

# The Rise of Fixed Income ETFs

**Edward A. Rosenberg**

Head of ETF Capital Markets & Analytics

*It's true: a rising tide lifts all boats. The recent uncertainty and flight to safety along with a late surge in interest rates has fueled inflows into fixed income assets. Investment in high-grade corporate bonds, TIPS, municipals and even high yield bonds all touted recent inflows, despite the proposed end of quantitative easing in the U.S. and record-setting growth in equities. Today with continued political uncertainty upping market volatility measures, plus the near certainty of at least two federal interest rate hikes in the coming year, we believe investors should understand exactly how best to approach fixed income investing and why fixed income ETFs are the fastest-growing vehicle with which to do so.*

**BONDS ARE POSITIONED TO GROW**

Fixed income securities, generally bonds, have always been integral to the investment portfolios of institutional investors, retirees or near-retirees and those who are planning a large purchase in the mid-term future. Given the “aging of America” plus the fact that investors can anticipate longer retirements than ever before, we believe demand for fixed income assets will continue to grow.

Bonds are historically unmatched for their ability to generate a reliable income stream, mitigate overall portfolio risk and generally protect investors from market volatility. But smart and cost-efficient investing in individual bonds can require a great deal of money and time in order to ensure proper diversification. Further, fixed income securities must be analyzed using several complex measures, such as credit risk, yield to maturity and default and duration risk, making them much more difficult to judge than more straightforward equities. Last but not least, regulatory changes have negatively impacted the market, reducing liquidity, increasing price volatility and disincentivizing certain players from bidding and offering securities on a daily basis.

MANAGED BY



## THE RISKS AND CHALLENGES OF FIXED INCOME INVESTING

Some bond analysts have characterized 2017 as potentially “not for the faint of heart.”<sup>1</sup> Here are some of the reasons why.

### Decreased Liquidity

One of the unintended consequences of post-financial crisis financial regulation, in particular the “Volcker Rule,” a key piece of the Dodd-Frank legislation, is that market makers have dramatically curtailed their activities, consequently reducing their non-Treasury bond inventories. In fact, near the end of 2015, corporate bond inventories turned negative for the first time in history. A dramatic increase in bond issuance with no equal rise in secondary trading added fuel to the fire.<sup>2</sup> The result: a decrease in market liquidity and an increase in bid-ask spreads. Bid-ask spreads are the difference between the price an underwriter or a market maker that is a sizable holder of a given security or that facilitates the trading of the security is willing to purchase a security and the price they are willing to sell a particular security. Trading costs escalated for both buyers and sellers, negatively impacting returns. Mortgage and municipal bonds also suffered during the period as public comments by the Fed-incited fears of an earlier — and speedier — tapering of its bond purchases. Given the recent Fed pronouncements, many analysts have called the 2016 sell-off, “Taper Tantrum, the Sequel.”<sup>3</sup>

### Clouded Credit Risk Judgements

The level of credit risk, or bond default risk, is the risk to the investor of losing all or part of the investment due to an issuer’s insolvency or inability to pay the bond’s principal and interest. The lower the issuer’s credit rating, the greater the amount of interest that issuer has to pay in order to sell a bond. Many regulatory directives and/or client investment guidelines have been built around Nationally Recognized Statistical Rating Organization (NRSRO) ratings. In fact, credit ratings had gained a seemingly permanent role providing investors with third-party evaluations of a debt issuer’s credit standing. That is now changing, forcing investors to look for alternate means of judging quality, such as applying the science of credit scoring, similar to the kind of methodology that revolutionized credit card approvals.

The years preceding the financial crisis exposed serious shortcomings with NRSRO ratings in practice. Regulatory changes mandated by the Dodd-Frank legislation also have pared back the investment industry’s reliance on NRSRO ratings. As evidence of these changes was a final rule adopted in September 2015 removed all references to credit ratings from the SEC’s regulations governing money funds. This only added to a growing sense among investors that NRSRO ratings haven’t kept up with the times. Further proof: Moody’s Investors Service Inc. avoided a 2016 lawsuit by agreeing to pay \$130 million to settle claims by the California Public Employee Retirement System (CALPERS) that the agency inflated ratings on residential-mortgage bond deals. Also named in the same lawsuit, Standard & Poor’s paid \$125 million to settle. To date various ratings agencies have paid CALPERS \$255 million to resolve similar claims.<sup>4</sup>

### Duration Risk

Duration is a measure (in years) of a bond’s sensitivity to interest rates. The longer the duration, the greater the sensitivity. In addition, duration can be used as a measure of volatility, or the frequency and severity of market price fluctuation in an investment. The math to calculate duration is complex; so many individual investors largely avoid the subject. Also, duration is a moving target based on interest rates, so buyers must be cognizant of duration measures from a dated source.

<sup>1</sup> Chapman, Chris. “2017: A year not for the faint-hearted bond investor.” *Investment Week*. January 4, 2017.

<sup>2</sup> “Bond Market Challenges Continue to Drive Demand for Fixed-Income ETFs.” Greenwich Associates, Javelin Strategy & Research. 2015.

<sup>3</sup> Alloway, Tracy. “This Bond Market Sell-off Looks a Lot Like ‘Taper Tantrum,’ The Sequel.” *Bloomberg Markets*. September 15, 2016.

<sup>4</sup> Rosenblatt, Joel and Scully, Matt. “Moody’s Settles Calpers Ratings Lawsuit for \$130 Million.” *Bloomberg Technology*. March 9, 2016.

## The Complexities of Yield to Maturity<sup>5</sup>

Yield to maturity (YTM), or the total return on a bond held until its maturity date with all payments made as scheduled, is a useful tool for estimating whether a particular bond is a good investment. It is also useful for comparing bonds with different maturities and interest rates (or coupons) because YTM expresses their values on the same terms. Calculating that yield, however, is not easy for the average investor. Calculating YTM assumes that all coupon payments are reinvested at the same rate as the bond's current yield, and take into account the bond's current market price, par value, coupon interest rate and term to maturity. Thankfully, bond yield tables and YTM calculators exist to ease the process. But as valuable as YTM may be, buyers must be aware of the limitations of its use. YTM usually does not consider taxes to be paid in its calculation. Nor does it account for any purchasing or selling costs. Most important, YTM is only an estimate in time. Market fluctuations can substantially affect the actual return on a bond when it is sold.

## THE RISE OF FIXED INCOME ETFs

Fixed income ETFs are a relative newcomer, having first launched in 2002, approximately 10 years after equity ETFs. Despite the fact that the global bond market dwarfs the global equity market, they remain a small part of the total ETF market. Despite recent volatility in the debt markets, 2016 inflows into U.S.-listed taxable bond ETFs totaled over \$85 billion.<sup>6</sup>

### INCREASE FLOWS TO TAXABLE BONDS



As with all ETFs, fixed income ETFs offer potential advantages when it comes to expenses, taxes, transparency of holdings and intraday tradability. But beyond these basics, we believe that fixed income ETFs offer many advantages over individual bonds and even over fixed income mutual funds:

- **Maturity** – rather than a fixed date at which investors are paid back, ETFs maintain a weighted average of the maturities of all the bonds in the portfolio. As individual bonds mature, additional bonds are brought with the goal of maintaining a constant maturity.
- **Market Liquidity** – Single bond issues may trade daily or as infrequently as once a month. Like all ETFs, the funds themselves trade on an exchange and can be bought or sold during market hours.
- **Monthly Income** – While most bonds pay out interest every six months, bond ETFs generally pay interest monthly, giving investors a potentially greater source of regular income. Interest payments vary with the averages based on the underlying bonds in the portfolio.
- **Price Transparency** – ETF prices are published on the exchange and the price of the basket of holdings is updated every 15 seconds during the trading day.
- **Diversification** – ETFs potentially enable investors to own hundreds of bonds in a single security at a purchase price that is could be substantially lower than investing in those same bonds individually.

<sup>5</sup> Investopedia. 2017.

<sup>6</sup> Morningstar, 12/31/2016..

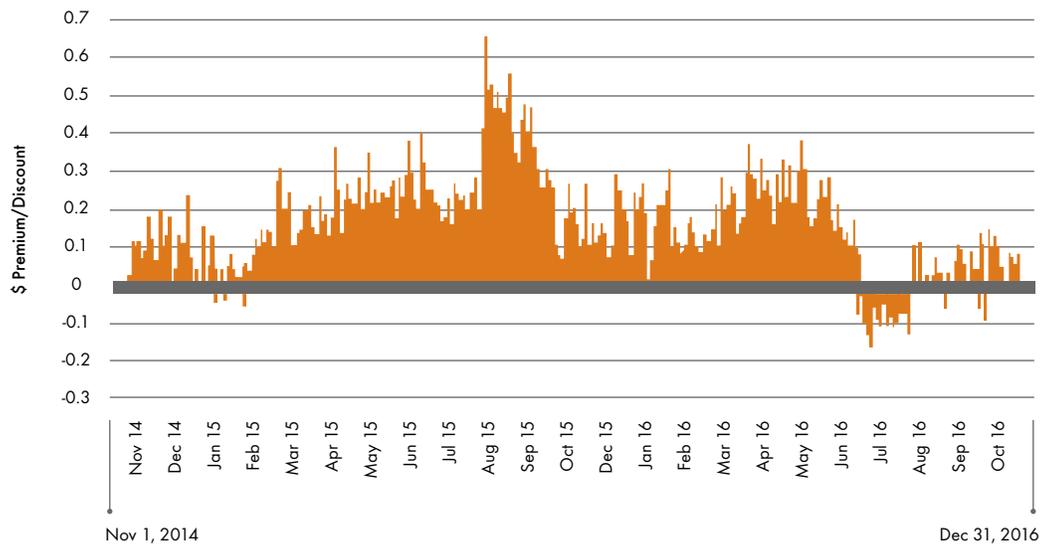
### EXPANDED LIQUIDITY IN VOLATILE MARKETS

We believe that the regulatory and low rate environment is forcing investors to analyze their fixed income holdings and evaluate the potential higher costs for quality, maturity and yield of individual bonds and therefore a desire to develop a better understanding of the tradeoffs between safety of principal, income and access to funds in managing overall liquidity.

There are several potential reasons why fixed income ETFs can offer liquidity when the bond market as a whole may not be as responsive. One is ETFs' open-ended structure and their creation/redemption mechanism, wherein shares can be added or subtracted at any time. We believe that process, along with liquidity in the secondary market, allow ETFs to trade at or near what is perceived as fair value with little to no market impact.

Another potential aspect of measuring an ETF's liquidity is its premium/discount data, which demonstrates whether and when the ETF may have been priced higher or lower than its actual Net Asset Value (NAV), or end of day trading price at close of market. When markets are calm, market price and NAV often can remain relatively close. In volatile market periods, however, the two prices may diverge to varying degrees, often due to multiple reasons including a widening of the spread of the underlying securities or even buying and selling pressures of the underlying securities, or basket of securities, within the portfolio. As an example, the chart below shows the monthly premium/discount change in the FlexShares Credit-Scored US Corporate Bond Index Fund (SKOR) ETF over a two year time frame. Fixed Income ETFs, especially those invested not invested in Treasury bonds generally trade at a premium to their NAV. The volatility in late 2015 and, to a greater degree in July-August 2016, however, demonstrated both increased premium and even discount respectively on the price of SKOR as the fair value of the underlying securities was reassessed in the marketplace. In both time frames, however, prices eventually returned to a more historically-based price.

#### SKOR PREMIUM/DISCOUNT SINCE INCEPTION



## FLEXSHARES AND FIXED INCOME INVESTING

We believe that the financial crisis presented a serious wake-up call for fixed income investors. Today, investors must add to their shopping lists exposure and risk transparency as well as control over impactful investment decisions. But with proper understanding of the market challenges and how to meet them, bond investors can potentially reap enduring benefits.

At FlexShares, we understand that fixed income investors, mindful that normalized interest rates and trading activity have been slow to return, increasingly favor new products that:

1. are economical and efficient;
2. follow a rules-based strategy;
3. pursue a systematic approach to investing (e.g. credit evaluation/selection);
4. elevate transparency in trading/valuation; and
5. Offer potential higher returns relative to risk.

To help fixed income investors capitalize on the opportunities presented by the new paradigm, FlexShares has introduced a number of innovative fixed income ETFs.

**FlexShares Ready Access Variable Income Fund (RAVI)** is our short-duration ETF with a variable NAV. Based on decades of Northern Trust's short-duration fixed income investing experience, we believe the fund's investment guidelines allow it to capture investment opportunities not available to investors in "preservation" products as it seeks to provide competitive income, ease of access and minimal principal volatility. RAVI is actively managed and constantly balances a mix of overnight, short-term and slightly longer term vehicles among its assets, including U.S. and non-U.S. public and private securities. Its ETF structure offers investors a wide range of asset components attempting to meet liquidity objectives.

**FlexShares Credit-Scored US Corporate Bond Index Fund (SKOR) and FlexShares Credit-Scored US Long Corporate Bond Index Fund (LKOR)** - SKOR (intermediate-maturity corporate bonds) and LKOR (longer-maturity corporate bonds) utilize our proprietary FlexShares Corporate Bond Credit Scoring Model to produce two truly innovative corporate credit ETFs. SKOR and LKOR both offer efficient, economical corporate credit investing in an ETF structure, with all the usual benefits of intra-day market trading, tax efficiency and transparency. The FlexShares rules-based credit scoring methodology enables our corporate bond index funds to provide an alternative to the historical approach of the credit agencies.

**FlexShares iBoxx® 3-Year Target Duration TIPS Fund (TDTT) and FlexShares iBoxx® 5-Year Target Duration TIPS Index Fund (TDTF)** - Unique indexed products seeking to effectively remove the variability around duration in a TIPS portfolio. For some investors in U.S. Treasury Inflation Protected Securities (TIPS), hedging against the growing threat of has come with unanticipated expense – the added time, effort, and fees incurred in attempting to target the "duration" of their investments to match the risk exposure of their portfolio. Both FlexShares TIPS ETF suite seek to provide investors with near-constant duration exposures in spite of shifts in inflation expectations and the impacts changing market rates have on TIPS beta. By following a targeted duration approach rather than market capitalization-weighted indexing, these funds provide investors with unique tools designed to hedge inflation and manage interest rate risk.

**FlexShares Disciplined Duration MBS Index Fund (MBSD)** – Designed to provide investors with a more efficient strategy for managing MBS duration/interest-rate risk. For those accustomed to investing in TBAs, whose access is blocked by problematic new regulations, MBSD is designed to provide an effective TBA substitute that unites market liquidity and duration management for an improved MBS investing experience.

Contact FlexShares at 1-855-FlexETF (1-855-353-9383) or visit [flexshares.com](http://flexshares.com) if you have questions on real assets or to learn more about any of the FlexShares family of ETFs.

**FlexShares Core Select Bond Fund (BNDC)** – Seeks total return and preservation of capital. Our newest fixed income fund, BNDC is an actively managed portfolio based on forecasts by Northern Trust, one of the world's leading managers of fixed income assets. By implementing active top-down decisions and primarily using passively managed, rules-based fixed income sector ETFs, the fund is constantly adjusted for potential changes in interest rate levels, the shape of the yield curve and credit spread relationships, all while emphasizing liquidity and diversification.

#### FOR MORE INFORMATION

From inception, the FlexShares mission has been to provide exchange traded funds that serve as the building blocks for outcome-oriented portfolios. We would be happy to provide more information about how our family of fixed income ETFs might play a role in your new approach to bond investing, and answer any questions you may have about the individual funds. Call us at 1-855-FlexETF (1-855-353-9383) or visit us at [www.flexshares.com](http://www.flexshares.com).

*Before investing, carefully consider the FlexShares® investment objectives, risks, charges and expenses. This and other information is in the prospectus and a summary prospectus, copies of which may be obtained by visiting [www.flexshares.com](http://www.flexshares.com). Read the prospectus carefully before you invest. Foreside Fund Services, LLC, distributor.*

An investment in FlexShares is subject to numerous risks, including possible loss of principal. Fund returns may not match the return of the respective indexes. The Funds are subject to the following principal risks: asset class; commodity; concentration; counterparty; currency; derivatives; dividend; emerging markets; equity securities; fluctuation of yield; foreign securities; geographic; income; industry concentration; inflation-protected securities; infrastructure-related companies; interest rate / maturity risk; issuer; large cap; management; market; market trading; mid cap stock; MLP; momentum; natural resources; new funds; non-diversification; passive investment; privatization; small cap stock; tracking error; value investing; and volatility risk. A full description of risks is in the prospectus.

FlexShares Core Select Bond Fund (BNDC) is actively managed and does not seek to replicate a specified index. The Fund is subject to increased credit and default risk, where there is an inability or unwillingness by the issuer of a fixed income security to meet its financial obligations, debt extension risk, where an issuer may exercise its right to pay principal on an obligation later than expected, as well as interest rate/maturity risk, where the value of the Fund's fixed income assets will decline because of rising interest rates. The Fund is subject to increased underlying fund risk, where the Fund's investment performance and its ability to achieve its investment objective may be directly related to the performance of the Underlying Funds in which it invests. The Fund may also be subject to increased concentration risk as it may invest more than 25% of its assets into the securities of a single developed market. Additionally, the Fund may invest without limitation in mortgage or asset-backed securities, which puts it at increased risk for interest rate/maturity risk, debt extension risk, and prepayment (or call) risk.

The FlexShares Credit-Scored US Corporate Bond Index Fund (SKOR) and the FlexShares Credit-Scored US Long Corporate Bond Index Fund (LKOR) are subject corporate bond risk, which is the risk that the issuer is unable to meet principal and interest rate payments on the obligation and may also be subject to price volatility due to such factors as interest rate sensitivity, market perception of credit worthiness of and general market liquidity. When interest rates rise, the value of corporate debt can be expected to decline. The Funds may invest in derivative instruments. Changes in the value of the derivative may not correlate with the underlying asset, rate or index and the Funds could lose more than the principal amount invested. The Funds are also non-diversified meaning the Fund's performance may depend on the performance of a small number of issuers because the Funds may invest a large percentage of assets in securities issued by or representing a small number of issuers.

FlexShares iBoxx® 3-Year Target Duration TIPS Fund (TDTT) and the FlexShares iBoxx® 5-Year Target Duration TIPS Index Fund (TDTF) may invest in derivative instruments. Changes in the value of the derivative may not correlate with the underlying asset, rate or index and the Funds could lose more than the principal amount invested. The Funds are subject to fluctuation of yield risk, income risk, inflation protected security risk and interest rate/maturity risk. The Funds are non-diversified meaning the Funds' performance may depend on the performance of a small number of issuers because the Funds may invest a large percentage of its assets in securities issued by or representing a small number of issuers.

FlexShares Ready Access Variable Income Fund (RAVI) is actively managed and does not seek to replicate a specified index. Additionally, the Fund may invest without limitation in the fixed income and debt securities of foreign issuers in both developed and emerging markets. The Fund is at increased credit and default risk, where there is an inability or unwillingness by the issuer of a fixed income security to meet its financial obligations, debt extension risk, where an issuer may exercise its right to pay principal on an obligation later than expected, as well as interest rate/maturity risk, where the value of the Fund's fixed income assets will decline because of rising interest rates. The Fund may also be subject to increased concentration risk as it may invest more than 25% of its assets into the securities of a single developed market. Additionally, the Fund may invest without limitation in mortgage or asset-backed securities, which puts it at increased risk for interest rate/maturity risk, debt extension risk, and prepayment (or call) risk. Also, the Fund is "non-diversified" under the Investment Company Act of 1940, and may invest more of its assets in fewer issuers than diversified funds.

FlexShares Disciplined Duration MBS Index Fund (MBSD) is subject to credit risk, which is the risk that the inability or unwillingness of an issuer or guarantor of a fixed-income security, or a counterparty to a TBA, repurchase or other transaction, to meet its payment or other financial obligations will adversely affect the value of the Fund's investments and its returns. Changes in the credit rating of a debt security held by the Fund could have a similar effect. Debt extension risk is the risk that an issuer will exercise its right to pay principal on an obligation held by the Fund (such as a mortgage-backed security) later than expected. This may happen during a period of rising interest rates. Under these circumstances, the value of the obligation will decrease and the Fund will suffer from the inability to invest in higher yielding securities. Mortgage-backed pass-through securities risk is the risk of investing in mortgage-backed securities issued by a U.S. Agency. These securities may not be backed by the full faith and credit of the U.S. government. As interest rates rise, bond prices fall, reducing the value of fixed income investments.

The iBoxx® 3-Year Target Duration TIPS Index and iBoxx® 5-Year Target Duration TIPS Index are the intellectual property (including registered trademarks) of Markit iBoxx® and/or its licensors ("Licensors"), which is used under license. The securities based on the Index are in no way sponsored, endorsed, sold or promoted by Markit iBoxx® and its Licensors and neither of the Licensors shall have any liability with respect thereto.

The BofA Merrill Lynch® Constrained Duration US Mortgage Backed Securities Index is the intellectual property (including registered trademarks) of BofA Merrill Lynch® and/or its licensors ("Licensors"), which is used under license. The securities based on the Index are in no way sponsored, endorsed, sold or promoted by BofA Merrill Lynch® and its Licensors and neither of the Licensors shall have any liability with respect thereto.

MANAGED BY

