Insights
Fixed Income

The Fixed Income Side of Factor Investing

What Investors Need to Know

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Factor investing is a popular strategy for equity investors, but in fixed income markets, it has only come into the fore more recently. That said, a key advantage for fixed income investors is that some of the same factors that have been implemented by equity investors can also be used to generate alpha in the bond market. In this piece, we focus on the Value and Momentum style factors.

Importantly, some of the traditional factors in stock markets (like Value and Momentum) have already been widely adopted, and they are becoming more and more commoditized in the equity trading space. Fixed income investors have the opportunity to take advantage of risk-adjusted return benefits from being early movers in fixed income factor investing.

Background

Systematic investing in equities has been widely accepted for many years, and quantitative trading shops have long employed rules-based strategies that take advantage of inefficiencies in the market. Algorithmic equity strategies for generating alpha have been popular and have seen development over the years with increasing investment and study.

By contrast, fixed income investors have been slower to embrace a systematic approach due to the relative complexity and illiquidity of the asset class. For example, each bond issuer may offer multiple debentures with different coupon levels, maturity dates, optionality, and seniority, making it difficult to apply rules that will work in practice. These dynamics are changing, however, with innovations in the way bonds trade. Specifically, electronic trading, portfolio trading, and the rise of fixed income ETFs have all contributed to greater price transparency, greater bond market efficiency, and lower transaction costs — opening the door for a systematic, data-driven approach in fixed income (see: The Modernization of Bond Market Trading and Its Implications).

Learning from Patterns

Historical data shows that certain market trends and inefficiencies have existed since the inception of equity trading. Alpha generation has since been borne out in trading strategies that take advantage of these anomalies. In particular, factor investing exposes portfolios of securities to common sources of systematic risk (such as styles, sectors, and regions) in order to put these anomalies to work and improve risk-adjusted returns. As mentioned, many of the popular factor trading techniques on the equity side are already in heavy use by equity traders, causing a reduction in the factor premium.[1]

Fixed income markets have more recently entered the factor investing area, as data shows that many of the same patterns that have repeatedly been revealed in equity markets can also apply to fixed income securities. As a result, fixed income investors can now use factors that expose them to bonds that may have higher returns in the future if historical trends pan out.

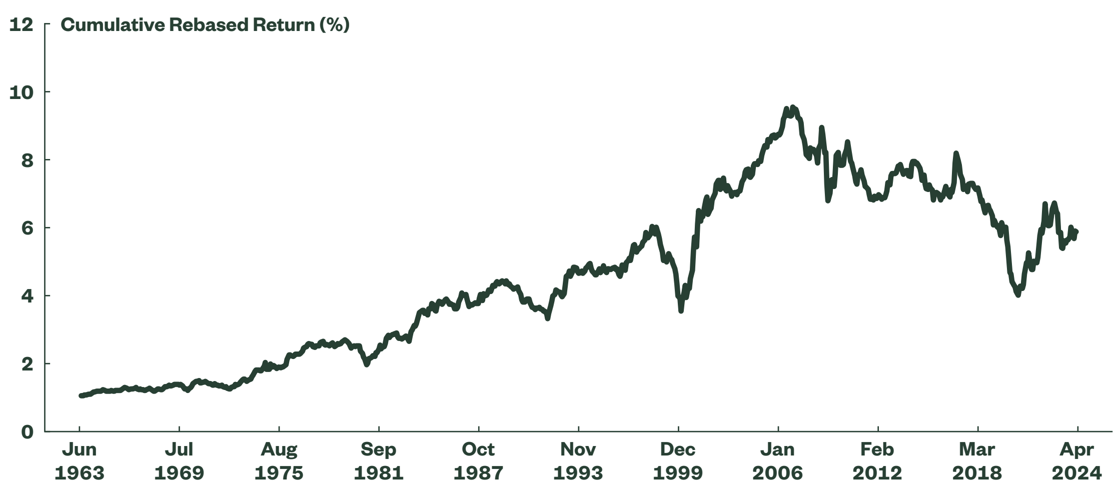
A Deeper Dive Into Value and Momentum Factors

There are two types of factors: "risk" factors and "style" factors. In this piece, we focus on the Value and Momentum style factors, which are applicable to both equity and fixed income markets.

Value

Value is a measure of the extent to which an asset is cheap or rich versus a universe, sector, set of peers, or other group. The starting point for equity factor investing was the Value factor, and it had an impressive multi-decade run of strong performance. Value investing has seen headwinds over the past 20 years due largely to the incredible price trajectory of growth stocks in transformative technology (Figure 1).

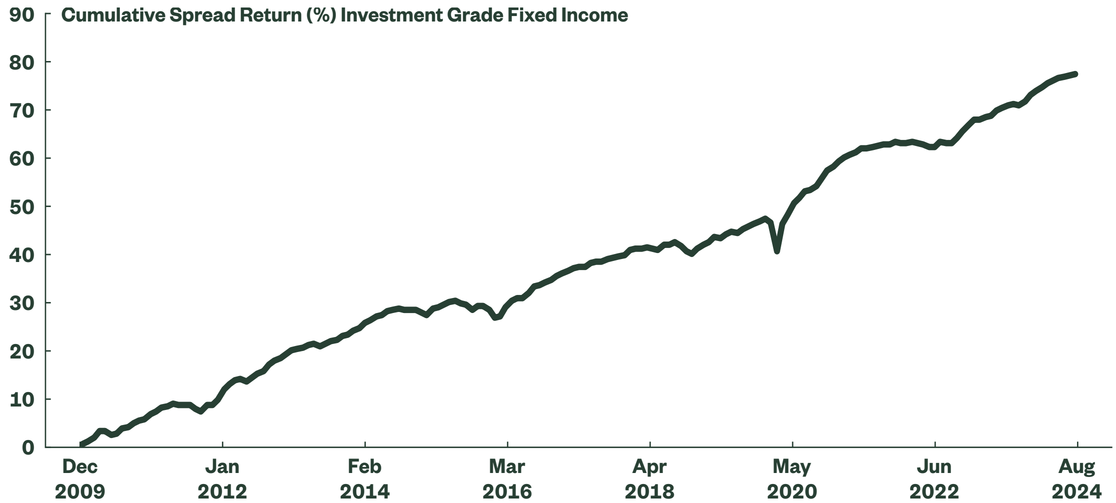
Figure 1
Equity Value Factor Return



Source: State Street Global Advisors, Kenneth French Data Library. HML = High Minus Low value. As of June 30, 2024.

Similar to equity factor investing of yesteryear, the starting point for fixed income factor investing is the Value factor. Because fixed income factor investing is still at a relatively early stage, the Value factor premium is intact and can be a useful driver of alpha (Figure 2). In addition, as in equity markets, the fixed income Value factor may outperform or underperform in certain periods even as it generates alpha over longer stretches.

Figure 2
Fixed Income Value Factor Return



Source: State Street Global Advisors, FactSet. As of 08/31/2024 in USD. Cumulative Spread Return from December 31, 2009 to August 31, 2024. Value factor based on quintile analysis.

Momentum

Momentum is based on the general observation that assets that have performed well in the recent past tend to continue to do well. In the equity space, Momentum can help investors avoid value traps (i.e., those stocks that are cheap but are cheap for a *reason* and will likely stay cheap). Momentum has been shown to be highly effective, but investors must manage certain challenges:

- Momentum trades tend to have dramatic reversals. Therefore, diversification is necessary to buffer the impact of Momentum going out of favor.
- Timing has proven too challenging for many investors seeking to enter Momentum strategies.

As a result of these hurdles, Momentum strategies are more likely to accompany other factor strategies on the equity side.

In fixed income, the Momentum factor comes into play by way of *equity* Momentum — i.e., corporate bond issuers with stronger Momentum in their equity prices tend to exhibit higher subsequent returns in their corporate bonds, and vice versa (see Overview: Systematic Active Fixed Income Signals and Naik, Trinh, and Rennison 2002).[2] Credit markets tend to react to changes in a company's prospects with a lag versus the equity market, so up or down equity Momentum may be followed by an adjustment up or down in bond performance. Explanations for this phenomenon in the literature and from practitioners include liquidity risk (Lin and Wu 2013),[3] the segregation of equity and bond markets, and the fact that stocks tend to be more sensitive to new information flows than bonds (Barclays QPS Research 2017).[4]

Combining Diversified Factors

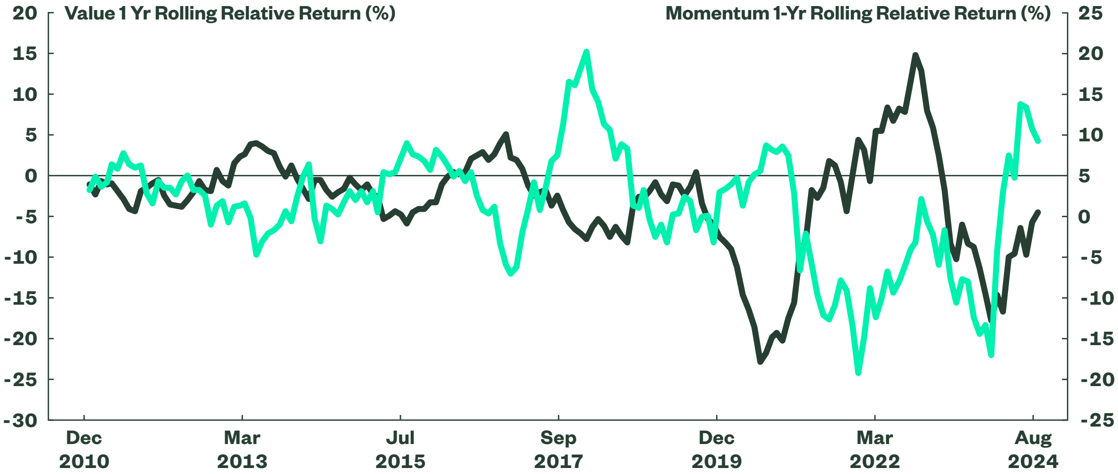
When implementing factor investing strategies, an important goal for investors is to find multiple factors that are diversifying relative to each other, but provide greater excess return when combined. The idea is to find outperformance, but in different ways.

Indeed, Polbennikov, Desclée, and Dubois[5] illustrate this result with an example based on a combination of Value and Momentum factor strategies. They found that a portfolio constructed to optimize a 50/50 blend of Value and Momentum signals achieved significantly better performance — in terms of average outperformance and information ratio — than a 50/50 blend of two portfolios that independently optimized each signal on its own.[6] As a result, Value and Momentum are two factors frequently combined to both diversify each other and boost returns.

This negative relationship between Value and Momentum is also displayed when fixed income portfolios use bond issuer Value and equity Momentum as factors (Figures 3 and 4).

Figure 3
(Equity) Value and Momentum Rolling 1-Year Relative Returns

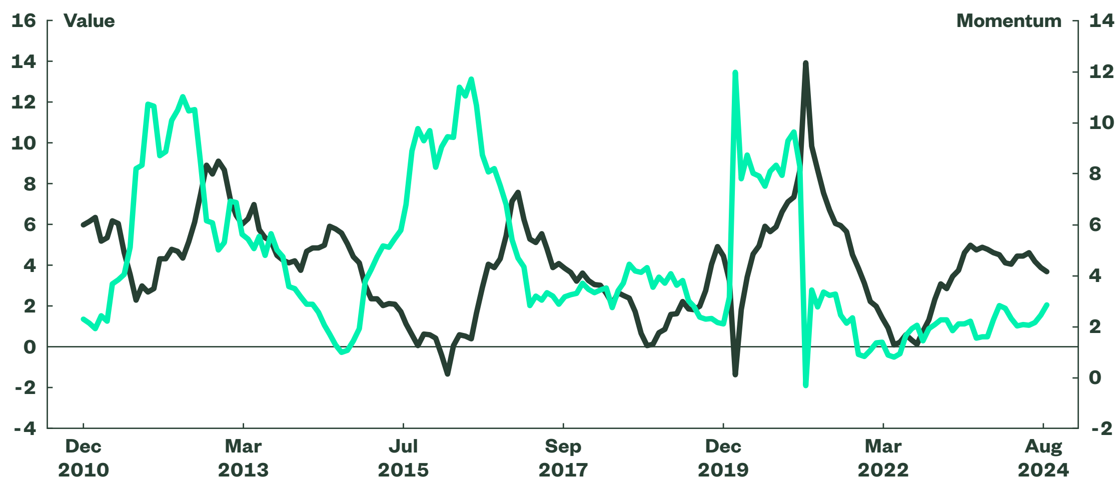
MSCI USA Value
MSCI USA Momentum (RHS)



Source: MSCI, FactSet. One year rolling net returns relative to the MSCI USA Index. As of 08/30/2024 in USD. Rolling annualized returns from December 31, 2009 to August 31, 2024. Past performance is not a reliable indicator of future performance.

Figure 4
(Fixed Income) Value and Momentum Rolling 1-Year Spread Returns

Value — Fixed Income
Momentum — Fixed Income (RHS)



Source: State Street Global Advisors. As of 08/30/2024 in USD. Annualized spread returns from December 31, 2009 to August 31, 2024. Value and Momentum factors based on quintile analysis. Past performance is not a reliable indicator of future performance.

A broader analysis across asset classes shows that the negative relationship between Value and Momentum factors is consistent regardless of whether equity or fixed income strategies are in place. Furthermore, when looking at each factor in isolation, equity Value is positively correlated to fixed income Value, and the same holds true for Momentum (Figure 5).

Figure 5
Value-Momentum Correlations Across Asset Classes
Correlation Matrix: Equity and Fixed Income Factor Returns, Jan 2010–Aug 2024

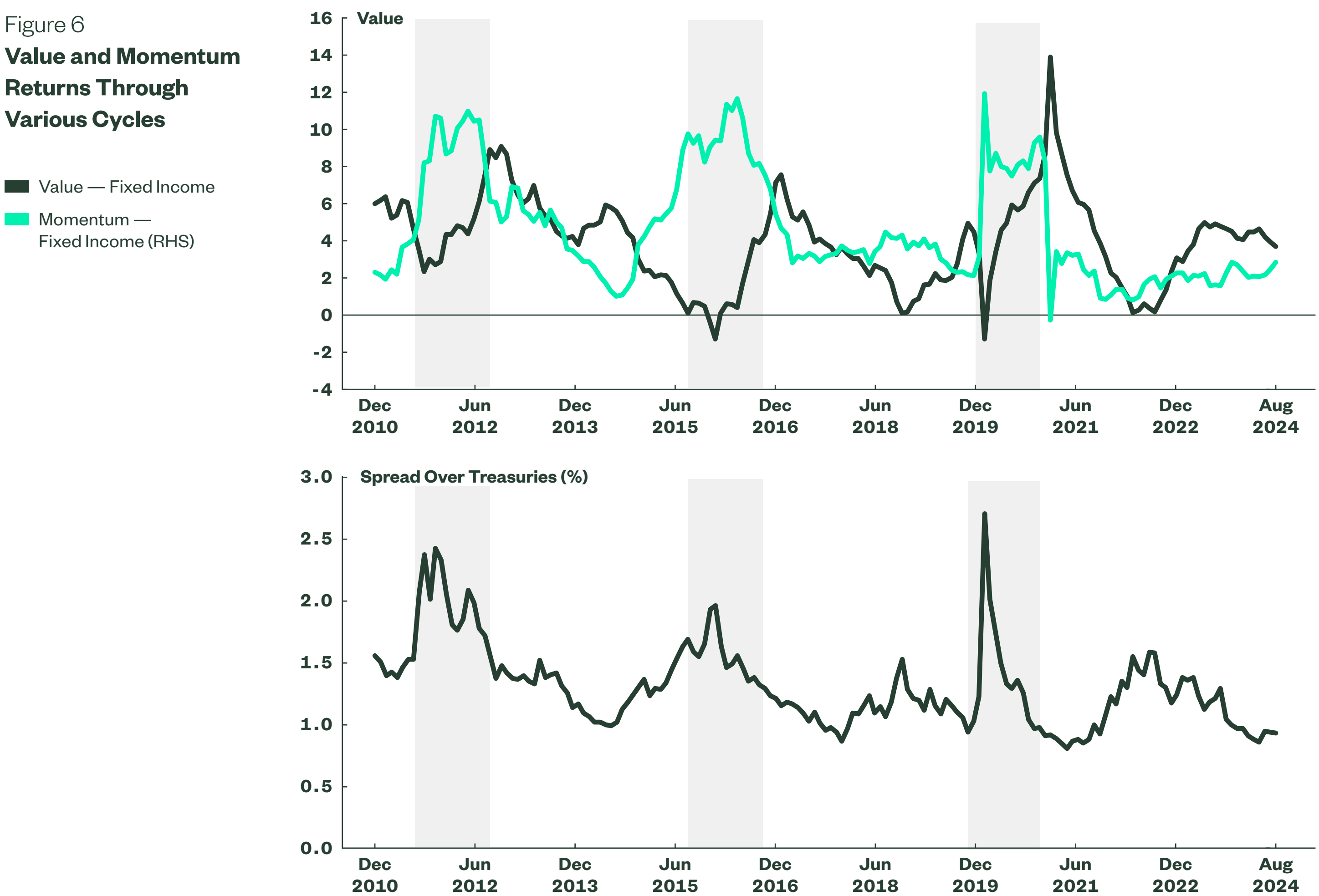
	Value Factors			Momentum Factors		
	Value — US IG	Value — US HY BB/B	MSCI — US Equity Value	Momentum — US IG	Momentum — US HY	MSCI — US Equity Momentum
Value — US IG	1.00					
Value — US HY BB/B	0.65	1.00				
MSCI — US Equity Value	-0.06	-0.02	1.00			
Momentum — US IG	-0.63	-0.44	-0.01	1.00		
Momentum — US HY	-0.50	-0.33	-0.04	0.71	1.00	
MSCI — US Equity Momentum	-0.19	-0.14	-0.19	0.09	0.09	1.00

Source: State Street Global Advisors, MSCI, FactSet, Barclays QPS. Correlation Matrix: Quintile Portfolio Returns, Jan 2010–Aug 2024. Investment Grade=IG, High Yield=HY.

Fixed Income Factors Through Various Cycles

In the equity world, traditional Value factors are typically viewed as cyclically sensitive and tend to move directly with the business cycle. This is also true in fixed income; the Value factor returns tend to fall during spikes in bond spreads. On the flip side, the Momentum factor returns tend to rise during these same periods, suggesting counter-cyclicality with the credit cycle — an attractive characteristic relative to many fundamentally managed active bond funds. Figure 6 shows how the pairing of less correlated factors can be beneficial during bear markets.

Figure 6
Value and Momentum Returns Through Various Cycles



Source: Top Chart — State Street Global Advisors. As of 08/30/2024 in USD. Lower Chart — Bloomberg, FactSet. As of 08/30/2024. Past performance is not a reliable indicator of future performance.

Why do Value and Momentum exhibit different behaviors? We think of Value as being a key performance driver, while Momentum acts as a risk control mechanism to enhance and stabilize performance across different market regimes. In addition, Value will tend to exhibit a carry or duration times spread bias, while Momentum can help protect against value traps during spread-widening episodes.

Many alpha strategies are looking to take advantage of the Value factor, but by complementing Value with Momentum, we seek to prevent an overabundance of the general pro-cyclicality of Value. This can lead to a competitive and differentiated outcome relative to fundamental managers.

The Bottom Line

Systematic active fixed income investing allows investors to take advantage of the performance benefits of making positive tilts towards certain alpha factors, including Value and Momentum. Systematic investing has been implemented widely by equity investors, but fixed income investors now have the opportunity to take advantage of this trading strategy — at a time in which the signals have not yet been commoditized. Importantly, by effectively combining signals, fixed income investors can gain diversification benefits and potentially improve portfolio returns.

Endnotes

1 Factor Premium: HML = High Minus Low value.

2 Naik, V., M. Trinh, G. Rennison, Introducing Lehman Brothers ESPRI: A credit selection model using equity returns as spread indicators, Lehman Brothers, Quantitative Credit Research Quarterly, 26–39, January 2002.

3 *Ji-Chai Lin* and *YiLin Wu, SEO Timing and Liquidity Risk*, *Journal of Corporate Finance*, 2013, vol. 19, issue C, 95–118.

4 Polbennikov, S., A. Desclee, "Equity Momentum in Credit (EMC)," Barclays Quantitative Portfolio Strategy, 18 August 2017.

5 Polbennikov, S., A. Desclee, M. Dubois, "Integrating Value and Momentum Strategies into Credit Portfolios," Barclays FICC Research, Quantitative Portfolio Strategy, 14 August 2019.

6 Explained another way, equal-weighting two portfolios, one value-optimized and one Momentum-optimized, is inferior to optimizing a single portfolio that equal-weights Value and Momentum signals.

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* Pensions & Investments Research Center, as of December 31, 2023.
† This figure is presented as of June 30, 2024 and includes ETF AUM of $1,393.92 billion USD of which approximately $69.35 billion USD is in gold assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated. Please note all AUM is unaudited.

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ID2378101-7060344.1.2.GBL.INST 0924
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