

INSIDE OUR SMART BETA APPROACH FOR CORPORATE BONDS: SCREEN FOR QUALITY, TILT TOWARD INCOME

By **Rick Harper**, WisdomTree Head of Fixed Income & Currency

“Smart beta” or fundamentally weighted¹ strategies have become an increasingly popular way for investors to allocate to equity markets in recent years. While their motivations often differ, a common theme is that weighting by market capitalization² (market cap) does not always lead to the most efficient portfolio. This trend has been slower to develop in fixed income, but our sense is that this may be starting to change.

Similar to equities, most fixed income benchmarks weight by market cap. As a result, investors who fully replicate these benchmarks may be investing in the largest debtors, regardless of valuations or their ability to pay. Put another way, the more debt a company issues, the more you are willing to invest. In our view, this logic is inconsistent with the way most investors normally allocate to fixed income.

To counter these issues, WisdomTree recently created a suite of corporate bond Indexes that take an alternative approach. WisdomTree’s Indexes screen for bonds with sufficient liquidity³ and favorable fundamentals, then tilt toward bonds with attractive income and valuation characteristics. Using these Indexes as a foundation, WisdomTree has also launched a series of exchange-traded funds (ETFs) that seek to track the performance of these strategies.

Below, we summarize a discussion with Rick Harper, Head of Fixed Income and Currency at WisdomTree, to gain more insight about the prospects for smart beta in fixed income, the intuition behind the new strategies and the role they can play in investor portfolios.

WHY NOW FOR SMART BETA FIXED INCOME?

Prior to 2008, investors may have recognized the shortcomings associated with cap-weighted fixed income, but they often failed to see the urgency for an alternative. The 2008 financial crisis, the European sovereign debt crisis and the extraordinary central bank policy that followed, however, have refocused investor attention. Additionally, issuer concentration risks within market cap indexes have become even more apparent. Though yields⁴ have modestly risen from historically low levels, sensitivity to interest rate risk remains high.⁵

¹ Fundamentally weighted: A type of index in which components are chosen based on fundamental criteria as opposed to market capitalization. Fundamentally weighted indexes may be based on fundamental metrics such as revenue, dividend rates, earnings or book value.

² Market capitalization weighted: Price x number of shares outstanding. Firms with the highest values receive the highest weights in approaches designed to weight firms by market cap.

³ Liquidity: The degree to which an asset or security can be bought or sold in the market without affecting the asset’s price. Liquidity is characterized by a high level of trading activity. Assets that can be easily bought or sold are known as liquid assets.

⁴ Yield: Refers to the yield to maturity, which is the single discount rate that equates the present value of a bond’s cash flows to its market price.

⁵ As represented by the Bloomberg Barclays U.S. Aggregate Index, as of 3/31/18.

In our view, alternative weighted strategies should be considered along a continuum of existing investment approaches. Fully discretionary, active management⁶ rests at one extreme, while the pursuit of market cap-weighted beta exposure dominates the other. To be successful, smart beta fixed income needs to follow a systematic, rules-based approach in addressing the flaws and retaining the virtues of these two extremes.

TELL ME MORE ABOUT THE FUNDAMENTAL CORPORATE BOND INDEXES AND YOUR RESEARCH THAT LED TO THEIR DEVELOPMENT?

For these strategies, we focused exclusively on publicly traded issuers of the U.S. corporate bond market. Given that our strategies rely on the regular update of audited financial statements, limiting the investable universe to publicly traded companies can effectively help level the playing field.

Additionally, we felt we needed to go back to basics and focus on what investors truly want out of their corporate bond portfolios: “quality” bonds that pay an attractive level of income. As a result, we developed a process that uses fundamental factors to screen credit markets and tilts toward the remaining bonds that offered attractive value and income characteristics.

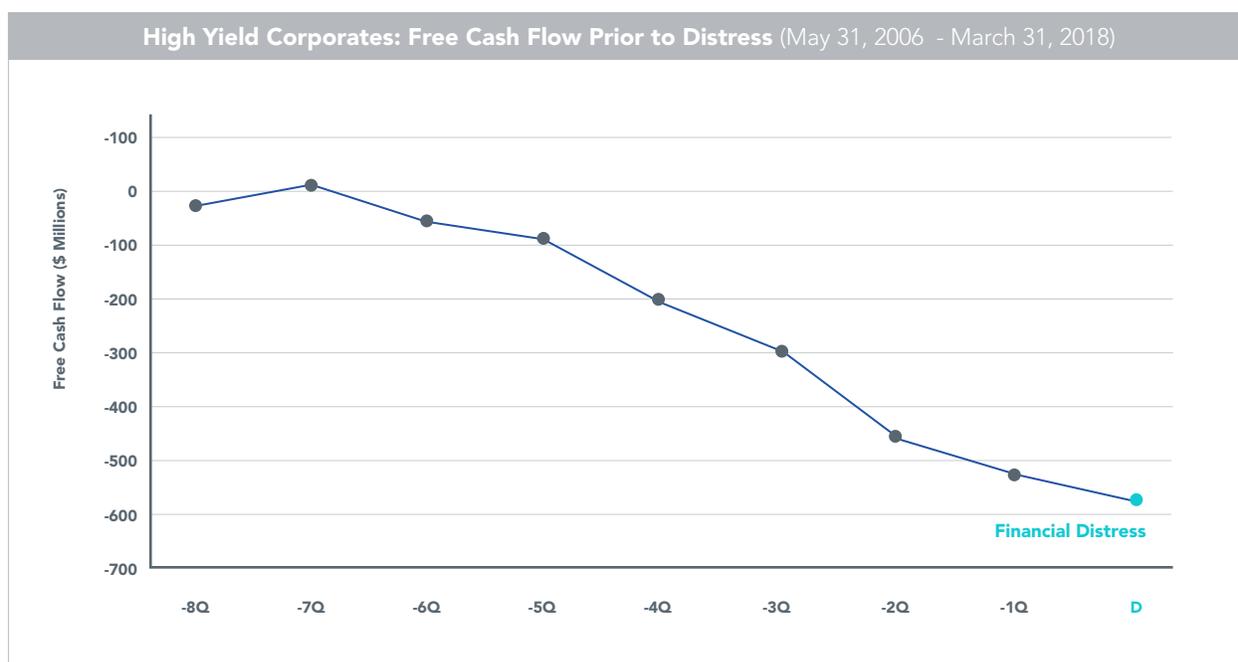
After several years of research, we have developed six strategies: intermediate- and short-maturity options covering investment grade⁷, high yield⁸ and BBB-rated⁹ issuers (the lowest level of investment grade).

| | |
|---|--|
| WisdomTree Fundamental U.S. Corporate Bond Index | WisdomTree Fundamental U.S. Short-term Corporate Bond Index |
| WisdomTree Fundamental U.S. High Yield Corporate Bond Index | WisdomTree Fundamental U.S. Short-term High Yield Corporate Bond Index |
| WisdomTree Fundamental U.S. BBB Corporate Bond Index | WisdomTree Fundamental U.S. Short-term BBB Corporate Bond Index |

⁶ Active management: investment method where a manager selects securities in an attempt to outperform the performance benchmark.
⁷ Investment grade: A rating given to a municipal or corporate bond. It is a relatively favorable rating by either Moody's or Standard & Poor's, indicating a higher chance an issuer performs interest and principal obligations as promised by the terms of the debt issuance.
⁸ High yield: Sometimes referred to as “junk bonds,” these securities have a higher risk of default than investment grade securities.
⁹ BBB rating: Standard & Poor's credit rating that implies the borrower has adequate capacity to meet financial commitments, but may be more vulnerable to adverse economic conditions. This rating represents the lowest level of investment grade.

WHAT FUNDAMENTAL FACTORS PROVED THE MOST EFFECTIVE IN YOUR RESEARCH?

For high yield corporate bonds, one of the biggest risks to an investor is that the issuer ultimately defaults¹⁰. We found deteriorating and negative cash flows¹¹ to be very effective in highlighting speculative credits that may eventually experience distress. Particularly in today’s environment, companies with inadequate or negative cash flow are constantly under pressure to find the necessary cash to pay bondholders. To study this factor, we examined publicly traded issuers of high yield bonds¹² that experienced distress, using data from 2006 to 2018. Figure 1 depicts the deterioration of their average cash flows in the eight quarters prior to becoming distressed.



Sources: WisdomTree, FactSet, 5/31/06 - 3/31/18. Data begins on 5/31/06 due to data availability for the high yield strategy. Past performance is not indicative of future results. Universe includes all publicly traded issuers that had non-investment grade debt issues with a minimum par amount of \$100 million outstanding and at least 1 year to maturity.

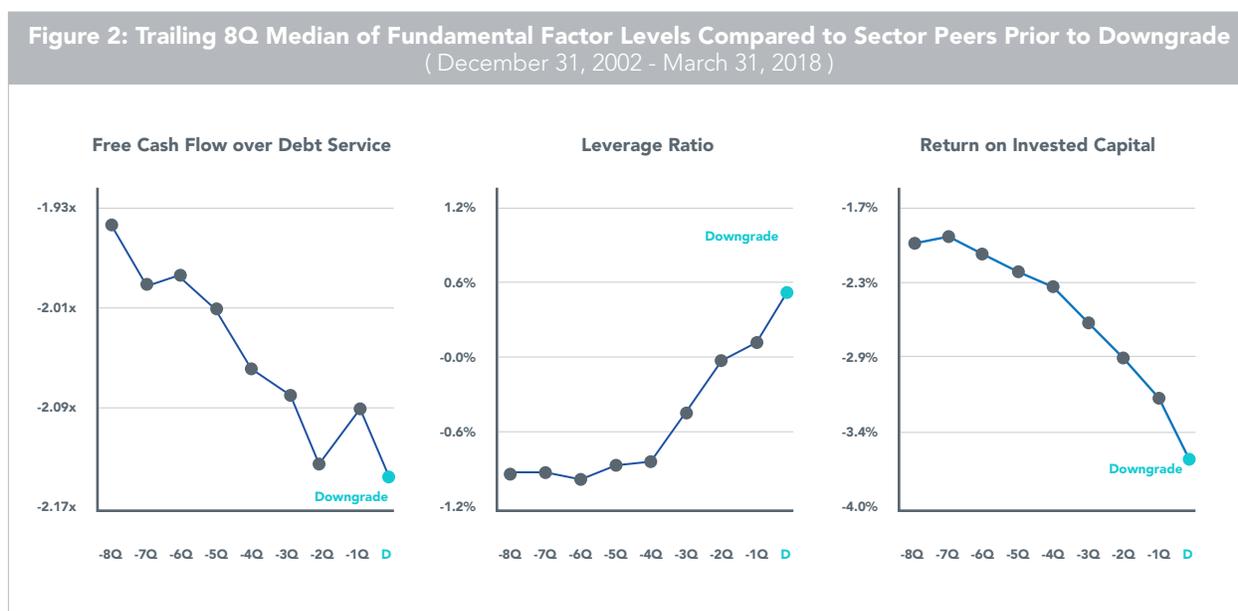
¹⁰ Default: The process in which a borrower fails to fulfill its contractual obligations.

¹¹ Free Cash flow: A measure of how much cash is left in the company after taking into account all the necessary expenses, including net capital expenditures.

¹² Publicly traded issuers examined had non-investment grade debt issues with a minimum par amount of \$100 million outstanding and at least 1 year to maturity.

IS THE SAME APPROACH APPLIED WHEN ASSESSING INVESTMENT GRADE CORPORATE BONDS?

For investment grade credits, the process is similar but requires more nuance. The risk of a ratings downgrade¹³, particularly one that would jeopardize the investment grade rating, poses a more pressing threat than default risk. Companies that are less profitable, employ more leverage¹⁴ and generate less free cash flow compared to their sector peers may find it harder to maintain their rating. In fact, we have found strong evidence that deterioration in fundamental factors regarding solvency, leverage and profitability precedes actual downgrades from the rating agencies. Figure 2 depicts the quarterly level of free cash flow over debt service¹⁵, leverage and the return on invested capital¹⁶ (ROIC) for companies compared to their sector peers in the eight quarters prior to the company getting downgraded.



Sources: WisdomTree, FactSet, 12/31/02 - 3/31/18. Past performance is not indicative of future results. Universe includes all publicly traded issuers, domiciled in the U.S., that had investment grade debt issues with a minimum par amount of \$100 million outstanding and at least 1 year to maturity.

In all three instances, issuer fundamentals tend to come under pressure. For our Indexes, an average fundamental score is calculated to rank companies across each sector. The resulting universe excludes all issuers in three broad sectors (Industrials, Financials and Utilities) with scores in the bottom 20% of the sector. As a result, these fundamental cuts should impart a quality bias compared to market cap-weighted indexes.

¹³ Downgrade: The reduction in the outlook by a credit ratings agency on the ability or willingness of a borrower to meet its obligations.

¹⁴ Leverage: Total debt divided by total assets. Higher numbers indicate greater borrowing to finance asset purchases; leverage can tend to make positive performance more positive and negative performance more negative.

¹⁵ Free Cash Flow over Debt Service: Represented by a measure of how much cash is left in the company after taking into account all the necessary expenses, including net capital expenditures divided by Debt Service (short term debt + interest payments + lease payments).

¹⁶ Return on invested capital: A measure of company performance commonly calculated as net income over shareholder's equity plus long-term debt.

HOW DOES THE VALUATION AND INCOME TILT COMPLEMENT THE FUNDAMENTAL SCREENING PROCESS?

In isolation, bonds with better fundamentals often entail a sacrifice in yield. Yield encapsulates both opportunity and risk, yet provides little guidance as to which one is likely to be realized. Investors typically demand higher yields in assuming greater risk, and blindly reaching for yield will likely involve investing in potentially troubled credits. We would rather screen out bonds we are uncomfortable with and then tilt greater weight to the remaining bonds with better income and valuation characteristics. Again, we screen for quality and tilt toward income. In assessing valuations, we consider the level of incremental income offered by each bond with respect to multiple risk factors, including potential for default, interest rate risk¹⁷ and likely recovery rates¹⁸. An income score is generated relative to sector peers and then used to tilt the portfolio. Our goal is to increase the income/return potential of the Index while retaining elements of the risk reduction potentially achieved by the fundamental cut.

HOW DO THE INDEXES ADDRESS RECENT CONCERNS ABOUT LIQUIDITY IN THE CORPORATE BOND MARKET?

The reduction in broker-dealer bond inventories as a consequence of regulation has received considerable industry and media attention. While market participants seek to reduce their dependency on broker-dealers, it is a real issue that needs to be considered in the construction of the Indexes.

The WisdomTree family of fundamentally weighted corporate bond Indexes address concerns about liquidity in three ways. First, the required minimum issue size is higher than that of many capitalization-weighted indexes. Generally speaking, larger issues tend to have better secondary trading volume. Second, the fundamental screen seeks to eliminate credits that could become distressed, which likely leads to compromised liquidity. Third, for the high yield indexes, an additional liquidity screen is applied to the investable universe after the fundamental cut. We measure liquidity as a function of size and seasoning (time since issuance) and cut the smallest and oldest 5% of bonds in the group. In many instances, the time since a bond was issued is inversely correlated to the level of trading activity.

WHAT DOES THE REBALANCING LOOK LIKE IN PRACTICE? AND HOW DO THE RESULTS COMPARE TO MARKET CAP BENCHMARKS?

Let's take a look at the quarterly process for the investment grade index.

Define the Universe: The universe of bonds is limited to publicly traded, U.S. domiciled issuers of corporate debt with at least \$350 million in debt outstanding.

Screen for Fundamentals: Normalized scores are generated for free cash flow over debt service, leverage and return on invested capital. The scores are averaged, and this composite is ranked against broad sector peers (Industrials, Financials and Utilities). The bottom 20% of the credits in each sector are removed.

¹⁷ Interest rate risk: The risk that an investment's value will decline due to an increase in interest rates.

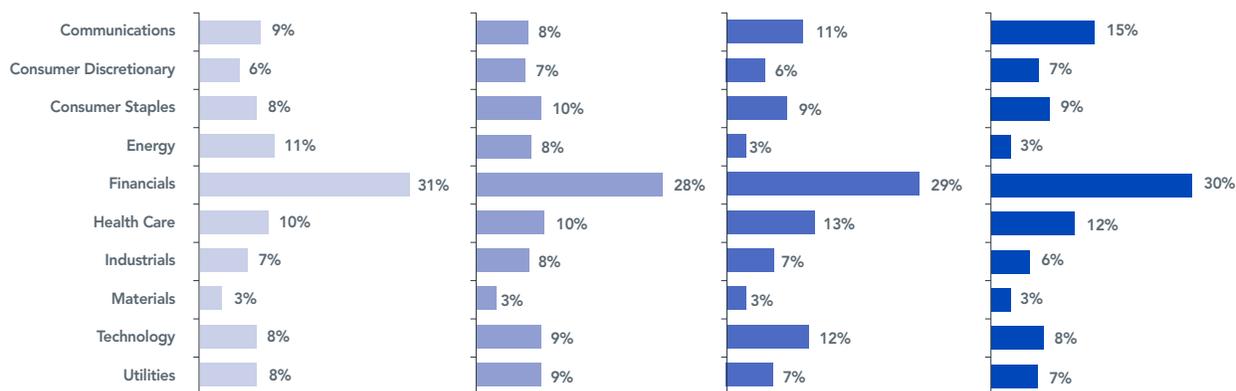
¹⁸ Recovery rate: The percentage of principal and interest that is ultimately recovered in the event of bankruptcy.

Tilt for Income: After the fundamental screen, the level of incremental income is considered within the context of potential default risk and interest rate risk; the income score is calculated, and credits are ranked in each broad sector before a tilt is applied to adjust the market value.

For the investment grade strategy, the portfolio currently provides a slight sacrifice in yield, but with less interest rate risk. The fundamental cut creates a relative underweight to sectors such as Energy within the broader sector classification.¹⁹

| | MARKET CAP BENCHMARK | UNIVERSE OF PUBLIC ISSUERS | POST FUNDAMENTAL CUT | POST INCOME TILT |
|------------------------|----------------------|----------------------------|----------------------|------------------|
| Characteristics | | | | |
| Yield | 3.74% | 3.70% | 3.64% | 3.70% |
| Duration | 7.37 | 7.48 | 7.53 | 6.99 |
| Number of Issues | 6,061 | 4,860 | 3,093 | 3,072 |
| Number of Issuers | 756 | 553 | 398 | 397 |

Sector Breakdown



Sources: WisdomTree, Bloomberg, as of rebalance at 2/28/18. Market Cap Benchmark defined as the Bloomberg U.S. Corporate Bond Index, a rules-based market value-weighted index engineered to measure the investment-grade, fixed-rated, taxable corporate bond market. Universe of Public Issuers represents a subset of the Market Cap Benchmark that excludes those with private parent companies. Post-Cut Portfolio is the portfolio that remains after cutting the bottom 20% by fundamentals. The Post-Tilt Portfolio represents the final index after adding in the income tilt. Subject to change. Past performance is not indicative of future results.

¹⁹ The investment grade fundamental screen currently generates an underweight to the Energy sector (3% vs. 11%). The high yield fundamental screen is currently significantly underweight the Energy sector (5% vs. 17%) and the Financials sector (10% vs. 15%). Data as of rebalance at 2/28/18.

HOW SHOULD INVESTORS WHO HAVE TYPICALLY INVESTED IN ACTIVELY MANAGED STRATEGIES THINK ABOUT THESE INDEXES?

In our view, our strategies follow a similar approach that many active managers may employ: Screen for good bonds and invest in those offering good income characteristics. While the Indexes follow a mechanical rebalancing process, we believe our research provides an intuitive approach to the market.

WHICH STRATEGIES DOES WISDOMTREE CURRENTLY OFFER IN AN ETF?

| Index Name | Fund Name |
|--|--|
| Wisdom Tree Fundamental U.S. Corporate Bond Index | WisdomTree Fundamental U.S. Corporate Bond Fund (WFIG) |
| WisdomTree Fundamental U.S. Short-term Corporate Bond Index | WisdomTree Fundamental U.S. Short-Term Corporate Bond Fund (SFIG) |
| WisdomTree Fundamental U.S. High Yield Corporate Bond Index | WisdomTree Fundamental U.S. High Yield Corporate Bond Fund (WFHY) |
| WisdomTree Fundamental U.S. Short-term High Yield Corporate Bond Index | WisdomTree Fundamental U.S. Short-Term High Yield Corporate Bond Fund (SFHY) |

WHAT ROLE CAN THESE ETFS PLAY IN AN INVESTOR PORTFOLIO?

We anticipate that these strategies can serve as substitutes or complements for existing strategies in core and core plus allocations. For existing passive allocations, they inject intuition into the investment process. As a complement to an actively managed strategy, incorporating WisdomTree Fundamental U.S. Corporate Bond ETFs should increase the transparency of the investment process as well as limit style drift²⁰ and turnover²¹. Within a diversified portfolio, we anticipate that correlation to equities could be similar to that of existing beta fixed income exposures with the tilt toward safety potentially offering more downside protection.

WHERE DO THESE ETFS FIT IN THE WISDOMTREE PRODUCT SUITE?

These fixed income Funds embrace many of the concepts inherent in the methodologies of our equity Funds, particularly our dividend and earnings-weighted families. The bias toward value while boosting income is a theme that runs through many of our equity strategies. Similar to dividends in the equity market, income payments can contribute a significant portion of a bond portfolio's return over time.

²⁰ Style drift: The divergence of a strategy's investment holdings from its stated investment objective.
²¹ Turnover: A measure of the frequency of change of a portfolio of investments.

Investors should carefully consider the investment objectives, risks, charges and expenses of the Funds before investing. To obtain a prospectus containing this and other important information, please call 866.909.9473 or visit WisdomTree.com. Read the prospectus carefully before you invest. Past performance does not guarantee future results.

There are risks associated with investing, including possible loss of principal. Fixed income investments are subject to interest rate risk; their value will normally decline as interest rates rise. High yield or "junk" bonds have lower credit ratings and involve a greater risk to principal. Fixed income investments are also subject to credit risk, the risk that the issuer of a bond will fail to pay interest and principal in a timely manner or that negative perceptions of the issuer's ability to make such payments will cause the price of that bond to decline. While the Fund attempts to limit credit and counterparty exposure, the value of an investment in the Fund may change quickly and without warning in response to issuer or counterparty defaults and changes in the credit ratings of the Fund's portfolio investments. Please read the Fund's prospectus for specific details regarding the Fund's risk profile.

Rick Harper is a registered representative of Foreside Funds Services, LLC.

WisdomTree Funds are distributed by Foreside Fund Services, LLC, in the U.S. only.

WTGM-2953