BlackRock

Turning point

How volatility and performance in 2020 accelerated institutional adoption of fixed income ETFs

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Foreword

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Most of the 30-year history and growth of exchange traded funds (ETFs) has been a story of equities. But fixed income ETFs have captured the attention of some of the world's largest investors as they continue to modernize the bond markets and increase transparency, convenience and accessibility. It's exactly what iShares set out to do when we launched the first fixed income ETFs in 2002.

Wealth managers were among the first significant adopters. They saw that fixed income ETFs could help them access parts of the bond market at good value and help build better portfolios for individual investors.

For years, asset managers and asset owners used fixed income ETFs more at the margin — for tactical allocations or temporary exposure to a hard-to-access asset class. Some were put off by fixed income ETFs' relative adolescence. And, while fixed income ETFs performed well under various stresses over the past decade, others theorized about what might happen in the event of a true shock.

Then the COVID-19 health crisis materialized in the first half of 2020, rattling economies and bond markets around the world. Liquidity, price discovery, usage and transaction costs were severely challenged across multiple asset classes in the bond markets, from high yield and investment grade corporates to emerging markets and even — for a brief period — US Treasuries.

It was the long-awaited test for fixed income ETFs — they passed. Through the stresses, the largest and most heavily traded fixed income ETFs performed as our institutional clients hoped they would, by providing more liquidity, greater transparency and lower transaction costs than the underlying bond market.

July 2020 marks the 18th birthday of the first iShares fixed income ETFs, a symbolic passage into adulthood. More than ever, we are optimistic about the future of fixed income ETFs, not just in terms of growth, but in their ability to deliver better outcomes for wealth managers, asset managers and asset owners globally.

Disclaimer: All $ amounts expressed in this report are in U.S. dollars unless otherwise noted.

Introduction

In the extreme financial asset volatility in the first half of 2020, the largest and most heavily traded fixed income ETFs performed a critical role and demonstrated that they are integral to efficient bond markets.

In their biggest test to date, fixed income ETFs provided deep liquidity, continuous price transparency and lower transaction costs than were available in individual bonds. The ability to buy and sell portfolios of bonds on exchange with ETFs helped investors navigate extreme price dislocations and sidestep a legacy marketplace that remains fragmented and comparatively difficult to access even for institutional investors. In many cases, institutional investors chose to use fixed income ETFs rather than fixed income derivatives.

As a result, asset owners — including pension funds and insurance companies — and asset managers ramped up adoption. In recent months, these large investors have increased their use of fixed income ETFs at scale, regularly with positions sized in the billions of dollars, as substitutes for individual bonds and fixed income instruments. Globally, BlackRock counted over 60 asset owners and asset managers that were first-time buyers of iShares fixed income ETFs in the first half of 2020. We estimate this group collectively added about $10 billion in assets.[1]

There is significant room for fixed income ETF asset growth as adoption by institutional investors accelerates. Global fixed income ETF assets accounted for $1.3 trillion at the end of June 2020 after growing 30% in just one year; still, ETFs represent only about 1% of the $100 trillion global fixed income securities market.[2] Bolstered by recent adoption patterns, BlackRock believes that institutional investors will help expand global fixed income ETF assets to $2 trillion by 2024.[3]

This paper provides the facts around how fixed income ETFs performed during the severe market conditions of early 2020. It also provides examples of how some of the leading active asset managers, insurance companies and pension funds globally are using fixed income ETFs in an effort to improve outcomes for their clients.

“There is significant room for fixed income ETF asset growth as adoption by institutional investors accelerates.”

1 Source: BlackRock as of 30 June 2020. **2** Source: BlackRock, Bloomberg (as of 30 June 2020). **3** BlackRock, “Primed for Growth: Bond ETFs and the Path to $2 Trillion,” June 2019; global fixed income ETF assets were $1.322 trillion (as of 30 June).There is no guarantee that any forecasts made will come to pass.

Fixed income ETFs shined in 2020's market volatility

The onset of the pandemic triggered unusual disruptions across fixed income markets and led to an uptick in activity for fixed income ETFs — which iShares pioneered in 2002.

While the transparency, liquidity and efficiency of on-exchange trading had already proven valuable to fixed income investors during multiple periods of market stress over the past decade, certain market participants continued to theorize about what might happen should fixed income ETFs be tested by a monumental market shock. They raised questions about whether ETFs would be able to withstand the pressure of continuous selling, and whether they might exacerbate price declines in the underlying markets.

The results were clear: Fixed income ETFs not only held up under stress, but they also became important tools for market participants by offering immediate trading at transparent prices, a combination that was often not available with individual bonds.

Institutions turned to the most liquid fixed income ETFs as sources of real-time price discovery and cost-efficient execution when transparent quotations and liquidity had sharply deteriorated in individual bonds.

When volatility struck, fixed income ETF trading surged

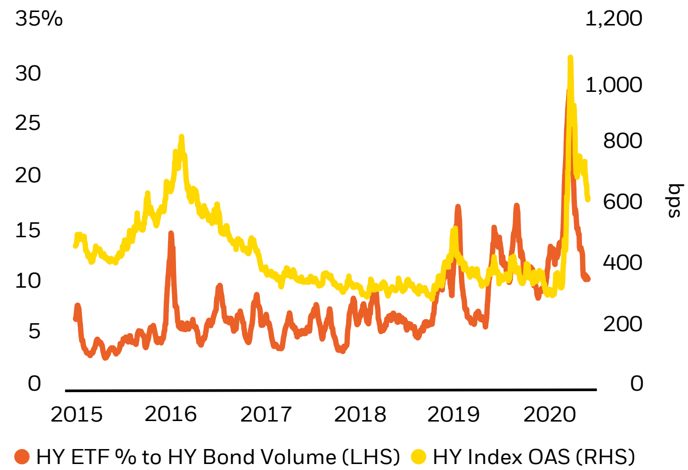
Investors have always tended to use fixed income ETFs even more during times of uncertainty because they are efficient and effective tools for rebalancing holdings, hedging portfolios and managing risk. Trading in US fixed income ETFs surged to $1.3 trillion in the first quarter of 2020 — half of the $2.6 trillion for all of 2019.[4]

Critically, US corporate fixed income ETF trading rose at a faster rate than trading in individual bonds as credit risk spiked, underscoring how fixed income ETFs provided incremental liquidity to the market. Trading volume in all US-listed high yield fixed income ETFs averaged as much as $7.8 billion per day in March 2020 and represented as much as 29% of individual high yield bond trading in the over-the-counter (OTC) market.[5] For comparison, high yield fixed income ETFs averaged around 11% of OTC high yield trading in 2019. The trend was similar in US investment grade corporate bond trading, where fixed income ETFs in March represented as much as 24% of individual investment grade bond trading in the OTC market, compared with 10% in 2019.[6]

In the same time period, iShares UCITS fixed income ETFs traded an average of $17.5 billion, more than twice the 2019 average of $7.8 billion. The largest trading days saw record turnover in several flagship iShares ETFs, with the € investment grade corporate fixed income ETF reaching a record $1.2 billion, which is 6.6 times its 12-month average. Meanwhile, the iShares € high yield corporate fixed income ETF saw record turnover of $590 million and local currency emerging markets fixed income ETF saw turnover of $851 million.

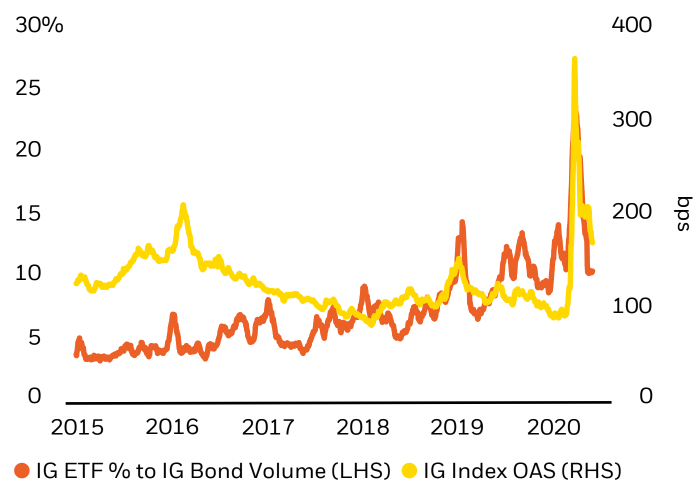
In both high yield and investment grade, as markets became more volatile, investors turned to fixed income ETFs.

Figure 1: High yield (HY) corporate fixed income ETF volume increased to a record relative to individual high yield bond volume (20-day average)



Source: Bloomberg. TRACE as of 31 May 2020.

Figure 2: Investment grade (IG) corporate fixed income ETF volume increased to a record relative to individual investment grade bond volume (20-day average)



Source: Bloomberg. TRACE as of 31 May 2020.

4 BlackRock, Bloomberg (as of 31 May 2020). **5** SIFMA TRACE; BlackRock; Bloomberg; on 20 March 2020, the 20-day average for US high yield fixed income ETFs reached $7.8 billion compared with $27.4 billion in individual bonds. **6** SIFMA TRACE; BlackRock; Bloomberg; on 25 March 2020, the 20-day average for US investment grade fixed income ETFs reached $6.9 billion compared with $28.8 billion in individual bonds.

Amid increased trading, fixed income ETFs were indicators of real-time, actionable prices

Many fixed income ETFs traded billions of dollars and tens of thousands of times per day on exchange during the peak of 2020's early-year market volatility.[7] This frequency of trading is orders of magnitude more often than the most heavily traded corporate bonds.

On 12 March, one of the worst days for equity markets in modern history and a day during which credit markets sold off sharply, the iShares iBoxx $ Investment Grade Corporate Bond ETF (LQD) traded almost 90,000 times on exchange compared with just 37 times on average for its largest five bond holdings.[8]

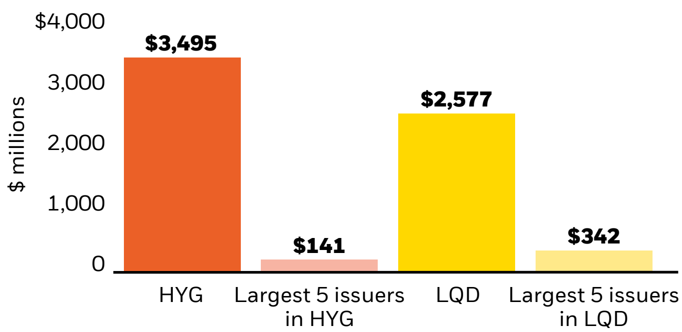
From February through April, the iShares iBoxx $ High Yield Corporate Bond ETF's (HYG) and the investment grade fixed income ETF average daily dollar trading volume was 25 times and 7.5 times more per day, respectively, than their five largest bond holdings.

High trading volumes support the notion that fixed income ETFs provided actionable prices for investors at a time when the underlying bond market was challenged. The on-exchange market prices for fixed income ETFs reflected both absolute and relative values and helped enable investors to understand rapidly changing market conditions.

Because they offer real-time pricing and trade often, fixed income ETFs are now central to valuation, portfolio construction and risk management for institutional investors. In particular, fixed income ETFs have emerged as benchmark references for returns, volatility and market sentiment.

Figure 3: iShares iBoxx $ High Yield Corporate Bond ETF (HYG) and iShares iBoxx $ Investment Grade Corporate Bond ETF (LQD) trading relative to largest holdings

February – April 2020 average daily trading volume



Source: Bloomberg. BlackRock as of 31 May 2020.

ETF spreads widened in line with elevated costs to trade the underlying bonds

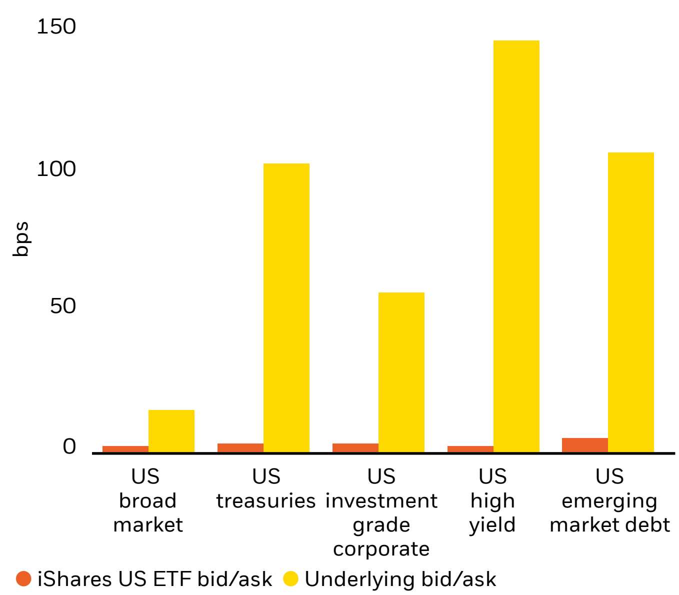
During the period of volatility from end of February through March 2020, market makers widened their bid ask spreads on fixed income ETFs across the board. This was almost entirely driven by elevated costs to trade against the backdrop of exceptionally high intra-day volatility in rates and credit markets, coupled with the lack of liquidity in underlying cash bond markets.

Not only did fixed income ETF prices reflect real-time value but US-domiciled 40 Act ETFs also had lower execution costs than were available in individual bonds.

Bid/ask spreads broadly doubled or more for both ETFs and the underlying bond market, with bid/ask spreads in the underlying market widened to several percentage points, or in some cases hundreds of basis points more. While bid/ask spreads for US-domiciled fixed income ETFs did increase somewhat during this period of market volatility, they remained vastly lower for iShares flagship ETFs than for individual bonds and bond portfolios across sectors.

Figure 4: Average bid/ask spread (price bps)

March 2020



Source: Bloomberg, BlackRock. Average spreads during March 2020.

7 BlackRock, Bloomberg (as of 31 May 2020). 8 BlackRock, FINRA TRACE (as of 31 May 2020).

> **"We have long used fixed income ETFs for tactical positioning, hedging and liquidity management. During this recent crisis, fixed income ETFs were an invaluable technology that enhanced our ability to navigate these challenging markets."**
>
> - Rick Rieder, BlackRock's Chief Investment Officer of Global Fixed Income

> **"Fixed income ETFs are an important tool in our diversified portfolios. This year, we have found fixed income ETFs an effective way to gain exposure to efficient markets at a lower cost, to provide targeted access to our dynamic asset allocation, and to efficiently manage portfolio risk."**
>
> - Isaac Poole, Chief Investment Officer, Oreana Financial Services

> **"Taking stock of price discovery and large-scale capital deployment in global ETF markets, the occurrence of the March 2020 crisis shows that Asian fixed income ETF market, while relatively under-developed, is destined to grow exponentially."**
>
> - Eddie Lau, Chief Investment Officer, Rongtong Global Investment

> **"Fixed Income ETFs are instrumental for our multi-asset class allocations as they enable us to access broad segments of various bond markets in a convenient instrument. With the significant volatility and market movements this past Spring, the use of these vehicles also enabled us to adjust duration very quickly and efficiently."**
>
> - Andrew Hua, Managing Director and Head of Portfolio Management, LGT Private Banking Asia

> **"Fixed income ETFs have emerged from this volatile market cycle as one of the most preferred tools due to the greater efficiency in execution of trades and diversification across markets. Investors are able to deploy resources into the market within a short span of time and lower cost. This in turn allows investors to capture more upside potential during periods of market recovery."**
>
> – Andy Chang, President and Chief Executive Officer, Cathay Securities Investment Trust

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Case studies in institutional adoption

For asset owners and asset managers, the ability to adjust fixed income exposures efficiently is mission critical. Recent volatility demonstrated that managing fixed income allocations through individual bonds can be challenging.

During the worst of the market turmoil in February and March 2020, fixed income ETFs became central to the investment decision-making process for a growing number of institutional investors. Given the lack of liquidity and price discovery in the underlying markets, portfolio managers and traders used fixed income ETFs to understand rapidly changing market conditions; help price individual bonds and portfolios; determine absolute and relative value opportunities that underpin allocation decisions; implement decisions rapidly and efficiently; and hedge unwanted risk.

What follows are four examples that highlight why and how institutional investors pivoted to fixed income ETFs during the extraordinary market volatility, and how fixed income ETFs are like a technology that can offer flexibility, lower trading costs and the convenience of market access.

An evolving role for fixed income ETFs on the 'sell side'

The "sell side" has been integrating fixed income ETFs into their infrastructure and workflow over the past decade. Today, fixed income ETFs are increasingly used by market makers and broker-dealers to manage inventory levels, to price individual bonds and bond portfolios, to facilitate large client-driven trades, such as portfolio trades, and to hedge swap and option books.[9] Many trading desks now have integrated risk-taking functions to facilitate trading across different "portfolio" instruments, including ETFs, total return swaps (TRS), credit default index swaps (CDX) and bond portfolio trades. This structure has helped to create trading efficiencies across the various "beta" products, particularly fixed income ETFs.

9 BlackRock, "Modernization of the Bond Market," June 2019.

1 Liquidity management

The buyer

An asset manager elects to use high yield fixed income ETFs for the first time.

Background

Asset managers need liquidity to manage fund subscriptions and redemptions while remaining invested to avoid cash “drag” that can lead to underperformance. The certainty of execution matters most in assets such as high yield bonds, where transacting in individual securities can be time-consuming and expensive.

The challenge

During March 2020, extreme volatility diminished liquidity in the high yield market. Fund portfolio managers struggled to sell bonds to raise cash to meet redemption requests. At the same time, as market sentiment turned positive, it was hard to buy enough high yield bonds to keep pace with the rally.

The traditional approach

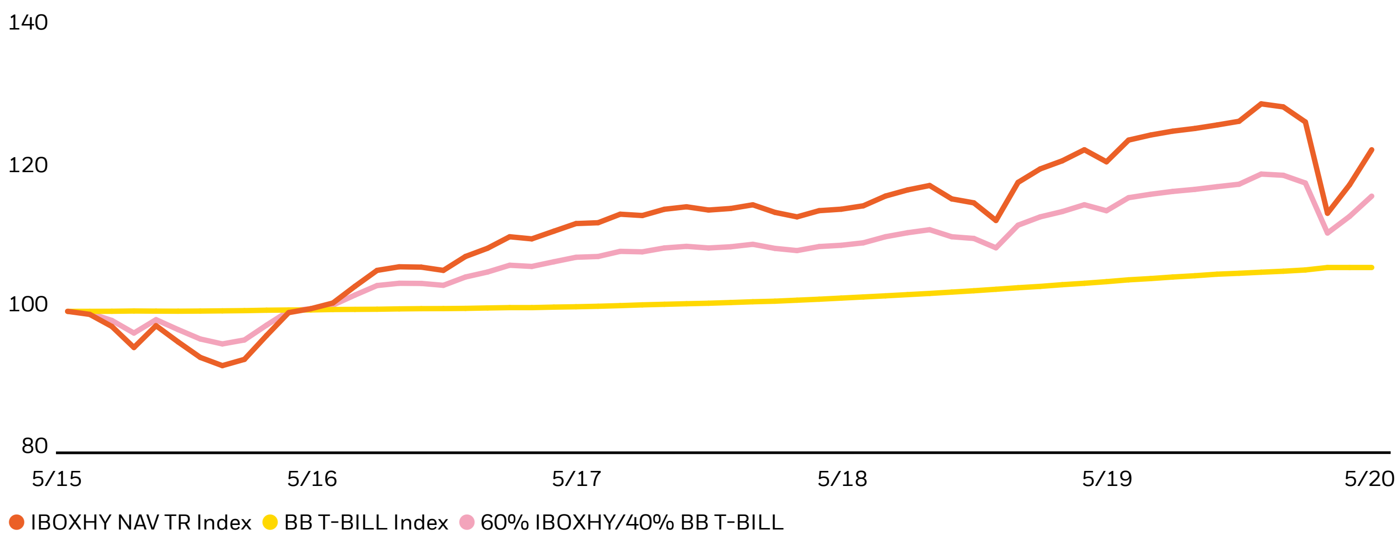
Traditionally, high yield bond fund portfolio managers created liquidity tiers, or “sleeves,” using the most liquid securities within a given asset class and cash-like instruments including money market funds.

The fixed income ETF approach

The fixed income ETF approach: Needing to take quick action in the context of market volatility, one large asset manager purchased $250 million of the high yield fixed income ETF. It was the first time the manager had used a fixed income ETF and did so for liquidity, speed and efficiency.

By using the ETF in their liquidity sleeve instead of high yield bonds, this asset manager was able to access both yield and market beta while maintaining the ability to liquidate, if necessary.

Figure 5: Using an ETF to deliver broad index return in combination with T-bills as a liquidity sleeve reduces cash drag



Source: Bloomberg, returns by index, Bloomberg Barclays T-Bill Index (BB T-Bills) and 60% IBOXHY/40% BB T-Bills, cumulative returns from 1 June 2015 - 29 May 2020. **Index performance is for illustrative purposes only. Index performance does not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Past performance does not guarantee future results.** An investment in fixed income funds is not equivalent to and involves risks not associated with an investment in cash. The case study provided is strictly for illustrative purposes only and should not be construed as investment advice.

2 Strategic asset allocation

The buyer

An insurer puts investment grade corporate fixed income ETFs at the center of their portfolio.

Background

Life insurers deal with significant premium cash flows every day. Their businesses depend on quickly and efficiently investing such cash flows at high enough yield to meet their liability obligations.

The challenge

Finding individual investment grade corporate bonds was difficult because liquidity and new issuance dried up in February and March 2020. Investment grade credit spreads widened by 280 bps and ETF bid/ask spreads widened from low single digits to 15-20 bps.[10]

The traditional approach

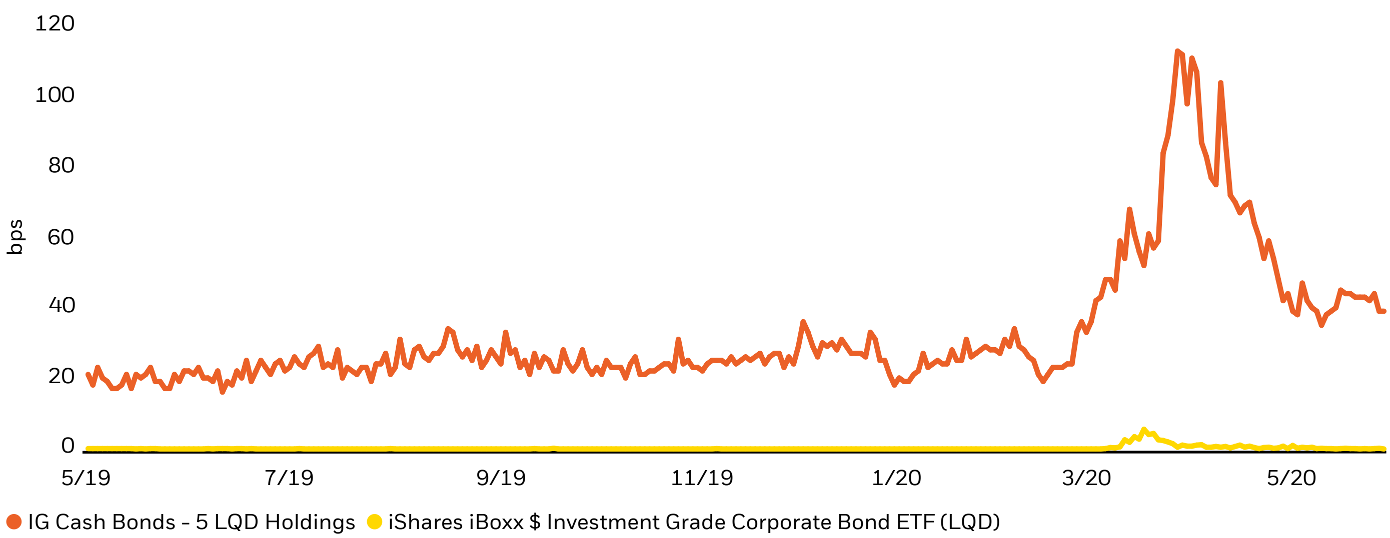
Traditionally, insurers relied heavily on individual investment grade bonds for liability matching, often by investing in newly issued bonds, which tend to be highly liquid.

The fixed income ETF approach

One major US insurer was faced with the prospect of holding too much cash and earning too little income. To help remedy this mismatch, the insurer invested in the highly liquid investment grade corporate fixed income ETF.

Figure 6: Efficient access to investment grade bonds with LQD

Bid/ask spread comparison



Source: Bloomberg (as of 31 May 2020). The case study provided is strictly for illustrative purposes only and should not be construed as investment advice.

10 Bloomberg Barclays US IG OAS (as of 31 May 2020).

3 Tactical asset allocation

The buyer

One large public pension plan targeted emerging market fixed income ETFs in rapidly changing conditions.

Background

Public pensions must maintain diversified portfolios that can meet the income obligations of their beneficiaries. Pension managers must rapidly and efficiently adjust investment exposures in changing market conditions.

The challenge

Price dislocations in March 2020 across the fixed income markets presented opportunities to many investors in areas including emerging markets.

The traditional approach

Traditionally, pension funds purchased large, liquid individual bonds or employed derivative products such as CDX in order to build desired exposure.

The fixed income ETF approach

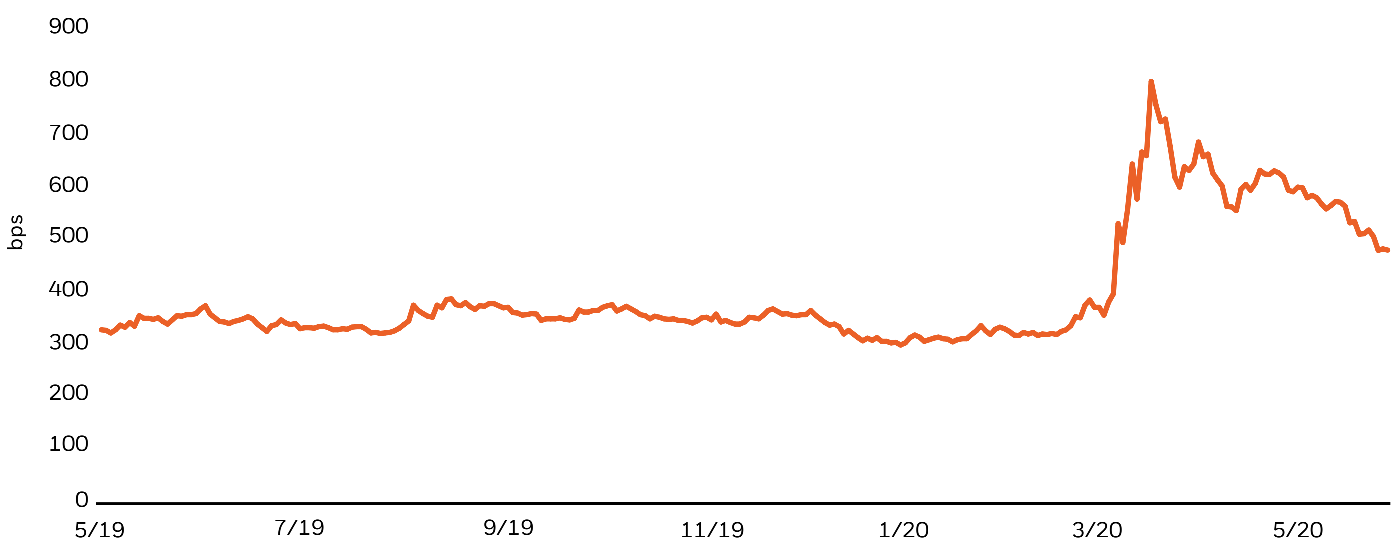
The plan sought to rebalance its portfolio to include higher-yielding assets including emerging market debt, hoping to take advantage of the broad sell-off. But it was expensive and time-consuming to build this position using individual bonds, given the sharp widening in bid/ask spreads for these securities. Dislocations in the basis between physical bonds and CDX made a derivative solution less palatable as well.

This plan opted to express its tactical market view using the US$ emerging markets fixed income ETF, which trades nearly $600 million on an average day.[11]

By using the ETF, the plan could quickly access the desired asset class while limiting transaction costs to single-digit bid/ask spreads versus several percentage points for comparable bonds. Liquidity was also a consideration as the ETF would allow them to efficiently increase or decrease the position as necessary.

Figure 7: Opportunities with emerging marketing bonds as the ETF's I-spread widened

EMB I-spread



Source: Bloomberg (as of 31 May 2020). I-spread represents the yield spread of US$ emerging market fixed income ETF relative to the underlying benchmark. The case study provided is strictly for illustrative purposes only and should not be construed as investment advice.

11 Source: BlackRock based on average daily trading volume YTD (as of 31 May 2020).

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4 Derivative replacement

The buyer

A large asset manager looks beyond CDX to ETFs in order to express a view on the corporate credit market.

Background

Asset managers have many choices for adding or hedging credit risk in portfolios. Investment grade and high yield fund managers can choose among credit default index swaps (CDX), credit index futures, credit index total return swaps, credit ETFs or individual bonds.

The challenge

The relative merits of using one investment versus another are driven by market dynamics. The liquidity provided by CDX allows investors to rapidly add and reduce risk at scale. However, the basis risk in CDX can be substantial and correlations with cash bond portfolios can deteriorate sharply during times of stress. Credit index total return swaps (such as iBoxx TRS) typically are an improvement in basis risk and correlation, but they do not yet enjoy the same liquidity and transaction cost advantages of CDX or credit ETFs. Corporate bond index futures (e.g., CBOE high yield bond index futures) are still in a nascent stage.

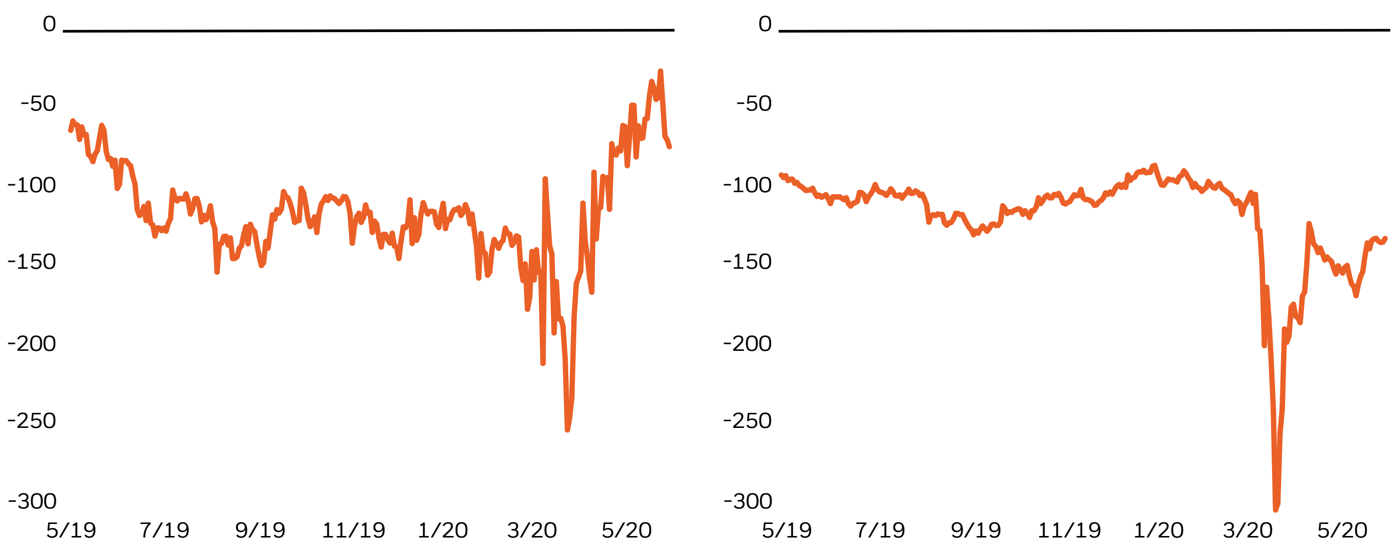
The fixed income ETF approach

In March, the asset manager that typically used CDX to access investment grade and high yield credit exposure found that the performance differential between the synthetic exposure and individual bonds reached an untenable extreme.

This manager had not previously used fixed income ETFs but had taken note of their deep liquidity and value relative to CDX in the context of the market dislocation. Accordingly, this manager purchased $1.2 billion in LQD and $500 million of HYG to increase their exposure to credit amid severe spread widening.

Figure 8: ETF and derivative spreads send a signal for investors

Spread between CDX.HY and HYG ETF I-spread (bps) | Spread between CDX.IG and LQD I-spread (bps)



Source: Bloomberg (as of 31 May 2020). The case study provided is strictly for illustrative purposes only and should not be construed as investment advice.

Conclusion

An eruption of market volatility in early 2020 touched nearly every corner of the fixed income markets. For institutions, the episode highlighted that the over-the-counter bond market remains relatively opaque and fragmented, despite improvements made in recent years.

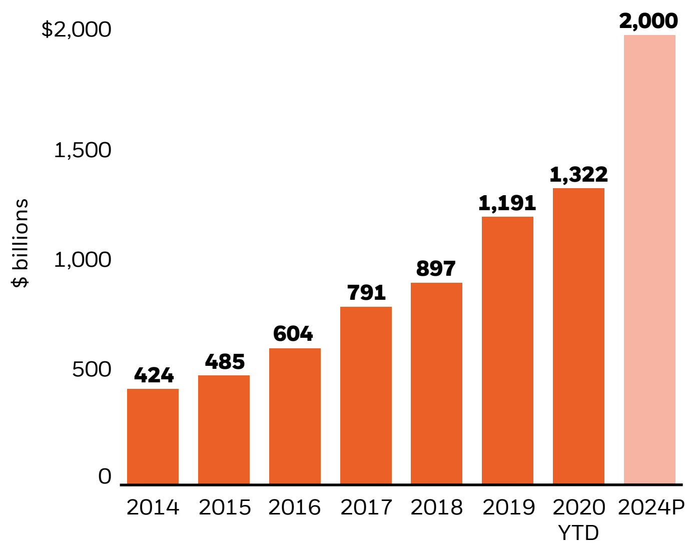
By contrast, the largest and most heavily traded fixed income ETFs illustrated the important role that they play in both normal and stressed market conditions by providing invaluable price discovery and liquidity. These attributes helped institutional investors understand and navigate rapidly changing market conditions at a time when it was needed most. It also showed that the most heavily traded fixed income ETFs are essential to the functioning of healthy fixed income markets, where buyers and sellers can exchange risk efficiently.

For pensions and insurance companies, fixed income ETFs provided a means to reduce complexity and streamline portfolio construction and risk-management practices. For asset managers, fixed income ETFs served as rapid and efficient tactical allocation tools and as liquidity sleeves to minimize trading frictions and reduce the potential for holding cash to harm returns.

Recent trends underscore BlackRock's view that institutional investors will propel future fixed income ETF growth, which remains just a fraction of total global fixed income assets. We reaffirm our projection from a year ago that global fixed income ETF assets will double, to $2 trillion, by 2024, aided by the important role that fixed income ETFs are playing in the modernization of fixed income market structure, the evolution of portfolio construction and constant product innovation.[12]

Indeed, the pace of growth could be faster than we expect. In the year since we made this projection, when fixed income ETF assets crossed $1 trillion in assets, assets grew by more than 30% — nearly all of which was organic growth. As more asset managers and asset owners embrace fixed income ETFs as an efficient, transparent and convenient way to access the bond market — especially in times of volatility — the prospects for growth will only look brighter.

Global fixed income ETF assets set to reach $2 trillion by 2024



Source: BlackRock, "Primed for Growth: Bond ETFs and the Path to $2 Trillion," June 2019. There is no guarantee that such forecast will come to pass. 2020 YTD data as of 30 June 2020.

12 BlackRock, "Primed for Growth: Bond ETFs and the Path to $2 Trillion," June 2019; global fixed income ETF assets were $1.322 trillion (as of 30 June 2020).

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