

Expanding Horizons: The Case for Global Bonds in Liability-Driven Investing

Author



Jonathan Barry, FSA, CFA
Senior Managing Director
Strategy and Insights Group

In brief

- Improved defined benefit (DB) funded status and lower liability durations provide an opportunity for sponsors to reduce derivative exposure and cover a higher portion of liabilities with physical bonds.
- Global investment-grade bonds can potentially complement traditional liability-driven investment (LDI) strategies, bringing the potential for attractive risk-adjusted returns while still maintaining critical liability-hedging characteristics.

The traditional approach to LDI

Over the past decade, LDI strategies have been widely adopted, with 77% of DB sponsors employing them in some form within their investment policy statement.¹ They have demonstrated their effectiveness over the years, with glide path strategies reducing risk as funded status improves and carefully constructed fixed income portfolios moving in line with plan liabilities as interest rates rise and fall.

Traditional LDI approaches use a combination of Treasuries and US investment-grade credit to create portfolios with duration and credit profiles comparable to the plan's liability. In many cases, derivatives are employed to extend duration beyond what is attainable with physical bonds and to fill gaps in the duration profile that cannot be covered easily with physical bonds.

DB plans have seen a marked change in their fortunes since the end of 2021 as rising rates have reduced DB plan liabilities, improving funded status, with many plans now at or above 100% funded status after more than a decade of funded status hovering in the 80% to 90% range.² As DB plans mature and participant populations age, liability duration naturally decreases. Higher rates have also reduced durations on typical plan liabilities from where they stood at the end of 2021 by two to three years.³ Better funded status and lower liability duration profiles can potentially allow for more liability to be covered with physical bonds, which can potentially enable sponsors to reduce derivative exposure and associated liquidity and counterparty risks while also lessening the governance oversight that comes with derivatives.

While the first stop on the route to higher allocations of physical bonds is US Treasuries and US investment-grade credit, we believe other asset classes, such as global investment-grade bonds, could also play an important role in LDI strategies.

Overview of the global bond market

A thorough understanding of the global bond market is an important first step in assessing the viability of this asset class. Exhibit 1 compares key attributes of the global bond universe with US and non-US investment-grade bonds.

Exhibit 1: Comparison of the global and US investment-grade bond universes

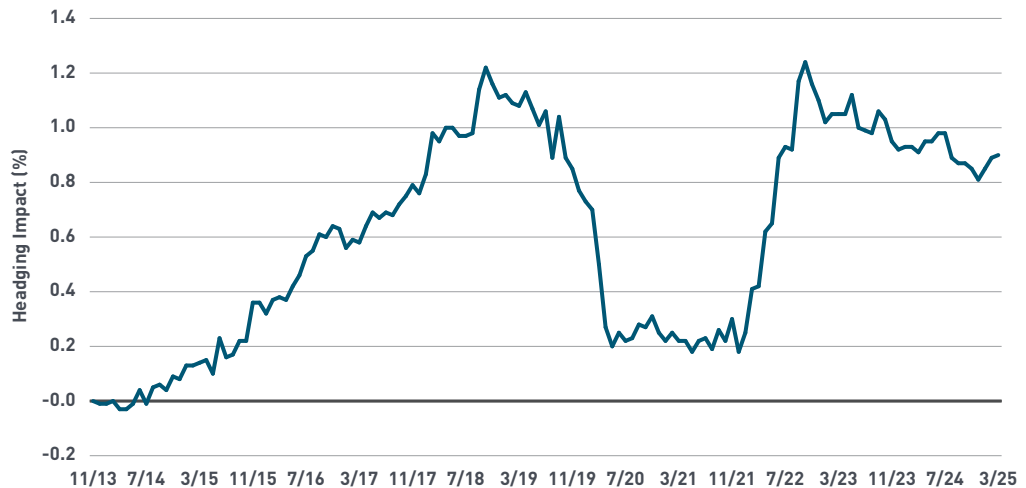
	Global IG Bonds	US IG Bonds	Non-US IG Bonds
Market Capitalization (\$tn)	\$71.1	\$28.8	\$39.6
No. of securities	30,732	13,711	13,657
Yield to Worst	3.58%	4.76%	2.60%
Duration	6.6	6.1	7.0
Currency of Issuance			
USD	44%	100%	N/A
Euro	23%	N/A	42%
Yen	10%	N/A	17%
Sterling	4%	N/A	7%
Other	19%	N/A	34%
Quality Breakdown			
Aaa	12%	3%	19%
Aa	42%	74%	21%
A	31%	11%	46%
Baa	14%	12%	14%
Sector Breakdown			
Treasury	54%	45%	64%
Gov't Related	15%	4%	21%
Corporate	18%	24%	11%
Securitized	13%	27%	4%

Source: Bloomberg. Data as of 21 April 2025. Global IG Bonds are represented by the Bloomberg Global Aggregate Index. US IG Bonds are represented by the Bloomberg US Aggregate Index. Non-US IG Bonds are represented by the Bloomberg Global Aggregate Ex-US Index.

Non-US-dollar-denominated bonds represent over half of the Bloomberg Global Aggregate Index, with over \$39 trillion of bonds issued in euros, yen and other currencies, providing a broader opportunity set for investors to consider. Non-US bonds are more evenly spread across quality sectors, with a higher percentage of A-rated securities, and have a higher proportion of government and government-related issues as compared to US bonds.

With non-USD-based investments, investors must consider currency risk. A US DB typically hedges non-USD exposure so assets and liabilities are denominated in the same currency. In the current market environment, hedging non-USD exposure can benefit US investors, as there is a negative cost to hedging many foreign currencies, including the euro and the yen. While the impact of hedging on yields varies over time, we estimate that hedging currency exposure in a broad global bond portfolio would increase the effective yield by roughly 100 basis points, as shown in Exhibit 2.

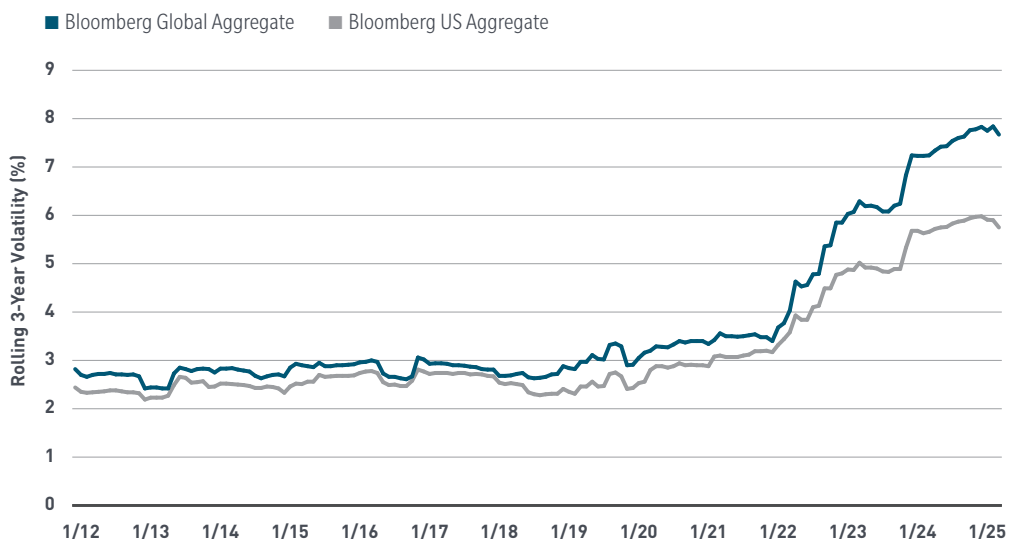
Exhibit 2: Historical impact on yields from hedging global bonds to USD



Source: Bloomberg from November 29, 2013 through March 31, 2025. Based on 3-month forward currency rates for a basket of currencies comprised of 44.5% USD, 23% Euros, 9.6% JPY, 4% GBP and 2.7% CAD, which are approximate weights of those currencies in the Bloomberg Global Aggregate Index (note that 15% of the index is denominated in other currencies which were not assumed to be hedged for purposes of this illustration).

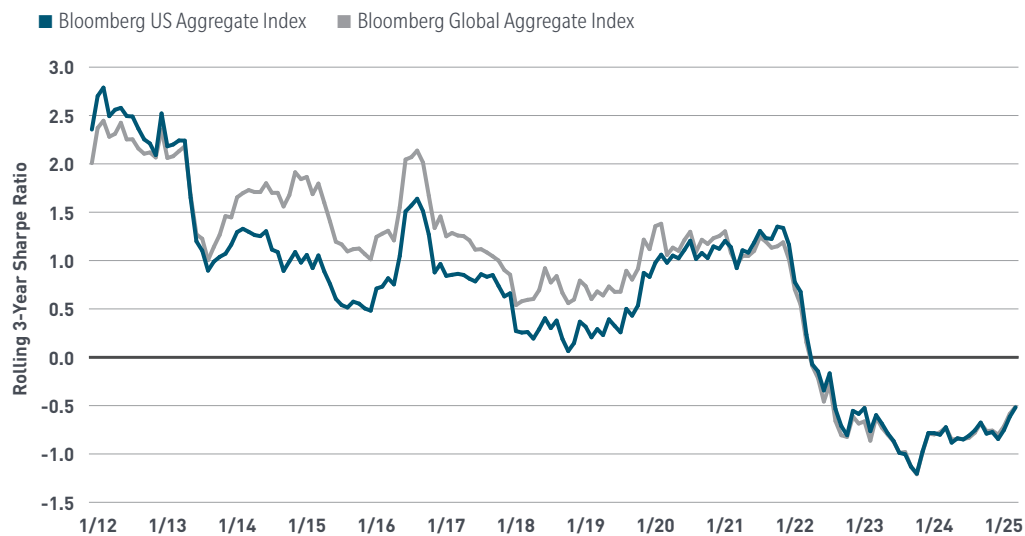
Considering the benefits of hedging, global bond yields today are comparable to their US counterpart at about 4.9%. But yields tell only part of the story. When hedged to USD, global bonds have exhibited lower standard deviation and higher Sharpe ratios than US bonds over the past decade, as shown in Exhibits 3 and 4.

Exhibit 3: Rolling three-year volatility



Source: FactSet based on monthly returns from December 31, 2011 through March 31, 2025 for the Bloomberg Global Aggregate Index (hedged to USD) and Bloomberg US Aggregate Index.

Exhibit 4: Rolling three-year Sharpe ratio



Source: FactSet based on monthly returns from December 31, 2011 through March 31, 2025 for the Bloomberg Global Aggregate Index (hedged to USD) and Bloomberg US Aggregate Index. Risk free rate assumed to be the FTSE 3-month UST Bill Index.

Global bonds in an LDI context

When considering the application of global bonds in an LDI context, we must consider the duration characteristics and correlation with plan liabilities and other assets commonly used in DB plans, as shown in Exhibit 5.

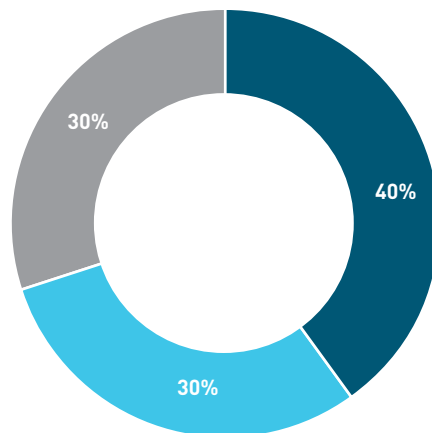
Exhibit 5: Correlation of global bonds with other asset classes

	Global Bonds (hedged to USD)	US Aggregate Bonds	US Intermediate Credit	US Long Government Credit	US Treasuries
Global Bonds (hedged to USD)	1.00	—	—	—	—
US Aggregate Bonds	0.96	1.00	—	—	—
US Intermediate Credit	0.90	0.90	1.00	—	—
US Long Government Credit	0.94	0.96	0.87	1.00	—
US Treasuries	0.89	0.94	0.73	0.90	1.00

Source: FactSet. Correlations based on monthly returns from 31 March 2015 through 31 March 2025 for the following indices: Bloomberg Global Aggregate Index (hedged to USD), Bloomberg US Aggregate Index, Bloomberg US Intermediate Credit Index, Bloomberg US Long Government Credit Index, Bloomberg Global US Treasury Index.

Exhibit 6: Hypothetical liability-hedging portfolio

■ US Treasury ■ US Intermediate Credit ■ US Long Govt/Credit



DURATION

7.7 years

0.96

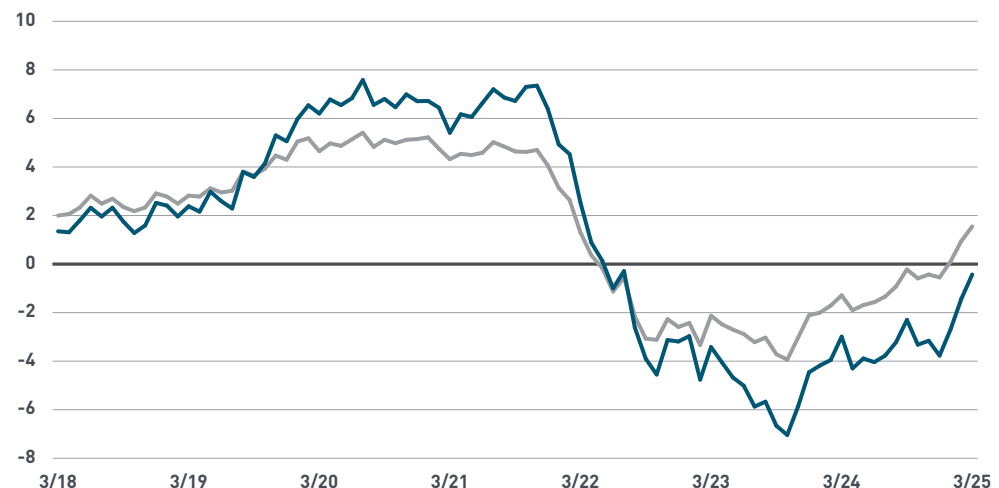
CORRELATION WITH
GLOBAL BONDS

For illustration purposes only.

We see a high correlation between global bonds and typical assets found in LDI portfolios. Taking this a step further, we looked at the correlation between global bonds and a portfolio of assets that might be used to hedge a hypothetical liability with a duration of about eight years, as shown in Exhibit 6.

Exhibit 7: Rolling three-year returns for global bonds versus hypothetical liability-hedging portfolio

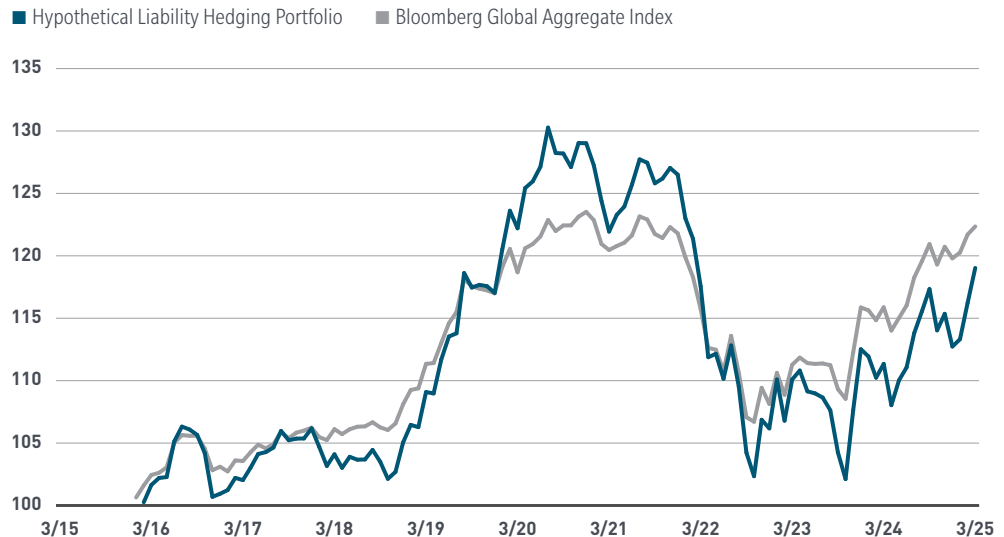
■ Hypothetical Liability Hedging Portfolio ■ Bloomberg Global Aggregate Index



HYPOTHETICAL RETURNS PRESENTED HEREIN ARE FOR ILLUSTRATIVE PURPOSES ONLY, DO NOT REPRESENT ACTUAL TRADING OR THE IMPACT OF MATERIAL ECONOMIC AND MARKET FACTORS, AND ARE BASED ON ANALYSIS DESIGNED WITH THE BENEFIT OF HINDSIGHT.

Source: FactSet. Based on monthly returns from March 31, 2015 through March 31, 2025 for the Bloomberg Global Aggregate Index (hedged to USD). To simulate a liability with a duration comparable to that of the Global Aggregate Index, returns for the "Hypothetical Liability" are based on a liability with a duration that is 70% of the FTSE Pension Discount Curve Short Index.

Exhibit 8: Cumulative return for global bonds versus hypothetical liability-hedging portfolio



HYPOTHETICAL RETURNS PRESENTED HEREIN ARE FOR ILLUSTRATIVE PURPOSES ONLY, DO NOT REPRESENT ACTUAL TRADING OR THE IMPACT OF MATERIAL ECONOMIC AND MARKET FACTORS, AND ARE BASED ON ANALYSIS DESIGNED WITH THE BENEFIT OF HINDSIGHT.

Source: FactSet. Based on monthly returns from March 31, 2015 through March 31, 2025 for the Bloomberg Global Aggregate Index (hedged to USD). To simulate a liability with a duration comparable to that of the Global Aggregate Index, returns for the "Hypothetical Liability" are based on a liability with a duration that is 70% of the FTSE Pension Discount Curve Short Index.

This high correlation is further illustrated when we compare rolling and cumulative returns for global bonds versus the liability-hedging portfolio, as shown in Exhibits 7 and 8.

We see that global bonds have generally kept pace with the hypothetical liability-hedging portfolio over rolling three-year periods, and for the past 10 years, global bonds have slightly outperformed the hypothetical liability-hedging portfolio, with an annualized return of 1.94% versus 1.50%.

What types of entities could benefit from global bonds?

Global bonds may be a good fit for well-funded DB plans that are well along their glide paths and are seeking to increase their allocation to physical bonds. Our analysis has found that global bonds, when hedged back to USD, can be highly correlated with existing LDI portfolios, and over time have done a good job of tracking liabilities with a comparable duration profile.

DB plans may not be the only entities that can potentially benefit from global bonds. Any entity currently employing a US-centric bond portfolio to hedge interest-sensitive liabilities such as insurance companies, endowments and foundations might find global bonds an attractive complement to traditional US Treasuries and credit.

While our analysis has focused on the beta case for global bonds, we believe an active approach to the asset class provides the opportunity to generate additional return through asset allocation, geographical bias, quality and sector and security selection within the context of a larger universe of issues. ▲

Endnotes

¹ Vanguard 2022 Pension Sponsor Survey.

² Milliman 2024 Corporate Pension Funded Study, April 2024, and Pension Funding Index, April 2025.

³ FTSE Pension Discount Curve data as of 31 March 2025. Discount rate for “Intermediate” plan increased from 2.74% on 12/31/2021 to 5.43% on 3/31/2025, while duration decreased from 16.83 years to 13.25 years over the same period. Discount rate for “Short” plan increased from 2.63% to 5.34%, and duration decreased from 13.42 to 10.90 over the same period.

Investments in debt instruments may decline in value as the result of, or perception of, declines in the credit quality of the issuer, borrower, counterparty, or other entity responsible for payment, underlying collateral, or changes in economic, political, issuer-specific, or other conditions. Certain types of debt instruments can be more sensitive to these factors and therefore more volatile. In addition, debt instruments entail interest rate risk (as interest rates rise, prices usually fall). Therefore, the portfolio's value may decline during rising rates.

This material is merely illustrative and is provided for general and educational purposes only, is not individualized to the needs of any specific investor and is not intended to serve as investment advice or as a basis for any investment decision. MFS does not provide legal advice, and the information provided herein is general in nature and should not be considered legal advice. Consult an attorney regarding your plan's specific legal situation.

Bloomberg Index Services Limited. BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively “Bloomberg”). Bloomberg or Bloomberg's licensors own all proprietary rights in the Bloomberg Indices. Bloomberg neither approves or endorses this material, or guarantees the accuracy or completeness of any information herein, or makes any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, neither shall have any liability or responsibility for injury or damages arising in connection therewith.

Source FTSE International Limited (“FTSE”) © FTSE 2024. “FTSE®” is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and/or FTSE ratings or underlying data and no party may rely on any FTSE indices, ratings and/or data underlying data contained in this communication. No further distribution of FTSE Data is permitted without FTSE's express written consent. FTSE does not promote, sponsor or endorse of this communication.

The views expressed herein are those of the MFS Strategy and Insights Group within the MFS distribution unit and may differ from those of MFS portfolio managers and research analysts. These views are subject to change at any time and should not be construed as the Advisor's investment advice, as securities recommendations, or as an indication of trading intent on behalf of MFS. No forecasts can be guaranteed.

Diversification does not guarantee a profit or protect against a loss. Past performance is no guarantee of future results.

GLOBAL DISCLOSURE

Unless otherwise indicated, logos and product and service names are trademarks of MFS® and its affiliates and may be registered in certain countries.

Distributed by:

U.S. – MFS Institutional Advisors, Inc. (“MFSI”), MFS Investment Management and MFS Fund Distributors, Inc., Member SIPC; **Latin America** – MFS International Ltd.; **Canada** – MFS Investment Management Canada Limited; **Note to UK and Switzerland readers:** Issued in the UK and Switzerland by MFS International (U.K.) Limited (“MIL UK”), a private limited company registered in England and Wales with the company number 03062718, and authorised and regulated in the conduct of investment business by the UK Financial Conduct Authority. MIL UK, an indirect subsidiary of MFS®, has its registered office at One Carter Lane, London, EC4V 5ER.; **Note to Europe (ex UK and Switzerland) readers:** Issued in Europe by MFS Investment Management (Lux) S.à r.l. (MFS Lux) – authorized under Luxembourg law as a management company for Funds domiciled in Luxembourg and which both provide products and investment services to institutional investors and is registered office is at S.a r.l. 4 Rue Albert Borschette, Luxembourg L-1246. Tel: 352 2826 12800. This material shall not be circulated or distributed to any person other than to professional investors (as permitted by local regulations) and should not be relied upon or distributed to persons where such reliance or distribution would be contrary to local regulation; **Singapore** – MFS International Singapore Pte. Ltd. (CRN 201228809M); **Australia/New Zealand** – MFS International Australia Pty Ltd (“MFS Australia”) (ABN 68 607 579 537) holds an Australian financial services licence number 485343. MFS Australia is regulated by the Australian Securities and Investments Commission.; **Hong Kong** – MFS International (Hong Kong) Limited (“MIL HK”), a private limited company licensed and regulated by the Hong Kong Securities and Futures Commission (the “SFC”). MIL HK is approved to engage in dealing in securities and asset management regulated activities and may provide certain investment services to “professional investors” as defined in the Securities and Futures Ordinance (“SFO”); **For Professional Investors in China** – MFS Financial Management Consulting (Shanghai) Co., Ltd. 2801-12, 28th Floor, 100 Century Avenue, Shanghai World Financial Center, Shanghai Pilot Free Trade Zone, 200120, China, a Chinese limited liability company registered to provide financial management consulting services.; **Japan** – MFS Investment Management K.K., is registered as a Financial Instruments Business Operator, Kanto Local Finance Bureau (FIBO) No.312, a member of the Investment Trust Association, Japan and the Japan Investment Advisers Association. As fees to be borne by investors vary depending upon circumstances such as products, services, investment period and market conditions, the total amount nor the calculation methods cannot be disclosed in advance. All investments involve risks, including market fluctuation and investors may lose the principal amount invested. Investors should obtain and read the prospectus and/or document set forth in Article 37-3 of Financial Instruments and Exchange Act carefully before making the investments. **For readers in Saudi Arabia, Kuwait, Oman, and UAE (excluding the DIFC and ADGM). In Qatar strictly for sophisticated investors and high net worth individuals only. In Bahrain, for sophisticated institutions only:** The information contained in this document is intended strictly for professional investors. The information contained in this document, does not constitute and should not be construed as an offer of, invitation or proposal to make an offer for, recommendation to apply for or an opinion or guidance on a financial product, service and/or strategy. Whilst great care has been taken to ensure that the information contained in this document is accurate, no responsibility can be accepted for any errors, mistakes or omissions or for any action taken in reliance thereon. You may only reproduce, circulate and use this document (or any part of it) with the consent of MFS International U.K. Ltd (“MIL UK”). The information contained in this document is for information purposes only. It is not intended for and should not be distributed to, or relied upon by, members of the public. The information contained in this document, may contain statements that are not purely historical in nature but are “forward-looking statements”. These include, amongst other things, projections, forecasts or estimates of income. These forward-looking statements are based upon certain assumptions, some of which are described in other relevant documents or materials. If you do not understand the contents of this document, you should consult an authorised financial adviser. Please note that any materials sent by the issuer (MIL UK) have been sent electronically from offshore. **South Africa** – This document, and the information contained is not intended and does not constitute, a public offer of securities in South Africa and accordingly should not be construed as such. This document is not for general circulation to the public in South Africa. This document has not been approved by the Financial Sector Conduct Authority and neither MFS International (U.K.) Limited nor its funds are registered for public sale in South Africa.