rate higher than projected in April 2023. Using data available as of August 2023, the City now projects that the crisis will cost \$4.7 billion in fiscal year 2024 and \$6.1 billion in fiscal year 2025, an increase of \$1.8 billion and \$5.1 billion in each respective fiscal year compared to the costs projected as of April 2023. Such increased costs are not reflected in the Financial Plan. The City continues to seek additional funding and other support from the State and the federal government for costs incurred by the City related to the provision of services to asylum seekers. The City currently has no estimate of the costs, if any, related to asylum seekers beyond fiscal year 2025, though they may be substantial, and no funding is included in the Financial Plan for such years.

On September 9, 2023, in response, in part, to the fiscal strain caused by the influx of asylum seekers, the City announced a PEG initiative to achieve savings. The PEG mandates a 5% reduction in agency spending per fiscal year in each of the next three financial plans, expected to be released in November 2023, January 2024 and April 2024, respectively, collectively covering fiscal year 2024 through fiscal year 2028. Cumulatively, the PEG mandates an approximately 15% reduction in agency spending in each fiscal year. Such savings initiatives shall not include layoffs, and will include (i) a freeze on spending for new needs; (ii) a freeze on hiring, other than critical positions required to support health, public safety and revenue generation, which will be permitted only on the basis of one new hire for every one departure; and (iii) a freeze on certain designated City-funded Other than Personal Services spending, including out of town travel (except to Washington, D.C. or Albany), temporary service contracts, consultant contracts and contracts for equipment and furnishings, with certain exemptions as approved by OMB and the Office of the First Deputy Mayor. The Mayor also plans to issue a directive implementing overtime-reduction plans for the City's four uniformed agencies (the Police, Fire, Sanitation and Corrections Departments). OMB will work with City agencies to implement the PEG measures. By themselves, these measures will not be sufficient to close the projected budget gaps in fiscal year 2024 and fiscal year 2025, consisting of the gaps reflected in the Financial Plan and the additional asylum seeker costs projected as of August 2023, as described above. While the City is taking steps to reduce costs associated with caring for asylum seekers to the fullest extent possible, absent additional State and federal funding and stronger-than-projected revenues, additional spending reductions may be necessary.

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 2024 and assumes direct revenues to the City from such lien sales of \$80 million in each of fiscal years 2024 through 2027. The Financial Plan further assumes that real property tax delinquencies as a percentage of the total property tax levy will average approximately 1.88% 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 over time beyond the rates assumed in the Financial Plan. Each 1% increase in delinquencies would reduce property tax revenues by approximately \$339 million, \$353 million, \$353 million, \$353 million and \$360 million in fiscal years 2023 through 2027, respectively

The City has reached labor contract settlements with District Council 37 of AFSCME ("DC 37") and the Police Benevolent Association ("PBA") for the 2021-2026 round of collective bargaining, and both contract settlements have been ratified by the unions. The Financial Plan reflects funding to cover the cost of the collective bargaining pattern of either the DC 37 framework or the PBA framework being applied to relevant civilian and uniformed unions. The City has also reached agreements with the United Federation of Teachers and the Teamsters Local 237, which have been ratified, and with the Uniformed Officers Coalition (which covers all 11 uniformed unions besides the PBA and the Uniformed Sanitationmen's Association). Such agreements follow the respective pattern established by the DC 37 and PBA agreements, as applicable. On July 31, 2023, an arbitration decision awarded nurses employed by New York City Health and Hospitals ("NYCHH") and represented by the New York State Nurses Association with substantial pay increases over a five and half year term, in excess of the DC 37 pattern. Such increased costs, which the City estimates will be approximately \$544 million through fiscal year 2027, are not reflected in the Financial Plan. On September 4, 2023, the City announced a voluntary settlement with Staten Island Ferry workers represented by the Marine Engineers' Beneficial Association. Such settlement is in excess of the DC 37 pattern, is retroactive back to calendar year 2010, and includes the 2021-2026 round of collective bargaining. Such increased costs, which the City estimates will be approximately \$54 million through fiscal year 2027, are not yet reflected in the Financial Plan. To date, the City has reached tentative or ratified agreements with unions which represent approximately 81% of the City's unionized workforce.

On May 25, 2023, the City Council passed a series of bills that revise the City's housing rental assistance voucher program for individuals and families who are experiencing or are at risk of homelessness. The bills lift existing eligibility requirements that applicants for vouchers reside or have resided in a City administered shelter, expand income eligibility from 200% of the federal poverty level to 50% of area median income, eliminate all work requirements for some households, and expand eligibility to households that have received written demands for payment of past rent. The Mayor vetoed the bills on June 23, 2023, noting operational, policy and legal issues presented in the legislation. The City Council voted to override the vetoes on July 13, 2023. The resulting laws, comprised of Local Law Numbers 100, 101 and 102 of 2023, each take effect on January 9, 2024. The City is currently reviewing such new laws and considering what steps to take in light of the fiscal, operational, policy and legal issues identified in the Mayor's veto messages. If these laws are construed to require that each eligible individual and family be provided with a rental assistance voucher, it is estimated that they would cost the City

\$749 million, \$2.1 billion, \$3.5 billion and \$4.8 billion in fiscal years 2024 through 2027, respectively. Such funding is not reflected in the Financial Plan.

The Financial Plan also does not reflect the requirement included in the State's fiscal year 2023 budget that adoption, foster care, and related service providers be compensated at 100% of maximum State aid rates, which is expected to cost the City up to \$118 million per fiscal year starting in fiscal year 2024.

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 \$46 million in fiscal year 2025, \$232 million in fiscal year 2026 and \$449 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 State 2021 Budget included a requirement that the City increase its funding of the Metropolitan Transportation Authority's ("MTA") net paratransit operating deficit from 33% to 50%. The State 2024 Budget further requires the City to increase its funding in fiscal years 2024 and 2025 from 50% to the lower of 80% of the deficit or 50% of the deficit plus \$165 million. Although the City has not increased funding to meet the required increase from 33% to 50%, the Financial Plan includes an additional \$165 million in each of fiscal years 2024 and 2025 to meet the requirements of the State 2024 Budget. The City's Financial Plan reflects \$340 million in each of fiscal years 2024 and 2025, and \$175 million in each of fiscal years 2026 and 2027, to cover the City's contributions for paratransit services, compared to the MTA's July 2023 financial plan estimates of \$389 million, \$440 million, \$458 million and \$473 million in fiscal years 2024 through 2027, respectively. The MTA's July 2023 financial plan assumes that City funding for the paratransit operating deficit in fiscal years 2026 and 2027 will include the increase in City funding of the deficit from 50% to 80% described above despite the fact that the State 2024 Budget mandated such increase only for fiscal years 2024 and 2025. The City will continue to monitor the anticipated paratransit costs for future years.

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 State law enacted in 2022 which mandates certain maximum class sizes in public school kindergarten through twelfth grades, to be phased in over five years. It is estimated that the City will be able to meet this obligation without additional funding in the first two years, but compliance will cost approximately \$1.3 billion per fiscal year when the requirement is fully phased in.

On January 31, 2019, the New York City Housing Authority ("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 and \$45 billion over the next twenty years. In July 2023, an updated NYCHA Physical Needs Assessment stated that such costs are projected at approximately \$60 billion over the next five years and \$78 billion over the next twenty years. 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 June 30, 2023, NYCHA's development partners completed renovations on 5,830 apartments, are actively repairing another 12,188 apartments, and are in predevelopment for an additional 19,691 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 62%. 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. The State 2024 Budget includes additional funding for the Emergency Rental Assistance Program, which provides funds for eligible households to pay rental and utility arrears accumulated during the COVID-19 pandemic. The City estimates NYCHA tenants may be eligible for up to \$128 million of this funding.

By order dated August 11, 2023, the New York State Supreme Court permanently enjoined the City from requiring any City retirees, and their dependents, from being removed from their current health insurance plans, and from being required to either enroll in a Medicare Advantage ("MA") plan or seek their own health coverage. The MA plan was estimated to generate \$600 million in annual savings in retiree health benefit costs. The City noticed an appeal.

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. In June 2023, the federal government provided final approval to move forward with congestion pricing and in July 2023 the MTA's Traffic Mobility Review Board met for the first time to discuss toll rates. In July 2023, the state of New Jersey filed a lawsuit challenging the federal government's approval of the congestion pricing plan.

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.

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 remains in effect for the City. The City's state of emergency was extended through October 8, 2022. It has been extended approximately monthly during the pandemic and may be extended beyond the current expiration date. The state of emergency of 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 83% 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 during the pandemic and are projected to remain approximately flat for fiscal years 2024 through 2026. 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. 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.

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. The ultimate impact of the COVID-19 pandemic on the City's economy and the amount and timing of collections of City revenues cannot be determined at this time. Additional changes in employment and earnings subject to personal income tax, as well as reductions in economic activity subject to sales tax, may occur, including, but not limited to, reductions in personal income tax due to changes in residency status resulting from remote work outside the City and other employment-related changes. No assurance can be provided that the COVID-19 pandemic and resulting economic disruption will not result in revenues to the City that are lower than projected herein.

**Employment.** The City is a leading center for the banking and securities industry, education, healthcare, life insurance, communications, publishing, fashion design, technology, information services, hospitality and retail fields. Over the past two decades the City has experienced a number of business cycles. From 1992 to 2000, the City added 456,500 private sector jobs (growth of 17%). From 2000 to 2003, the City lost 173,200 private sector jobs (decline of 5%). From 2003 to 2008, the City added 257,600 private sector jobs (growth of 9%). From 2008 to 2009, the City lost 103,200 private sector jobs (decline of 3%). From 2009 to 2019, the City added 918,400 private sector jobs (growth of 29%). From 2019 to 2020, the City lost 496,900 private sector jobs due to the COVID-19 pandemic. All such changes are based on average annual employment levels through and including the years referenced. As of August 2022, total employment in the City was 4,541,400 compared to 4,251,900 in August 2021 (growth of 6.8%) based on data provided by the New York State Department of Labor, which are not seasonally adjusted.

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. As shown in the Forecast of Key Economic Indicators below, 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 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. Certain of these assumptions are reviewed in reports issued by the City Comptroller and other public officials. 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, and the operating limit. Real Estate Tax revenue projections for fiscal years 2023 through 2027 reflect certain City tax programs proposed by the Mayor and adopted by the 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 each of fiscal years 2024 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 \$138 million, \$136 million, \$134 million, \$132 million and \$130 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 \$660 million, \$670 million, \$670 million, \$670 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 averaging 1.9% from fiscal years 2023 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 certain minority 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. The parties now await oral argument.

Other Taxes. The Financial Plan reflects the following assumptions regarding projected baseline revenues from Other Taxes: (i) with respect to the personal income tax, increases in fiscal year 2023 due to strong withholding income and flat non-wage income, decreases in fiscal year 2024 due to lower non-wage sources of income including PTET and increases in fiscal years 2025 through 2027 as overall historical levels of revenue resume; (ii) with respect to the business corporation tax, increases in revenue in fiscal year 2023 reflecting continued strength in both finance and non-finance sectors, plateauing after several years of exceptional growth, continued increases in fiscal years 2024 through 2027, reflecting a return to historical levels of revenue growth; (iii) with respect to the unincorporated business income tax, a decline in fiscal year 2023 reflecting a weaker Wall Street performance, with 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, moderate growth 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 in fiscal years 2024 through 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 flat fiscal year 2023 reflecting high vacancy rates for commercial office space in Manhattan and slow 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 \$8.5 billion in fiscal year 2023, \$7.8 billion in fiscal year 2024, \$7.6 billion in each of fiscal years 2025 and 2026 and \$7.5 billion in fiscal year 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 May 31, 2023, approximately 17.7% 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 268,936 as of June 30, 2023 to an estimated level of 265,550 by June 30, 2027.

Other Fringe Benefits includes \$3.209 billion, \$3.428 billion, \$3.595 billion, \$3.754 billion and \$3.913 billion in fiscal years 2023 through 2027, respectively, for post-employment benefits other than pensions ("OPEB") expenditures for current retirees, which costs are currently paid by the City on a pay-as-you-go basis.

The Financial Plan reflects the full costs of labor settlements with DC 37 and the PBA as a framework for the City workforce. The City has also reached additional agreements with the United Federation of Teachers and the Teamsters Local 237, which have been ratified, and with the Uniformed Officers Coalition, covering all 11 uniformed unions besides the PBA and the Uniformed Sanitationmen's Association. Such agreements follow the respective pattern established by the DC 37 and PBA agreements, as applicable. On July 31, 2023, an arbitration decision awarded nurses employed by NYCHH and represented by the New York State Nurses Association with substantial pay increases over a five and half year term, in excess of the DC 37 pattern. Such increased costs, which the City estimates will be approximately \$544 million through fiscal year 2027, are not reflected in the Financial Plan. On September 4, 2023, the City announced a voluntary settlement with Staten Island Ferry workers represented by the Marine Engineers' Beneficial Association. Such settlement is in excess of the DC 37 pattern, is retroactive back to calendar year 2010, and includes the 2021-2026 round of collective bargaining. Such increased costs, which the City estimates will be approximately \$54 million through fiscal year 2027, are not yet reflected in the Financial Plan. To date, the City has tentative or ratified agreements with unions which represent approximately 81% of the City's unionized workforce.

#### 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. Energy costs for each of the 2023 through 2027 fiscal years are assumed to vary annually, with total energy expenditures projected at \$1.12 billion in fiscal year 2023 and increasing to \$1.38 billion by fiscal year 2027.

**Public Assistance.** Of total cash assistance expenditures in the City, the City-funded portion is projected to be \$985 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 \$6.2 billion in fiscal year 2023, \$6.7 billion in fiscal year 2024, \$6.5 billion in fiscal year 2025, \$6.6 billion in fiscal year 2026 and \$6.8 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 May 2023, NYCHH released a cash-based financial plan, which projected City-funded expenditures of \$1.7 billion in fiscal year 2023, \$1.7 billion in fiscal year 2024, \$1.3 billion in fiscal year 2025 and \$1.1 billion 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 \$10.9 billion, \$10.2 billion, \$9.7 billion, \$9.4 billion and \$9.5 billion, and total disbursements of \$10.9 billion, \$10.4 billion, \$9.7 billion and \$9.8 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 2024 through 2027 fiscal years was published in July 2023 (the "2024 NYCT Financial Plan"). The NYCT fiscal year coincides with the calendar year. The 2024 NYCT Financial Plan reflects the negative impacts of the COVID-19 pandemic on MTA costs, ridership, and farebox revenue. The 2024 NYCT Financial Plan reflects City assistance to the NYCT operating budget of \$651.4 million in 2024, increasing to \$701.9 million in 2027. In addition, the 2024 NYCT Financial Plan projects real estate transfer tax revenue dedicated for NYCT use of \$546.2 million in 2024, higher than 2023's \$408.1 million; that amount increases each year to reach \$617.5 million by 2027. The 2024 NYCT Financial Plan reflects \$12.2 billion in revenues and \$15.4 billion in expenses for 2024, leaving a budget gap of \$3.1 billion. After accounting for accrual adjustments and cash carried over from 2022, there are projected operating budget gaps of \$211 million in 2024, \$918 million in 2025, \$1.2 billion in 2026, and \$2.1 billion in 2027. 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. This contribution was increased to \$0.60 for every \$100 of payroll in New York City in the 2024 State Budget. The PMT is currently expected to generate revenues for NYCT in the amount of \$1.9 billion in 2024, decreasing to \$1.4 billion in 2027.

The MTA has been able to correct the serious budget shortfalls reflected in its previous financial plan through the receipt of one-time direct State aid, a State-mandated increase to the City's share of paratransit costs, and the implementation of new taxes, fare and toll increases, and operational efficiencies. 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 American Rescue Plan Act ("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. In June 2023, the federal government provided final approval to move forward with congestion pricing and in July 2023 the Traffic Mobility Review Board met for the first time to discuss toll rates. The 2024 NYCT Financial Plan anticipates that the MTA will begin receiving revenue from congestion tolling in or around the second quarter of 2024. MTA expects to receive \$600 million of revenue in 2024 and \$1 billion per year thereafter. In July 2023, the state of New Jersey filed a lawsuit challenging the federal government's approval of the congestion pricing plan.

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 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 State 2024 Budget further requires the City to increase its funding in fiscal years 2024 and 2025 from 50% to the lower of 80% of the deficit or 50% of the deficit plus \$165 million. Although the City has not increased funding to meet the required increase from 33% to 50%, the Financial Plan includes an additional \$165 million in each of fiscal years 2024 and 2025 to meet the requirements of the State 2024 Budget. The City's Financial Plan reflects \$340 million in each of fiscal years 2024 and 2025, and \$175 million in each of fiscal years 2026 and 2027, to cover the City's contributions for paratransit services, compared to the MTA's July 2023 financial plan estimates of \$389 million, \$440 million, \$458 million and \$473 million in fiscal years 2024, 2025, 2026 and 2027, respectively. The MTA's July 2023 financial plan assumes that City funding for the paratransit operating deficit in fiscal years 2026 and 2027 will include the increase in City funding of the deficit from 50% to 80% described above despite the fact that the State 2024 Budget mandated such increase only for fiscal years 2024 and 2025. 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 \$4.11 billion, \$4.34 billion, \$4.55 billion, \$4.80 billion and \$5.0 billion in fiscal years 2023 through 2027, respectively, conduit debt service of \$123 million, \$121 million, \$120 million, \$119 million and \$118 million in fiscal years 2023 through 2027, respectively, and TFA debt service of \$3.25 billion, \$3.28 billion, \$3.57 billion, \$4.09 billion and \$4.58 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. Two recent storms have significantly affected the City's Financial Plan and climate planning.

Superstorm Sandy. 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, the south shore of Staten Island, and the communities surrounding Jamaica Bay in Brooklyn and Queens. 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 \$1.7 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 March 31, 2023, the City, NYCHH and NYCHA have received \$5.1 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 March 31, 2023. 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.

**Post-Tropical Cyclone Ida.** 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 April 20, 2023, the City released PlaNYC: Getting Sustainability Done ("PlaNYC 2023"). Building on prior recommendations released closely after Ida hit the City, PlaNYC 2023 includes measures to address flooding caused by extreme rainfall. The total costs of implementing all of PlaNYC 2023's recommendations, including those relating to extreme rainfall, would be substantial and in some cases would require State and federal funding alongside additional City funding. The City continues to review the effects of climate change, including increased flooding and heavy rain events.

**Strategic Planning and Resiliency.** 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 has developed PlaNYC 2023 which addresses some of the risks identified in the NPCC Reports. Among other things, PlaNYC 2023 includes measures to address the biggest risks to the City associated with climate change, including extreme heat and flooding from extreme rainfall, coastal storms and tidal flooding due to sea level rise. PlaNYC 2023 also describes measures to reduce economy-wide greenhouse gas emissions and initiatives to transition away from polluting fossil fuels to clean energy.

The City is in the process of implementing infrastructure projects to protect areas of the City from flooding associated with extreme rainfall, storm surge, and tidal flooding due to sea level rise. (See below for additional information on the impacts of flooding.) These projects and initiatives are in various stages of feasibility review, design, 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 sources.

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 and Red Hook neighborhoods, and an energy resilience project is underway in Hunts Point, with shoreline reinforcement projects also happening in other identified areas of the City. These projects are in various stages of feasibility review, design, construction, and implementation. Funding for these projects is coming from City and federal sources, and \$672 million is included in the Ten-Year Capital Strategy. As the projects proceed, the City continues to monitor anticipated costs and reflects updates in the capital plan as needed.

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 Atlantic Shorefront and Bayside Projects (the "Rockaways Projects"). 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 Ten Year Capital Strategy. The Rockaways Projects consist of coastal protection elements on the Atlantic shorefront and on the Jamaica Bay side of the Rockaways. Construction has begun on the Atlantic Shorefront Project, which is fully funded by the federal government, with an expected cost of approximately \$590 million. Design has started on the Bayside Project, which is fully funded by the federal government, with a current expected cost of \$253 million.

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. Starting in 2027, 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 during extreme storm events.

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 \$775 million in more than 12,500 energy conservation measures across almost 2,300 buildings, comprising more than 70 percent of City government's building square footage. The investments have decreased energy use and reduced emissions by nearly 325,000 metric tons. The Ten-Year Capital Strategy includes \$4.3 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 more frequent and intense climate impacts such as hurricanes, tropical storms, cloudbursts, droughts, 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 \$135 million in fiscal year 2023, \$122 million in fiscal year 2024 and \$124 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 May 31, 2023, a software vulnerability was publicly announced for the widely used file sharing software, MOVEit, which impacted both private and public sector entities worldwide. The DOE was among those entities subsequently impacted. The threat was immediately contained, and an investigation determined that approximately 19,000 unique documents were accessed without authorization, which contained a subset of sensitive data elements. The DOE has sent out individual notifications. There is no evidence of any effects on the City's operations or harm to its digital networks.

**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 August 11, 2023, the City Comptroller released a report commenting on the Financial Plan. The report notes that while the adopted budget more accurately reflects the likely costs of many of the programmatic expenses identified by the City Comptroller as unaccounted for in the City's preliminary budget, many expenditures remain underfunded. Additional risks to the budget include: higher than budgeted costs of shelter for people seeking asylum; increased costs of the City's rental assistance programs; DOE spending in excess of budgeted costs, resulting from increased need for special education Carter Cases (reimbursement for costs of placing a student in a non-public school or program when a parent or guardian disagrees with DOE's recommended individualized education plan), expiration of federal COVID-19 aid, implementation of the State mandate to reduce class sizes and other costs; and higher than budgeted costs for overtime, public assistance, and contributions to the MTA.

The City Comptroller projects net risks of \$1.96 billion, \$4.57 billion, \$5.78 billion and \$6.08 in fiscal years 2024 through 2027, respectively. When added to the results projected in the Financial Plan, budget gaps of \$1.96 billion, \$9.65 billion, \$12.62 billion and \$13.98 billion are projected in fiscal years 2024 through 2027, respectively.

The City Comptroller's net revenue projections are higher than the budget projections by \$834 million, \$1.16 billion, \$1.44 billion and \$1.74 billion in fiscal years 2024 through 2027, respectively. The report projects that: (i) property tax revenues will be higher by \$26 million, \$821 million, \$985 million and \$1.75 billion in fiscal

years 2024 through 2027, respectively; (ii) personal income tax revenues will be higher by \$730 million, \$124 million and \$99 million in fiscal years 2024 through 2026, respectively, and lower by \$245 million in fiscal year 2027; (iii) business tax revenues will be lower by \$359 million, \$451 million, \$188 million and \$49 million in fiscal years 2024 through 2027, respectively; (iv) sales tax revenues will be higher by \$235 million, \$151 million and \$60 million in fiscal years 2024 through 2026, respectively, and lower by \$9 million in fiscal year 2027; (v) real estate transaction-related tax revenues will be lower by \$45 million in fiscal year 2024, and higher by \$228 million, \$188 million and \$3 million in fiscal years 2025 through 2027, respectively; (vi) other tax revenue will be higher by \$1 million, \$40 million, \$67 million and \$70 million in fiscal years 2024 through 2027, respectively; (vii) tax audit revenues will be higher by \$179 million in each of fiscal years 2024 through 2027; and (viii) miscellaneous revenues will be higher by \$67 million, \$65 million, \$49 million and \$34 million in fiscal years 2024 through 2027, respectively.

The City Comptroller's net expenditure projections are higher by \$2.80 billion, \$5.72 billion, \$7.22 billion and \$7.81 billion in fiscal years 2024 through 2027, respectively, as a result of: (i) increased expenditures for temporary and professional services of \$142 million in fiscal year 2024; (ii) additional overtime expenditures of \$683 million in fiscal year 2024 and \$450 million in each of fiscal years 2025 through 2027; (iii) increased costs of collective bargaining agreements of \$72 million, \$120 million, \$170 million and \$180 million in fiscal years 2024 through 2027, respectively; (iv) increased costs of providing services to people seeking asylum of \$750 million, \$2.94 billion, \$3.65 billion and \$3.65 billion in fiscal years 2024 through 2027, respectively; (v) increased expenditures for DOE programs of \$399 million, \$1.05 billion, \$1.72 billion and \$2.42 billion in fiscal years 2024 through 2027. respectively; (vi) increased expenditures for the Public Health Corps of \$13 million in fiscal year 2025 and \$49 million in each of fiscal years 2026 and 2027; (vii) increased public assistance costs of \$225 million in each of fiscal years 2024 through 2026; (viii) increased expenditures associated with rental assistance of \$374 million in fiscal year 2024 and \$637 million in each of fiscal years 2025 through 2027; (ix) increased costs of contributions to the MTA of \$155 million, \$162 million, \$254 million and \$420 million in fiscal years 2024 through 2027, respectively; (x) increased expenditures associated with paying prevailing wage rates for homeless shelter security guards of \$55 million in each of fiscal years 2024 through 2027; (xi) increased expenditures associated with the State's foster care reimbursement rate of \$118 million in each of fiscal years 2024 through 2027; and (xii) increased expenditures of \$175 million in fiscal year 2024 related to legal settlements. The report also projects (i) anticipated personal services accrual savings due to vacancies of \$350 million in fiscal year 2024; and (ii) decreased pension fund contributions of \$49 million, \$111 million and \$170 million in fiscal years 2025 through 2027, 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 August 10, 2023, the OSDC released a report commenting on the Financial Plan. The report states that budget gaps in the Financial Plan are at the highest level since fiscal year 2011, and while the City has overcome gaps of this size in the past, including during recessions, it is likely to face continued spending pressure from unfunded programs in future years and substantial uncertainty over volatile expenditures with the potential for a significant fiscal impact. The report notes that while the most significant risk for the City remains a recession, State and national economies have remained resilient through interest rate hikes and an exhaustion of federal fiscal aid. The report further notes that spending pressure is likely to come from recurring risks as well as those that are harder to predict, most significantly costs for asylum seekers and an expansion of the City's Family Homelessness and Eviction Prevention Supplement rental assistance program.

The report identifies a net offset to the Financial Plan of \$418 million in fiscal year 2023 and net risks of \$561 million, \$4.78 billion, \$6.56 billion and \$8.25 billion in fiscal years 2024 through 2027, respectively. When

combined with the results projected in the Financial Plan, the report estimates a budget surplus of \$418 million in fiscal year 2023 and potential budget gaps of \$561 million, \$9.86 billion, \$13.4 billion and \$16.15 billion in fiscal years 2024 through 2027, respectively.

The specific risks to the Financial Plan noted in the OSDC report include: (i) decreased federal and State reimbursement for costs of services for asylum seekers of \$290 million in fiscal year 2025; (ii) increased costs of operating subsidies to the MTA of \$140 million, \$150 million, \$238 million and \$394 million in fiscal years 2024 through 2027, respectively; (iii) 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 \$808 million, \$1.07 billion, \$1.07 billion and \$977 million in fiscal years 2024 through 2027, respectively; (iv) increased uniform services overtime costs of \$84 million, \$531 million, \$512 million, \$517 million and \$516 million in fiscal years 2023 through 2027, respectively; (v) 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 \$245 million, \$400 million, \$702 million, \$1.32 billion and \$1.97 billion in fiscal years 2023 through 2027, respectively; (vi) increased expenditures related to the early childhood intervention program of \$55 million, \$65 million, \$76 million and \$76 million in fiscal years 2024 through 2027, respectively; (vii) increased expenditures to fund school health programs of \$39 million in each of fiscal years 2024 through 2027; (viii) increased expenditures to fund the Public Health Corps of \$13 million, \$49 million and \$49 million in fiscal years 2025 through 2027, respectively; (ix) increased expenditures resulting from expansion of the Family Homelessness and Eviction Prevention Supplement rental assistance program of \$98 million, \$1.24 billion, \$2.65 billion and \$4.02 billion in fiscal years 2024 through 2027, respectively; and (x) increased expenditures for residual services for asylum seekers of \$1.9 billion, \$2.18 billion and \$1.45 billion in fiscal years 2025 through 2027, respectively. The report also identifies: (i) increased tax revenues of \$147 million, \$1.16 billion, \$1.15 billion, \$1.45 billion and \$1.05 billion in fiscal years 2023 through 2027, respectively; (ii) payroll savings of \$600 million and \$275 million in fiscal years 2023 and 2024, respectively; (iii) variable rate debt service savings of \$75 million in fiscal year 2024; and (iv) decreased pension fund contributions of \$54 million, \$123 million and \$188 million in fiscal years 2025 through 2027, respectively.

On August 7, 2023, the Control Board released a report commenting on the Financial Plan. The report notes that the City continues to show healthy job growth, with the City's private sector outpacing the nation and the City's payroll jobs surpassing the prepandemic level. The commercial real estate market remains depressed due to hybrid working and high vacancy rates. However, tourism continues a strong recovery with the number of visitors expected to surpass prepandemic levels in fiscal year 2024. The report states that the Control Board believes that current economic data points to a slowdown in the economy over the next 12 months but the Control Board is not forecasting a recession in the coming year. The report states that given the high level of capital commitments in the five-year capital plan, the City may not be able to achieve its targeted total commitments, and that without effectively managing spending, the capital program may become unaffordable as there could be increasing pressure to support other expense areas while tax revenue growth is moderate.

The Control Board report identified estimated net offsets to the Financial Plan of \$70 million and \$702 million in fiscal years 2023 and 2024, respectively, and net risks to the Financial Plan of \$1.45 billion, \$3.08 billion and \$4.67 billion in fiscal years 2025 through 2027, respectively, resulting in projected budget surpluses of \$70 million and \$702 million in fiscal years 2023 and 2024, respectively, and projected budget gaps of \$6.53 billion. \$9.91 billion and \$12.57 billion in fiscal years 2025 through 2027, respectively. Such net offsets and risks result from: (i) increases in property tax revenues of \$91 million, \$225 million, \$579 million, \$646 million and \$684 million in fiscal years 2023 through 2027, respectively; (ii) increases in nonproperty tax revenues of \$1.65 billion and \$57 million in fiscal years 2024 and 2025, respectively, and decreases in nonproperty tax revenues of \$514 million and \$1.5 billion in fiscal years 2026 and 2027, respectively; (iii) increased expenditures resulting from increased costs of support for asylum seekers of \$290 million, \$710 million and \$710 million in fiscal years 2025 through 2027, respectively; (iv) decreased expenditures resulting from lower reimbursements for paratransit costs of \$10 million in fiscal year 2023 and increased expenditures resulting from higher reimbursements for paratransit costs of \$75 million, \$89 million, \$104 million and \$120 million in fiscal years 2024 through 2027, respectively; (v) increased expenditures for MTA Bus operations of \$92 million, \$33 million, \$135 million, \$274 million and \$315 million in fiscal years 2023 through 2027, respectively; (vi) increased expenditures associated with the State's foster care reimbursement rate of \$118 million in each of fiscal years 2024 through 2027; (vii) increased expenditures associated with the Family Homelessness and Eviction Prevention Supplement rental assistance program of \$230 million, \$223 million and \$229 million in fiscal years 2025 through 2027, respectively; (viii) increased expenditures associated with providing services to students with disabilities of \$115 million in fiscal

year 2024 and \$265 million in each of fiscal years 2025 through 2027; (ix) increased expenditures associated with increases in charter school tuition rates of \$47 million, \$109 million, \$298 million and \$508 million in fiscal years 2024 through 2027, respectively; (x) increased expenditures associated with State-mandated class size reduction of \$433 million and \$863 million in fiscal years 2026 and 2027, respectively; (xi) increased expenditures associated with student transportation of \$78 million in each of fiscal years 2024 through 2027; (xii) increased costs associated with the expansion of the DOE summer academic and enrichment program of \$96 million in fiscal year 2024 and \$176 million in each of fiscal years 2025 through 2027; (xiii) a decrease in uniformed services overtime expenses of \$62 million in fiscal year 2023 and increases in uniformed services overtime expenses of \$615 million, \$644 million, \$647 million and \$647 million in fiscal years 2024 through 2027, respectively; and (xiv) decreases in pension contributions of \$51 million, \$116 million and \$177 million in fiscal years 2025 through 2027, respectively.

**Outstanding General Obligation Indebtedness.** As of June 30, 2023, approximately \$40.09 billion of City general obligation bonds were outstanding.

As of June 30, 2023, Hudson Yards Infrastructure Corporation ("HYIC") has outstanding approximately \$2.5 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 \$10.6 million of which has been drawn as of June 30, 2023. 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. No such payments have been required since fiscal year 2015. 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 2018, 2019 and 2022, 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 2023 through 2027. The City's Ten-Year Capital Strategy applicable to the City's water and sewer system covering fiscal years 2024 through 2033, projects Cityfunded 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 \$14.8 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. 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 Ten-Year Capital Strategy for fiscal years 2024 through 2033 totals \$164.8 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 second largest component of State nonfarm employment, but only the fifth largest when measured by wage share. This sector accounts for a smaller share of 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 onetenth of all nonfarm jobs in the State, it contributes 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 percentage of total State employment than for the nation. Farming is an important part of the State's rural economy, although it constitutes only 0.2 percent of total State GDP. According to the New York State Department of Agriculture and Markets, New York is the fifth largest dairy producer in the nation. Federal, State, and local governments comprise the third 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 9, 2023 (AIS), reflects the State's Enacted Budget Financial Plan (the "Financial Plan") for Fiscal Year (FY) 2024 issued by the Division of the Budget (DOB) and sets forth the State's official Financial Plan projections for Fiscal Year 2024 through Fiscal Year 2027 (the "Financial Plan period"). DOB expects to complete the first quarterly update to the FY 2024 Enacted Budget Financial Plan in July 2023. Given (i) the relatively short period of time since the release date of the FY 2024 Enacted Budget Financial Plan, and (ii) DOB's current analysis of preliminary operating results for the first quarter of FY 2024, DOB does not anticipate significant changes in the State's financial condition that would mandate the release of disclosure in a first quarterly update to the AIS. Accordingly, DOB does not anticipate that it will be preparing and releasing a first quarterly update to this AIS and instead expects the next update of this AIS to be released following the mid-year update to the Enacted Budget Financial Plan. The State has filed the AIS with the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access (EMMA) system. An electronic copy of the AIS can be accessed through EMMA at www.emma.msrb.org.

The annual State budget process and financial reporting cycle begins with the start of a new State fiscal year on April 1 and the enactment of the State's annual budget (the "Enacted Budget"), which may be after the start of the fiscal year. Following the Enacted Budget, DOB publishes the State's Enacted Budget Financial Plan and generally updates it quarterly to reflect results through June 30 (the "First Quarterly Update to the Financial Plan"), September 30 (the "Mid-Year Update to the Financial Plan"), and December 31 (the "Executive Budget Financial Plan"). In addition, the Governor's Executive Budget proposal (the "Executive Budget") is typically submitted to the Legislature in January and the Governor's amendments are due within thirty days following the submission of the Executive Budget, at which time the Executive Budget Financial Plan may be amended (the "Updated Executive Budget Financial Plan"). However, following a gubernatorial election, the Governor's Executive Budget proposal is due on or before the first day of February and amendments are due in early March.

#### **Financial Plan Overview**

In Governor submitted the FY 2024 Executive Budget, with amendments, to the Legislature on March 3, 2023. DOB estimated that the Executive Budget, if adopted without modification, would have provided for balanced General Fund operations in FY 2024, leaving projected budget gaps of \$5.1 billion in FY 2025, \$8.6 billion in FY 2026, and \$7.2 billion in FY 2027, totaling roughly \$21 billion. The gaps were principally due to the downward revisions in projected tax receipts at that time.

On March 31, 2023, the Legislature enacted the annual debt service appropriations, without amendment, in advance of the new fiscal year that began on April 1. The Governor and Legislative leaders reached agreement on the outlines of the budget for FY 2024 at the end of April, and the Legislature completed final action on the budget bills on May 2, 2023. The Governor completed her review of the budget bills on May 12, 2023.

The final budget agreement includes key elements proposed by the Governor in her Executive Budget, including fully funding existing commitments, such as the third and final year of the Foundation Aid phase-in funding; a comprehensive plan to put the Metropolitan Transportation Authority (MTA) on stable financial footing; adding substantial new operating and capital aid for health care; providing extraordinary funding for services to asylum seekers; expanding mental health inpatient, outpatient, and supportive services; providing matching funds to increase the State University of New York (SUNY) centers' endowments; providing a monthly discount on electric utility bills for moderate-income customers; and increasing the minimum wage and funding the cost for State service providers. The final agreement provides additional funding for many areas of the budget including increased operating aid for university systems, expansion of free school meals, aid for legal defense and discovery for indigent and low-income individuals, rent arrears assistance, and expansion of the Empire State Child Credit to include children under four years of age.

DOB estimates that the budget enacted by the Legislature and approved by the Governor is balanced in FY 2024, as required by law. The Enacted Budget Financial Plan includes savings and resources in FY 2024 that DOB estimates will be sufficient both to fund the negotiated additions and restorations to the budget, and fully cover downward revisions to tax receipts described later. The gaps in the outyears are projected at \$9.1 billion in FY 2025, \$13.9 billion in FY 2026, and \$13.4 billion in FY 2027. The increase in the gaps over the Financial Plan period (FY 2025 through FY 2027) are principally due to additional downward revisions in projected tax receipts reflected in the Enacted Budget Financial Plan.

### **FY 2023 RESULTS**

At the close of FY 2023, the State completed the final deposits needed to reach the administration's goal of bringing principal reserves to a minimum of 15 percent of State Operating Funds spending. The increase in reserves was supported by the extraordinary growth in tax collections over the past two years. Principal reserves now total \$19.5 billion (16 percent of State Operating Funds spending) and are complemented by additional reserves for debt management, future operational costs, and a transaction risk reserve.

The State ended FY 2023 in a stronger overall position in comparison to the estimates in both the initial FY 2023 Enacted Budget Financial Plan and the FY 2024 Executive Budget Financial Plan. Results reflected both strong receipts and disbursements that fell substantially below budgeted levels. The excess resources that were available at the close of FY 2023 have been carried forward through available balances and reserves, as well as used to prepay future expenses to reduce costs in future years of the Financial Plan. (

In FY 2024, the combination of available resources generated from operations in FY 2023 and downward revisions to spending based on prior year results are sufficient to offset the new initiatives and costs, as well as the downward revisions to tax receipts beginning in FY 2024.

### **Tax Receipts**

Tax receipts, excluding Pass-Through Entity Tax (PTET), have been decreased by over \$5 billion annually in comparison to the Executive Budget forecast, due primarily to weaker than expected April PIT receipts from extension payments and final returns. Collections for April and May 2023 are projected to be roughly \$4.6 billion below the last public forecast, particularly in extension payments and higher refunds, and are consistent with the experiences of comparable PIT- dependent states, as well the Federal government. The drop in tax receipts appears to be related to a decline in tax year 2022 liability, which is most directly attributable to a sharp decrease in nonwage income, with weakness in capital gains serving as the primary driver. This decline is the basis for the substantial downward revisions to tax receipts in the Enacted Budget Financial Plan.

Excluding distressed hospital assistance and other Medicaid additions that are funded by resources within the Global Cap Index, non-recurring additions are estimated at roughly \$1.2 billion in FY 2024. The largest one-time spending additions include rent arrears (\$391 million) to support additional tenants and families, including the New York City Housing Authority and other public housing residents and recipients of Federal Section 8 vouchers, and discretionary additions (\$390 million) for individual program areas. In addition, the final budget agreement excluded several Executive revenue proposals, such as the ban on flavored tobacco, but expanded the Empire State Child Credit to include children under four years of age.

The negotiated changes in FY 2024 are offset by available resources and balances carried forward from FY 2023, and the use of the Indigent Legal Services Fund to offset aid for legal defense.

### **Other Forecast Revisions**

The Financial Plan includes revisions to reflect the management of surplus resources generated in FY 2023 to be used in subsequent years. Actions taken consisted of the prepayment of debt service and fringe benefit expenses due in future years and capital advances to the MTA, as well as carrying forward available balances and Federal reimbursements that have been programmed for use in FY 2024, in part to offset spending that carried over from FY 2023. In addition, discretionary deposits to the Retiree Health Benefit Trust Fund (RHBTF) in future years will be made pending fiscal conditions. Furthermore, the timing of transfers from the health care transformation fund have been revised over the multi-year plan to partially offset the cost of home care wage increases.

DOB has made other revisions to the Executive Budget Financial Plan projections of non-tax receipts and spending in all years based on prior year results, as well as updated forecasts and programmatic assumptions. The revisions include higher investment income and lower disbursements across numerous program areas and fringe benefit costs. In addition, the Financial Plan has been updated to reflect the full cost to the State of the bonus payments to eligible healthcare workers. The Centers for Medicare & Medicaid Services (CMS) has provided initial guidance indicating that the Federal government is unlikely to provide Federal matching funds for the bonus payments executed to date. The State is continuing to negotiate with CMS to find an acceptable process for documenting and claiming a Federal share.

# FY 2024 Enacted Budget Financial Plan Highlights

### **Reserves and Risks**

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 Financial Plan maintains a reserve for such transaction risks, in addition to the principal reserves and other reserves for specific purposes (e.g., future operational and labor costs).

Principal Reserves . The State completed the entire \$10.6 billion of planned deposits and set asides to principal reserves at the end of FY 2023 – two years ahead of the initial plan laid out in October 2021. The current balance in principal reserves is just over \$19.5 billion, an amount equal to approximately 16 percent of projected FY 2024 State Operating Funds disbursements.

The FY 2024 Enacted Budget includes legislation that increases 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 25 percent, and the maximum annual deposit from 3 percent to 15 percent, of projected General Fund spending in the current year.

A deposit to the Rainy Day Reserve Fund is anticipated to be made at the end of FY 2024 depending on fiscal and economic conditions, including any material decline in tax collections. The allocation of principal reserves may be adjusted in future updates dependent on fiscal conditions and consistent with the allowable balance and deposit authorization for the Rainy Day Reserve.

Debt Management Reserve Fund. To ensure the State can abide by the limits imposed by the Debt Reform Act, \$1 billion has been set aside in the debt management reserve.

RHBTF<sup>2</sup>. 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. In FY 2023, deposits previously planned in later years (\$600 million) were accelerated for a total deposit of \$920 million, consistent with the

statutory limit of 1.5 percent of the actuarial accrued liability. The balance in the reserve totals \$1.2 billion. Future deposits will be dependent on fiscal conditions.

Operational/Labor Cost Reserve. The Financial Plan includes an informal set aside of funds in the General Fund balance available for unexpected and new costs of Executive agencies inclusive of, but not limited to, future labor agreements, inflationary costs or other critical needs. These funds are included in the General Fund balance and are not included in spending estimates.

The State recently reached a tentative labor agreement with the Public Employees Federation (PEF) for the three-year period from FY 2024 through FY 2026. The agreement is subject to ratification by union membership and the votes are expected to take place in the coming months. The tentative agreement includes 3 percent salary increases for each year of the agreement and a one-time bonus of \$3,000, as well as other one-time payments that are expected to be partly offset by expected health insurance benefit savings. In the past, agencies have been required to fund general salary increases within existing budgets through efficiencies and other savings initiatives. However, certain one-time payments are expected to be covered with the General Fund reserve.

The State also reached a tentative agreement with United University Professions (UUP) representing SUNY employees for the four-year period from Academic Year 2023 through Academic Year 2026, which is also subject to ratification and includes general salary increases of 2 percent in FY 2023 followed by 3 percent salary increases for each of the next three years, as well as other payments and modifications to health insurance benefits. The cost of the UUP agreement is expected to be funded by SUNY except for related fringe benefits costs currently paid by the State, and onetime payments related to negotiated labor agreements.

# **Outyear Budget Gaps**

The Enacted Budget Financial Plan projects outyear budget gaps of \$9.1 billion in FY 2025, \$13.9 billion in FY 2026, and \$13.4 billion in FY 2027, a total of roughly \$36 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 nearly \$37 billion (FY 2025 to FY 2027) in comparison to the May 2022 forecast included in the FY 2023 Enacted Budget Financial Plan. If the FY 2025 Budget is balanced with recurring savings, the projected budget gap for FY 2026 would be \$4.8 billion. The projected budget gaps do not reflect the use of any reserves to balance operations.

### **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.

#### **State Spending**

The Financial Plan projects that State Operating Funds spending will total \$125.3 billion in FY 2024, an increase of \$1.6 billion, or 1.3 percent, from FY 2023. The decline in all other spending reflects the management of surplus resources generated in prior years, which consist of the prepayment of debt service and fringe benefit expenses due in future years.

**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 prepayments in FY 2023, have a substantial impact on total debt service spending.

# **Receipts**

Tax Receipts. The estimates for tax receipts have been reduced in each year of the Financial Plan, consistent with collections through May 2023 and DOB's updated economic forecast.

In addition, the FY 2024 Enacted Budget extends through tax year 2026 the Article 9-A tax rates on taxpayers with business income over \$5 million and the alternative capital base tax rate for certain taxpayers. Other tax changes include various extensions, enforcement initiatives and reforms including the extension of credits for historic property rehabilitation, New York City musical and theatrical productions, and farmers, as well as a new credit for child care expansion and the inclusion of children under four years of age to the Empire State Child Credit.

Debt Service. Revisions reflect savings from lower bond issuances due to increased PAYGO resources and slower than expected capital spending, as well as additional debt service prepayments made in FY 2023 that reduce debt service costs in future years.

Other Receipts/Transfers. The Financial Plan includes a \$1.4 billion increase to the estimated investment income the State expects to generate consistent with higher interest rates and liquidity. Other changes include a reduction to the Transaction Risk Reserve, which is maintained at \$2 billion annually, and revisions to certain planned transfers due to the availability of revenues and balances in other funds that are earmarked to support new investments. Other changes include restatements and adjustments between debt service transfers, resulting from the prepayment of Dedicated Highway and Bridge Trust Fund (DHBTF) Bonds which increases debt service transfers from, along with a corresponding decrease in capital projects transfers. There is no resulting Financial Plan impact.

#### **Disbursements**

#### **Assistance and Grants**

School Aid. The Financial Plan provides \$34.4 billion in State aid to schools for school year (SY) 2024, an increase of \$3 billion (9.7 percent). Including Federal prekindergarten expansion grants, schools will receive \$34.5 billion. This growth primarily reflects a \$2.6 billion (12.3 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 of full funding. School Aid growth also includes a \$225 million increase in expense-based aid and a \$150 million increase in State-funded full-day prekindergarten programming for four-year-old children.

The decrease in projected General Fund disbursements for education shown in the previous table primarily reflects additional resources in the State's Lottery, Mobile Sports, Video Lottery Terminals (VLTs) and Commercial Gaming Funds available to finance School Aid spending.

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 CMS annual projections of health care spending. The revised rates provide additional Medicaid spending of \$475 million in FY 2024 growing to \$754 million in FY 2027. Medicaid spending is currently projected to exceed the cap by \$242 million in FY 2026 and \$283 million in FY 2027. The higher cost is mainly attributable to higher-than-expected enrollment, utilization and spending trends. The Governor's healthcare commission will examine and recommend reforms to improve quality and reduce costs.

The FY 2024 Enacted Budget includes several investments in health care, including \$500 million in assistance for financially distressed hospitals, 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 Financial Plan includes savings which began on 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, the 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 actions 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, the State will utilize a portion of the Affordable Care Act (ACA) Enhanced Federal Medical Assistance Percentage (eFMAP) savings to offset growth in Medicaid costs borne by the State rather than counties (\$219 million). Other actions include shifting pregnancy coverage to the Essential Plan (EP) (\$41 million in FY 2024 and \$165 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 extended eFMAP through the end of the 2023 calendar year but at declining levels. Beginning April 1, 2023, eFMAP is reduced over the next three quarters from 6.2 percent to 5 percent through June 30, 2.5 percent through September 30, and 1.5 percent through December 31.

Asylum Seekers Services and Assistance. The FY 2024 Enacted Budget provides support to New York City for services and assistance for asylum seekers, including shelter cost reimbursement.

#### Minimum Wage/Home Care Wages.

The FY 2024 Enacted Budget includes increasing the minimum wage for home care and non-home care workers. The increases will 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.

For non-homecare workers, the FY 2024 Enacted Budget authorizes increasing the minimum wage on January 1, 2024 to \$16 per hour in New York City and Nassau, Suffolk, and Westchester counties, and to \$15 in the remainder of the State, followed by an additional \$0.50 increase each year in 2025 and 2026, and then indexing to inflation annually thereafter.

For home health and personal care workers, the FY 2024 Enacted Budget authorizes increasing the minimum wage, effective January 1, 2024, by \$1.55 downstate and \$1.35 in the rest of the State, with additional Statewide minimum wage increases of \$0.55 to come January 1, 2025 and January 1, 2026. Pending CMS approval, the increases are anticipated to be partially funded by HCBS eFMAP in FY 2024.

Bonus for Healthcare and Direct Care Workers. In FY 2023, healthcare, direct care and other critical safety workers earning less than \$125,000 annually began receiving a State-funded bonus payment of up to \$3,000. The amount of the bonus is based on hours worked and length of time in service. The program runs through April 1, 2024 and the timing of payments is dependent on claims submission. As such, the Financial Plan has been revised to reflect payments continuing into FY 2024 and FY 2025.

In addition, the State previously expected Federal matching funds of roughly \$1.3 billion for the bonus payments made to eligible healthcare workers. Based on initial CMS feedback, the Financial Plan has been revised to reflect the State paying the entire costs of these bonus payments between FY 2023 and FY 2025. This ensures funding has been included in the event of a final determination that these costs are ineligible for Federal matching funds; however the State is continuing to negotiate with CMS to find an acceptable process for documenting and claiming a Federal share.

Mental Hygiene. The FY 2024 Enacted Budget includes 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 Enacted Budget also expands mental health services for children and families, enhances suicide prevention programs, strengthens supportive housing programs, and supports the 4 percent Cost of Living Adjustment (COLA) for voluntary operated providers.

Public Health/Aging. The FY 2024 Enacted Budget adds funding for the Hunger Prevention and Nutrition Assistance Program (HPNAP), tobacco control, cancer services as well as a 4 percent COLA for SOFA consistent with the other Human Services agencies.

Social Services/Housing. The FY 2024 Enacted Budget provides funding to ensure continuity in the level of childcare subsidies; expands eligibility for child care subsidies to more families; creates an employer-supported child care pilot program to provide new financial support for child care; and continues funding for the emergency rental assistance and landlord aid programs, including legal services for tenants facing eviction. 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 related to Institutions for Mental Disease (IMD), indexing of the minimum wage, and providing a 4 percent COLA for the human services workforce. These investments are offset by 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 Enacted Budget includes \$200 million in 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.

Higher Education. The FY 2024 Enacted Budget adds \$93 million in recurring annual operating support for City University of New York (CUNY) campuses starting in Academic Year 2024 and a multiyear commitment to provide CUNY with general operating aid increases of \$36 million in each of the following two academic years (2025 and 2026).

Public Safety. The FY 2024 Enacted Budget includes increased support for Prosecutors and Defenders, Alternative to Incarceration (ATI), the Gun Involved Violence Elimination (GIVE) program, re-entry services, and additional funding to assist in the implementation of criminal discovery laws and pretrial services. The FY 2024 Enacted 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 Enacted Budget includes one-time State assistance to the MTA to address extraordinary revenue impacts caused by the pandemic (\$305 million, of which \$5 million is dedicated to the MTA's Outer Borough Transit Account) 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 Assistance and Grants. The FY 2024 Enacted Budget includes increased funding for various other programs and initiatives including recurring assistance to the City of Albany, the Liberty Defense Project and the Office of New Americans, various programs administered by the Empire State Development Corporation, immigration legal services and combating bias-based crimes. In addition, all other spending includes a reconciliation for the net impact of the Mental Hygiene Stabilization Fund and OPWDD Local Share Adjustments related to the Medicaid Global Cap.

The FY 2024 Enacted Budget also includes \$80 million in FY 2024 and \$134 million in annual outyear support for a new State-funded initiative to incentivize qualifying low-income public and nonpublic schools to participate in the Federal Community Eligibility Provision (CEP) program, allowing all students in those schools to eat breakfast and lunch at no charge regardless of their families' income.

### **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 (JSOC), geographical wage adjustments, and additional enforcement to curb the illegal sale of cannabis.

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 Classes. Increased funding will support additional State Police recruiting classes in FY 2024.

SUNY Endowment Funding. The State will provide \$1 in State funds (up to \$500 million) for every \$2 in private contributions to the endowments of 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 Enacted 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 implemented in March 2023. Additionally, there have been increases to the assigned counsel rate for attorneys providing services to indigent persons. Spending increases for the Legislature are mainly driven by personnel costs for legislative staff, as well as increases for member salaries.

Fringe Benefits/Fixed Costs. The fringe benefit projections have been lowered to account for the management of surplus resources generated in FY 2023 used to prepay fringe benefit expenses due in FY 2024, revised projections for employee health insurance and pension expenses, and future deposits to the RHBTF dependent on fiscal conditions.

### **Transfer to Other Funds**

Capital Projects. The FY 2024 Enacted Budget reduces transfers to various capital projects funds, including: the DHBTF, due to the State's prepayment of dedicated bonds, described above; the Dedicated Infrastructure Investment Fund (DIIF), which is related to slower than anticipated program spending and an updated timeline for the construction of the stadium in Orchard Park; and the State Capital Project Fund, related to the timing of bond proceeds reimbursements. The reduction in transfers is partially offset by new investments for residential energy-efficiency upgrades, health care transformation, and the development of technology systems associated with pre-trial discovery laws.

SUNY Operations. The FY 2024 Enacted Budget provides \$163 million (\$122 million in FY 2024) in new recurring general operating support for SUNY campuses and a multiyear commitment to provide SUNY with general operating aid increases of \$54 million in each of the following two academic years (2025 and 2026). Another \$75 million in State aid to SUNY in Academic Year 2024 (\$56 million in FY 2024) will fund transformational initiatives at campuses that support innovation, help meet workforce needs, and provide student support.

Other Transfers. Transfers reflect a revised schedule for funding the health care transformation fund.

#### **Reserve Changes**

The previously planned deposits to principal reserves in FY 2024 (\$2.4 billion) and FY 2025 (\$2.9 billion) were accelerated and completed in FY 2023. In addition, revisions to the estimated PTET/PIT tax credit payments are offset by the reserve set aside for this purpose. Other changes include the use of available, accumulated surpluses that were carried forward to lower the projected outyear budget gaps and revisions to spending supported by the Monetary Settlements Reserve.

# FY 2024 Enacted Budget Financial Plan

### **Receipts**

General Fund receipts, including transfers from other funds, are estimated to total \$100.5 billion in FY 2024, a decrease of \$2.7 billion (2.6 percent) from FY 2023. Excluding the impact of the PTET program, total receipts are projected to decrease by \$2.9 billion (2.7 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 \$90.7 billion in FY 2024, a decrease of \$10.2 billion (10.1 percent) from FY 2023. The decrease reflects the effects of a mild recession on PIT revenues, in addition to declines in Corporate Franchise Tax (CFT) receipts and estate tax receipts. 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 \$4.9 billion in FY 2023 and increase PIT receipts \$13.7 billion in FY 2024. Including these prepayments, tax receipts are estimated to decrease by \$1.6 billion from FY 2023.

PIT receipts, excluding PTET and debt prepayments, but including transfers after payment of debt service, are estimated to total \$60.4 billion in FY 2024, a decrease of \$10 billion (14.2 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 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 \$1.6 billion (9.8 percent) from FY 2023. This increase reflects moderate growth in the sales tax base (2.7 percent).

Business tax receipts, excluding PTET, are estimated at \$9.3 billion in FY 2024, a decrease of \$1.1 billion (10.3 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 Clean Water/Clean Air (CW/CA) Bonds, are expected to total \$2.6 billion in FY 2024, a decrease of \$797 million from FY 2023. This is primarily due to the

estate tax returning to typical trends following record receipt collections in FY 2023, as well as a decline in real estate transfer tax receipts as the market continues to cool off.

Miscellaneous receipts are projected to increase by \$192 million from FY 2023 due to historically high investment income receipts associated with high interest rates and large fund balances associated with the timing of PTET receipts.

Non-tax transfers are estimated to total \$1.9 billion in FY 2024, a decrease of \$1.4 billion from FY 2023. The change is mainly attributable to an increase in the Transaction Risk Reserve compared to FY 2023 which reduces transfers from other funds, partially offset by increases in transfers from the Health Care Transformation, Mental Health Services, Tribal State Compact and Indigent Legal Services funds.

#### **Disbursements**

General Fund disbursements, including transfers to other funds, are expected to total \$104.4 billion in FY 2024, an increase of \$11.6 billion (12.5 percent) from FY 2023. The annual change in spending is in part due to 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.

Assistance and grants spending is estimated to total \$75.1 billion in FY 2024, an increase of \$12.2 billion from FY 2023. General Fund spending for education and health care represents most of the assistance and grants spending growth. 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 an over \$2 billion drop in eFMAP savings. School Aid is estimated to increase by \$3.3 billion (12.8 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 \$150 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 \$1.7 billion due to investments in health care and provider reimbursement associated with the authorization to increase the State's minimum wage, 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. Other assistance and grants growth is primarily the 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, emergency rental and rental arrears assistance and landlord aid programs including legal services for tenants facing eviction, and significant one-time funding to support asylum seekers services and assistance in New York City.

General Fund agency operations costs, including fringe benefits, are expected to total \$21 billion in FY 2024, a decrease of \$657 million from FY 2023, driven primarily by a decline in General State Charges (GSCs) spending that partially offsets the increase in State Operations spending. 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, increase inpatient beds in State-operated Psychiatric Centers, and provide additional enforcement to curb the illegal sale of cannabis. Additionally, the cost of deploying the National Guard to assist New York City with providing care for asylum seekers and consulting costs associated with development of Section 1115 Medicaid demonstration waivers increase spending in FY 2024. Judiciary spending is projected to increase in FY 2024 driven by increases to the assigned counsel rate for attorneys providing services to indigent persons. Fringe benefit costs are expected to decrease in FY 2024 primarily due to a \$920 million payment to the RHBTF and the advance of certain health insurance and workers compensation payments in FY 2023, partially offset by the increased costs of providing pension benefits to current and retired employees.

General Fund transfers to Other Funds are projected to total \$8.4 billion in FY 2024, an increase of \$67 million from FY 2023. The growth is mainly attributable to increased transfers for capital projects reflecting an increase in planned Pay-As-You-Go (PAYGO) capital spending and increased transfers to SUNY for transformational initiatives at campuses that support innovation, help meet workforce needs, and provide student support; partially offset by lower Health Care Transformation and Dedicated Mass Transportation Trust Fund transfers.

### FY 2024 Closing Balance

Excluding the Pass-Through Entity Tax (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 \$25.9 billion, a decrease of \$1.6 billion 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 planned use of prior year resources to fund certain commitments and operations in FY 2024.

### **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 that is 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 Enacted 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. 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 the State to obtain up to \$1 billion in line of credit facilities, which may 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 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 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 PIT 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 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 Financial Plan includes an estimate for PTET within business taxes and the corresponding decrease in PIT receipts. It is expected that the tax benefit accompanying the PTET program will end in 2025 due to the scheduled expiration of the SALT deduction cap under current Federal law. Therefore, the estimates in the Financial Plan reflect the likelihood that entities cease to participate in the later years of the Financial Plan period.

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 entire amount was set aside for purposes of offsetting the decrease in PIT receipts in FY 2023 and beyond. The accompanying tax credits result in decreased PIT collections beginning in April 2022. In FY 2024, the State expects to continue to collect PTET and pay PIT credits connected with the program for tax years 2021 through 2023. A portion of the reserve balance will cover the difference between PTET collections and related PIT credits.

FY 2023 PIT collections were reduced by an estimated \$17.0 billion due to PTET credits and All Funds receipts were reduced by a net \$2.1 billion, due to timing. PIT credits may be claimed on the tax return in the following fiscal year, or they can be reflected sooner through reductions in estimated payments. In tax year 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. Taxpayers recognized a substantial portion of PTET PIT credits through current estimated payments beginning tax year 2022 and are expected to continue this behavior in future years. FY 2023 PIT collections were reduced by credits for most 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).

# 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.

#### **Assistance and Grants**

Approximately two-thirds of State spending is for assistance and grants 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 assistance and grants spending.

Over the past two years, assistance and grants funding has included a significant amount of spending for pandemic recovery initiatives, which support time-limited programs including the Emergency Rental Assistance Program (ERAP), the Landlord Rental Assistance Program (LRAP), assistance to excluded workers, small business assistance, funding for hospitals that are experiencing financial distress as a result of the COVID-19 pandemic, public utility arrears assistance, Healthcare/Direct Care Worker Bonuses, and other targeted initiatives. Most of the one- time assistance was exhausted in FY 2023.

School Aid spending for SY 2024 is estimated at \$34.4 billion, excluding Federal prekindergarten grants, representing an annual increase of \$3.0 billion (9.7 percent). This annual growth is primarily driven by increased funding for Foundation Aid (\$2.6 billion), expense-based reimbursement programs (\$225 million), and the expansion of State-funded full-day prekindergarten programming for four-year-old children (\$150 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 assistance and grants spending, excluding the effect of the temporary eFMAP, is estimated at \$27.3 billion in FY 2024, an annual increase of 7.0 percent. Medicaid costs reported under the Global Cap are projected to increase by \$1.4 billion, consistent with the updated growth index. Higher spending is attributable to 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 (\$190 million) and financial relief to counties and New York City associated with full coverage of the local share of spending growth (\$182 million). A portion of Medicaid-related expenses of Office for People with Developmental Disabilities (OPWDD) will be funded outside of the DOH Global Cap to provide spending room for healthcare worker bonus payments and other initiatives.

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 is 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 \$1.6 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 4 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 (\$305 million, of which

\$5 million is dedicated to the MTA's Outer Borough Transit Account), 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 \$581 million to the MTA, \$33 million for non-MTA downstate transit systems, and \$38 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, emergency rental assistance and landlord aid programs including legal services for tenants facing eviction, 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 adapting to Federal requirements, the indexing of the minimum wage and a 4 percent COLA for the human services workforce. 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 9.2 percent in FY 2024, primarily reflecting estimated increases in spending for student financial aid programs, including the continued expansion of Tuition Assistance Program (TAP) for part-time students in degree-granting programs as well as students enrolled in nondegree workforce credentialing programs at public institutions, and increased operating support for CUNY senior colleges.

Increased funding for other education programs largely reflects the continued impact of an 11 percent SY 2023 COLA for special education program tuition rates and the return of enrollment in such programs to pre-pandemic levels, and a new State-funded initiative to incentivize qualifying low-income public and nonpublic schools to participate in the CEP program, allowing all students in those schools to eat breakfast and lunch at no charge regardless of their families' income.

Other assistance and grants spending growth includes additional funding for energy affordability; and criminal justice programs including: Aid to Prosecution, Aid to Defense, ATI, GIVE programs, pretrial services, discovery reform funding, and anti-Fentanyl innovation grant funding. The FY 2024 Enacted Budget also provides additional funding for immigration legal services and combating biased based crimes. 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 prior year State costs incurred for pandemic response and recovery efforts; and the payment of salary increases pursuant to existing contracts, including retroactive salary increases. FY 2024 spending growth includes increased spending to support asylum seekers services and assistance efforts, State Police recruiting classes, lead abatement, the opening of new inpatient beds in State- operated Psychiatric Centers, and additional enforcement to curb the illegal sale of cannabis.

University systems spending growth in FY 2024 reflects expected State payments related to the establishment of a \$500 million program 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 across all SUNY campuses that support

innovation, help meet the workforce needs of the future, and provide needed supports to students. In addition, the Financial Plan includes \$120 million in new recurring operating aid support for SUNY State-operated campuses in FY 2024.

The operating costs for the offices of independently elected officials (Attorney General, Comptroller, Judiciary, and Legislature) are projected to increase by a combined \$220 million (8.1 percent). The increase is primarily due to planned increases for personnel and contract costs. The FY 2024 Enacted Budget also increases the assigned counsel rate for attorneys providing services to indigent persons.

The decline in GSCs spending is primarily attributable to a payment into the State's Retiree Health Insurance Trust Fund of \$920 million in FY 2023. Additionally, at the end of FY 2023, the State made certain prepayments of the Workers' Compensation and Health insurance obligations for FY 2024. These one-time non-recurring payments in FY 2023 partially offset the cost increases for health insurance and workers' compensation claims, driven by medical cost inflation and increases in the average weekly wage.

### Other Matters Affecting the Financial Plan

The 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 Financial Plan are based on reasonable assumptions at the time they were prepared. DOB is unable to provide any assurance that actual results will not differ materially and adversely from these projections.

Receipts. State tax collections are economically sensitive and are affected by the condition of the State and national economies. Uncertainties and risks that may affect the 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 events; Federal laws and regulations; financial sector compensation; capital gains; and monetary policy affecting interest rates and the financial markets.

Disbursements. Projections and timing of disbursements is subject to many of the same risks listed above for receipts, as well as assumptions which may have additional risks including, but not limited to: the level of wage and benefit increases for State employees; changes in the size of the State's workforce; factors affecting the State's required pension fund contributions; the availability of Federal reimbursement, including Federal COVID-19 emergency assistance; the receipt of Federal approvals necessary to implement the Medicaid savings actions; unanticipated growth in public assistance programs; the ability of the State to implement cost reduction initiatives, including reductions in State agency operations, when established, and the success with which the State controls expenditures; 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.

Litigation Risk. The Financial Plan forecast is subject to litigation risk. Litigation against the State may challenge the constitutionality of various actions with fiscal implications. Furthermore, certain adverse decisions may not meet the materiality threshold to warrant a description herein but, in the aggregate, could still negatively affect the Financial Plan.

Financial Plan Management. In developing the Financial Plan, DOB attempts to mitigate financial risks, with an emphasis on the General Fund. It does this by, among other things, exercising caution when calculating total General Fund disbursements and managing the accumulation of financial resources. Such resources include but are not limited to: fund balances that are not needed each year, reimbursement for capital advances, and prepayment of expenses subject to available resources, to maintain budget flexibility. 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. There is no guarantee that such financial resources or cash management actions will be sufficient to address risks that may materialize in a given fiscal year.

In addition, there can be no assurance that the State's financial position will not change materially and adversely from current projections. If this were to occur, the State may be required to take additional gap-closing actions. Such actions may include, but are not limited to, reductions in State agency operations; delays or reductions in payments to local governments or other recipients of State aid; delays in or suspension of capital maintenance and construction; extraordinary financing of operating expenses; and use of non-recurring resources. In some cases, the ability of the State to implement such actions requires the approval of the Legislature and cannot be implemented solely by the Governor.

#### **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. The Financial Plan may also be adversely affected by other Federal government actions including audits, disallowances, changes to Federal participation rates or other Medicaid rules, and discretionary spending reductions. Any significant reductions in Federal aid could have a materially adverse impact on the Financial Plan. Health care and human services are the notable areas for potential changes in Federal funding.

Medicaid. Federal funding for Medicaid is subject to review by CMS every five years and is currently extended through March 31, 2027, which supports the Medicaid Managed Care Programs, Children's Home and Community Based Services (HCBS), and self-direction of personal care services.

In September 2022, the State requested \$13.5 billion in new Federal Medicaid funding to address health disparities exacerbated by the COVID-19 pandemic. If approved by CMS, the funding would be available over a five-year term and would help support social, physical and behavioral health care services throughout the State. The qualification, however, is that this request may require additional State resources to draw down funding, as the State may be unable to identify sufficient Designated State Healthcare Programs (DSHP) to match the full Federal allocation. Fiscally, the request could also be scaled to the size of existing funding match and/or new State resources could be made available.

Federal Debt Limit. Periodically, Congress needs to act to increase or suspend the debt limit to avoid delaying payments and/or defaulting on debt obligations. 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 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 and 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. 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. The Financial Plan estimates of tax receipts assume the SALT deduction cap is not extended or modified after 2025.

## **Major Operating Programs**

# **Statutory Growth Caps for School Aid and Medicaid**

In FY 2012, the State began utilizing spending growth caps intended to limit the year-to-year growth in the State's two largest assistance and grants programs, School Aid and Medicaid.

School Aid. The School Aid growth cap is 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). The statutory PIGI for School Aid limits School Aid increases to no more than the average annual income growth over a ten-year period. In certain years, the authorized School Aid increases exceeded the indexed levels. The SY 2024 increase of \$3.0 billion (9.7 percent) is above the indexed PIGI rate of 4.2 percent. In SY 2025 and beyond, School Aid is projected to increase in line with the rate allowed under the School Aid growth cap.

Medicaid. Over 80 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 consumer price index (CPI) for all urban consumers and thus allowed for growth attributable to increasing costs, though not increasing utilization. To accommodate growth in factors not indexed under the prior Global Cap, 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 2024 Enacted 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 actual 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 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 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.

Currently, only non-citizens with certain immigration statuses are eligible for Federal and/or State benefits, including those "Permanently Residing Under Color of Law" (PRUCOL). While the term PRUCOL is not an immigration status, it is a public benefit category used by the Office of Temporary and Disability Assistance (OTDA) for the purposes of determining eligibility for Safety Net Assistance (SNA) and by DOH for determining which non-citizens may be eligible for Medicaid. Administrative actions are being taken to align the OTDA and DOH definitions of PRUCOL. As a result, more households may be eligible for SNA, increasing State costs.

# **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 individuals and government payor mix. Accordingly, the FY 2024 Enacted Budget commits an additional \$500 million in one-time resources in FY 2024, 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 Department of Financial Services (DFS) have reached significant opioid related settlements with several corporations for their roles in helping fuel the opioid epidemic. As a result of the settlements, the State and its subdivisions are expected to receive payments over multiple years extending through 2040 which total more than \$2.6 billion. A portion of this total will be paid directly to localities under the terms of the settlements, with the remainder paid to the State. 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 these settlements 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. 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 pursuant to 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. Detailed descriptions of prior settlements are available in previous Financial Plan publications.

#### **State Labor Force**

### **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's agreement with the Civil Service Employees Association (CSEA) extends through FY 2026, but all other contracts are now expired.

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

The State recently reached tentative agreements with PEF and UUP. Both agreements are subject to ratification by the respective membership of each union. The agreement with PEF runs from FY 2024 to FY 2026 and would provide 3 percent across the board salary increases for each year of the contract and a \$3,000 bonus in FY 2024. The agreement with UUP runs from FY 2023 to FY 2026 and would provide a 2 percent across the board salary increase in FY 2023 and 3 percent across the board salary increases from FY 2024 to FY 2026. The tentative agreement with UUP would also provide a \$1,500 bonus to employees in FY 2025 and FY 2026. If these tentative agreements are ratified, this table will be revised accordingly in future updates.

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 retirees and beneficiaries were receiving pension benefits. Article 5, section 7 of the State Constitution considers membership in any State pension or retirement system 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 Systems (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. All projections are based on estimated market returns and numerous actuarial assumptions which, if unrealized, could have a materially adverse effect on these projections.

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 2022.

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 applied 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 Financial Plan reflects the actuarial changes approved by the Comptroller, including revised ERS/PFRS pension estimates of \$1.9 billion for FY 2024 based on the February 2023 estimate provided by the Actuary. Approximately \$77 million in pension interest savings was achieved from the payment of the State's FY 2024 ERS/PFRS bill in May 2023.

The FY 2024 Enacted Budget included legislation that modified the requirements when awarding an accidental disability benefit when the disability was related to the heart for all NYSLRS members. Furthermore, it enhanced the death and disability benefit paid to PFRS members in the event of incapacity or death due to heart disease. The Financial Plan reflects the cost to the changes which are estimated to be \$14.6 million in FY 2024 and approximately \$2.1 million annually thereafter.

The Comptroller does not forecast pension liability estimates for the later years of the 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.

### **Pension Assets and Liabilities**

The System's assets are held by the CRF for the exclusive benefit of members, retirees and beneficiaries. Investments for the System are made by the State Comptroller as trustee of the CRF.

The System reports that the net position restricted for pension benefits as of March 31, 2022 was \$273.7 billion (including \$2.4 billion in receivables, which consist of employer contributions, amortized amounts, member contributions, member loans, accrued interest and dividends, investment sales and other miscellaneous receivables), an increase of \$13.6 billion or 5.2 percent from the FY 2021 level of \$260.1 billion. The increase in net position restricted for pension benefits from FY 2021 to FY 2022 is primarily the result of the net appreciation of the fair value of the investment portfolio. The System's audited Financial Statement reports a time-weighted investment rate of return of 9.5 percent (gross rate of return before the deduction of certain fees) for FY 2022.

Consistent with statutory limitations affecting categories of investment, the State Comptroller, as trustee of the CRF, establishes a target asset allocation and approves policies and procedures to guide and direct the investment activities of the Division of Pension Investment and Cash Management. The purpose of this asset allocation strategy is to identify the optimal diversified mix of assets to meet the requirements of pension payment obligations to members. In the fiscal year ended March 31, 2020, an asset liability analysis was completed, and a long-term policy allocation was adopted as of April 1, 2021. The current long-term policy allocation seeks a mix that includes 47 percent public equities (32 percent domestic and 15 percent international); 24 percent fixed income and cash; and 29 percent alternative investments (10 percent private equity, 9 percent real estate, 4 percent credit, 3 percent opportunistic/absolute return or hedge funds, and 3 percent real assets). Since the implementation of the long-term policy allocation will take several years, transition targets have been established to aid in the asset rebalancing process.

The System reports that the present value of anticipated benefits for current members, retirees, and beneficiaries increased to \$320.1 billion (including \$166.6 billion for retirees and beneficiaries) as of April 1, 2022, up from \$308.8 billion as of April 1, 2021. The funding method used by the System anticipates that the plan net position, plus future actuarially determined contributions, will be sufficient to pay for the anticipated benefits of current members, retirees and beneficiaries. The valuation used by the Retirement Systems Actuary was based on audited net position restricted for pension benefits as of March 31, 2022. Actuarially determined contributions are calculated using actuarial assets and the present value of anticipated benefits. Actuarial assets differed from plan net position on April 1, 2022 in that the determination of actuarial assets restarted a smoothing method, with an eight-year smoothing period, that recognized 12.5 percent of the unexpected gain for FY 2022. Actuarial assets increased from \$260.1 billion on April 1, 2021 to \$267.3 billion on April 1, 2022.

The ratio of fiduciary net position to the total pension liability for ERS, as of March 31, 2022, calculated by the System's Actuary, was 103.65 percent. The ratio of the fiduciary net position to the total pension liability for PFRS, as of March 31, 2022, calculated by the System's Actuary, was 98.66 percent.

### **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 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.

# **State Debt**

## **Bond Market and Credit Ratings**

Successful execution of the 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. 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.

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 \$24.8 billion in FY 2023 to a low point of \$3.7 billion 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 \$2.6 billion in FY 2024, or roughly \$8.5 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.

### **Enacted Budget - Debt Cap Changes**

In the FY 2024 Enacted Budget, the State added new bond-financed capital commitments that are expected to add \$1 billion in new debt over the five-year Capital Plan period, which is in addition to \$4 billion of new capital proposed in the FY 2024 Executive Budget. The capital spending increases are offset by higher underspending on capital projects than previously assumed, the assumption that the State will issue bonds on a slower schedule, and \$3 billion of new PAYGO capital spending. 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. In addition, the State has set aside \$1 billion in a debt management reserve that can be used, as needed, for debt management actions in the future.

#### **Localities and Authorities**

#### **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 Financial Plan projections. 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 has been provided to the MTA from the Coronavirus Aid, Relief, and Economic Security (CARES) Act (\$4 billion), Coronavirus Response and Relief Supplemental Appropriations (CRRSA) Act (\$4.1 billion), and the American Rescue Plan Act (ARP) (\$7 billion). The MTA also borrowed \$2.9 billion through the Federal Reserve's Municipal Liquidity Facility (MLF).

In the FY 2024 Enacted Budget, the State took substantial action to provide the MTA with additional operating revenues dedicated to help solve the MTA's fiscal crisis due to the effects of the pandemic. This includes an increase in the metropolitan commuter transportation mobility tax (MCTMT) in New York City, a one-time State subsidy of \$300 million, an increase in New York City's contribution to the MTA for the costs of paratransit services, and directing a portion of future casino revenues to the MTA.

Risks to the 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

in future years, either through additional subsidies or new revenues, it could have a material and adverse impact on the State's Financial Plan.

### **Other Risks and Ongoing Concerns**

### **Climate Change**

Climate change poses significant threats to physical, biological, and economic systems in New York and around the world. 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 wildfires, and more extreme heat. The immediate and long-term effects of climate change could adversely impact the Financial Plan in current or future years. To mitigate and manage these impacts, the Federal government, the State, municipalities, and public utilities are undertaking actions to reduce greenhouse gas emissions and adapt existing infrastructure to a changed environment. There can be no assurance that such efforts will be adequate or timely enough to mitigate the most damaging effects of climate change.

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.

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. 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 require a minimum of 70 percent of electricity to be generated 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, which recommends, among other actions, that the State develop a cap-and- invest program to limit greenhouse gas emissions. Pursuant to the CLCPA, by January 1, 2024 the Department of Environmental Conservation is required to draft and circulate rules and regulations that are consistent with meeting the CLCPA's statewide greenhouse gas emission limits.

New York's electricity system is already part of a regional cap-and-invest style program, the Regional Greenhouse Gas Initiative (RGGI). Since RGGI was established in 2005, the program has helped reduce greenhouse gases from power plants by more than half and raised nearly \$6 billion to support cleaner energy solutions amongst its 12 participating states.

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.

- Authorizing the New York Power Authority (NYPA) to plan, design, develop, finance, construct, own, operate, maintain and improve renewable energy generating projects;
- Prohibiting building systems and/or equipment that burn fossil fuels in new construction starting December 31, 2025 for any new building seven stories or lower, except large commercial and industrial buildings, and December 31, 2028 for all other new buildings:

- Requiring new off-road vehicles and equipment sold in New York to be zero-emissions by 2035 and new mediumduty and heavy-duty vehicles to be zero-emissions by 2045;
- 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;
- Appropriating \$200 million to help low-income families retrofit their homes by adding insulation, installing energy
  efficient appliances, and switching to clean energy; and
- Appropriating \$500 million to advance the offshore wind industry.

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.

# Cybersecurity

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 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 Enacted 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 preventing 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





