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The Impact of Interest Rate Changes on Core Bond Managers

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The market has experienced dramatic changes in interest rates in recent years. In this paper, we seek to evaluate if the universe of fixed income managers – specifically active core bond managers – has engaged in trying to "time the market" based on these fluctuating interest rates, and to what degree they have been successful.[1]

Before evaluating performance, it is important to first review a central concept of investing in bonds. Interest rates have an inverse relationship with bond prices. As interest rates rise, the price for bonds typically drops, and vice versa.

Some active bond managers may seek to use these relationships to their advantage by trying to time the market.[2] These managers may reduce their sensitivity to interest rates when they believe rates will rise and, conversely, increase their sensitivity to interest rates when they predict rates will fall. The most common approach for adjusting interest rate exposure is to shorten or lengthen the duration of the portfolio.

Recent experience

Interest rates have varied considerably in the past seven years. This variability has hit all points along the yield curve. In our analysis below, we examine the relationship between changes in short-term rates, as proxied by the Fed Funds Effective Rate, and longer-term rates, as proxied by the 10-Year Treasury.

Short term rates

The years immediately following the Global Financial Crisis ("GFC") were characterized by the Federal Reserve's ("Fed") zero interest rate policy for short-term rates. After a gradual climb from 2016 to early 2019, short-term rates sharply dropped and remained near zero during the Covid-19 pandemic (see Figure 1). Subsequently, in 2022, the Fed drastically raised short-term rates in an effort to combat inflation. In fact, the largest month-to-month positive and second largest month-to-month negative Federal Funds Effective Rate changes in the past thirty years occurred after January 2020.

[1] Timing any market is not always successful, and past success (or lack thereof) is not necessarily indicative of future performance (e.g., outperformance may have been attributable to luck rather than skill).

[2] Anecdotally, we believe that most active core bond managers are generally close to duration neutral with some key rate duration variations along the curve. That is, a typical manager is not trying to drive a meaningful amount of relative returns from timing interest rate movements (maybe 5-20%). However, there is a small sub-set that seek to manage their duration posture more aggressively.

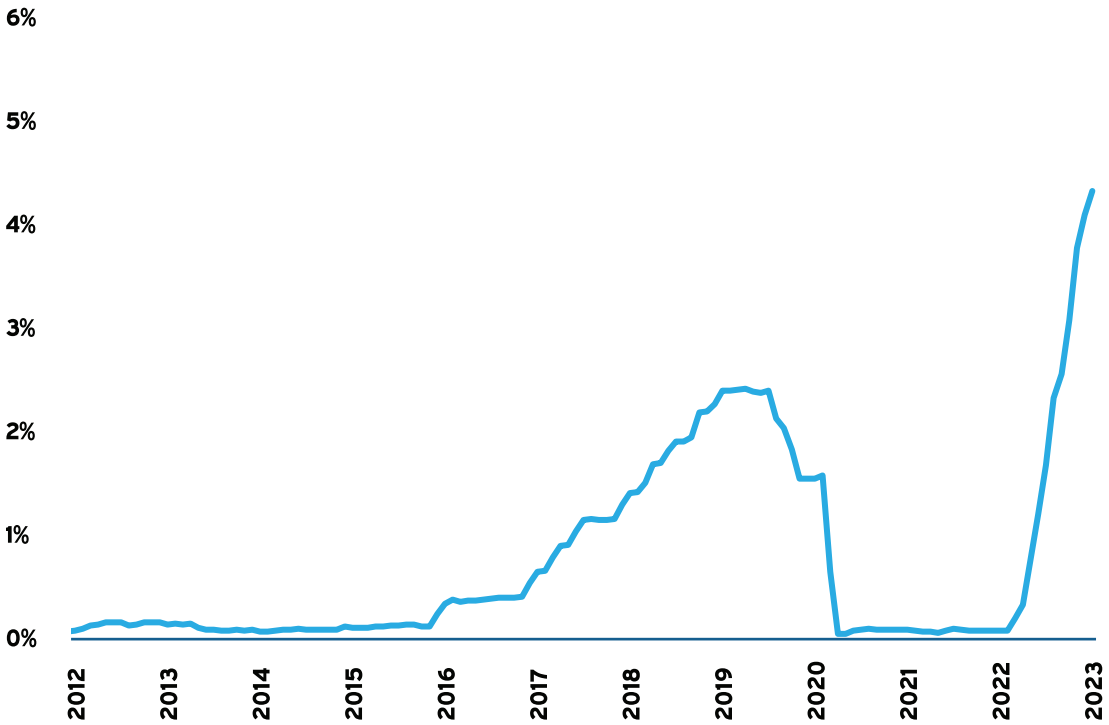

FIGURE 1
Federal Funds Effective Rate

Source: Monthly federal funds rate from FRED. Data as of 1/1/2023. Sourced on 2/23/2023.

Core bond managers may try to capitalize on (or insulate themselves against) these interest rate fluctuations in an attempt to generate alpha. Figure 2 depicts the rolling 1-year median excess return generated above (or below) the benchmark for the core bond manager universe.

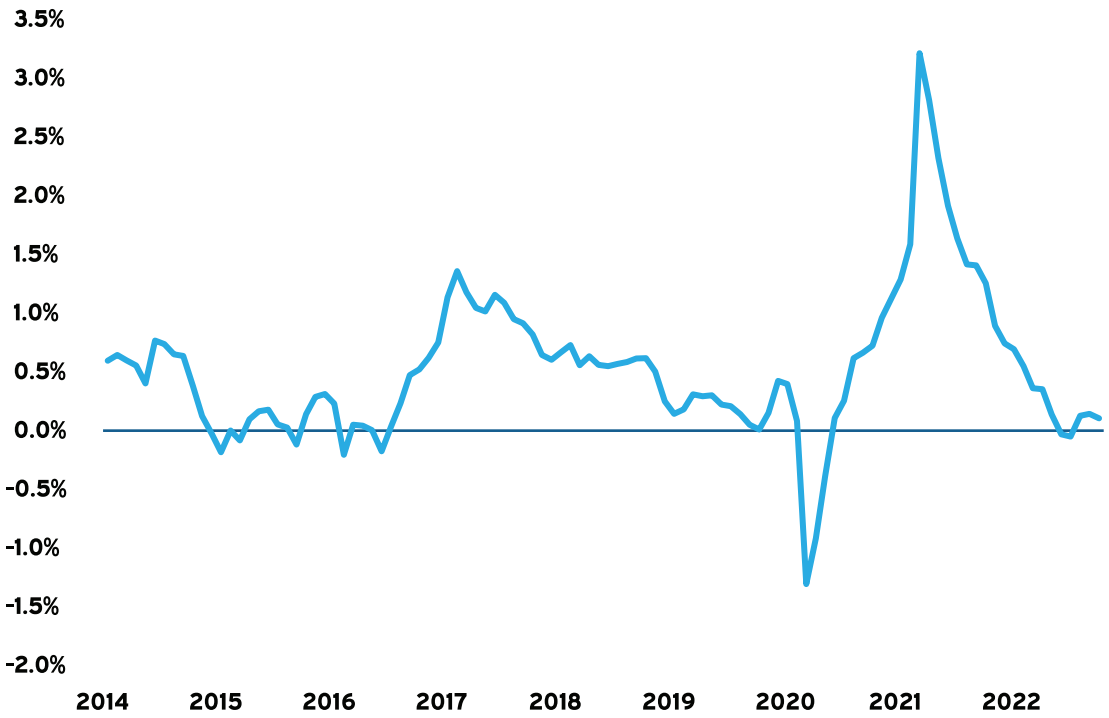

FIGURE 2
Rolling 1-Year Core Bond Manager Excess Return, Gross

Source: Rolling geometric average excess returns from Morningstar's US Core Bonds universe. Data as of 10/31/2022. Benchmark is the Bloomberg US Aggregate. Data as of 10/31/2022. Sourced on 11/2/2022. Returns throughout this document are gross of fees.

Since 2014, the average rolling 1-year outperformance for the universe has been 0.53%.[3] The chart appears to show that relative performance declined considerably in 2020, when the Fed unexpectedly dropped short-term rates in response to the COVID pandemic. The median excess return for the month of March 2020 was -1.37%. After rates bottomed, relative performance rebounded over the following year, peaking exactly one year later and then returning to their normal level.[4]

Longer term rates

Another commonly used interest rate indicator is the 10-year US Treasury bond. The average active core bond portfolio has a duration that is much closer to the duration of the 10-Year Treasury than that of the Federal Funds Rate. Hence a comparison to changes in the 10-year Treasury bellwether may be more relevant.

If core bond managers successfully engaged in timing the markets, we would expect to see a positive relationship between the excess returns of the core bond manager universe and changes in interest rates. Figure 3 below compares monthly excess returns to the absolute value of the change in the yield on the 10-year Treasury for that same month.[5] In general, there is no meaningful relationship, with a correlation of -0.23 for the period shown. Moreover, it appears that excess returns tend to drop during the months with the largest changes in interest rates.[6]

[3] The universe compares the gross of fee returns of the managers to the Bloomberg US Aggregate index. Anecdotally, we have observed for many years that much of the active core bond universe takes on more credit risk than their benchmark. Hence the excess return might be considered the result of excess beta, not alpha. Data as of 10/31/22.

[4] Anecdotally, we believe that the majority of managers were overweight credit (relative to Treasuries and securitized) and "down in quality" vs. the benchmark at the onset of the pandemic. Those two factors most likely account for a very large proportion of the underperformance, as well as the subsequent rebound.

[5] We chose the relationship between excess returns and the absolute value of the changes in rates as it more clearly illustrates the factor we are examining. Namely, we are analyzing whether performance corresponds with any type of rate change (up or down), not if managers perform better/worse when rates rise/fall.

[6] The largest drops in excess returns may be driven by other factors, such as changes in credit spreads.

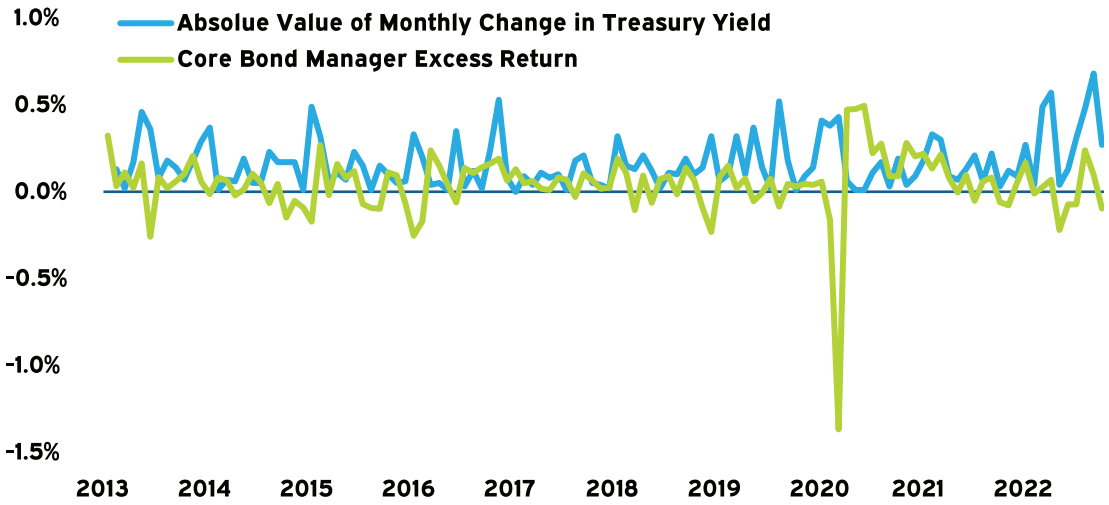

FIGURE 3
Core Bond Manager Monthly Excess Return vs Absolute Value of Change in Treasury Yield

Source: FRED and Morningstar. Represents gross of fee monthly excess returns for the core bond manager universe. Morningstar data as of 10/31/2022, sourced on 11/2/2022. Benchmark is the Bloomberg US Aggregate. FRED data as of 10/31/2022.

Many of the sharpest changes in rates, such as those during the pandemic, were sudden and unexpected. Therefore, it might be illustrative to also compare changes in interest rates over a longer period, as this may be more reflective of the typical investment horizon for the average core bond manager.

Figure 4 below compares the rolling one-year excess returns to the absolute value of the change in the yield on the 10-year Treasury for that same one-year period. Again, there is no meaningful, positive relationship. The correlation is -0.18 for the period shown. Moreover, it appears that excess returns tend to drop (again) during the periods with the largest one-year changes in interest rates.

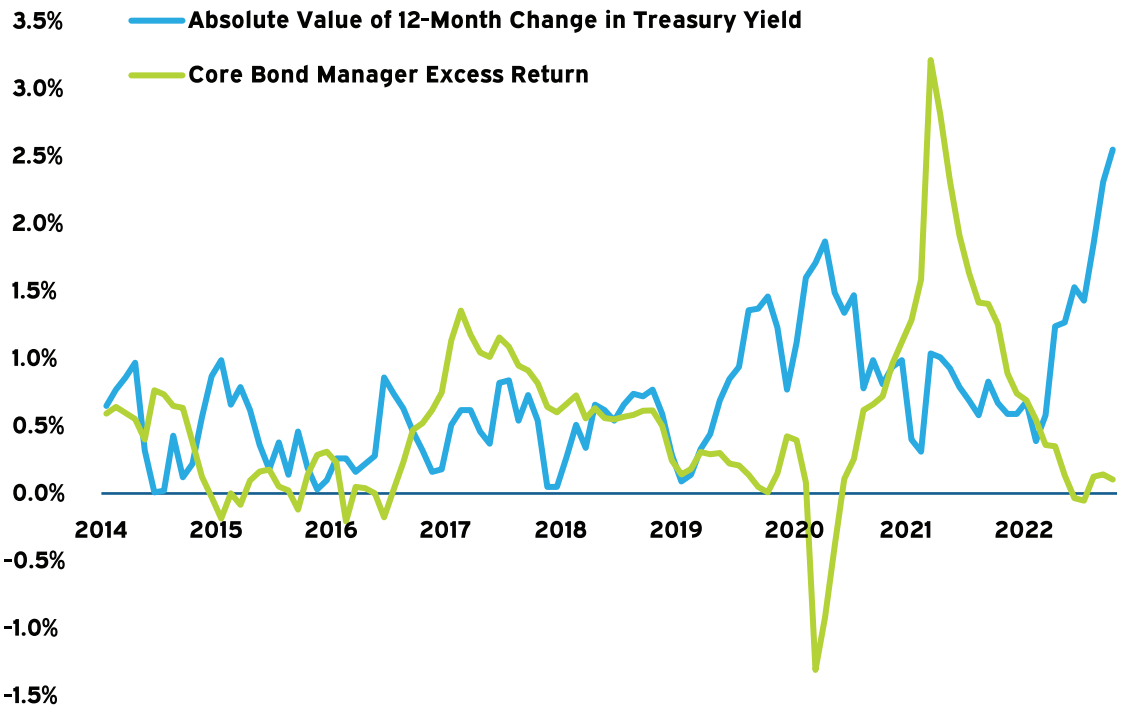

FIGURE 4
Core Bond Manager Rolling 1-Year Excess Return vs Absolute Value of Change in Treasury Yield

Source: FRED and Morningstar. Represents gross of fee rolling one-year excess returns for the core bond manager universe. Morningstar data as of 10/31/2022, sourced on 11/2/2022. Benchmark is the Bloomberg US Aggregate. FRED data as of 10/31/2022.

Conclusion

Fixed income manager performance can be attributed to many factors, potentially including changes in interest rates and trying to time these changes. Our analysis shows no strong evidence of a linkage between changes in interest rates and manager alpha. This implies that either the vast majority of the active core bond manager universe were not engaged in trying to time changes in interest rates, and/or that any skill they might have at doing so was negligible, on average, for the period measured.

This analysis appears to support the anecdotal observation of our public markets manager research team that factors other than duration management typically determine 80-100% of performance above or below the benchmark over the long term for the vast majority of active core bond managers. These other factors – the ones most likely driving excess returns – include security selection and sector allocation. Another factor, yield curve positioning, is likely a secondary driver for most managers. We intend to examine the impact of these other factors in a future research note.

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