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The Impact of ETFs and Index-Tracking and Passive Strategies on the Fixed-Income Market

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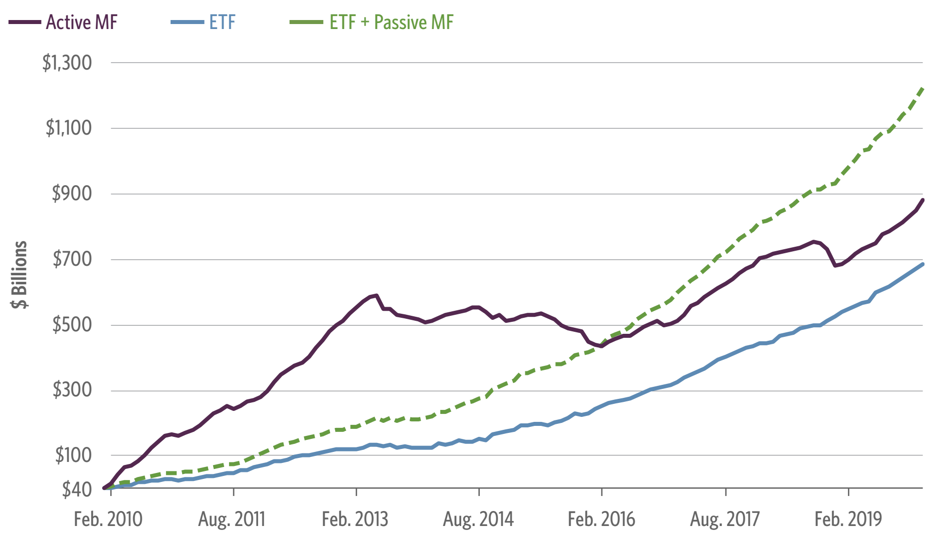
The rise in fixed-income exchange-traded funds (ETFs) and other index-constrained or passive strategies has been accompanied by increased scrutiny of how they affect the markets. As markets have been grappling in recent weeks with coronavirus-induced volatility, this interest has only gotten more intense.

With the general decline in interest rates and accommodative policies of global central banks since the financial crisis, fund flows into fixed-income investment vehicles have been steadily rising, with flows into passive or index-constrained funds exceeding flows into actively managed funds, showing the trend is clearly towards greater allocations to passive strategies.

Passive Flows Exceed Active in Fixed-Income Mutual Funds

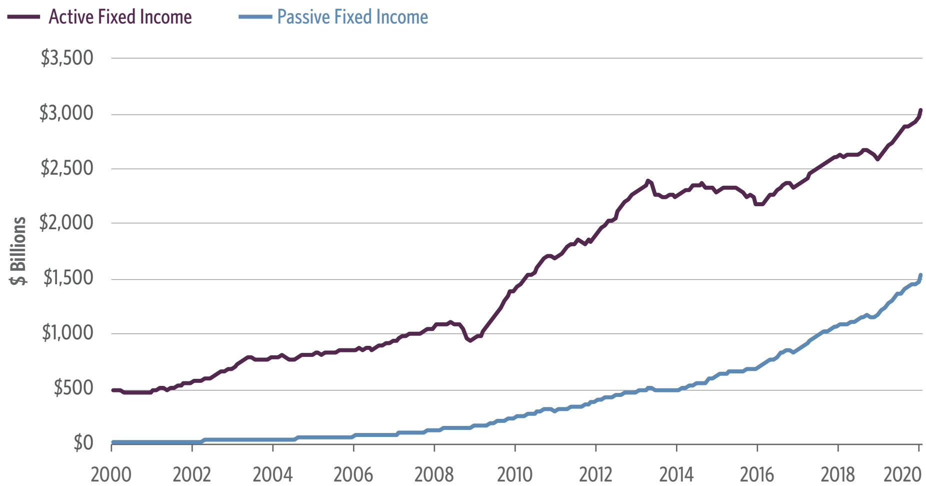


Source: Guggenheim Investments, Morningstar. Data as of 1.31.2020.

Even with the trend in flows, however, assets in actively managed fixed-income funds still exceed the assets in ETFs and passive or index-constrained funds.

To use the mutual fund industry as a proxy for the market, as of Jan. 31, 2020, assets in actively managed fixed-income funds totaled $3.0 trillion, compared to $1.5 trillion in ETFs and other passive funds.

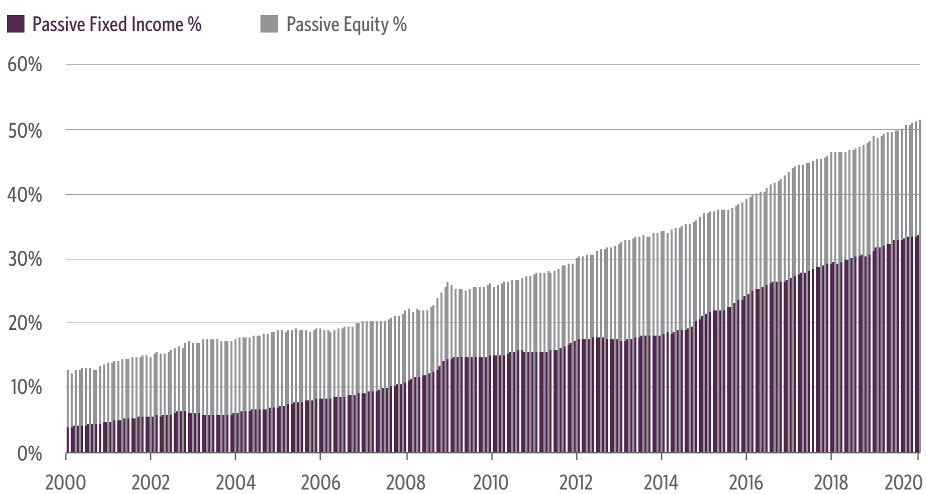
Active Fixed-Income Fund Assets Are Double Those of Passive Funds



Source: Guggenheim Investments, Morningstar. Data as of 1.31.2020.

As a point of comparison, the trend towards passive management is farther ahead for equities than for fixed income, with passive strategies now accounting for more than half of all equity mutual fund assets, compared to just a third of fixed-income mutual fund assets.

Passive Fund Assets Are Rising Faster in Equities



Source: Guggenheim Investments, Morningstar. Data as of 1.31.2020.

In considering the impact on the fixed-income market of fixed-income ETFs and other passive funds, it is worth noting that the fixed-income universe is sprawling, diverse, and huge. With approximately $43 trillion in outstanding securities, the fixed-income market comprises 4.7 million non-matured CUSIPs as well as non-CUSIP debt instruments, such as bank loans. For comparison, the number of listed stocks in the United States amounts to only about 3,600 companies, with a total market capitalization of approximately $30 trillion.

The size and heterogeneity of the fixed-income market might suggest that it is difficult for passive strategies to have an impact on the larger market, but there are three key areas where the allocation requirements of passive funds have had, or could potentially have, an impact.

1. When passive funds are buyers.
2. When passive funds are sellers.
3. When active fixed-income managers deploy passive instruments such as ETFs and other products to achieve their portfolio objectives.

When Passive Funds Are Buyers

When passive fixed-income funds buy securities, they are seeking to match or nearly match the weightings of the index to which they are benchmarked. This means that their allocations will necessarily reflect a preponderance of the biggest borrowers in the respective index. For some investors, this means concentrated exposures and increased risks. For example, since the financial crisis, the Bloomberg Barclays Aggregate Bond index (the Agg), the broadest index in the fixed-income market, has become increasingly concentrated in Treasury and Agency securities. The sheer glut of Treasurys and their dominant representation in the Agg is unlikely to reverse anytime soon due to the significant need to fund present and future government deficits. Since passive investors have no ability to invest beyond the index, they become an important source of demand for these securities. This also makes them vulnerable to interest rate and duration risk at current low yields. Even modest increases in rates would be sufficient for passive fixed-income strategies to incur losses.

At its inception in 1986, the Agg was a good proxy for the broad universe of fixed-income assets, which at the time primarily consisted of Treasurys, Agency bonds, Agency mortgage-backed securities (MBS), and investment-grade corporate bonds—all of which met the inclusion criteria. Because of the Agg's eligibility rules and the evolution in structured credit, however, the Agg excludes about half of the fixed-income securities that are in the U.S. fixed-income market. Inclusion in the Agg requires that securities be U.S. dollar-denominated, investment-grade rated, fixed-rate, taxable, and have above a minimum par amount of $300 million outstanding. Sectors outside the Agg include many types of asset-backed securities (ABS), non-Agency residential MBS (RMBS), high-yield corporate bonds, leveraged loans, municipal bonds, and any security with a floating-rate coupon. Passive funds that are indexed to the Agg therefore will hold none of these securities, regardless of their relative value proposition. Market dynamics for securities that are within the Agg and those that are not in the Agg will differ depending on the presence of the passive index buyer.

When Passive Funds Are Sellers

When an ETF or passively managed fund has to sell certain securities to reflect the weighting requirements of the index to which it is benchmarked, the impact on the markets will be determined by the significance of the change. For example, today, the leverage bubble in the market is in corporate debt. A decade of ultra-easy monetary policy has led corporate issuers to accumulate record levels of debt, making them vulnerable to downgrades when the turn in the business cycle arrives. The problem is most acute in the investment-grade market, where nearly one-third of nonfinancial debt outstanding has been issued by firms whose leverage multiples are already consistent with a high-yield rating. We expect a material dislocation in credit markets when a wave of issuers lose their investment-grade status and become "fallen angels."

The impact will be far-reaching due to the sheer size of the problem. The index of corporate bonds now has approximately $3 trillion in BBB-rated securities. Due to the large size and deteriorating quality of U.S. investment-grade corporate debt outstanding, the risks posed by a slew of rating downgrades are more pronounced today than at any time in the past 30 years. Given the record size of the BBB market, the potential fallen angel volume in the next downturn is the largest ever, exceeding the volume of fallen angels in the last cycle by two to three times.

Not only will a wave of selling be prompted by downgrades to below investment-grade, but a passive fund that is constrained to an investment-grade index will not be able to pre-emptively trade out of positions that are at risk of becoming fallen angels, thereby exposing investors in the fund to excessive downgrade risk. In addition, this selling will expose the passive fund's investors to the risk that execution will result in less than optimal price realization. Moreover, this flood of sales from investment-grade passive funds will affect the market value of all holders of these securities, whether they are passive or active.

The growth of passive investing could affect securities markets by contributing to a higher correlation of returns and less security-specific price information in certain cases. Even though passive investing currently accounts for a relatively low portion of the total outstanding fixed-income securities, the concentration of passive funds investing in the larger capital structures can cause this subset of the fixed-income universe to trade with higher correlation and less security-specific information. Passive funds place more emphasis on matching factors such as issuer and industry exposure and duration, without reviewing the idiosyncratic attributes of individual securities in an index. They do not devote resources to seeking out and using security-specific information relevant for valuing individual securities.

As the amount of passive investing increases relative to the size of the market, this dynamic is likely to increase. As trading for capital activity is generally performed on a large group of issuers within an index, higher correlation within the index constituents is likely to result. In addition, it may also magnify any pricing differences between constituent issuers and issuers whose securities are not included in the index. As discussed above, the construction of bond indexes is based on the amount of outstanding bonds. This can cause the portfolios to be concentrated in the larger and/or more leveraged capital structures, causing certain names to trade with a higher beta than similar issuers not represented in the indexes. These issuers tend to increase in a rising market and decline more in a falling market. As passive funds grow, the mechanical trading impact of index inclusion or exclusion due to credit downgrade or other factors is likely to have a larger impact on portfolio returns.

For assets that are not in the benchmark index, security selection may become more valuable as those bonds are likely to be more influenced by real price discovery based on credit fundamentals as supposed to index flows.

When Active Managers Deploy Passive Products

The growth of active fixed-income managers using ETFs and other tools to execute their investment strategies is making it a more important element of the market. Investors and their dealer counterparts often use fixed-income ETFs for risk management purposes, to hedge their holdings to make a basket purchase of many securities, known as a portfolio trade. There are two outgrowths of this activity that affect the fixed-income market landscape. First is that the exchange liquidity of ETFs and other instruments makes it an efficient risk management tool. This low-cost hedging tool may serve to reduce bid-ask spreads on underlying bonds. Second, ETFs have a creation/redemption feature that can enhance the price transparency of the underlying securities, and as their usage increases it enables counterparties to algorithmically price a larger number of bonds. While this market transparency is a useful tool, the valuations implied by the trades are nevertheless based primarily on technical considerations, not the underlying creditworthiness of the issuers. In some cases, portfolio trades associated with ETF creations/redemptions may be based on prices obtained by a service and not necessarily reflective of where those bonds would actually trade on their own. Portfolio construction across the fixed-income landscape is evolving to respond to and take advantage of the way ETFs and passive vehicles are changing liquidity and valuation patterns of securities.

A corollary to this discussion is the use of the Credit Default Swap index (CDX) or options on ETFs as a form of index investing or trading in both the investment-grade and high-yield markets. As pointed out by analysts at Bianco Research, in the high-yield market, the volumes of CDX trading are higher than the volume of ETF trading, and together they both have exceeded the trading volume of the cash market. The relatively narrow universe of names contained in the high-yield CDX can compound price behaviors during periods of active trading, including increasing the correlation and beta of the largest issuers. Given the more idiosyncratic nature of the issuers in the high-yield market (as opposed to investment grade), this phenomenon has the potential to create anomalies for price discovery during times of market stress.

Risk Factors

While passive vehicles have come to perform many important functions in the investor's toolkit, the rise in fixed-income ETFs has raised concerns among regulators. In April 2019, the Securities and Exchange Commission's Fixed-Income Market Structure Advisory Committee released a report on the investment implications of ETFs and mutual funds under stressful market conditions. The report cited one study that suggested that "ETFs may lead to persistent price distortions of individual bonds from fundamentals, and excessive co-movements in returns of individual bonds." The paper also examined the real-world experience of the impact of intra-day liquidity of ETFs during stressed markets, including the Taper Tantrum of 2013, the collapse of the Third Avenue Credit Fund in 2015, various flash crashes, and the high-yield market dislocation in December 2018. The paper concluded that in these historic periods of stressed market conditions that ETFs helped provide price discovery and that there "is no evidence that fixed-income funds have had liquidity problems."

In the first quarter of 2020, in the midst of the market volatility induced by the coronavirus crisis, market observers have gotten another chance to evaluate the ways in which ETFs behave during periods of market stress. Many of the largest ETFs have traded at discounts to net asset value (NAV). ETFs create a mechanism for price discovery and diversified risk transfer, especially during periods of market stress, but this can come at the cost of wide discounts to NAV.

During the market turbulence, bond trading volumes increased as credit risk sold off. However, the increase in bond volume was not as significant as the rise in ETF and CDX volumes. The rise in trading activity is a healthy sign during stressed markets, but the disparity in trading volumes and the discounts to NAV indicate that investors were choosing to utilize ETFs and other portfolio products such as CDX over the underlying securities to express their market trading objectives. The gap between the price of the ETF and its net asset value is a good indicator of the liquidity in the underlying securities.

While ETFs can create liquidity and risk transference, the key point is that the cost of that is not fully predictable in high stress environments and can become disconnected from or drive down the underlying cash basket value. If market conditions are stressed enough, buyers should adjust their appetite for risk transfer and buy as discounts to NAV widen, but there are also scenarios where they stop their liquidity supply entirely. This can occur if the NAV is being calculated with prices that do not reflect where bonds can actually trade. ETFs and other passive or index-constrained products are a tool in the portfolio manager's modern-day toolbox. Their growth and impact on the market bears watching. They can be used as a hedging tool and as a liquidity transfer mechanism, and they are a driver of valuation and price transparency. ETFs will not necessarily create incremental liquidity in high volatility markets where the value of the underlying cash bonds is uncertain, but in most environments they do increase liquidity in the market as they increase market turnover which attracts a heterogenous investor base. This is positive for the fixed-income market as it increases two-way flows with corresponding increase in investment strategy diversity.

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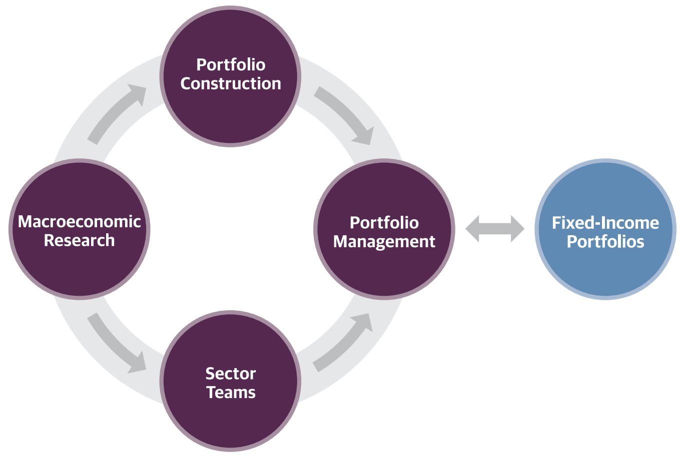

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