Fixed Income ETF Liquidity: What You Need to Know

How fixed income ETFs can trade more efficiently than the underlying bonds they represent

Bond ETFs have grown rapidly over the past several years. While still smaller than the equity ETF market, assets under management in fixed income ETFs have doubled about every 3 years since the first fund’s inception in 2002.¹ One of the key advantages of fixed income ETFs is their ability to offer investors efficient access to bond markets. Because of inherent differences between equity and fixed income markets, bond ETFs often employ a process called index sampling, making them easier to trade than the basket of bonds the ETF represents. The efficiency of the ETF structure has resulted in these products performing as designed in times of market stress.

¹Source: Simfund Strategic Insights® as of 12/31/17. For illustrative purposes only. ²There is no guarantee that these objectives will be met. ³Goldman Sachs does not provide accounting, tax or legal advice. Please see additional disclosures at the end of this document. ⁴Liquidity is the ability to invest or redeem during market hours. Tax Efficiency refers to low portfolio turnover which can help manage the impact of capital gains taxes. ETFs may or may not hold all securities in its respective index. We note that ETFs are not riskless investments, so investors can lose money. Please see the ETF Risk Disclosures for additional risk considerations in the end disclosures. Ordinary brokerage commissions apply. Brokerage commissions will reduce returns. One cannot directly invest in an unmanaged index.

**Bond ETF Index Sampling**

Fixed income ETFs generally do not hold every security in the indices they track given the nature of the bond market: a company that issues bonds may have many different issues in the marketplace (e.g., bonds covering different maturities). Although separate issues, these bonds tend to perform similarly as they represent debt of the same issuing firm.

In seeking to avoid incremental trading costs on similar bond issues, fixed income ETF portfolio managers select a subset of the index based on duration, sector, credit quality, and availability. The end goal: to construct a sampled portfolio designed to offer exposure in line with the index.

**How Sampling Works**

Portfolio managers construct a portfolio to track the index² while balancing liquidity, transaction costs, and tax efficiency³. The full ETF index is narrowed down to a representative sample of bond issues using a process known as optimization to match the index’s risk characteristics:

- Duration
- Sector
- Credit Quality
- Availability

This sample of bonds forms a portfolio which can be exchanged in-kind for shares of the ETF:
Potential Benefits of Index Sampling

While both equity and fixed income benchmark indices are used as market measurement tools, bond indices were originally incepted to show broker/dealers’ inventories of thousands of bonds. Not only would it be operationally inefficient to hold the entire index, the cost of doing so is much higher than the cost to trade a bond ETF: as seen in the comparison at right, the spreads on the bonds in the underlying index are typically far wider than those of the ETFs themselves.

Bond ETFs in Times of Market Stress

Bond markets have experienced numerous market sell-offs and volatile environments since 2008. In these periods, fixed income ETFs, on average, did not see significant premiums or discounts to their Net Asset Value. This is possible because ETF transactions do not automatically result in a transaction in the underlying bonds: one can transfer risk in the secondary markets without impacting the underlying portfolio.

Who Can Help Me Navigate Bond ETF Trading?

The GSAM ETF Capital Markets Team is here to assist investors in understanding the ETF landscape and trading practices. We can help clients evaluate costs associated with ETF trading strategies and connect them to the right people and resources to execute transactions efficiently. Our wide network of market makers can give investors a clearer picture of a fund’s liquidity and show them the market impact a particular trade may have.

For more information, please contact your Goldman Sachs Representative or visit GSAM.com.

Past performance does not guarantee future results, which may vary. Individual shares may only be purchased and sold in secondary market transactions through brokers; shares trade at market prices rather than NAV; shares may trade at a price greater than or less than NAV; and investors may incur commission costs when buying or selling shares.
Glossary:

In-Kind: exchanging securities directly rather than using cash as an exchange medium. In this document, "in-kind" refers to the direct exchange of bonds for shares of an ETF.

Duration: an approximate measure of a bond's price sensitivity to changes in interest rates.

Sector: term to describe a group of companies in the same segment of the economy or who share a similar business type

Credit Quality informs investors of a bond or bond portfolio's credit worthiness or risk of default.

One basis point is equal to 1/100th of a percent.

NAV: Net Asset Value. The per share value of a fund based on the value of its underlying securities minus its liabilities.

Risk Considerations:

Investments in fixed income securities are subject to the risks associated with debt securities including credit, price and interest rate risk.

Equity securities are more volatile than bonds and subject to greater risks. Small and mid-sized company stocks involve greater risks than those customarily associated with larger companies.

High Yield: Below investment grade (high yield) bonds are more at risk of default and are subject to liquidity risk.

Exchange-Traded Funds are subject to risks similar to those of stocks. Investment returns may fluctuate and are subject to market volatility, so that an investor's shares, when redeemed, or sold, may be worth more or less than their original cost. ETFs may yield investment results that, before expenses, generally correspond to the price and yield of a particular index. There is no assurance that the price and yield performance of the index can be fully matched.

This material is provided for educational purposes only and should not be construed as investment advice or an offer or solicitation to buy or sell securities.

Views and opinions expressed are for informational purposes only and do not constitute a recommendation by GSAM to buy, sell, or hold any security. Views and opinions are current as of 3/15/2018 and may be subject to change, they should not be construed as investment advice. Views and opinions expressed are those of the speaker, and not necessarily of GSAM.

This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. This material has been prepared by GSAM and is not financial research nor a product of Goldman Sachs Global Investment Research (GIR). It was not prepared in compliance with applicable provisions of law designed to promote the independence of financial analysis and is not subject to a prohibition on trading following the distribution of financial research. The views and opinions expressed may differ from those of Goldman Sachs Global Investment Research or other departments or divisions of Goldman Sachs and its affiliates.

Investors are urged to consult with their financial advisors before buying or selling any securities. This information may not be current and GSAM has no obligation to provide any updates or changes.

THIS MATERIAL IS FOR INFORMATIONAL PURPOSES ONLY AND IS PROVIDED SOLELY ON THE BASIS THAT IT WILL NOT CONSTITUTE INVESTMENT OR OTHER ADVICE OR A RECOMMENDATION RELATING TO ANY PERSON'S OR PLAN'S INVESTMENT OR OTHER DECISIONS, AND GOLDMAN SACHS IS NOT A FIDUCIARY OR ADVISOR WITH RESPECT TO ANY PERSON OR PLAN BY REASON OF PROVIDING THE MATERIAL OR CONTENT HEREIN INCLUDING UNDER THE EMPLOYEE RETIREMENT INCOME SECURITY ACT OF 1974 OR DEPARTMENT OF LABOR REGULATIONS. PLAN SPONSORS AND OTHER FIDUCIARIES SHOULD CONSIDER THEIR OWN CIRCUMSTANCES IN ASSESSING ANY POTENTIAL COURSE OF ACTION.

Goldman Sachs does not provide accounting, tax, or legal advice. Notwithstanding anything in this document to the contrary, and except as required to enable compliance with applicable securities law, you may disclose to any person the US federal and state income tax treatment and tax structure of the transaction and all materials of any kind (including tax opinions and other tax analyses) that are provided to you relating to such tax treatment and tax structure, without Goldman Sachs imposing any limitation of any kind. Investors should be aware that a determination of the tax consequences to them should take into account their specific circumstances and that the tax law is subject to change in the future or retroactively and investors are strongly urged to consult with their own tax advisor regarding any potential strategy, investment or transaction.

Confidentiality

No part of this material may, without GSAM's prior written consent, be (i) copied, photocopied or duplicated in any form, by any means, or (ii) distributed to any person that is not an employee, officer, director, or authorized agent of the recipient.

© 2018 Goldman Sachs. All rights reserved. Date of first use: 03/15/2018. 124497-OTU-722447