BLACKROCK®

## Changes to the Methodology for Calculating 'Effective Duration'

## For Municipal Bond Portfolios — BlackRock Mutual Funds, BlackRock Closed-End Funds and iShares® Funds

Effective Sept. 26, 2016, BlackRock implemented a new methodology for calculating "effective duration" in municipal bond fund portfolios for applicable BlackRock mutual funds, BlackRock closed-end funds and iShares exchange-traded funds (each a "Municipal Bond Fund" and collectively the "Municipal Bond Funds"). The new methodology will be applied only to effective duration numbers calculated as of Sept. 26 onward. The new methodology replaces the model previously used by BlackRock to evaluate duration, a common indicator of an investment's sensitivity to interest rate movements. The new methodology will impact the reported effective duration for your Municipal Bond Fund.

We view the new methodology for calculating effective duration as a more precise gauge of interest rate risk. We believe this is particularly important in the current market environment, one where interest rates are likely to remain low for longer, but volatile as the Federal Reserve inches toward "normalization" after an extended period of near-zero rates.

Our transition to this new methodology reflects our ongoing assessment of risk and commitment to providing our clients with the most useful information for evaluating the risk/reward potential of the Municipal Bond Funds, both on an absolute basis and relative to industry peers.

It is important to note that any impact on your Municipal Bond Fund's reported effective duration number following Sept. 26 due to the new methodology does not reflect a change in the fund's investment strategy or investment policies. There may, however, be changes in the fund's effective duration arising from changes made in the ordinary course of portfolio management since the last time the fund's effective duration number was reported.

Below are answers to some of the questions you might have.

### KEY QUESTIONS

**How is my Municipal Bond Fund's effective duration affected by the new methodology?**
The change in the municipal bond duration calculation methodology used by BlackRock to measure interest rate sensitivity will cause the "effective duration" figure for most Municipal Bond Funds to increase. The new methodology takes effect on Sept. 26, 2016, and will be used to calculate your Municipal Bond Fund's effective duration, as well as that of its benchmark, from that date onward. Your Municipal Bond Fund's effective duration is reported on the fund's website. Any impact on a Municipal Bond Fund's effective duration number after Sept. 26 due to the new calculation methodology does not reflect a change in your Municipal Bond Fund's investment strategy or investment policies. There may, however, be changes in your Municipal Bond Fund's effective duration arising from changes made in the ordinary course of portfolio management since the last time the fund's effective duration number was reported.

**How is the new effective duration methodology different?**
The new methodology is based on an underlying model (known as the Black-Karasinski model), which has been customized to offer several enhanced features. Key among them is that the new methodology is calibrated to markets on a daily basis and incorporates after-tax effects. We believe the addition of the after-tax functionality differentiates BlackRock in the industry and provides investors with an enhanced understanding of interest rate risk in municipal bond portfolios. We believe the new enhanced methodology better reflects how municipal securities trade in the financial markets and, as such, can provide portfolio managers with greater insight when employing strategies such as hedging of municipal securities. Other enhancements, such as robust yield curve construction and estimation techniques, further strengthen the new methodology.

**Why was the effective duration methodology changed?**
BlackRock makes enhancements to its analytics on a regular basis, this being one example. The new methodology incorporates certain enhanced features, such as after-tax functionality, which is important to understanding interest rate risk in tax-exempt portfolios. We believe the enhancements enable the new methodology to calculate duration with greater precision.

**Why is this change being made now?**
The implementation of the new effective duration calculation methodology comes after many months of analysis, model construction and testing, consistent with BlackRock's rigorous process for reviewing and updating its analytics. We believe the timing is advantageous as the Federal Reserve seeks to "normalize" interest rates after a long period of accommodative monetary policy.

**How does this change impact my Municipal Bond Fund?**
There is no change to the investment strategy or policies of your Municipal Bond Fund resulting from the new effective duration calculation methodology. Any change in the effective duration metric is a reporting change only. Going forward, the reported effective duration numbers as calculated by the new methodology will be used as a data input by BlackRock in portfolio structuring and management. The new methodology will be applied to the Municipal Bond Funds and their benchmarks such that investors will continue to have a useful reference point for measuring effective duration.

**Does this differ from the way other municipal market participants evaluate effective duration?**
While our methodology is customized to offer several enhancements, such as being calibrated to markets on a daily basis and incorporating after-tax effects, the underlying model (known as the Black-Karasinski model) is consistent with many of the options-based municipal duration models used in the industry.

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Investment involves risk. The two main risks related to fixed income investing are interest rate risk and credit risk. Typically, when interest rates rise, there is a corresponding decline in the market value of bonds. Credit risk refers to the possibility that the issuer of the bond will not be able to make principal and interest payments. There may be less information available on the financial condition of issuers of municipal securities than for public corporations. The market for municipal bonds may be less liquid than for taxable bonds. A portion of the income may be taxable. Some investors may be subject to Alternative Minimum Tax (AMT). Capital gains distributions, if any, are taxable.



Prepared by BlackRock Investments, LLC, member FINRA.

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