BLACKROCK CORE BOND TRUST Form N-CSR November 03, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT

INVESTMENT COMPANIES

Investment Company Act file number 811-10543

Name of Fund: BlackRock Core Bond Trust (BHK)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: John M. Perlowski, Chief Executive Officer, BlackRock Core Bond

Trust, 55 East 52nd Street, New York, NY 10055

Registrant s telephone number, including area code: (800) 882-0052, Option 4

Date of fiscal year end: 08/31/2016

Date of reporting period: 08/31/2016

Item 1 Report to Stockholders

AUGUST 31, 2016

ANNUAL REPORT

BlackRock Core Bond Trust (BHK)

 $BlackRock\ Corporate\ High\ Yield\ Fund,\ Inc.\ (HYT)$

BlackRock Income Trust, Inc. (BKT)

Not FDIC Insured May Lose Value No Bank Guarantee

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The Markets in Review

Dear Shareholder,

Uneven economic outlooks and the divergence of monetary policies across regions have been the overarching themes driving financial markets over the past couple of years. In the latter half of 2015, investors were focused largely on the timing of the Federal Reserve's (the Fed) decision to end its near-zero interest rate policy. The Fed ultimately hiked rates in December, while, in contrast, the European Central Bank and the Bank of Japan increased stimulus, even introducing negative interest rates. The U.S. dollar had strengthened considerably, causing profit challenges for U.S. companies that generate revenues overseas, and pressuring emerging market currencies and commodities prices. Also during this time period, oil prices collapsed due to excess global supply. China showed signs of slowing economic growth and declining confidence in the country's policymakers stoked worries about the potential impact on the global economy. Risk assets (such as equities and high yield bonds) struggled as volatility increased.

The elevated market volatility spilled over into 2016, but as the first quarter wore on, fears of a global recession began to fade, allowing markets to calm and risk assets to rebound. Central bank stimulus in Europe and Japan, combined with a more tempered outlook for rate hikes in the United States, helped bolster financial markets. A softening in U.S. dollar strength brought relief to U.S. exporters and emerging market economies, and oil prices rebounded as the world slargest producers agreed to reduce supply.

Volatility spiked in late June when the United Kingdom shocked investors with its vote to leave the European Union. Uncertainty around how the British exit might affect the global economy and political landscape drove investors to high-quality assets, pushing already low global yields to even lower levels. However, risk assets recovered swiftly in July as economic data suggested that the consequences had thus far been contained to the United Kingdom.

With a number of factors holding interest rates down central bank accommodation, an aging population in need of income, and institutions such as insurance companies and pension plans needing to meet liabilities assets offering decent yield have become increasingly scarce. As a result, income-seeking investors have stretched into riskier assets despite high valuations in many sectors.

Market volatility touched a year-to-date low in August, which may be a signal that investors have become complacent given persistent macro risks: Geopolitical turmoil continues to loom. A surprise move from the Fed i.e., raising rates sooner than expected has the potential to roil markets. And perhaps most likely to stir things up the U.S. presidential election.

At BlackRock, we believe investors need to think globally, extend their scope across a broad array of asset classes and be prepared to adjust accordingly as market conditions change over time. We encourage you to talk with your financial advisor and visit blackrock.com for further insight about investing in today s markets.

| · | |
|-----------------------------------|----|
| Rob Kapito | |
| President, BlackRock Advisors, LL | .(|

Rob Kapito

Sincerely,

President, BlackRock Advisors, LLC

Total Returns as of August 31, 2016

| | 6-month | 12-month |
|------------------------------|---------|----------|
| U.S. large cap equities | 13.60% | 12.55% |
| (S&P 500 [®] Index) | | |

| U.S. small cap equities (Russell 2000® Index) | 20.87 | 8.59 |
|---|-------|--------|
| International equities | 10.35 | (0.12) |
| (MSCI Europe, Australasia, | | |
| Far East Index) | 22.60 | 11.02 |
| Emerging market equities (MSCI Emerging Markets Index) | 22.69 | 11.83 |
| 3-month Treasury bills | 0.17 | 0.23 |
| (BofA Merrill Lynch 3-Month | 0.17 | 0.23 |
| U.S. Treasury Bill Index) | | |
| U.S. Treasury securities | 2.22 | 7.35 |
| (BofA Merrill Lynch | | |
| 10-Year U.S. Treasury | | |
| Index) U.S. investment grade bonds | 3.68 | 5.97 |
| (Bloomberg Barclays U.S. | 3.06 | 3.91 |
| Aggregate Bond Index) | | |
| Tax-exempt municipal | 3.35 | 7.03 |
| bonds (S&P Municipal | | |
| Bond Index) | | |
| U.S. high yield bonds | 15.56 | 9.12 |
| (Bloomberg Barclays U.S. Corporate High Yield 2% Issuer | | |
| Capped Index) | | |

Past performance is no guarantee of future results. Index performance is shown for illustrative purposes only. You cannot invest directly in an index.

THIS PAGE NOT PART OF YOUR FUND REPORT

Trust Summary as of August 31, 2016

BlackRock Core Bond Trust

Trust Overview

BlackRock Core Bond Trust s (BHK) (the Trust) investment objective is to provide current income and capital appreciation. The Trust seeks to achieve its investment objective by investing at least 75% of its managed assets in bonds that are investment grade quality at the time of investment. The Trust s investments will include a broad range of bonds, including corporate bonds, U.S. government and agency securities and mortgage-related securities. The Trust may invest up to 25% of its total managed assets in bonds that at the time of investment are rated Ba/BB or below by Moody s Investors Service, Inc. (Moody s), Fitch Ratings (Fitch) or another nationally recognized rating agency or bonds that are unrated but judged to be of comparable quality by the investment adviser. The Trust may invest directly in such securities or synthetically through the use of derivatives.

No assurance can be given that the Trust s investment objective will be achieved.

| Trust Information | |
|--|-------------------|
| Symbol on New York Stock Exchange (NYSE) | ВНК |
| Initial Offering Date | November 27, 2001 |
| Current Distribution Rate on Closing Market Price as of August 31, 2016 (\$14.33) ¹ | 5.44% |
| Current Monthly Distribution per Common Share ² | \$0.065 |
| Current Annualized Distribution per Common Share ² | \$0.780 |
| Economic Leverage as of August 31, 2016 ³ | 26% |

- 1 Current distribution rate on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. The current distribution rate may consist of income, net realized gains and/or a tax return of capital. Past performance does not guarantee future results.
- The distribution rate is not constant and is subject to change.
- Represents reverse repurchase agreements outstanding as a percentage of total managed assets, which is the total assets of the Trust (including any assets attributable to borrowings) minus the sum of liabilities (other than borrowings representing financial leverage). For a discussion of leveraging techniques utilized by the Trust, please see The Benefits and Risks of Leveraging on page 10.

Performance and Portfolio Management Commentary

Returns for the 12 months ended August 31, 2016 were as follows:

Returns Based On

| | Market Price | NAV |
|--|--------------|--------|
| BHK ^{1,2} | 20.85% | 13.67% |
| Lipper Corporate BBB-Rated Debt Funds (Leveraged) ³ | 15.43% | 7.69% |

- ¹ All returns reflect reinvestment of dividends and/or distributions.
- The Trust s discount to NAV, which narrowed during the period, accounts for the difference between performance based on price and performance based on NAV.

3 Average return.

Performance results may include adjustments made for financial reporting purposes in accordance with U.S. generally accepted accounting principles. The following discussion relates to the Trust s absolute performance based on NAV:

What factors influenced performance?

The largest positive contributor to the Trust s performance was its allocation to investment grade corporate securities, followed by its allocation to U.S. Treasuries. Also contributing to performance was the Trust s positioning within high yield corporates, commercial mortgage-backed securities (CMBS) and global sovereign/supranational/agency issues.

The Trust employs derivatives to manage duration and yield curve positioning. During the period, the employment of interest rate derivatives did not materially impact performance.

Describe recent portfolio activity.

At the start of the period the Trust maintained a consistent allocation, favoring investment grade and high yield corporates, securitized products such as asset-backed securities (ABS) and CMBS, as well as agency mortgage-backed securities (MBS). Volatility increased at year end 2015 in the wake of the first Fed rate hike in nine years and the subsequent currency depreciation of the Chinese yuan in January. As a result, the Trust reduced risk by decreasing exposure to structured products, corporate credit and sovereign securities in favor of U.S. Treasuries. During the second half of the period, the Trust continued to reduce exposure to spread products and added exposure to U.S. Treasuries, as the investment adviser expected market volatility to remain elevated ahead of the U.K. referendum on leaving the European Union. Most of the reductions were within high yield corporates and CMBS. Following the U.K. referendum vote, the Trust began to add exposure to spread products as a way of increasing yield and to benefit from investors global search for income due to very low interest rate levels.

Describe portfolio positioning at period end.

The Trust maintained diversified exposure within non-government spread sectors, including investment grade credit, high yield credit, CMBS and ABS, as well as smaller allocations to non-agency mortgages and U.S. municipals. The Trust also held exposure to government-related sectors such as U.S. Treasury securities, agency debt and agency MBS. The Trust closed the period with a long duration profile.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

BlackRock Core Bond Trust

Market Price and Net Asset Value Per Share Summary

| | 8/31/16 | 8/31/15 | Change | High | Low |
|-----------------|----------|----------|--------|----------|----------|
| Market Price | \$ 14.33 | \$ 12.63 | 13.46% | \$ 14.34 | \$ 12.34 |
| Net Asset Value | \$ 15.25 | \$ 14.29 | 6.72% | \$ 15.28 | \$ 13.74 |

Market Price and Net Asset Value History For the Past Five Years

Overview of the Trust s Total Investments

| Portfolio Composition | 8/31/16 | 8/31/15 |
|---|---------|---------|
| Corporate Bonds | 47% | 49% |
| U.S. Treasury Obligations | 14 | 6 |
| Preferred Securities | 10 | 10 |
| Non-Agency Mortgage-Backed Securities | 10 | 12 |
| Asset-Backed Securities | 8 | 11 |
| U.S. Government Sponsored Agency Securities | 6 | 8 |
| Municipal Bonds | 2 | 2 |
| Foreign Agency Obligations | 2 | 2 |
| Floating Rate Loan Interests | 1 | |
| Short-Term Securities | 1 | 1 |
| Options Written | (1) | (1) |
| Other ¹ | | |

¹ Representing less than 1% of the Trust s total investments and may include Common Stocks and Options Purchased.

| Credit Quality Allocation ^{2,3} | 8/31/16 | 8/31/15 |
|--|---------|---------|
| AAA/Aaa ⁴ | 24% | 18% |
| AA/Aa | 4 | 7 |
| A | 14 | 18 |
| BBB/Baa | 22 | 33 |
| BB/Ba | 17 | 13 |
| В | 12 | 7 |
| CCC/Caa | 4 | 1 |
| N/R | 3 | 3 |

² For financial reporting purposes, credit quality ratings shown above reflect the highest rating assigned by either S&P or Moody s if ratings differ. These rating agencies are independent, nationally recognized statistical rating organizations and are widely used. Investment grade ratings are credit ratings of BBB/Baa or higher. Below investment grade ratings are credit ratings of BB/Ba or lower. Investments designated N/R are not rated by either rating agency. Unrated investments do not necessarily indicate low credit quality. Credit quality ratings are subject to change.

- ³ Excludes Short-Term Securities, Options Purchased and Options Written.
- 4 The investment adviser evaluates the credit quality of not-rated investments based upon certain factors including, but not limited to, credit ratings for similar investments and financial analysis of sectors and individual investments. Using this approach, the investment adviser has deemed U.S. Government Sponsored Agency Securities and U.S. Treasury Obligations as AAA/Aaa.

Trust Summary as of August 31, 2016

BlackRock Corporate High Yield Fund, Inc.

Trust Overview

BlackRock Corporate High Yield Fund, Inc. s (HYT) (the Trust) primary investment objective is to provide shareholders with current income. The Trust s secondary investment objective is to provide shareholders with capital appreciation. The Trust seeks to achieve its objectives by investing primarily in a diversified portfolio of fixed income securities which are rated below investment grade or, if unrated, are considered by the investment adviser to be of comparable quality. The Trust may invest directly in fixed income securities or synthetically through the use of derivatives.

No assurance can be given that the Trust s investment objectives will be achieved.

| Trust Information | |
|--|--------------|
| Symbol on NYSE | HYT |
| Initial Offering Date | May 30, 2003 |
| Current Distribution Rate on Closing Market Price as of August 31, 2016 (\$10.88) ¹ | 7.72% |
| Current Monthly Distribution per Common Share ² | \$0.07 |
| Current Annualized Distribution per Common Share ² | \$0.84 |
| Economic Leverage as of August 31, 2016 ³ | 29% |

- 1 Current distribution rate on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. The current distribution rate may consist of income, net realized gains and/or a tax return of capital. Past performance does not guarantee future results.
- The distribution rate is not constant and is subject to change.
- Represents bank borrowings as a percentage of total managed assets, which is the total assets of the Trust (including any assets attributable to borrowings) minus the sum of liabilities (other than borrowings representing financial leverage). For a discussion of leveraging techniques utilized by the Trust, please see The Benefits and Risks of Leveraging on page 10.

Performance and Portfolio Management Commentary

Returns for the 12 months ended August 31, 2016 were as follows:

Returns Based On

| | Market Price | NAV | |
|--|--------------|-------|--|
| $HYT^{1,2}$ | 20.29% | 7.76% | |
| Lipper High Yield Funds (Leveraged) ³ | 18.69% | 7.88% | |

- ¹ All returns reflect reinvestment of dividends and/or distributions.
- The Trust s discount to NAV, which narrowed during the period, accounts for the difference between performance based on price and performance based on NAV.
- 3 Average return.

Performance results may include adjustments made for financial reporting purposes in accordance with U.S. generally accepted accounting principles. The following discussion relates to the Trust s absolute performance based on NAV:

What factors influenced performance?

Credit markets performed poorly during the first half of the period, driven in large part by declines in commodity prices. However, in the second half of the period, the high-yield market rebounded sharply, led by a recovery in commodity-related assets. Holdings within the energy and metals & mining industries were the most notable contributors to the Trust s performance during the period. Holdings within the technology and cable & satellite industries helped performance as well.

The Trust s exposure to equity and equity-like positions were the primary detractors to performance during the period. **Describe recent portfolio activity.**

The Trust began the period somewhat conservatively positioned but steadily increased its risk profile as volatility decreased and risk markets became more stable. By the middle of the period, the Trust had transitioned to a market-neutral risk position and then proceeded to a slightly overweight risk position. The investment adviser added risk to the portfolio at a measured pace, while remaining underweight to the more distressed areas of the high yield market, which led performance over the period. The Trust added to exposure in the metals & mining sector and moved toward a more neutral-weight position in commodity-related issuers. The Trust decreased risk in the pharmaceutical and home construction industries during the period.

Describe portfolio positioning at period end.

The Trust held the majority of its portfolio in corporate bonds, with a modest allocation to floating rate loan interests (bank loans). Within high yield corporates, the Trust had most of its assets in single B-rated bonds, followed by BB-rated bonds. The Trust kept exposure to high conviction CCC-rated issues but favored select equity and equity-like assets over the higher-beta segment of the CCC-rated bond market.

Leading individual positions included Ally Financial (banking), First Data Corp. (technology), and Altice NV (cable & satellite). The Trust also maintained exposure to equity futures positions to help reduce portfolio risk. Bank loans provided diversification and helped increase the stability of the Trust sportfolio, while providing attractive levels of income.

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BlackRock Corporate High Yield Fund, Inc.

Market Price and Net Asset Value Per Share Summary

| | 8/31/16 | 8/31/15 | Change | High | Low |
|-----------------|----------|----------|---------|----------|----------|
| Market Price | \$ 10.88 | \$ 9.97 | 9.13% | \$ 10.93 | \$ 9.13 |
| Net Asset Value | \$ 11.79 | \$ 12.06 | (2.24)% | \$ 12.06 | \$ 10.13 |