

Whitepaper | April 2023

An unbiased approach to finding opportunities in emerging-market debt

Barney Goodchild and Aaron Grehan



It takes Aviva Investors





Barney Goodchild

Head of Credit and Equity Investment Specialists

Main responsibilities

Barney leads the credit and equity investment specialists team. The team works closely with portfolio managers across our credit and equity platform to articulate their investment process, portfolio positioning and investment performance to clients and consultants around the world.



Aaron Grehan

Head of Hard Currency Emerging-Market Debt

Main responsibilities

Aaron is Head of Hard Currency Emerging-market Debt and a senior portfolio manager with co-management responsibility for both hard-currency sovereign and corporate bond portfolios. He has been co-managing the hard currency strategy since he joined the team in 2010 and has co-managed the corporate focused strategy since launch in 2012.

Contents

Key takeaways	3
<hr/>	
Introduction	3
<hr/>	
A differentiated approach	5
<hr/>	
The result	9
<hr/>	
Emerging-market Debt Hard Currency Sovereign Composite	10
<hr/>	
Contact us	11
<hr/>	

Key takeaways

Many EMD managers underperform during periods of market weakness due to a bias towards higher-yielding parts of the market, poor understanding of EM-specific risks and deficient portfolio construction.

Such approaches are likely to lead to higher drawdowns and increased volatility of excess returns over the long run.

Our differentiated approach seeks to avoid such biases and deliver alpha that is uncorrelated to HY and IG spread differentials, along with enhanced capital preservation and a smoother path of returns.

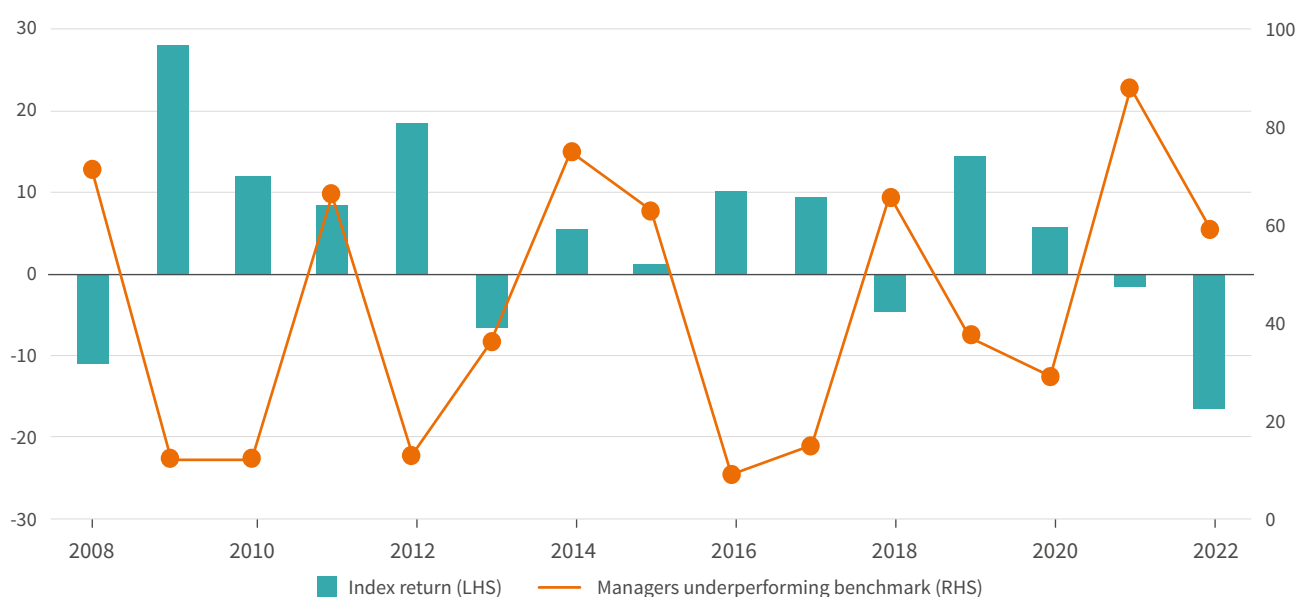
Introduction

An unbiased and flexible approach, deep understanding of risk and robust portfolio construction are the keys to delivering consistent outperformance in emerging-market debt (EMD) strategies.

EMD can offer significant returns, but has historically been susceptible to periods of increased volatility and rapid spread widening, as recently witnessed in 2021 and 2022 when global inflation concerns and the Russian invasion of Ukraine led to negative returns across EMD.

As shown below, when the JP Morgan EMBI Global index declined 1.51 per cent in 2021, 88 per cent of managers underperformed. Similarly, when the index fell 16.45 per cent in 2022, 60 per cent of managers underperformed.

Figure 1. Index returns versus peer group performance (per cent)



Note: Index returns: JP Morgan EMBI Global Index. Peers are from the eVestment Global Emerging-markets Hard Currency benchmarked to the EMBI Global or Global Diversified Index. Chart does not depict the performance of any Aviva product or strategy.

Source: Aviva Investors, eVestment. Data as of December 31, 2022.

An analogous pattern emerges when we look at drawdowns. In one of the most turbulent months during the Global Financial Crisis, October 2008, the index fell 14.9 per cent and 82 per cent of managers underperformed. More recently, 94 per cent of managers underperformed when the benchmark declined 12.6 per cent in March 2020, as the economic impact of strict lockdown measures at the onset of COVID-19 became clear.

We believe there are three main reasons many managers fail to outperform during periods of market weakness:

- 1 A structural bias towards the higher-yielding parts of the EMD market.
- 2 A poor understanding of EM-specific risk factors and overreliance on traditional risk metrics.
- 3 Deficiencies in portfolio construction that lead to concentrated portfolios and overreliance on credit spread compression.

A failure to fully consider these factors is likely to lead to higher drawdowns and increased volatility of excess returns over the long run.

In this whitepaper, we examine the key elements of our approach to investing in EMD, which we believe are crucial to delivering superior outcomes for clients. These include uncorrelated alpha, a smoother return path and robust portfolio construction.

There are three main reasons many managers fail to outperform during periods of market weakness

Aviva Investors Emerging-markets Hard Currency Strategy

- Aviva Investors' Emerging-markets Hard Currency strategy
- The strategy targets consistent outperformance, uncorrelated was launched in June 2000 and is focused on hard currency alpha generation and enhanced capital preservation versus EM sovereign and quasi-sovereign debt. peers and the benchmark.



A differentiated approach

Emerging-markets are typically less efficient than their developed-market counterparts. In our view, alpha opportunities are created by the breadth and diversity of an under-researched and under-reported universe. Our approach to generating consistent outperformance is underpinned by three core pillars, detailed below.

Emerging-markets are typically less efficient than their developed-market counterparts

1. Unbiased, flexible process to generate uncorrelated alpha

The EM hard-currency debt universe is split approximately 60/40 between investment-grade and high-yield issuers. Our analysis of the EMD hard-currency peer universe suggests most managers have a structural bias towards higher-yielding parts of the market.

Whilst this can be profitable at certain points in the cycle, over the long run it is likely to lead to higher drawdowns and increased volatility of returns. Periods like Q4 2021, when 95 per cent of managers underperformed, and Q2 2022, when 82 per cent of managers underperformed, are examples of when a high-beta approach can be costly.

We take a different approach. We believe attractive investment opportunities exist across the investable universe, not only within the higher-yielding parts of the market. Our approach considers the full opportunity set without bias, resulting in flexible positioning between the high-yield and investment-grade portions of the market.

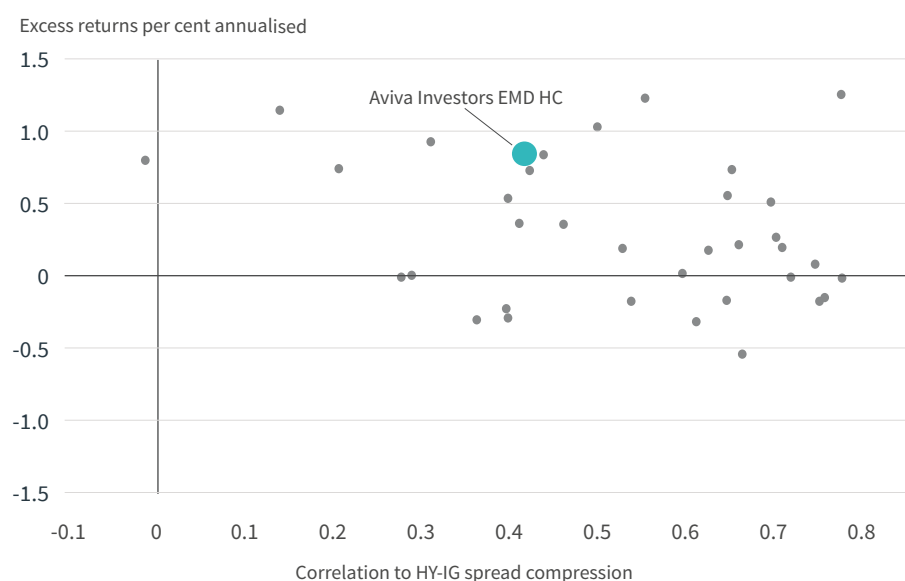
Ultimately, our ability to generate alpha is less dependent on high-yield spread compression. We generate alpha from active country selection decisions, not broad-based beta allocations.

Ultimately, our ability to generate alpha is less dependent on high-yield spread compression



The result: alpha generation that has historically been uncorrelated to spread differentials between high yield and investment grade.

Figure 2. Uncorrelated alpha



Most hard currency managers generate their excess returns from a structural overweight to high-yield names

Our alpha generation is uncorrelated to high-yield - investment-grade spread differentials

Past performance is not a guide to future performance

Note: Aviva Investors performance is based on the Aviva Investors Emerging-market Bond composite. Index returns based on the JP Morgan EMBI Global Investment Grade and EMBI Global High Yield Indexes. Based on 10 years of monthly data. Peers from the eVestment Emerging-markets Hard Currency universe.

Source: Aviva Investors JP Morgan. Data as of December 31, 2022.

2. Deep understanding of EMD risk fosters capital preservation and smooth return path

As an asset class, EMD offers potentially attractive returns; however, different markets can exhibit periods of high volatility and idiosyncratic risk that are difficult to capture within traditional risk measures.

Tracking error is one such example. The measure is widely used by portfolio managers to understand levels of risk within a portfolio. However, it has several serious limitations we believe make it a poor risk metric:

- **Fails to measure risk of loss:** Tracking error measures the deviation from a benchmark rather than the risk of loss. If a benchmark index is inefficient, deviations from the benchmark should be beneficial in reducing risk or improving portfolio returns. Too often, however, deviation from a benchmark is viewed as “taking risk” rather than reducing it or improving risk-adjusted returns.
- **Engenders forced ownership:** Investment managers and consultants often focus on tracking error as a measure of the degree to which a portfolio is active. Strategies with low historical levels of tracking error are often labeled as “closet trackers” or “semi-passive”. This forces managers to add risk or off-benchmark positions to appear active.
- **Incorrectly assumes more risk leads to excess returns:** In some asset classes, such as US investment-grade credit, a strong correlation exists between tracking error and excess returns. This suggests adding risk on average improves returns. Our analysis, however, indicates there is no correlation between tracking error and excess returns for EMD hard-currency managers. This is likely to be the result of higher downside risks.

We focus on a variety of risk measures, such as duration times spread, alongside a deep understanding of EM-specific risks built over decades of experience. Our process is not predicated upon a foundation of imperfect metrics. We believe this is a critical differentiating factor in our ability to deliver superior client outcomes. It is also important to consider non-financial risks, such as environmental, social and governance factors. These can highlight risks and opportunities that would not be captured by quantitative risk metrics or traditional fundamental analysis.

We focus on a variety of risk measures, such as duration times spread, alongside a deep understanding of EM-specific risks built over decades of experience

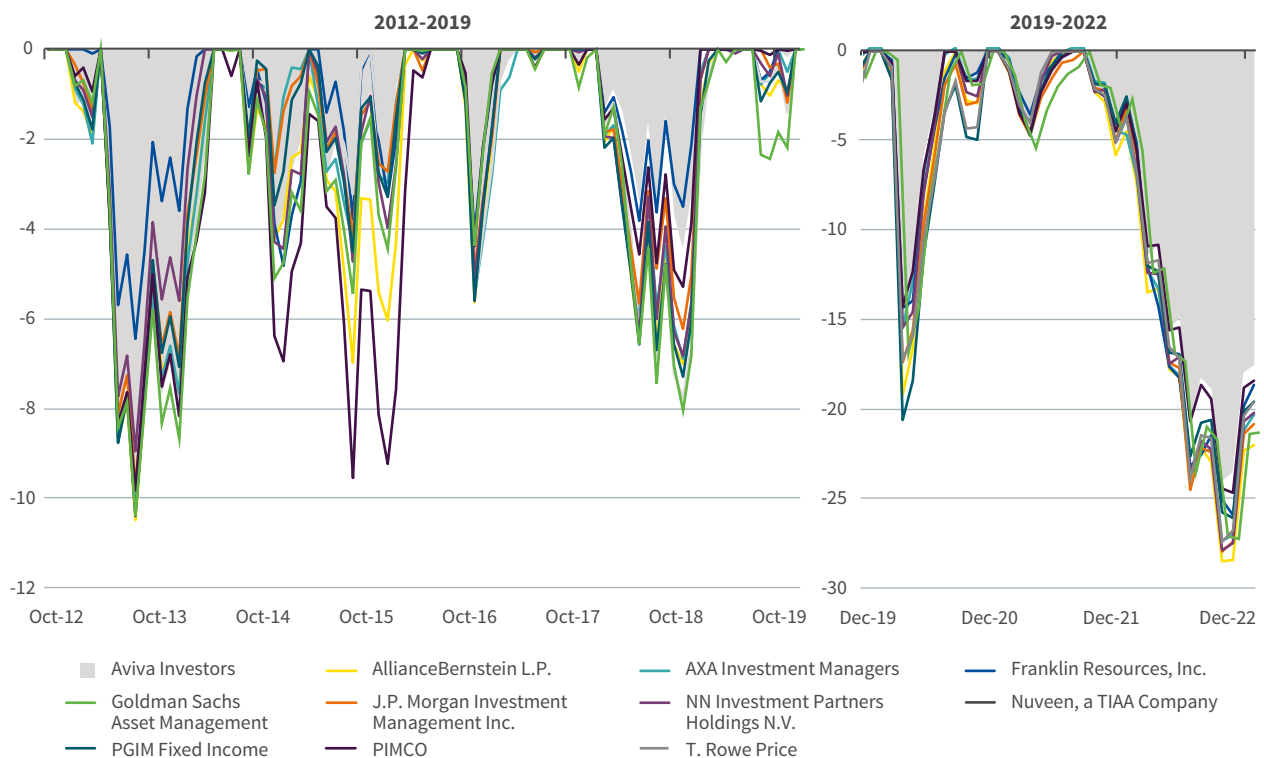
An in-depth understanding of EM risk is embedded throughout our investment process, which is centered around fundamental analysis. Through this, we believe we can thoroughly assess an issuer's risks to determine if we will be compensated accordingly.

We draw on a blend of quantitative and qualitative analysis to assess an issuer's ability and willingness to repay debt, its vulnerability to external shocks, and the ability of the authorities to take appropriate action if required.



The potential result: enhanced capital preservation and a smoother path of returns versus peers and the benchmark.

Figure 3. Consistently low drawdowns



Past performance is not a guide to future performance

Note: Data includes top ten largest strategies based on AUM in the Vestment Global Emerging-markets Fixed Income – Hard Currency universe. Calculated with monthly returns dating back to January 2014. Aviva Investors refers to the Aviva Investors Emerging-market Bond composite.

Source: eVestment. Data as of December 31, 2022.

3. Focused portfolio construction can drive potentially consistent outperformance

Robust portfolio construction is essential to transforming good ideas into portfolios that meet clients' risk and return objectives, as well as constraints. Our process is focused on maximising risk-adjusted rather than total returns. We target the most attractive opportunities irrespective of credit rating.

To build a high-conviction portfolio, we are benchmark agnostic at the issuer level, which allows us to concentrate on countries that are meaningful from a risk/reward perspective at the total portfolio level. While the EMBI Global universe is defined by 70 countries, as at December 31, 2022, the portfolio will typically have exposure to only around two-thirds of that total, with 15-20 positions driving risk contributions at a portfolio level.

To strike the right balance between long-term and short-term opportunities, we break down the portfolio into core, active and tactical positions. This seeks to ensure capital is allocated to credits that offer improving prospects across a diversified universe with an appropriate blend of opportunities to maximise risk-adjusted returns.



The Result: focused portfolio construction can drive potentially consistent outperformance.

Figure 4. Portfolio building blocks

Core (75 per cent) Long-term holdings	Example: Mexico
<ul style="list-style-type: none"> Stable and/or improving credit stories throughout the business cycle. Credit selection driven by deep understanding of fundamentals. No formal exit price, but rather a continuous assessment of the original investment thesis. 	<ul style="list-style-type: none"> Mexico is and has been a de-rating story: fiscal metrics are strong and government debt is stable. But policy has been pro-cyclical and insufficiently geared towards ensuring growth sustainability through investment. Long-term, this means Mexico could remain stuck in a low-growth equilibrium. But in the shorter term, Mexico's relative macro and fiscal stability and lack of near-term political or policy risks means risks to the credit rating are balanced especially as EMs enter a period of heightened fiscal and geopolitical risks. ESG judgement is neutral, meaning we believe ESG scores fully reflect the current ESG performance of the country. Despite challenges regarding the longer-term outlook for Mexico, we believe investors are well compensated for these risks.
Active (20 per cent) Medium-term holdings	Example: Ivory Coast
<ul style="list-style-type: none"> Relative-value driven selection of alpha opportunities. Expectation current valuations offer potential attractive returns. Clear exit price or "valuation target" outlined at time of purchase. 	<ul style="list-style-type: none"> Ivory Coast benefits from strong growth, modest debt and sound economic policy. External vulnerabilities are reduced through its membership of WAEMU, the West African Monetary Union, where reserves are centralised. Fiscal policy is looser than pre-pandemic, but overall credit metrics have improved. As a result, the Ivory Coast is one of the few countries to have been upgraded from B+ to BB-. Ivory Coast has good relations with the IMF, and may be considering an IMF programme which would provide additional support.
Tactical (five per cent) Short-term holdings	Credit default swaps
<ul style="list-style-type: none"> Tactical positions that take advantage of mispriced securities. Exit strategy outlined at time of purchase. 	<ul style="list-style-type: none"> Tactical use of CDS to isolate and manage country-specific risks. Can be used tactically as a liquid alternative to reduce country exposure rather than through selling physical holdings. Also used to take advantage of deteriorating credits and event-specific risks.

For illustrative purposes only not to be considered as investment recommendations. Holdings and allocations are subject to change.

Source: Aviva Investors, March 2023.

The result

To recap, we believe there are three main reasons many managers fail to outperform in periods of market weakness:

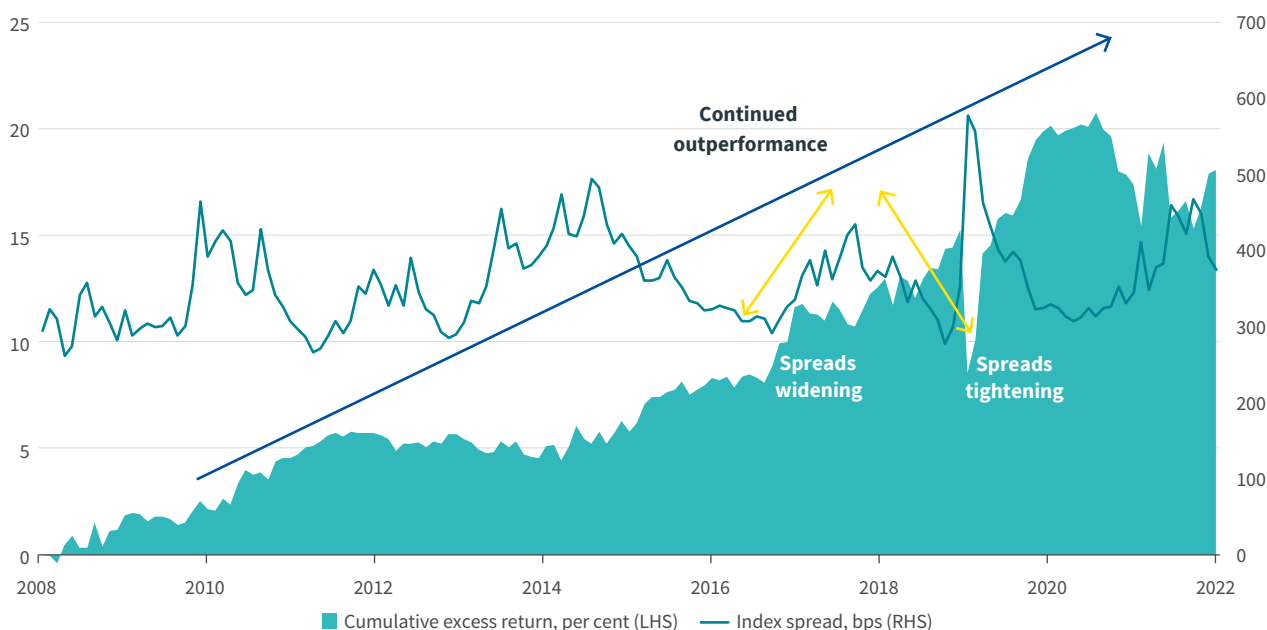
1. A structural bias towards the higher-yielding parts of the EMD market.
2. A poor understanding of EM-specific risk factors and overreliance on traditional risk metrics.
3. Deficient portfolio construction that leads to concentrated portfolios and overreliance on credit spread compression.

We believe there are three main reasons many managers fail to outperform in periods of market weakness

By understanding and correcting for the biases and pitfalls, we believe we can deliver:

1. Alpha that is uncorrelated to spread differentials between high yield and investment grade.
2. Enhanced capital preservation and a smoother path of returns versus peers and the benchmark.
3. A differentiated process that can generate positive excess returns throughout market cycles without being overly reliant on a single source of alpha, such as credit beta.

Figure 5. Uncorrelated alpha



Past performance is not a guide to future performance

Note: Cumulative excess returns versus JP Morgan EMBI Global Index. Based on 10 years of monthly data. Based on GIPS composite performance, please see the following page for the full GIPS disclosure along with the updated data.

Source: JP Morgan. Data as of December 31, 2022.

Emerging-market Debt Hard Currency Sovereign Composite

Figure 6. December 2003 to December 2022

Year ended	Total return (per cent)							Assets (\$ in millions)	
	Gross of fees	Net of fees	EMBI Global Index	Gross composite std. deviation 3yr	Benchmark std. deviation 3yr	Composite dispersion (per cent)	Composite accounts	Composite assets	Total firm assets
2022	-14.97	n/a	-16.45	n/a	n/a	n/a	1	3,344.0	267,766.0
2021	-2.14	n/a	-1.51	n/a	n/a	n/a	1	3,936.2	303,653.4
2020	7.99	n/a	5.88	n/a	n/a	n/a	1	4,117.0	296,642.4
2019	15.62	n/a	14.42	n/a	n/a	n/a	1	4,166.6	272,982.4
2018	-2.95	n/a	-4.61	n/a	n/a	n/a	1	3,340.7	252,082.5
2017	9.08	n/a	9.32	n/a	n/a	n/a	1	2,108.0	276,562.3
2016	11.38	n/a	10.19	n/a	n/a	n/a	1	1,1914.2	258,122.3
2015	1.60	n/a	1.23	n/a	n/a	n/a	1	1,227.4	253,510.8
2014	5.03	n/a	5.53	n/a	n/a	n/a	1	1,351.0	205,493.6
2013	-6.27	n/a	-6.58	n/a	n/a	n/a	1	1,471.3	208,223.8
2012	20.13	n/a	18.54	n/a	n/a	n/a	1	2,074.1	234,749.8
2011	8.90	n/a	8.46	n/a	n/a	n/a	1	1,069.6	222,573.5
2010	14.00	n/a	12.04	n/a	n/a	n/a	1	857.0	222,929.8
2009	28.25	n/a	28.18	n/a	n/a	n/a	1	669.9	229,153.7
2008	-7.30	n/a	-10.91	n/a	n/a	n/a	1	343.7	194,527.6
2007	6.14	n/a	6.28	n/a	n/a	n/a	1	512.8	347,419.4
2006	12.32	n/a	9.88	n/a	n/a	n/a	1	501.3	314,267.4
2005	9.99	n/a	10.73	n/a	n/a	n/a	1	448.6	266,321.1
2004	8.87	n/a	11.73	n/a	n/a	n/a	1	407.6	270,836.5

Aviva Investors Global Services claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS Standards. Aviva Investors Global Services has been independently verified for the periods January 1, 1998 to December 31, 2022. The verification reports are available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS Standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation. The firm is defined as Aviva Investors Global Services, which includes all managed assets, excluding direct real estate investments. The firm was redefined as of December 31, 2013, when open ended direct real estate assets were removed from the firm. Closed end direct real estate assets had been excluded from the firm as at December 31, 2010. Therefore, direct real estate assets managed by Aviva are not included within the assets under management value. Following the acquisition of Friends Life group by the Aviva Group, the assets managed by Friends Life group, and its investment operations, were integrated into Aviva Investors in 2015. Aviva Investors Global Services AUM increased from £131bn at the end of 2014 to £172bn at the end of 2015. Further details are available upon request. Further to an agreement dated May 26, 2018 between Aviva Investors Global Services Limited and LaSalle Investment Management, Aviva Investor's global indirect real estate investment division was transferred to LaSalle Investment Management with effect from November 6, 2018.

The aim of portfolios within this composite is to achieve capital growth or income by investing in bonds of issuers in worldwide emerging-market countries. To achieve the investment objective, investments may be made in bonds issued by Governmental, quasi governmental and corporate issuers and in financial derivative instruments such as futures, options, swap contracts, swaptions, forward currency exchange contracts, foreign exchange OTC options and credit default swaps, each of which may be traded through recognised exchanges or via the over-the-counter market.

This composite was created on July 2, 2010. With a start date of December 31, 2003. Returns are presented gross of management fees and other expenses but net of all trading costs. For unitised funds, gross returns are calculated by adding back the Total Expense Ratio (TER) only, or part thereof, to the net return. Actual fees charged are dependent on the mandate and value of client assets. The fee scale for pooled clients ranges from 0.2% p.a. to 1.8% p.a. and for segregated mandates the fee scale starts at 0.5% p.a. All income is taken gross of tax, but net of irrecoverable taxes. Further information is available upon request.

Composite dispersion is calculated using the asset-weighted standard deviation of all portfolios that were included in the composite for the entire year. If the composite includes less than 5 portfolios for the full year no measure of dispersion is shown. Additional information regarding policies for valuing portfolios/funds, and calculating and reporting returns is available upon request. A list and description of all composites is available upon request. Three-year annualised ex post standard deviation measures for both the composite and benchmark are shown as Composite Risk and Benchmark Risk. This information is not presented when there are less than 36 monthly observations available. This composite is measured against the JPMorgan Emerging-markets Bond Index (EMBI) Global index which is a comprehensive emerging-market debt benchmark that tracks returns for US dollar-denominated debt instruments issued by emerging-market sovereign and quasisovereign entities.

Key risks

Investment risk

The value of an investment and any income from it can go down as well as up and can fluctuate in response to changes in currency and exchange rates. Investors may not get back the original amount invested.

Credit risk

Bond values are affected by changes in interest rates and the bond issuer's creditworthiness. Bonds that offer the potential for a higher income typically have a greater risk of default.

Currency risk

The strategy is exposed to different currencies. Derivatives are used to minimise, but may not always eliminate, the impact of movements in currency exchange rates.

Emerging market risk

Investments can be made in emerging markets. These markets may be volatile and carry higher risk than developed markets.

Derivatives risk

Investments can be made in derivatives, which can be complex and highly volatile. Derivatives may not perform as expected, meaning significant losses may be incurred.

Derivatives are instruments that can be complex and highly volatile, have some degree of unpredictability (especially in unusual market conditions), and can create losses significantly greater than the cost of the derivative itself.

Illiquid securities risk

Some investments could be hard to value or to sell at a desired time, or at a price considered to be fair (especially in large quantities), and as a result their prices can be volatile.

For investments in money market instruments such as short-term bank debt, the market prices/value can rise as well as fall on a daily basis. Their values are affected by changes in interest rates, inflation and any decline in creditworthiness of the issuer.

Money market securities risk

Investments are not guaranteed, an investment in a Money Market Fund is different from an investment in deposits and can fluctuate in price meaning you may not get back the original amount you invested. This investment does not rely on external support for guaranteeing liquidity or stabilising the NAV per unit or share. The risk of loss of the principal is to be borne by the investor.

Important Information

THIS IS A MARKETING COMMUNICATION

Except where stated as otherwise, the source of all information is Aviva Investors Global Services Limited ("Aviva Investors"). Unless stated otherwise any views, opinions and future returns expressed are those of Aviva Investors and based on Aviva Investors internal forecasts. They should not be viewed as indicating any guarantee of return from an investment managed by Aviva Investors nor as advice of any nature. The value of an investment and any income from it may go down as well as up and the investor may not get back the original amount invested. Past performance is not a guide to future returns. Where relevant, information on our approach to the sustainability aspects of the strategy and the Sustainable Finance disclosure regulation (SFDR) including policies and procedures can be found on the following link: <https://www.avivainvestors.com/en-gb/capabilities/sustainable-finance-disclosure-regulation/> In Europe this document is issued by Aviva Investors Luxembourg S.A. Registered Office: 2 rue du Fort Bourbon, 1st Floor, 1249 Luxembourg. Supervised by Commission de Surveillance du Secteur Financier. An Aviva company. In the UK this is issued by Aviva Investors Global Services Limited. Registered in England No. 1151805. Registered Office: 80 Fenchurch Street, London EC3M 4AE. Authorised and regulated by the Financial Conduct Authority. Firm Reference No. 119178. In Switzerland, this document is issued by Aviva Investors Schweiz GmbH.

In Australia: Aviva Investors Pacific Pty Ltd, a company incorporated under the laws of Australia with Australian Business No. 87 153 200 278 and Australian Company No. 153 200 278, holds an Australian Financial Services License (AFSL 411458) issued by the Australian Securities and Investments Commission. Business Address: Level 27, 101 Collins Street, Melbourne VIC 3000, Australia. This document offers only general financial advice, and does not seek to take into account the individual objectives, financial situation or needs of any particular investor or class of investor. Consequently prospective investors must consider the appropriateness of any advice having regard to their own objectives, financial situation and needs, before investing.

In Singapore: This document / advertisement has not been reviewed by the Monetary Authority of Singapore. It is prepared by Aviva Investors Global Services Limited (registered in England No.1151805, registered office: 80 Fenchurch Street, London EC3M 4AE) who is authorised and regulated by the Financial Conduct Authority and a member of the Investment Association. This document is not a prospectus registered with the Monetary Authority of Singapore. Accordingly, this document and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of shares, units or interests may not be circulated or distributed, nor may the shares, units or interests be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor pursuant to Section 304 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA") or (ii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. Issued by Aviva Investors Asia Pte. Limited, a company incorporated under the laws of Singapore with registration number 200813519W, holds a valid Capital Markets Services Licence to carry out fund management activities issued under the Securities and Futures Act (Singapore Statute Cap. 289) and is an Exempt Financial Adviser for the purposes of the Financial Advisers Act (Singapore Statute Cap.110). Registered Office: 138 Market Street, #05-01 CapitaGreen, Singapore 048946.

400109 / AUS: 20230427_07 / SG: 20230427_06 – 31/05/24

Contact us

Australia

+61 3 9653 6473
brett.jackson@avivainvestors.com

Benelux

+31 20 799 7707
catrinus.vanwilligen@avivainvestors.com

Germany, Austria and Nordics

+49 69 25 78 26 109
crmeurope@avivainvestors.com

Singapore

+65 9168 0287
richard.surrency@avivainvestors.com

Southern Europe

+39 334 6645 229
crmeurope@avivainvestors.com

Switzerland

+41 44 215 90 14
crmeurope@avivainvestors.com

United Kingdom

+44 207 809 6000
uk.clientservices@avivainvestors.com

