Fixed Income ETFs: Fixing the fallacies

Fixed income ETFs have now established track records that should convince even sceptics that they are a versatile and mainstream instrument for gaining fixed income exposure





Experts in fixed income

With over 28 years' experience, we are no stranger to managing fixed income index strategies.¹ We manage \$236 billion in index and active fixed income assets at LGIM.



LGIM ranks 3rd out of the world's largest 75 asset managers for stewardship, transparency and governance.²

"LGIM, a predominantly passive investor, shows leading performance. This demonstrates that passive investors can have a leading approach to responsible investment." (Share Action, 2020)

LGIM Fixed Income:

Scalable & growing business delivering for clients

Managing Fixed Income Index assets for over

28 years

\$236 billion

Fixed Income Index and Active

Growth in Fixed Income Index AUM

32% over 3 years to 30/06/20

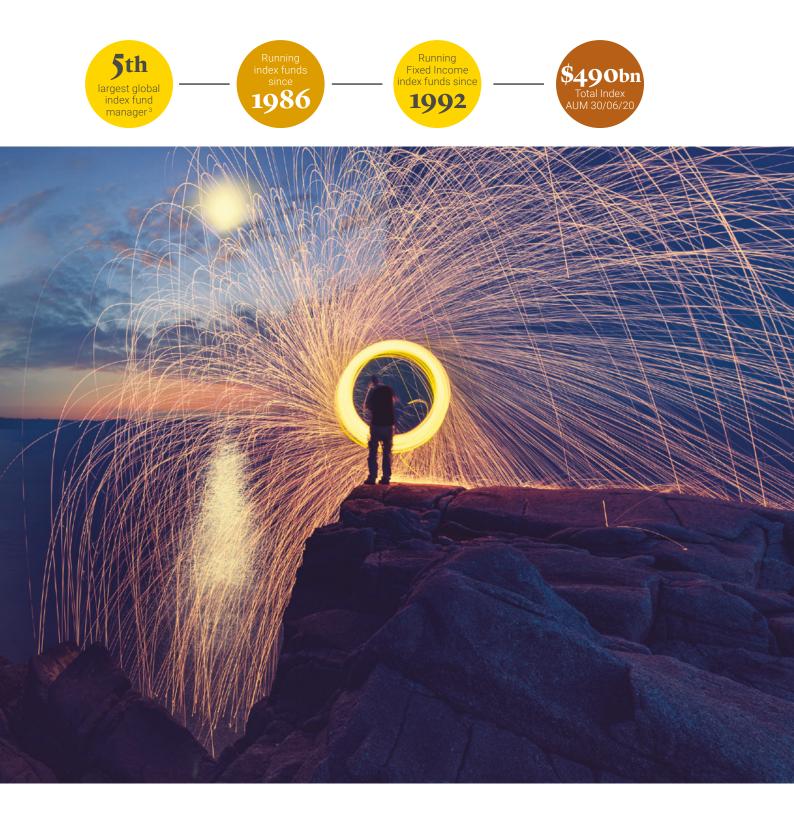
19 years

Average industry experience of Fixed Income Index PMs

Sources for all: LGIM, as at 30 June 2020

¹ Source: LGIM, as at 31 July 2020. Inception of first fixed income index fund was March 1992.

² Source: Share Action, 'Point of no returns', March 2020. This survey analysed the world's 75 largest asset managers on a range of responsible investment themes, including governance, climate change, biodiversity and human and labour rights, as well as ESG products, voting record, and engagement on ESG issues.



³ Source: Pensions & Investments, "The largest index managers survey 2019".

Myths persist about fixed income ETFs – and must be busted

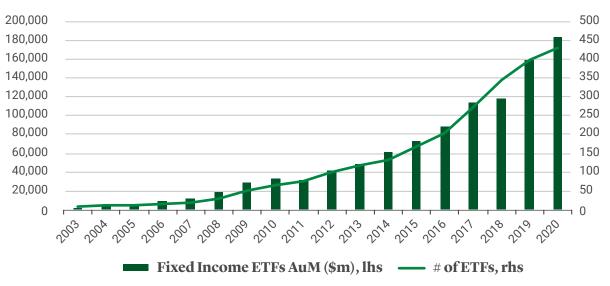
The immense stresses placed on asset markets during the first quarter of 2020 were a 'make or break' period for many investment strategies and financial products.

Fixed income ETFs rose to the challenge of providing investors with continuous pricing and liquidity during these unprecedented strains, in our view clearly demonstrating their value during an extreme test.

In fact, the secondary market – a unique feature of fixed income ETFs as a mainstream investment option for bonds – provided investors with much needed liquidity as trading volumes spiked to record levels. Only a small proportion of ETF trading activity required primary market access, another source of liquidity for investors. Even the Federal Reserve, in attempting to provide liquidity to the corporate bond market in America, identified ETFs as the most efficient tool for gaining exposure to the underlying bond market. This was a significant endorsement of a conclusion many other investors had already reached. As the chart shows, the use of fixed income ETFs has been rising for many years – and is expected to continue doing so.

Despite this tremendous success in both bull and bear markets, we are aware a few misconceptions remain when some investors are considering investing in fixed income through ETFs.

In this guide, we tackle five of the most prevalent.

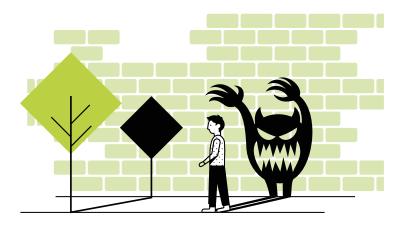


Fixed income ETFs by number and assets under management in Europe

Source: LGIM, Bloomberg, as at 31 July 2020

Need to know

When ETFs are traded in the secondary market, investors buy and sell ETF shares with brokers or other investors without any need for portfolio managers to trade in the underlying bonds. Trading in underlying bonds only takes place if there is a need to address a supply/demand imbalance. This occurs in what is known as the primary market, when investors liaise with their intermediaries to interact with the ETF provider in order to subscribe or redeem ETF shares.



Myth

Reality

Fixed income ETFs had to be rescued by central banks	The US Federal Reserve believed that bond markets (not ETFs) had to be supported during a period of crisis, and did so through the most efficient tool available – by purchasing fixed income ETFs
Fixed income ETFs only provide an illusion of liquidity	Fixed income ETFs can provide meaningful liquidity, even in times of market stress – the secondary market is a source of liquidity not available to traditional unlisted funds
Fixed income ETF prices cannot be relied on in times of market stress	Fixed income ETFs accurately reflect the real-time conditions of the markets while providing price transparency to all investors, even in volatile markets
For any given exposure, all index funds are essentially the same	Not all indices, and not all index funds, are created equally; some funds are more thoughtful in their design through active input from the asset manager
ESG factors aren't relevant in fixed income	ESG factors are already material in bond markets, and they are only going to become more so as ESG data quality improves

Myth 1: **Fixed income ETFs had to be rescued by central banks**

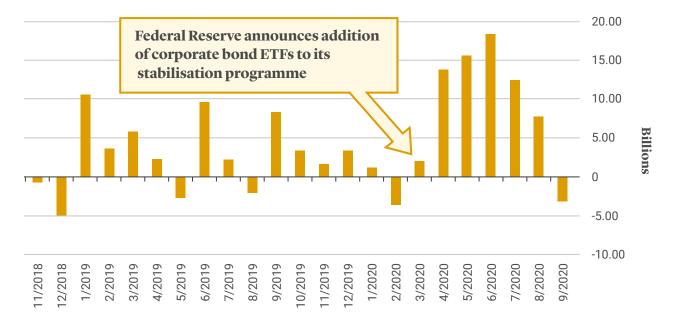
Reality:

The US Federal Reserve believed that bond markets (not ETFs) had to be supported during a period of crisis, and did so through the most efficient method available – by purchasing fixed income ETFs At the height of the market turmoil in March 2020, the Federal Reserve announced that, as part of its efforts to support the US corporate debt market, it would expand its stabilisation programme to include the purchasing of corporate debt ETFs.

These measures formed part of the Fed's 'rescue' package for corporate America amid extreme economic and financial anxiety; we believe they should be viewed as a vote of confidence in ETFs as an investment structure.

As evidence of the strength of the ETF structure in fixed income, consider this chart of flows into US bond ETFs before the Fed's announcement. As you can see, there were modest outflows in February but there was no 'run' on these investment vehicles that required intervention.





Net new assets into US domiciled USD corporate bond ETFs

The Fed's actions were simply about supporting the corporate debt market – but we believe the fact that the central bank chose to express this view through ETFs should give investors confidence in the structure.

The Fed itself explained that it recognised that ETFs can provide access to the broad underlying bond market in simple, efficient and scalable transactions; an ETF buying programme can be set up much more easily than creating an infrastructure for interacting with the over-the-counter bond market directly.



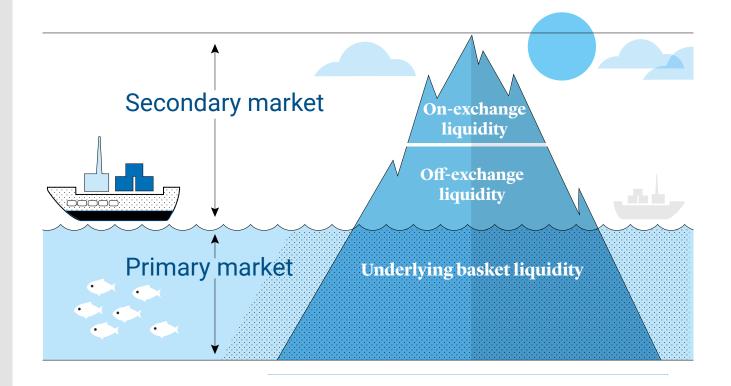
Myth 2: **Fixed income ETFs only provide an illusion of liquidity**

Reality:

Fixed income ETFs can provide meaningful liquidity, even in times of market stress; the secondary market is a source of liquidity not available to traditional unlisted funds The ETF structure inherently provides a number of layers of liquidity: investors access the secondary market first to find willing buyers and sellers of the ETF before portfolio managers have to buy or sell the relevant bonds to create or redeem ETF shares respectively.

If these top two layers of liquidity (as illustrated below) in the secondary market were illusory, they would have disappeared during the stresses of the first quarter.

In fact, during that turmoil, secondary market trading volumes in ETF shares rose significantly, as we see in the chart.





Trading in bond ETFs during peak of COVID-19 panic, February and March 2020

- These increases in secondary market volumes provide good evidence that, despite the misconception that in stressed markets holders of fixed income ETFs will not be able to find buyers, in fact many buyers were found.
- Authorised participants and market makers are able to match buyers and sellers in the secondary market without needing to access the primary market to create/redeem ETF shares.

Source: Bloomberg and LGIM. 'Underlying bonds' refers to universe of USD investment-grade corporate bonds; ETF analysis covers all US-domiciled USD investment-grade corporate bond ETFs.

- Actual primary market volumes in many fixed income ETFs represented only a fraction of total volumes traded via bond ETFs even during these recent periods of market stress, meaning there was no need for large-scale trading in the underlying bonds and reiterating the importance of the secondary market.
- This emphasis on secondary market trading, with relatively little dealing in the primary market, means there is a lower risk of a fire sale of those underlying assets because investors exiting the ETF do not necessarily trigger the disposal of any bonds.

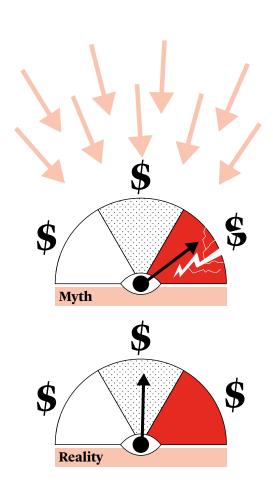
Even if greater activity in the primary market had been required, fixed income ETFs are at least as liquid as their underlying components.* This alone puts them on a par with other collective investment funds, but in practice the liquidity available in the secondary market has generally been sufficient without needing to trade the underlying bonds.

*Investors should be aware that these underlying components may themselves become less liquid, but this is true of all collective investment funds and is not unique to the ETF structure.

Myth 3: **Fixed income ETF** prices cannot be relied on in times of market stress

Reality:

Fixed income ETFs accurately reflect the real-time conditions of the markets while providing price transparency to all investors, even in volatile markets



During the volatility of the first quarter of 2020, some fixed income ETFs began trading at discounts to the net asset value (NAV) of the underlying bonds in their portfolios.

Price Premium Premium Discount Time

Stylised illustration of an ETF's price relative to its NAV

Source: LGIM. For illustrative purposes only.

During normal market conditions, the ETF creation/ redemption mechanism by primary market participants means that material premiums or discounts to NAV are rare, and as a result some investors were concerned about this difference between the ETF price and the NAV.

While an ETF's price should generally track its NAV closely, we don't believe investors should be unduly worried by the brief dislocations witnessed during the first quarter of 2020. Rather, the discounts widened because the ETF prices became better reflections of market conditions than the NAV under these extreme circumstances.

This is because the intraday price of the ETF is based on live trading in the ETF, driven by the supply and demand for the ETF, whereas the NAV that's calculated at a single point in the day (and even an intra-day calculated indicative NAV) is based on the most recently traded prices in the underlying bonds, which can quickly become stale in extreme market conditions.

The underlying bonds in a fixed income ETF are traded over the counter, which means they are not bought and sold on transparent and widely accessible exchanges like equities or ETFs themselves. If those bonds in the ETF have not traded on a given day, or even that week, the ETF's NAV is based on estimates or outdated pricing. In contrast, an ETF's price is set with each trade through a day so is more dynamic than the NAV. "ETFs are not papering over the true illiquidity in underlying bonds; they are replacing the underlying bond illiquidity with a new, liquid, market"

Matt Levine, Bloomberg Opinion columnist, 15 May 2020 ³

When robust trading volumes are observed, fixed income ETFs can act as real-time indicators of the prices of the underlying basket of bonds. They can therefore be viewed as price-discovery tools. Discounts or premiums can thus arise as the NAVs catch up. They are evidence of the ETFs' efficiency and provide an important tool for capital markets; they are not defects or cause for alarm.

"ETFs trade continuously, and their liquidity is supported by a variety of intermediaries. As a result, ETFs incorporate information in a more timely manner than the underlying bonds."

Sirio Aramonte and Fernando Avalos, "The recent distress in corporate bond markets: cues from ETFs", Bank for International Settlements, 2020 ⁴



³ Source: https://www.bloomberg.com/news/newsletters/2020-05-15/money-stuff-investors-feel-good-about-covid-bonds ⁴ Source: https://www.bis.org/publ/bisbull06.pdf

Myth 4: For any given exposure, all index funds are essentially the same

Reality:

Not all indices, and not all index funds, are created equally; some funds are more thoughtful in their design through active input by the asset manager

Index funds, even those nominally tracking the same asset class or sector, are not homogenous. Investors are already likely to be familiar with issues such as fees, tracking error and rebalancing methodology, but those using fixed income ETFs should also be aware of four other important considerations.

Liquidity and size thresholds

- Indices with lower minimum issuer thresholds (i.e. the minimum amount of debt an entity can issue for the bond to be eligible for index inclusion) could potentially face greater challenges with liquidity.
- For instance, all else being equal, an index that sets a \$500 million minimum issue size is likely to be more liquid than an index with a \$300 million minimum issue size.
- On the other hand, smaller sized issues may offer investors a size premium.
- A thoughtfully designed index should aim to provide better liquidity while retaining a level of access to the size premium that smaller issues may offer.

Investor crowding around maturity and credit events

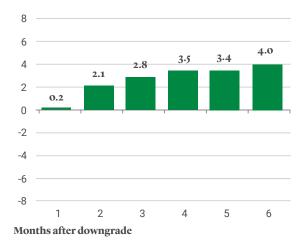
- Indices by nature are rules based and transparent. A rules-based trading strategy can however create inefficiencies when many market participants seek to place trades at the same time.
- Index providers' rules governing the treatment of upgraded or downgraded bonds – e.g. investmentgrade bonds that are downgraded to a high-yield rating – can lead to crowded trades and forced sales.

Bonds' performance relative to investment grade index, six months before and after downgrade



'Fallen Angels' – 6 months before downgrade relative performance versus IG index (cumulative)

'Fallen Angels' – 6 months after downgrade relative performance versus IG index (cumulative)



Sources: LGIM, Bloomberg and Markit iBoxx. Analysis covers GBP corporate bonds for the period from 1 January 2012 to 30 June 2020.



Cumulative outperformance of immediate coupon reinvestment vs an index that reinvests coupons only at month end

Source: JPM and Bloomberg, data to 29 September 2020

- For example, if a bond has to be removed from an index on the last day of the month following a rating downgrade, this could lead to a crowd of investors all selling the same bond at once, thereby depressing its price.
- However, if an ETF is managed flexibly around these events, investors can benefit from trades that are better timed to potentially extract additional value, as indicated by the charts to the left.
- Similarly, some providers remove all bonds with a maturity of less than one year from the index on the rebalancing date. This can have the same effect of crowded sales as soon as the bond crosses that one-year point.
- An ETF that can hold bonds closer to their maturity can avoid this congestion and potentially add value for investors.

How invested are you anyway?

- Coupons accrue through the month and some index providers hold them as cash until the month's end before reinvesting them. This can lead to a cash drag on performance.
- Thoughtful indices reinvest coupons immediately so that the ETF is exposed to the desired bond market without a cash drag.

Coupon reinvestment example: JPM Emerging Markets Bond Index

- The chart above illustrates the outperformance of an index that invests coupons immediately versus an index that reinvests coupons only at month end.

- Assuming that coupons are paid mid-month, on average we observe an average outperformance of roughly +2.1 basis points per annum, which accumulates to a meaningful number looking at the past 20 years.

ESG factors and responsible investing

- Indices without explicit references to ESG factors in their methodology do not typically incorporate these criteria in their rules and exposure.
- ESG considerations can be integrated in fixed income indices through approaches including exclusions, tilting, and optimisation.
- For tilting and optimisation in particular, different processes for creating an ESG score for issuers can lead to different exposures and ESG profiles.

In all four of these areas, transparency and a rules-based methodology is essential in understanding the nature of an index. ETF investors should expect clarity over a strategy's approach and the systematic implementation of that approach.

Myth 5: ESG factors aren't relevant in fixed income

Reality:

ESG factors are already material in bond markets and they are only going to become more so as ESG data quality improves

For many investors, there is an intuitive connection between equity markets and the importance of environmental, social, and governance (ESG) considerations: it seems axiomatic that shareholders should benefit from responsible and sustainable business practices. But when it comes to fixed income, this relationship can be harder to grasp: bondholders just need to be confident an issuer can pay its coupons and return the principal at maturity, don't they?

However, the basic principles of investing in fixed income tell us that bondholders are looking to reduce the uncertainty around the range of possible outcomes to be comfortable holding a bond through to maturity. Moreover, bondholders' investment horizons are inherently long term; this implies that the identification of downside risks should be front and centre in any robust fixed income investment strategy.

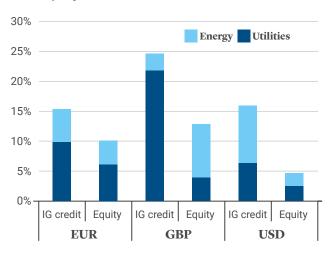
This is where ESG considerations play a vital role. ESG integration is not a new tool for assessment in fixed income, but the improved quantity and quality of data available has opened up greater levels of issuer transparency.

For example, consider the potential impact of risks to issuers and bondholders in each of ESG's three letters.

Environmental risk

FSG

The sectors facing the biggest climate change challenges – particularly utilities – have traditionally been viewed favourably by credit investors due to their systemic importance and strong cash flows and therefore account for a large proportion of the investment-grade market. As various industries turn to the bond markets to fund their climate transition strategies, exposure to this risk is likely to grow further.



Utility and energy weights in credit and equity indices

Sources: LGIM, Bloomberg, Markit. Investment Grade (IG) credit figures are iBoxx indices. Equity figures are the FTSE 100 (GBP), BE500 (EUR) and S&P500 (USD) indices. Data as at 2 September 2020.

⁵ Source: https://www.spglobal.com/marketintelligence/en/news-insights/trending/2tr0b8lhizii3et6liigka2

"In light of the recent developments relating to opioid litigation, we now believe there is a plausible risk of settlements or judgments against certain drug manufacturer companies, relating to opioids, materially exceeding a billion dollars. In addition, we believe ongoing uncertainty around the exposure will likely limit access to capital markets for companies perceived to have elevated risk."

S&P Global Ratings, 23 September 2019 5

Social risk

In 2019, the repercussions of the opioids crisis in the US were felt across the pharmaceutical industry. A number of companies are facing litigation over their alleged role in the crisis and many of the exposed issuers – from branded manufacturers to distributors – have pursued settlements which were financially material.

In September 2019, Purdue, the manufacturer of OxyContin, filed for bankruptcy as part of a \$10 billion agreement to settle opioid-related lawsuits. The next month, a majority of US states reached a tentative settlement agreement with distributors for more than \$19 billion, and, over the subsequent nine months, various manufacturers individually settled for several billion apiece.

However, not all states have approved the distributor settlement and multiple US cities and counties have pursued their own litigation outside the state cases. Accordingly, the ultimate financial impact from the opioid crisis has yet to be determined.

The opioids crisis illustrates the diversity of social issues facing this sector. The tragic social cost is clear and the financial consequences for the companies involved also demonstrate the importance of considering such implications and the role of companies in crises such as these from an investment perspective.

Governance risk

A country's ESG profile may help provide investors with an indication as to the credibility of the management of the economy; poor governance could increase the risk of the issuer encountering problems servicing its debt obligations. Lebanon is one such case, having defaulted on its government debt in March 2020. Monitoring Lebanon's ESG profile may have helped investors anticipate a higher probability of default. As the chart illustrates, Lebanon had scored poorly on ESG metrics for a long period before its default.

The low overall ESG score was attributable primarily to Lebanon's performance on the social and governance criteria, rather than on environmental matters. Economic reform in the country has long been stymied by political divisions, with a downturn aggravated from October last year by widespread protests against corruption in the country.

Lebanon's JPM ESG Score

JPM ESG Score 100 90 "Lebanon to default 80 on \$1.2bn debt" 70 Financial Times, 60 7 March 2020 50 40 30 20 10 0 01-Apr-18 01-Jul-19 01-Jul-18)1-0ct-18 1-Jan-19 01-Apr-19)1-0ct-18 01-Jan-20 01-Apr-20)1-Jul-20 11-0ct-20

Source: JPMorgan, data to 30 October 2020. JPMorgan's ESG scores are calculated using data from leading ESG research providers RepRisk and Sustainalytics. The scores range from 0 to 100, with 100 classified as the best possible score.

Each of these case studies illustrates why ESG factors are already crucial in fixed income. But more importantly, long-term trends – from evolving consumer preferences to tighter regulation on everything from pollution to data protection – are going to make ESG considerations even more financially material in bond markets in the future.

Independent views on fixed income ETFs

The Federal Reserve is not the only major financial institution to have backed the ETF structure for fixed income.

Bank of England

"In light of the relative liquidity in ETF shares compared to the corporate bond market, price discovery [in the market stress of March 2020] was often occurring via ETFs rather than their underlying assets. During this period, ETF prices appear to have provided information about future changes in underlying asset markets, offering evidence that ETF prices incorporated new information more rapidly than the net asset values (NAV) of assets held within their, and equivalent, funds." ⁶

Bank for International Settlements

"Unlike mutual funds, whose assets are valued once a day, ETFs trade continuously, and their liquidity is supported by a variety of intermediaries. As a result, ETFs incorporate information in a more timely manner than the underlying bonds." ⁷

The Investment Association

"It is our members' view that ETFs have proven themselves resilient despite the initial market shock and that they have provided a key source of liquidity and price discovery during the crisis." ⁸

⁶ Source: https://www.bankofengland.co.uk/-/media/boe/files/financial-stability-report/2020/may-2020.pdf

⁷ Source: https://www.bis.org/publ/bisbull06.pdf

⁸ Source: https://www.theia.org/sites/default/files/2020-06/ETF%20performance%20during%20COVID-19.pdf

We believe investors will continue to expand their use of ETFs for core fixed income exposure given four primary advantages of the structure:

Accessibility

Fixed income ETFs allow investors to buy and sell the asset class simply and transparently in a single transaction

Versatility

Transparent, rules based portfolios can help investors use fixed income ETFs strategically or tactically

Liquidity

Fixed income ETFs can provide an additional layer of liquidity at all times, which is especially important in times of market stress as demonstrated in the first quarter of 2020

Pricing

Fixed income ETFs are priced throughout the day, so can process information about the bond market more quickly than other investment vehicles

For more on these advantages and to understand how L&G ETF puts them into practice, please see our introduction to our fixed income range.

The value of an investment and any income taken from it is not guaranteed and can go down as well as up; you may not get back the amount you originally invested.

Contact us

For further information about LGIM, please visit www.lgimetf.com or contact your usual LGIM representative.



Important information

The value of an investment and any income taken from it is not guaranteed and can go down as well as up, you may not get back the amount you originally invested.

Past performance is not a guide to the future.

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