BlackRock

Summary Prospectus

BlackRock Municipal Bond Fund, Inc. | Service Shares

• BlackRock National Municipal Fund

Service: BNMSX

Before you invest, you may want to review the Fund's prospectus, which contains more information about the Fund and its risks. You can find the Fund's prospectus (including amendments and supplements), reports to shareholders and other information about the Fund, including the Fund's statement of additional information, online at http://www.blackrock.com/prospectus. You can also get this information at no cost by calling (800) 537-4942 or by sending an e-mail request to **prospectus.request@blackrock.com**, or from your financial professional. The Fund's prospectus and statement of additional information, both dated November 1, 2023, as amended and supplemented from time to time, are incorporated by reference into (legally made a part of) this Summary Prospectus.

This Summary Prospectus contains information you should know before investing, including information about risks. Please read it before you invest and keep it for future reference.

The Securities and Exchange Commission has not approved or disapproved these securities or passed upon the adequacy of this Summary Prospectus. Any representation to the contrary is a criminal offense.

Not FDIC Insured • May Lose Value • No Bank Guarantee

Summary Prospectus

Key Facts About BlackRock National Municipal Fund

Investment Objective

The investment objective of BlackRock National Municipal Fund (the "Fund") is to provide shareholders with as high a level of income exempt from Federal income taxes as is consistent with the investment policies of the Fund.

Fees and Expenses of the Fund

This table describes the fees and expenses that you may pay if you buy, hold and sell Service Shares of the Fund. You may pay other fees, such as brokerage commissions and other fees to your financial professional or your selected securities dealer, broker, investment adviser, service provider or industry professional (including BlackRock Advisors, LLC ("BlackRock") and its affiliates) (each a "Financial Intermediary"), which are not reflected in the table and example below.

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

0.39%
0.25%
0.20% 0.08% 0.12%
0.01%
0.85%

Service Shares

Management Fee ¹	0.39%
Distribution and/or Service (12b-1) Fees	0.25%
Other Expenses Miscellaneous Other Expenses Interest Expense	0.20% 0.08% 0.12%
Acquired Fund Fees and Expenses ²	0.01%
Total Annual Fund Operating Expenses ²	0.85%
Fee Waivers and/or Expense Reimbursements ^{1,3}	(0.04)%
Total Annual Fund Operating Expenses After Fee Waivers and/or Expense Reimbursements ^{1,3}	0.81%

- As described in the "Management of the Fund" section of the Fund's prospectus beginning on page 28, BlackRock Advisors, LLC ("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 agreements may be terminated upon 90 days' notice by a majority of the non-interested directors of BlackRock Municipal Bond Fund, Inc. (the "Corporation") or by a vote of a majority of the outstanding voting securities of the Fund.
- The Total Annual Fund Operating Expenses do not correlate to the ratios of expenses to average net assets given in the Fund's most recent annual report, which do not include Acquired Fund Fees and Expenses.
- As described in the "Management of the Fund" section of the Fund's prospectus beginning on page 28, BlackRock 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) to 0.68% of average daily net assets through June 30, 2025. The contractual agreement may be terminated upon 90 days' notice by a majority of the noninterested directors of the Corporation or by a vote of a majority of the outstanding voting securities of the Fund.

This Example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. The Example assumes that you invest \$10,000 in the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. The Example also assumes that your investment has a 5% return each year and that the Fund's operating expenses remain the same. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

	1 Year	3 Years	5 Years	10 Years
Service Shares	\$83	\$267	\$467	\$1,045

Portfolio Turnover:

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the Example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 63% of the average value of its portfolio.

Principal Investment Strategies of the Fund

Under normal circumstances, the Fund seeks to achieve its objective by investing at least 80% of its assets in municipal bonds. Municipal bonds include debt obligations issued by or on behalf of a governmental entity or other qualifying issuer that pay interest that is, in the opinion of bond counsel to the issuer, generally excludable from gross income for Federal income tax purposes (except that the interest may be includable in taxable income for purposes of the Federal alternative minimum tax). Municipal bonds may be obligations of a variety of issuers, including governmental entities or other qualifying issuers. Issuers may be states, territories and possessions of the United States and the District of Columbia and their political subdivisions, agencies and instrumentalities. Municipal bonds also include short-term tax-exempt obligations like municipal notes and variable rate demand obligations.

The Fund may invest in municipal bonds rated in any rating category or in unrated municipal bonds. Although Fund management presently intends to invest at least 65% of the Fund's net assets in municipal bonds rated investment grade or in unrated municipal bonds that Fund management believes are of comparable quality, it is possible that in the future the Fund could invest up to 100% of its assets in "junk bonds." Investment grade bonds are securities which are rated in the four highest categories by at least one of the major rating agencies or determined by the management team to be of similar quality. The Fund does not intend to invest more than 35% of its net assets in junk bonds or in unrated bonds that Fund management believes are of comparable quality. This is a non-fundamental policy and may be changed by the Board at any time. The Fund will primarily invest in municipal bonds that have a maturity of five years or longer.

The Fund may engage in transactions in certain derivatives, such as financial futures contracts and options thereon, indexed and inverse floating rate obligations and swap agreements, including credit default swap agreements. The Fund may use derivative instruments to hedge its investments or to seek to enhance returns. The Fund may leverage its assets through the use of proceeds received through tender option bond transactions. In a tender option bond transaction, the Fund transfers municipal bonds or other municipal securities into a special purpose entity (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 residual inverse floating rate interests ("TOB Residuals"), which are generally issued to the Fund. The Fund may invest in TOB Residuals and may also invest in TOB Floaters. The Fund will look through to the underlying municipal bond held by a TOB Trust for purposes of the Fund's 80% policy.

Principal Risks of Investing in the Fund

Risk is inherent in all investing. The value of your investment in the Fund, as well as the amount of return you receive on your investment, may fluctuate significantly from day to day and over time. You may lose part or all of your investment in the Fund or your investment may not perform as well as other similar investments. The following is a summary description of principal risks of investing in the Fund. The relative significance of each risk factor below may change over time and you should review each risk factor carefully.

■ **Debt Securities Risk** — Debt securities, such as bonds, involve interest rate risk, credit risk, extension risk, and prepayment risk, among other things.

Interest Rate Risk — The market value of bonds and other fixed-income securities changes in response to interest rate changes and other factors. Interest rate risk is the risk that prices of bonds and other fixed-income securities will increase as interest rates fall and decrease as interest rates rise.

The Fund may be subject to a greater risk of rising interest rates due to the recent period of historically low interest rates. For example, if interest rates increase by 1%, assuming a current portfolio duration of ten years, and all other factors being equal, the value of the Fund's investments would be expected to decrease by 10%. (Duration is a measure of the price sensitivity of a debt security or portfolio of debt securities to relative changes in interest rates.) The magnitude of these fluctuations in the market price of bonds and other fixed-income securities is generally greater for those securities with longer maturities. Fluctuations in the market price of the Fund's investments will not affect interest income derived from instruments already owned by the Fund, but will be reflected in the Fund's net asset value. The Fund may lose money if short-term or long-term interest rates rise sharply in a manner not anticipated by Fund management.

To the extent the Fund invests in debt securities that may be prepaid at the option of the obligor (such as mortgage-backed securities), the sensitivity of such securities to changes in interest rates may increase (to the detriment of the Fund) when interest rates rise. Moreover, because rates on certain floating rate debt securities typically reset

only periodically, changes in prevailing interest rates (and particularly sudden and significant changes) can be expected to cause some fluctuations in the net asset value of the Fund to the extent that it invests in floating rate debt securities.

These basic principles of bond prices also apply to U.S. Government securities. A security backed by the "full faith and credit" of the U.S. Government is guaranteed only as to its stated interest rate and face value at maturity, not its current market price. Just like other fixed-income securities, government-guaranteed securities will fluctuate in value when interest rates change.

A general rise in interest rates has the potential to cause investors to move out of fixed-income securities on a large scale, which may increase redemptions from funds that hold large amounts of fixed-income securities. Heavy redemptions could cause the Fund to sell assets at inopportune times or at a loss or depressed value and could hurt the Fund's performance.

Credit Risk — Credit risk refers to the possibility that the issuer of a debt security (i.e., the borrower) will not be able to make payments of interest and principal when due. Changes in an issuer's credit rating or the market's perception of an issuer's creditworthiness may also affect the value of the Fund's investment in that issuer. The degree of credit risk depends on both the financial condition of the issuer and the terms of the obligation.

Extension Risk — When interest rates rise, certain obligations will be paid off by the obligor more slowly than anticipated, causing the value of these obligations to fall.

Prepayment Risk — When interest rates fall, certain obligations will be paid off by the obligor more quickly than originally anticipated, and the Fund may have to invest the proceeds in securities with lower yields.

■ Municipal Securities Risks — Municipal securities risks include the ability of the issuer to repay the obligation, the relative lack of information about certain issuers of municipal securities, and the possibility of future legislative changes which could affect the market for and value of municipal securities. Budgetary constraints of local, state, and federal governments upon which the issuers may be relying for funding may also impact municipal securities. These risks include:

General Obligation Bonds Risks — Timely payments depend on the issuer's credit quality, ability to raise tax revenues and ability to maintain an adequate tax base.

Revenue Bonds Risks — These payments depend on the money earned by the particular facility or class of facilities, or the amount of revenues derived from another source.

Private Activity Bonds Risks — Municipalities and other public authorities issue private activity bonds to finance development of industrial facilities for use by a private enterprise. The private enterprise pays the principal and interest on the bond, and the issuer does not pledge its full faith, credit and taxing power for repayment.

Moral Obligation Bonds Risks — Moral obligation bonds are generally issued by special purpose public authorities of a state or municipality. If the issuer is unable to meet its obligations, repayment of these bonds becomes a moral commitment, but not a legal obligation, of the state or municipality.

Municipal Notes Risks — Municipal notes are shorter term municipal debt obligations. If there is a shortfall in the anticipated proceeds, the notes may not be fully repaid and the Fund may lose money.

Municipal Lease Obligations Risks — In a municipal lease obligation, the issuer agrees to make payments when due on the lease obligation. Although the issuer does not pledge its unlimited taxing power for payment of the lease obligation, the lease obligation is secured by the leased property.

Tax-Exempt Status Risk — The Fund and its investment manager will rely on the opinion of issuers' bond counsel and, in the case of derivative securities, sponsors' counsel, on the tax-exempt status of interest on municipal bonds and payments under derivative securities. Neither the Fund nor its investment manager will independently review the bases for those tax opinions, which may ultimately be determined to be incorrect and subject the Fund and its shareholders to substantial tax liabilities.

- **Junk Bonds Risk** Although junk bonds generally pay higher rates of interest than investment grade bonds, junk bonds are high risk investments that are considered speculative and may cause income and principal losses for the Fund.
- **Derivatives Risk** The Fund's use of derivatives may increase its costs, reduce the Fund's returns and/or increase volatility. Derivatives involve significant risks, including:

Leverage Risk — The Fund's use of derivatives 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 — Some derivatives are more sensitive to interest rate changes and market price fluctuations than other securities. The Fund could also suffer losses related to its derivatives positions as a result of unanticipated

market movements, which losses are potentially unlimited. Finally, BlackRock may not be able to predict correctly the direction of securities prices, interest rates and other economic factors, which could cause the Fund's derivatives positions to lose value.

Counterparty Risk — Derivatives are also subject to counterparty risk, which is the risk that the other party in the transaction will be unable or unwilling to fulfill its contractual obligation, and the related risks of having concentrated exposure to such a counterparty.

Illiquidity Risk — The possible lack of a liquid secondary market for derivatives and the resulting inability of the Fund to sell or otherwise close a derivatives position could expose the Fund to losses and could make derivatives more difficult for the Fund to value accurately.

Operational Risk — The use of derivatives includes the risk of potential operational issues, including documentation issues, settlement issues, systems failures, inadequate controls and human error.

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

Volatility and Correlation Risk — Volatility is defined as the characteristic of a security, an index or a market to fluctuate significantly in price within a short time period. A risk of the Fund's use of derivatives is that the fluctuations in their values may not correlate with the overall securities markets.

Valuation Risk — Valuation for derivatives may not be readily available in the market. Valuation may be more difficult in times of market turmoil since many investors and market makers may be reluctant to purchase complex instruments or quote prices for them.

Hedging Risk — Hedges are sometimes subject to imperfect matching between the derivative and the underlying security, and there can be no assurance that the Fund's hedging transactions will be effective. The use of hedging may result in certain adverse tax consequences.

Tax Risk — Certain aspects of the tax treatment of derivative instruments, including swap agreements and commodity-linked derivative instruments, are currently unclear and may be affected by changes in legislation, regulations or other legally binding authority. Such treatment may be less favorable than that given to a direct investment in an underlying asset and may adversely affect the timing, character and amount of income the Fund realizes from its investments.

Regulatory Risk — Derivative contracts are subject to regulation under the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") in the United States and under comparable regimes in Europe, Asia and other non-U.S. jurisdictions. Under the Dodd-Frank Act, with respect to uncleared swaps, swap dealers are required to collect variation margin from the Fund and may be required by applicable regulations to collect initial margin from the 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. In addition, 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 derivatives contracts, terms that delay or restrict the rights of counterparties, such as the Fund, to terminate such contracts, 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. The implementation of these requirements with respect to derivatives, as well as regulations under the Dodd-Frank Act regarding clearing, mandatory trading and margining of other derivatives, may increase the costs and risks to the Fund of trading in these instruments and, as a result, may affect returns to investors in the Fund.

■ Illiquid Investments Risk — The Fund may not acquire any illiquid investment if, immediately after the acquisition, the Fund would have invested more than 15% of its net assets in illiquid investments. An illiquid investment is any investment that the 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 the 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 the 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. The 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 the 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. An investment may be illiquid due to, among other things, the reduced number and capacity of traditional market participants to make a market in fixed-income securities or the lack of an active trading market. To the extent that the Fund's principal investment strategies

involve derivatives or securities with substantial market and/or credit risk, the Fund will tend to have the greatest exposure to the risks associated with illiquid investments. Illiquid investments may be harder to value, especially in changing markets, and if the Fund is forced to sell these investments to meet redemption requests or for other cash needs, the Fund may suffer a loss. This may be magnified in a rising interest rate environment or other circumstances where investor redemptions from fixed-income mutual funds may be higher than normal. In addition, when there is illiquidity in the market for certain securities, the Fund, due to limitations on illiquid investments, may be subject to purchase and sale restrictions.

- Leverage Risk Some transactions may give rise to a form of economic leverage. These transactions may include, among others, derivatives, and may expose the Fund to greater risk and increase its costs. The use of leverage may cause the Fund to liquidate portfolio positions when it may not be advantageous to do so to satisfy its obligations or to meet the applicable requirements of the Investment Company Act of 1940, as amended (the "Investment Company Act"), and the rules thereunder. Increases and decreases in the value of the Fund's portfolio will be magnified when the Fund uses leverage.
- Market Risk and Selection Risk Market risk is the risk that one or more markets in which the Fund invests will go down in value, including the possibility that the markets will go down sharply and unpredictably. The value of a security or other asset may decline due to changes in general market conditions, economic trends or events that are not specifically related to the issuer of the security or other asset, or factors that affect a particular issuer or issuers, exchange, country, group of countries, region, market, industry, group of industries, sector or asset class. Local, regional or global events such as war, acts of terrorism, the spread of infectious illness or other public health issues like pandemics or epidemics, recessions, or other events could have a significant impact on the Fund and its investments. Selection risk is the risk that the securities selected by Fund management will underperform the markets, the relevant indices or the securities selected by other funds with similar investment objectives and investment strategies. This means you may lose money.

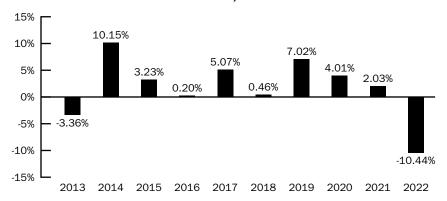
An outbreak of an infectious coronavirus (COVID-19) that was first detected in December 2019 developed into a global pandemic that has resulted in numerous disruptions in the market and has had significant economic impact leaving general concern and uncertainty. Although vaccines have been developed and approved for use by various governments, the duration of the pandemic and its effects cannot be predicted with certainty. The impact of this coronavirus, and other epidemics and pandemics that may arise in the future, could affect the economies of many nations, individual companies and the market in general ways that cannot necessarily be foreseen at the present time.

- Tender Option Bonds and Related Securities Risk The Fund's participation in tender option bond transactions may reduce the Fund's returns and/or increase volatility. Investments in tender option bond transactions expose the Fund to counterparty risk and leverage risk. An investment in a tender option bond transaction typically will involve greater risk than an investment in a municipal fixed rate security, including the risk of loss of principal. Distributions on TOB Residuals will bear an inverse relationship to short-term municipal security interest rates. Distributions on TOB Residuals paid to the Fund will be reduced or, in the extreme, eliminated as short-term municipal interest rates rise and will increase when short-term municipal interest rates fall. TOB Residuals generally will underperform the market for fixed rate municipal securities in a rising interest rate environment. The Fund may invest in TOB Trusts on either a non-recourse or recourse basis. If the Fund invests in a TOB Trust on a recourse basis, it could suffer losses in excess of the value of its TOB Residuals.
- Variable Rate Demand Obligations Risks Variable rate demand obligations are floating rate securities that combine an interest in a long-term municipal bond with a right to demand payment before maturity from a bank or other financial institution. If the bank or financial institution is unable to pay, the Fund may lose money.

Performance Information

The information shows you how the Fund's performance has varied year by year and provides some indication of the risks of investing in the Fund. The table compares the Fund's performance to that of the Bloomberg Municipal Bond Index. To the extent that dividends and distributions have been paid by the Fund, the performance information for the Fund in the chart and table assumes reinvestment of the dividends and distributions. As with all such investments, past performance (before and after taxes) is not an indication of future results. The table includes all applicable fees. If the Fund's investment manager and its affiliates had not waived or reimbursed certain Fund expenses during these periods, the Fund's returns would have been lower. Updated information on the Fund's performance, including its current net asset value, can be obtained by visiting http://www.blackrock.com or can be obtained by phone at (800) 882-0052.

Service Shares ANNUAL TOTAL RETURNS BlackRock National Municipal Fund As of 12/31



During the ten-year period shown in the bar chart, the highest return for a quarter was 4.57% (quarter ended December 31, 2022) and the lowest return for a quarter was -6.28% (quarter ended March 31, 2022). The year-to-date return as of September 30, 2023 was 0.10%.

For the periods ended 12/31/22 Average Annual Total Returns	1 Year	5 Years	10 Years
BlackRock National Municipal Fund — Service Shares			
Return Before Taxes	(10.44)%	0.43%	1.69%
Return After Taxes on Distributions	(10.44)%	0.39%	1.67%
Return After Taxes on Distributions and Sale of Fund Shares	(5.25)%	0.87%	1.93%
Bloomberg Municipal Bond Index			
(Reflects no deduction for fees, expenses or taxes)	(8.53)%	1.25%	2.13%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown, and the after-tax returns shown are not relevant to investors who hold their shares through tax-deferred arrangements, such as 401(k) plans or individual retirement accounts.

Investment Manager

The Fund's investment manager is BlackRock Advisors, LLC (previously defined as "BlackRock").

Portfolio Managers

Name	Portfolio Manager of the Fund Since	Title
Walter O'Connor, CFA	1996	Managing Director of BlackRock, Inc.
Michael Kalinoski, CFA	2016	Director of BlackRock, Inc.
Kevin Maloney, CFA	2022	Director of BlackRock, Inc.
Phillip Soccio, CFA	2022	Director of BlackRock, Inc.

Purchase and Sale of Fund Shares

You may purchase or redeem shares of the Fund each day the New York Stock Exchange is open. To purchase or sell shares, you should contact your financial professional or your selected securities dealer, broker, investment adviser, service provider or industry professional (including BlackRock and its affiliates) (each a "Financial Intermediary"), or, if you hold your shares through the Fund, you should contact the Fund by phone at (800) 537-4942, by mail (c/o BlackRock Funds, P.O. Box 534429, Pittsburgh, Pennsylvania 15253-4429), or by the Internet at www.blackrock.com. The Fund's initial and subsequent investment minimums generally are as follows, although the Fund may reduce or waive the minimums in some cases:

Service Shares

Minimum Initial Investment	\$5,000
Minimum Additional Investment	There is no minimum amount for additional investments.

Tax Information

The Fund's dividends and distributions may be subject to U.S. federal income taxes and may be taxed as ordinary income or capital gains, unless you are a tax-exempt investor or are investing through a qualified tax-exempt plan described in section 401(a) of the Internal Revenue Code, in which case you may be subject to U.S. federal income tax when distributions are received from such tax-deferred arrangements.

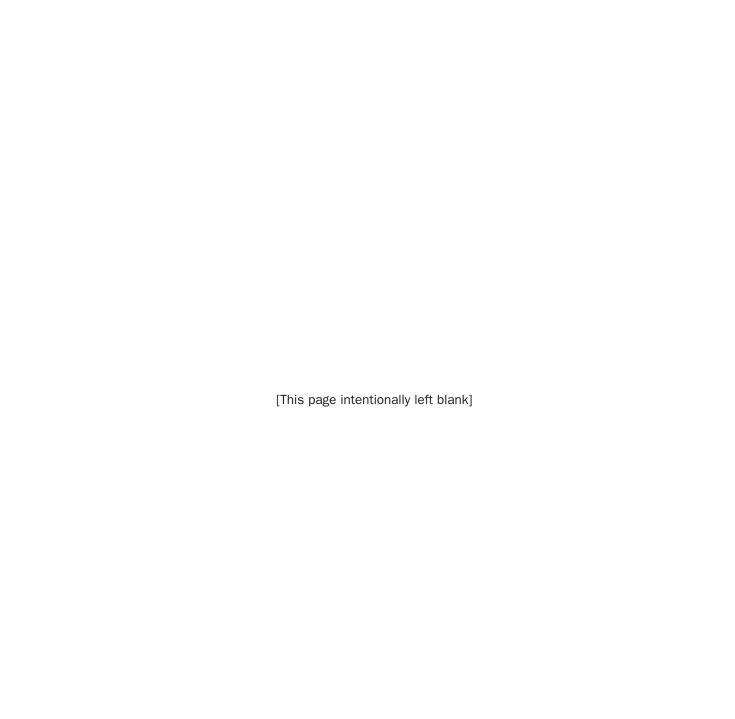
The Fund intends to make distributions most of which will be excludable from gross income for federal income tax purposes.

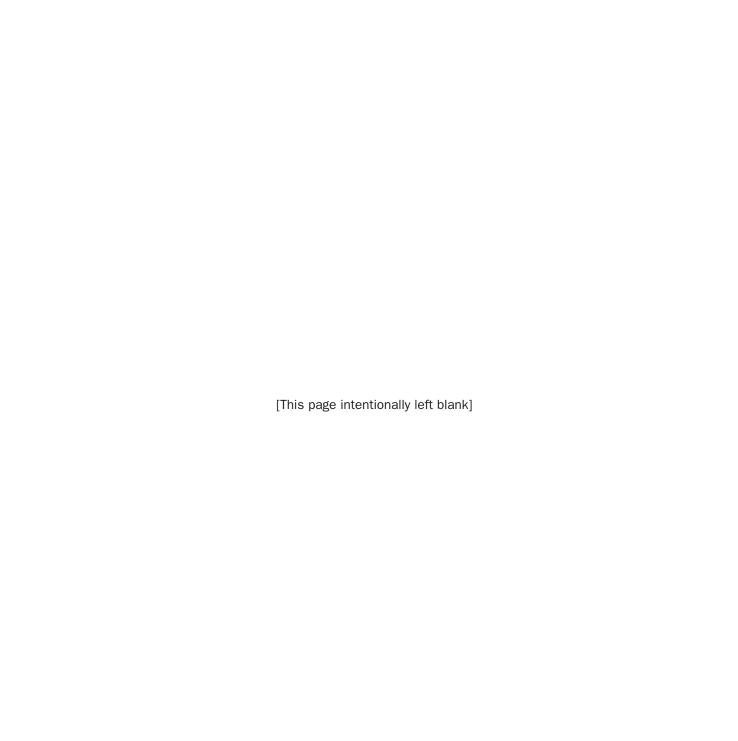
Payments to Broker/Dealers and Other Financial Intermediaries

If you purchase shares of the Fund through a Financial Intermediary, the Fund and BlackRock Investments, LLC, the Fund's distributor, or its affiliates may pay the Financial Intermediary for the sale of Fund shares and related services. These payments may create a conflict of interest by influencing the Financial Intermediary and your individual financial professional to recommend the Fund over another investment.

Ask your individual financial professional or visit your Financial Intermediary's website for more information.







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