Closed-end fund market review

Third quarter 2021

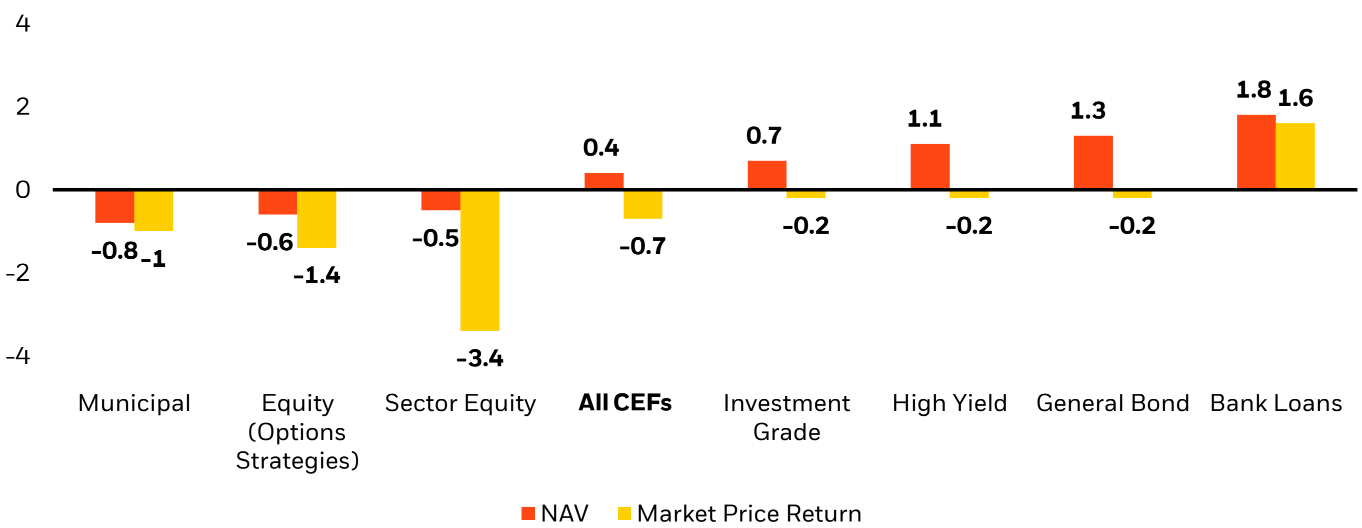
BlackRock.

Closed-end fund market overview

Equities moved slightly higher in the third quarter, led by strong corporate earnings and a supportive Federal Reserve (Fed). The S&P 500 hit an all-time high, but pulled back amid inflation concerns in late September, finishing the quarter up 0.6%. Bonds were positive on the quarter, with the Barclays US Aggregate Bond Index up 0.5%. The 10-year US treasury yield finished the quarter at 1.52%, which was 7 basis points higher than at the end of June. For most of the quarter, longer duration bonds outperformed short duration, but saw a reversal toward the end of September on expectations that the Fed would start to taper QE. High yield bonds outpaced government and investment grade bonds over the period.

Closed-end fund ("CEFs") performance was generally flat for the quarter, with the average CEF up 0.4% on net asset value ("NAV") and down -0.7% on market price. Bank Loan CEFs were the best performing fund's in the CEF market on the quarter. The strong performance was led by demand for floating rate assets in the face of potential rising interest rates. Over the quarter, discounts in the CEF space widened by an average of 100 basis points, ending the quarter at an average of -1.5%. Discount widening was largely driven by a risk-off market sentiment and volatility in September. Overall, CEF's continue to trade at narrower discounts than historic averages (5-year avg. CEF discount is -5.6%) given the sustained market demand for income (the avg. CEF is yielding 6.5%).

Third quarter CEF total returns % (NAV and market price)



Source: Lipper as of 9/30/2021. Returns are shown net of advisory fees paid by the fund and net of the fund's operating fees and expenses. Investors who purchase shares of the fund through an investment adviser or other financial professional may separately pay a fee to that service provider. **Past performance is not indicative of future results.**

blackrock.com

Municipal

Municipal bonds were down slightly over the third quarter, as longer duration assets took a hit toward the end of September. The sell-off in September was driven by less favorable supply and demand dynamics and rising interest rates as Fed began to outline a plan for tapering asset purchases. The average muni CEF was down -0.8 % on NAV and -1.0% on market price in the third quarter.

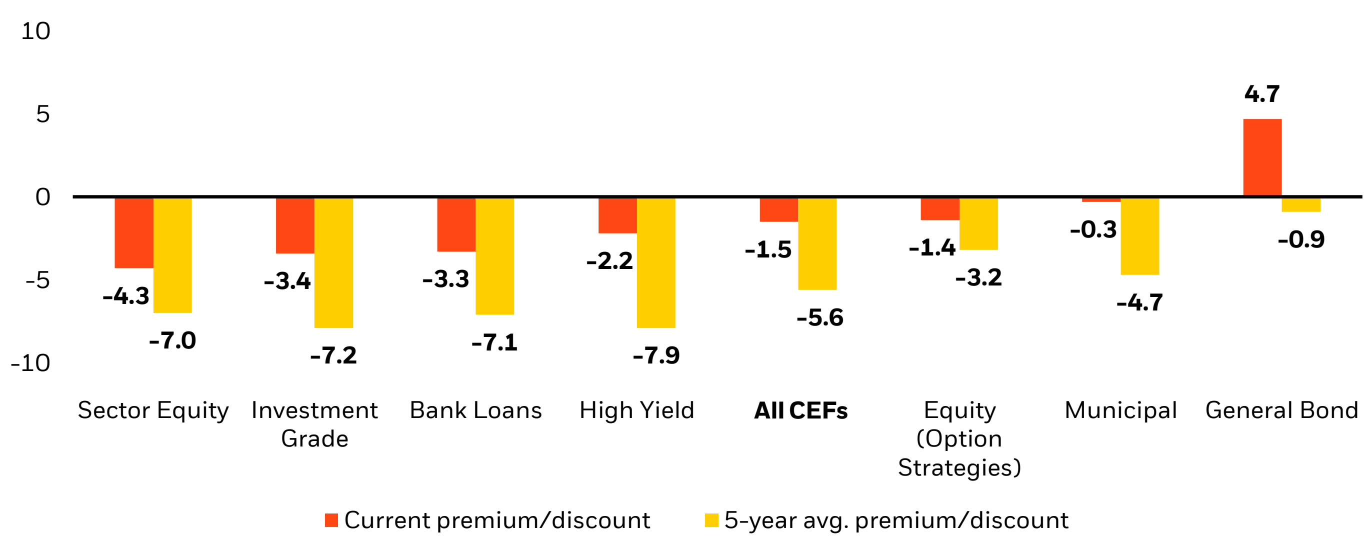
The demand for muni CEFs continues to be supported by low yields across the fixed income universe. The average tax equivalent yield for muni CEFs is 7.4%. Muni CEF discounts narrowed an average of only 10 basis points over the quarter, finishing at an -0.3%, still much narrower than their 5 year average discount of -4.7%. Low short-term interest rates have been helpful in lowering leverage costs, leading to a number of distribution increases across the industry. The SIFMA municipal swap index, a common base rate used to calculate leverage costs finished June at a rate of 0.05%, much lower than its 3-year average of 0.81%. A low short-term interest rate environment generally bodes well for muni CEF distribution stability.

Fixed income

Most bond sectors were rangebound over the course of the third quarter. The 10-year treasury moved lower in July and August, but ended the quarter at around the same level it started due to inflation concerns in September. High yield bonds outperformed investment grade bonds as global bond yields moved higher toward the end of the quarter. The average fixed income CEF was up 1.2% on NAV and 0.3% on market price over the quarter.

Fixed income CEF discounts widened 130 basis points, on average, finishing the quarter at an average discount of -1.1%, still much narrower than their 5-year average discount of -6.0%. Investors have turned to fixed income CEFs for their competitive yields. The average fixed income CEF is currently yielding 6.8%. The demand for yield has kept discounts in the category relatively narrow. Most fixed income CEFs use leverage in an attempt to enhance their earnings. Low short-term rates have reduced leverage costs and have benefited distributions stability in the space. This dynamic helps support competitive yields compared to their open-end fund counterparts.

Current premium/discount versus 5-year average as of September 30, 2021



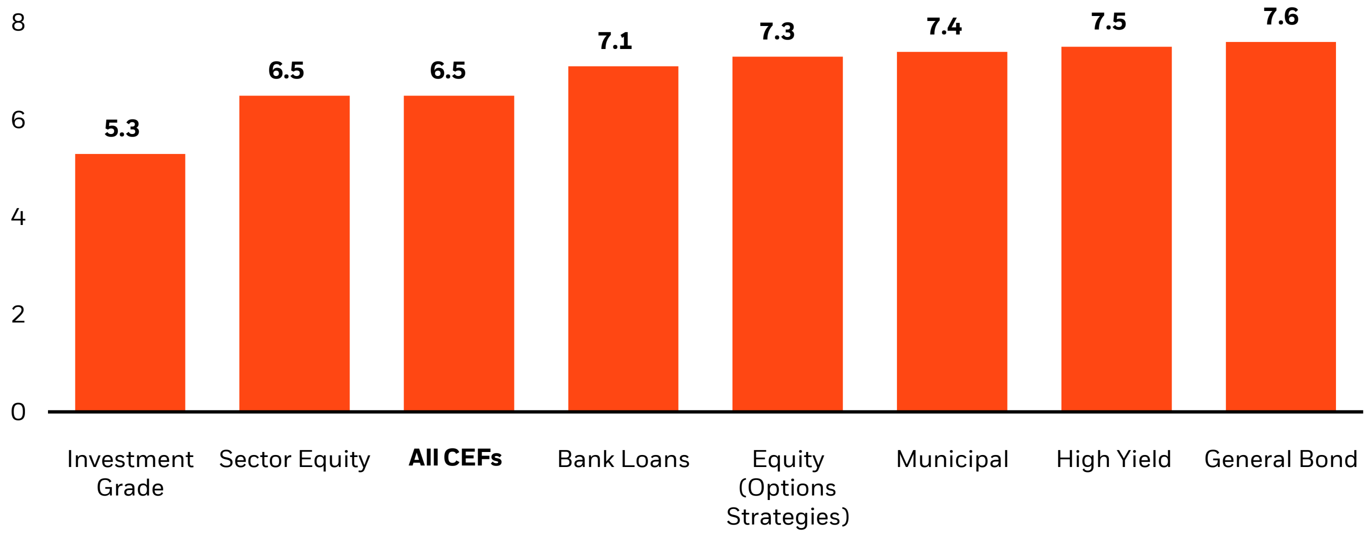
Source: Lipper as of 9/30/2021.

Equity

US equities started the quarter strong on the heels of strong earnings numbers and a dovish message from the Fed, but fell towards the end of September. Inflation and growth concerns popped up toward the end of the quarter, leading to a spike in volatility and equity sell-off in growth sectors. Equity CEFs finished the quarter negative, with the average equity CEF down -0.5% on NAV and -2.4% in market price.

NAV's outperformed market prices as discounts widened in the space. Discounts in the equity CEF space widened by 80 basis points over the quarter, finishing at an average discount of -2.8%. Discount widening in the space was led by sector equity funds. In particular, technology CEF discounts widened more than any other sector as growth oriented stocks took a hit in September.

Distribution rate (% of market price) as of September 30, 2021



Source: Lipper as of 9/30/2021. Distribution rate is calculated by annualizing the fund's latest declared regular distribution and dividing that number by the funds market price as of the stated date. Distributions are sourced from net investment income, unless noted otherwise. Tax-Equivalent Distribution Rate calculated using a 40.8% effective tax rate.

About BlackRock

BlackRock's purpose is to help more and more people experience financial well-being. As a fiduciary to investors and a leading provider of financial technology, we help millions of people build savings that serve them throughout their lives by making investing easier and more affordable.

For additional information on BlackRock, please visit www.blackrock.com/corporate | Twitter: @blackrock | LinkedIn: www.linkedin.com/company/blackrock.

Availability of fund updates

BlackRock will update performance and certain other data for the Funds on a monthly basis on its website in the "Closed-end Funds" section of www.blackrock.com as well as certain other material information as necessary from time to time. Investors and others are advised to check the website for updated performance information and the release of other material information about the Funds. This reference to BlackRock's website is intended to allow investors public access to information regarding the Funds and does not, and is not intended to, incorporate BlackRock's website in this release.

Past performance is not indicative of future results. You cannot invest directly in an unmanaged index.

Investment return, price, yields and NAV will fluctuate with changes in market conditions. At the time of sale, your shares may have a market price that is above or below net asset value, and may be worth more or less than your original investment. There is no assurance that a fund will meet its investment objective. Closed-end fund shares are not deposits or obligations of, or guaranteed by, any bank and are not insured by the FDIC or any other agency. Investing involves risk, including possible loss of principal amount invested. This is not a prospectus intended for use in the purchase or sale of any fund's shares. Investors should review a fund's prospectus and other publicly available information, including shareholder reports, carefully before investing. Shares may only be purchased or sold through registered broker/dealers. For more information regarding any of BlackRock's closed-end funds, please call BlackRock at 800-882-0052. No assurance can be given that a fund will achieve its investment objective.

Some BlackRock CEFs may utilize leverage to seek to enhance the yield and net asset value of their common stock, through bank borrowings, issuance of short-term debt securities or shares of preferred stock, or a combination thereof. However, these objectives cannot be achieved in all interest rate environments. While leverage may result in a higher yield for the fund, the use of leverage involves risk, including the potential for higher volatility of the NAV, fluctuations of dividends and other distributions paid by the fund and the market price of the fund's common stock, among others. Certain funds may invest assets in securities of issuers domiciled outside the United States, including issuers from emerging markets. Foreign investing involves special risks, including foreign currency risk and the possibility of substantial volatility due to adverse political, economic or other developments.

Some BlackRock CEFs make distributions of ordinary income and capital gains at calendar year end. Those distributions temporarily cause extraordinarily high yields. There is no assurance that a fund will repeat that yield in the future. Subsequent monthly distributions that do not include ordinary income or capital gains in the form of dividends will likely be lower. Fund details, holdings and characteristics are as of the date noted and subject to change.

The opinions expressed are those of BlackRock as of June 30, 2021, and are subject to change at any time due to changes in market or economic conditions. BlackRock makes no undertaking to change this document in response to such changes. These comments should not be construed as a recommendation of any individual holdings or market sectors.

General market and credit risks: Debt instruments are subject to credit and interest rate risks. Credit risk refers to the likelihood that an obligor will default in the payment of principal or interest on an instrument. Financial strength and solvency of an obligor are the primary factors influencing credit risk. In addition, lack or inadequacy of collateral or credit enhancement for a debt instrument may affect its credit risk. Credit risk may change over the life of an instrument and debt instrument that are rated by rating agencies are often reviewed and may be subject to downgrade. Interest rate risk refers to the risks associated with market changes in interest rates. Interest rate changes may affect the value of a debt instrument indirectly (especially in the case of fixed rate obligations or directly (especially in the case of instrument whose rates are adjustable). In general, rising interest rates will negatively impact the process of a fixed rate debt instrument and falling interest rates will have a positive effect on price. Adjustable rate instruments also react to interest rate changes in a similar manner although generally to a lesser degree (depending, however, on the characteristics of the reset terms, including the index chosen, frequency of reset and reset caps or floors, among other factors).

Municipal market risks: 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 taxable bonds. A portion of the income may be taxable. Some investors may be subject to Alternative Minimum Tax (AMT). Capital gain distributions, if any, are taxable. The Fund may utilize leveraging to seek to enhance the yield and net asset value of its common stock, as described in the Fund's prospectus. These objectives will not necessarily be achieved in all interest rate environments. The use of leverage involves risk, including the potential for higher volatility and greater declines of the Fund's net asset value, fluctuations of dividends and other distributions paid by the Fund and the market price of the Fund's common stock, among others.

Equity market risks: The price of equities may rise or fall because of changes in the broad market or changes in a company's financial condition—sometimes rapidly or unpredictable. These price movements may result from factors affecting individual companies, sectors or industries, such as changes in economic or political conditions. Equity securities are subject to "stock market risk" meaning that stock prices may decline over short or extended periods of time.

Index description:

SIFMA Municipal Swap Index: 7-day high-grade market index comprised of tax-exempt Variable Rate Demand Obligations (VRDOs) with certain characteristics. The Index is calculated and published by Bloomberg. The Index is overseen by SIFMA's Municipal Swap Index Committee.

Prepared by BlackRock Investments, LLC, member FINRA.

Not FDIC Insured • May Lose Value • No Bank Guarantee

BlackRock.