Manulife Investment Management

Second quarter 2024

Sustainable Asia Bond Strategy

Quarterly Market & Strategy Review

For a discussion of the risks associated with this strategy, please see the Investment Considerations page at the end of the presentation.

Sustainable Asia Bond Strategy
Second quarter overview

Quarter's overview – Sustainable Asia Bond Strategy

Market highlights

- Over the quarter, market pared back rate cut expectations amid continued hawkish stance by the Federal Reserve (Fed) due to stickier-than-expected inflation data. The Fed kept its interest rate unchanged at 5.25% to 5.50% over the period; dot plot after June FOMC meeting indicated the possibility of one cut by the end of 2024. The 10-year Treasury yield rose from 4.20% to 4.40%.
- Asian credit markets posted positive returns this quarter amid tighter credit spreads offsetting higher US Treasury yields. The J.P. Morgan Asia Credit Index increased by 1.37%, while the J.P. Morgan ESG Asia Credit Index increased by 1.39% in US dollar terms.
- Credit spreads of Asian investment grade (IG) tightened as trading technical remains supportive amid stable corporate earnings; Asian high yield credits generally outperformed led by China property sector on the back of the improved market sentiment amid new measures announced to support the property sector.

Portfolio

- We built the portfolio's overweight duration relative to the benchmark opportunistically across the quarter as yields corrected higher, moving from 4.7 vs 4.4 years as of Q1-2024 to 4.7 vs 4.2 years as of Q2-2024.
- We increased the portfolio's high yield exposure by around 3.5% as we believe carry likely to be the main driver of returns over the medium-term.
- We maintained the portfolio's relative overweight exposure to ESG-labelled bonds as of Q2-2024 at 40.5%, compared to the benchmark's exposure of 20.0%. Notably, the portfolio participated in new primary market deals from an Asian sovereign and a Singapore financial that issued sustainable and green bonds respectively.

Performance

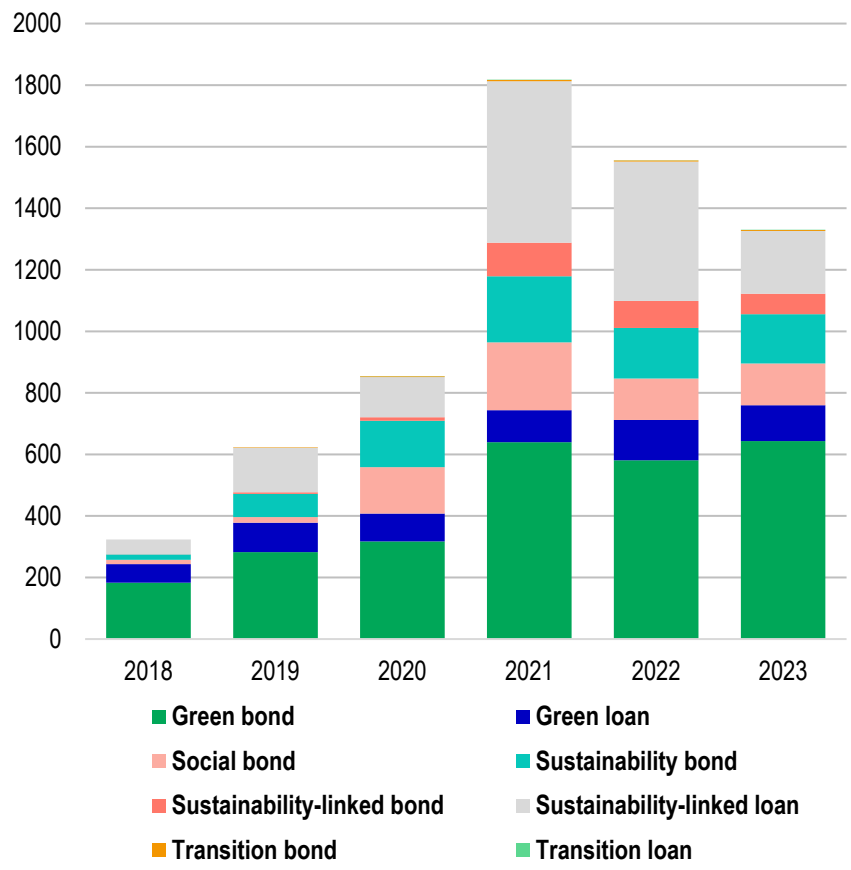
- The Strategy returned 0.89% (gross) and 0.76% (net) in Q2, underperformed the benchmark which returned 1.39%.
- Main contributor to relative performance came from portfolio's overweight in corporates and underweight in government-related issuers. Portfolio's allocation to SGD and INR bonds also contributed.
- Main detractors to relative performance came from the portfolio's exposure to higher quality USD Singapore credit which underperformed. Portfolio's overweight USD interest rate duration positioning also detracted amid higher US Treasury yield environment.

Source: Manulife Investment Management, Bloomberg, JPMorgan indices, as of 30 June 2024.

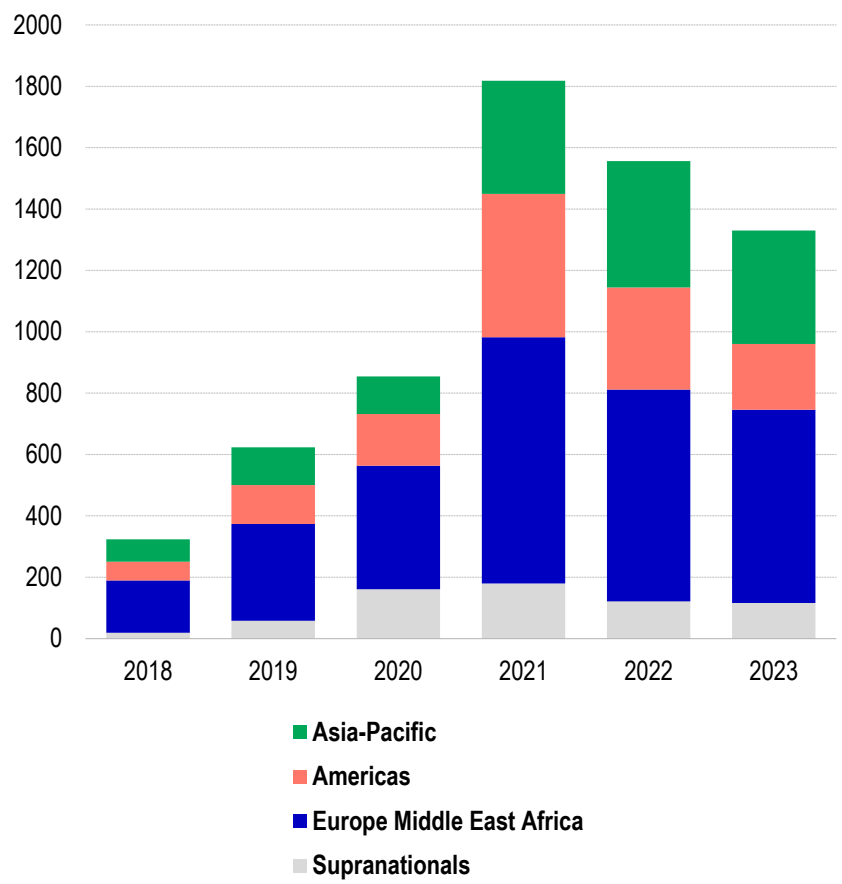
We consider that the integration of sustainability risks in the decision-making process is an important element in determining long-term performance outcomes and is an effective risk mitigation technique. Our approach to sustainability provides a flexible framework that supports implementation across different asset classes and investment teams. While we believe that sustainable investing will lead to better long-term investment outcomes, there is no guarantee that sustainable investing will ensure better returns in the longer term. In particular, by limiting the range of investable assets through the exclusionary framework, positive screening and thematic investment, we may forego the opportunity to invest in an investment which we otherwise believe likely to outperform over time. For EU investors: Manulife Investment Management has reviewed the strategy against the obligations of SFDR and considers that the strategy would meet the criteria of Article 9. Past performance is not indicative of future results. Performance is shown in USD. Gross performance results do not include advisory fees and other expenses an investor may incur, which when deducted will reduce returns. Net performance results reflect the application of the highest incremental rate of the standard investment advisory fee schedule to gross performance results. Changes in exchange rates may have an adverse effect. For complete performance please see page 9.

Sustainable debt issuance

Sustainable debt issuance per instrument type (calendar year, US$ billion)



Sustainable debt issuance per region (calendar year, US$ billion)



Source: Bloomberg New Energy Finance, Sustainable Finance Market Outlook Data Set, as of 31 December 2023. Data updated half yearly.

Sustainable Asia Bond Strategy

Increased the portfolio's high yield exposure to capture carry

Key portfolio changes

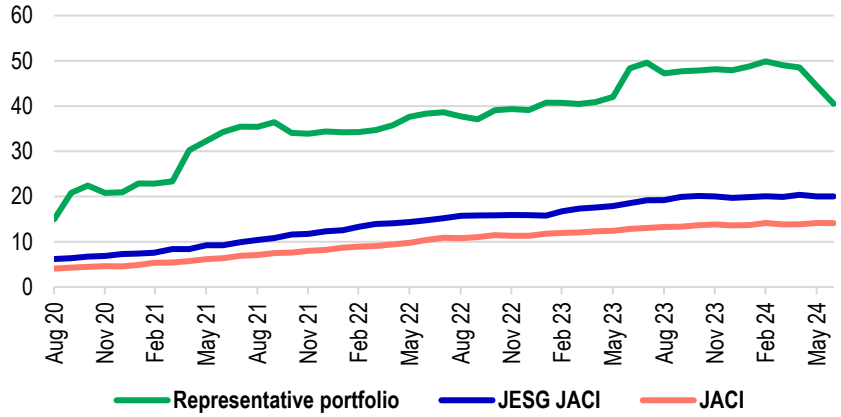
Credit

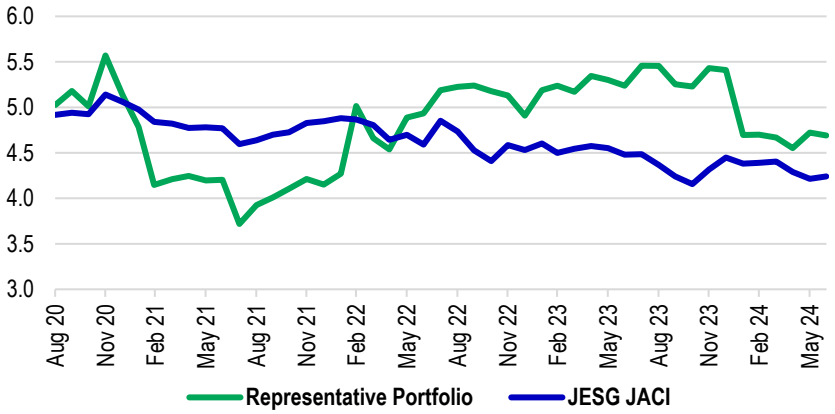
- We increased the portfolio's high yield exposure by around 3.5% as of Q2-2024 as we believe carry likely to be the main driver of returns over the medium-term.
- We maintained the portfolio's relative overweight exposure to ESG-labelled bonds as of Q2-2024 at 40.5%, compared to the benchmark's exposure of 20.0% as of Q2-2024. Notably, the portfolio participated in new primary market deals from an Asian sovereign and a Singapore financial that issued sustainable and green bonds respectively.

Rates and currencies

- We built the portfolio's overweight duration relative to the benchmark opportunistically across the quarter as yields corrected higher, moving from 4.7 vs 4.4 years as of Q1-2024 to 4.7 vs 4.2 years as of Q2-2024.
- The portfolio maintained its 1% exposure to Asia local currencies (e.g., INR, IDR) over the quarter.

Broad allocation changes by ESG-labelled bonds and duration



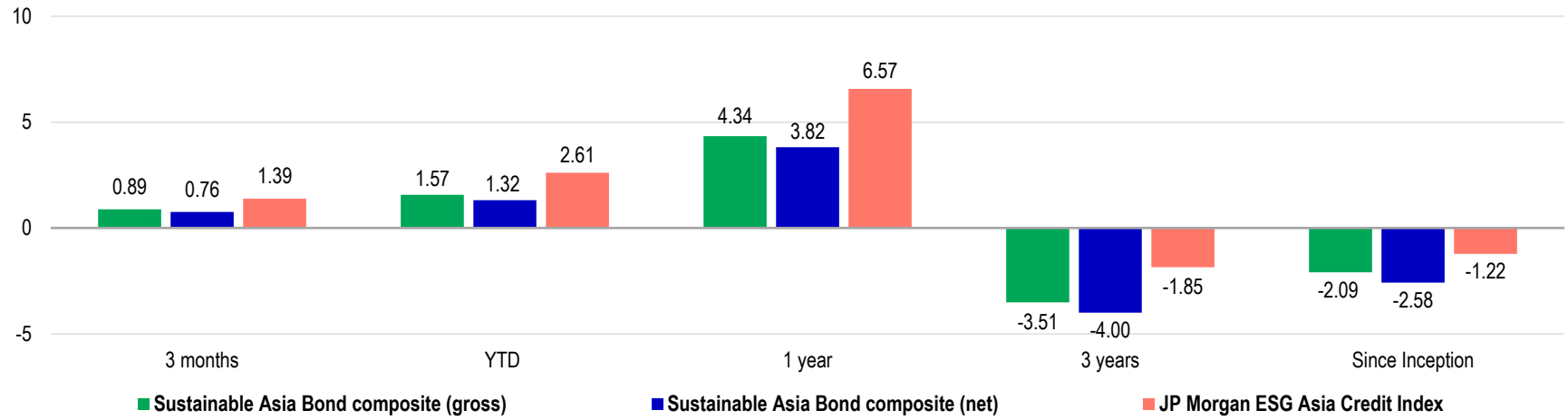


As of 30 June 2024.

Holdings, sector weightings, market capitalisation and portfolio characteristics are subject to change at any time and are for illustrative and reference purpose only. This information does not constitute, and should not be construed as, investment advice or recommendations with respect to the securities and sectors listed. This information is supplemental to the GIPS Report included as a part of this material.

Sustainable Asia Bond composite
Investment results as of June 30, 2024

Annualized returns (%)



Calendar year returns (%)

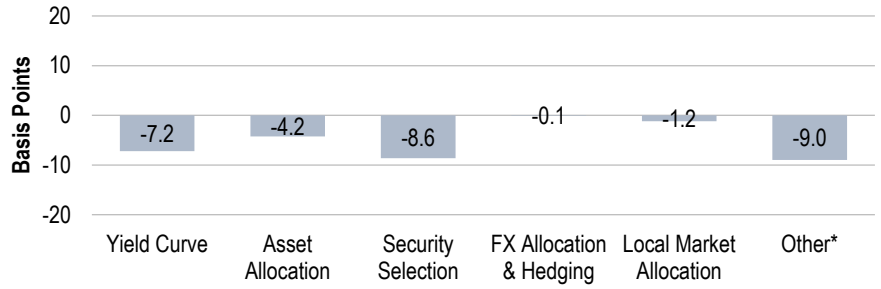
	2023	2022	2021	2020
Sustainable Asia Bond composite (gross)	4.76	-13.06	-2.65	2.41
Sustainable Asia Bond composite (net)	4.24	-13.49	-3.14	2.23
JP Morgan ESG Asia Credit Index	6.83	-11.68	-2.81	1.38
Excess return (gross)	**-2.08**	**-1.38**	**0.16**	**1.03**
Excess return (net)	**-2.60**	**-1.81**	**-0.33**	**0.86**

Composite inception date: September 1, 2020.

Past performance is not indicative of future results. Performance is shown in USD. Returns greater than one year are annualized. Gross performance results do not reflect the deduction of investment management fees, and are net of commissions and foreign withholding tax. Net performance results reflect the application of the highest incremental rate of the standard investment advisory fee schedule to gross performance results. Actual fees may vary depending on, among other things, the applicable fee schedule and portfolio size. Changes in exchange rates may have an adverse effect. This information is supplemental to the GIPS Report included as a part of this presentation.

Sustainable Asia Bond Strategy
Performance attribution Q2

Performance attribution vs. benchmark



Performance (%)	Q2
Sustainable Asia Bond Strategy (gross)	0.89
Sustainable Asia Bond Strategy (net)	0.76
Benchmark	1.39
Excess return (gross)	**-0.50**
Excess return (net)	**-0.63**

Asset allocation contribution by geographic buckets

Bucket name	Avg weight (%)		Outperf	
	Port	Bench	Alloc	Select
USD : Sri Lanka	0.0	0.6	1.9	0.0
USD : Taiwan	1.6	3.2	0.8	0.0
USD : S.Korea	15.2	16.8	0.8	0.4
USD : Australia	4.7	0.0	0.8	0.0
USD : Singapore	4.7	4.8	0.5	-6.6
USD : Macau	0.0	2.3	0.5	0.0
USD : Hong Kong	9.5	13.3	0.5	5.6
USD : Malaysia	1.2	1.6	0.1	-0.1
USD : Indonesia	12.7	13.4	-0.1	-3.3
USD : India	6.8	7.0	-0.1	-1.9
USD : Philippines	7.9	6.6	-0.4	0.1
USD : Thailand	3.8	2.3	-2.0	-1.7
USD : China	14.4	19.9	-5.9	3.4
USD : Others (including cash)	9.3	8.2	-1.7	-4.4

Main contributors (excess return)

- Portfolio's overweight in corporates and underweight in government-related issuers contributed to relative performance.
- Portfolio's allocation to SGD and INR bonds contributed to relative performance.

Main detractors (excess return)

- Portfolio's exposure to higher quality USD Singapore credit underperformed and detracted relative performance.
- Portfolio's overweight USD interest rate duration positioning detracted amid higher US Treasury yield environment.

Source: Manulife Investment Management, Bloomberg PORT system, as of 30 June 2024. Benchmark: JPMorgan ESG Asia Credit Index. *Other: notably includes intra-day, pricing differences, interest rate derivative basis.
Past performance is not indicative of future results. Performance shown of the strategy is gross of fees and does not include advisory fees and other expense an investor may incur, which when deducted will reduce terms. Changes in exchange rates may have an adverse effect. Net performance results reflect the application of the highest incremental rate of the standard investment advisory fee schedule to gross performance results.

Sustainable Asia Bond Strategy
Market outlook

Our outlook for 2024

Macro and rates

- US economy seeing softer macro data and signs of disinflation. We expect the Fed to cut rates in September. US Treasury yields offer increasingly attractive valuations; we see retracements as an opportunity to incrementally add duration to the portfolio.
- We expect economic trajectory and growth prospects in Asia, especially the Southeast Asia region, to remain strong and positive. For example, Indonesia and India 2024's GDP is expected to grow by 5.0% and 7.0% respectively.

Credit

- We see Asian investment grade credits underpinned by stable fundamentals and strong technical demand. We are also constructive on Asian high yield as they provide attractive carry and buffer against potential interest rate volatility.
- New issue pipeline provides the opportunity to build up portfolio's exposure to ESG-labelled bonds and Asian issuers that demonstrate strong sustainability attributes.

As of 30 June 2024.

For Institutional/Investment Professional Use Only. Not for distribution to the public.

Why Sustainable Asia Bond Strategy?

Why ESG in Asia?

- Fast growing asset class, potential diversification benefits for global investors and aiming for long-term sustainable performance

Why this Strategy?

- Active ESG bond portfolio leveraging on-the-ground credit research to select issuers with strong sustainable attributes and aiming to outperform traditional Asian bond peers

Why Manulife IM?

- We offer comprehensive Asia fixed income capabilities leveraging the deep local expertise of our investment professionals, supported by a dedicated ESG team based in Asia and beyond

Diversification does not guarantee a profit nor protect against loss in any market

Manulife Investment Management
Sustainable Asia Bond Composite

GIPS® Report

Creation Date: September 1, 2020 | Inception Date: September 1, 2020 | Reporting Currency: USD

Schedule of Calendar Year Returns and Assets

Year End	Gross of Fees Return (%)	Net of Fees Return (%)	Benchmark Return (%)	Composite Net 3-Yr Std. Dev. (%)	Benchmark 3-Yr Std. Dev. (%)	Number of Portfolios End of Period	Composite Dispersion (%)	Total Assets End of Period (Millions)	Firm Assets End of Period (Millions)
2023	4.76	4.24	6.83	7.66	6.77	<=5	N/A	105	486,485
2022	-13.06	-13.49	-11.68	N/A	N/A	<=5	N/A	86	422,291
2021	-2.65	-3.14	-2.81	N/A	N/A	<=5	N/A	101	455,705
Partial 2020	2.41	2.23	1.38	N/A	N/A	<=5	N/A	75	421,097

Schedule of Year End Returns

Date	Return	1 Year Gross (%)	5 Year Gross (%)	10 Year Gross (%)	SI Gross (%)	1 Year Net (%)	5 Year Net (%)	10 Year Net (%)	SI Net (%)
12/31/23	Composite	4.76	N/A	N/A	-2.85	4.24	N/A	N/A	-3.34

Date	Return	1 Year	5 Year	10 Year	SI
12/31/23	Benchmark	6.83	N/A	N/A	-2.16

Firm Definition: For purposes of compliance with the Global Investment Performance Standards (GIPS®), our firm Manulife Investment Management "Manulife IM" was created on January 1, 2018, as a result of a consolidation of six regional firms that claimed compliance with GIPS®. Effective January 1, 2021, the firm includes assets managed under contract by Manulife Investment Management Private Markets (US) LLC ("Manulife IM PM US") and the unaffiliated managers SMA/Wrap business from John Hancock Investment Management LLC, a Manulife IM company. Effective January 1, 2023, the firm includes assets managed by Manulife Investment Management Timberland and Agriculture Inc ("MIMTA"). Effective June 30, 2024, the firm includes CQS, wholly owned by Manulife Investment Management (Europe) Limited acquired April 2, 2024.

Compliance Statement: Manulife claims compliance with the Global investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Manulife has been independently verified for the periods 1/1/2018 through 12/31/2023. The verification report(s) is/are available upon request. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report. Compliance with the GIPS® Standards for the predecessor firms were verified by a third party for the periods noted: MAM US 1/1/1993 to 12/31/2017, MAM UK 1/1/2008 to 12/31/2017, MAMJ 1/1/2006 to 12/31/2017, MAM HK 1/1/2006 to 12/31/2017, MAMS 6/5/2007 to 12/31/2017, MAML 1/1/2007 to 12/31/2017, MIM AG 1/1/2005 to 12/31/2022, MIM T 1/1/2004 to 12/31/2022 and MIMTA 1/1/2018 to 12/31/2022. GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

General Disclosure: A complete list of the Firm's composite and pooled funds descriptions as well as policies regarding valuing investments, calculating performance, and preparing GIPS reports are available upon request. All returns reflect the reinvestment of dividends and other earnings. Gross performance results do not reflect the deduction of investment management fees, and are net of commissions and foreign withholding tax. Net performance results reflect the application of the highest incremental rate of the standard investment advisory fee schedule to gross performance results. Actual fees may vary depending on, among other things, the applicable fee schedule and portfolio size. Advisory fees are available upon request. Dispersion of annual returns is measured by an equal weighted standard deviation calculation of gross of fee returns. From inception to December 31, 2019 dispersion was measured by an asset weighted standard deviation calculation of gross of fee returns. Dispersion is not presented when there are five or fewer accounts in the composite for the entire year. Past performance is not a guarantee of future results. For annual periods starting January 1, 2011, the 3-year annualized ex-post standard deviation is not shown for the composite or the benchmark when 36 monthly composite returns are not available. The 3-year standard deviation for composite returns is calculated using composite net returns.

Composite Description: The Sustainable Asia Bond strategy aims to maximize total returns from a combination of income generation and potential capital appreciation by investing primarily in a portfolio of fixed income securities issued by governments, agencies, supranational and corporations in Asia (which shall include Australia and New Zealand), with the issuers and/or the securities demonstrating strong environmental and/or social sustainability attributes and/or enabling sustainable practices. From inception to August 31, 2023 the Sustainable Asia Bond strategy aims to maximize total returns from a combination of income generation and potential capital appreciation by investing primarily in a portfolio of fixed income securities issued by governments, agencies, supranational and corporations in Asia (which shall include Australia and New Zealand).

Fee Schedule: This report is intended for institutional investors and the standard investment advisory fee schedule is 0.50% on the first $50 million; 0.40% on the next $50 million and 0.30% thereafter.

Benchmark Description: The J.P. Morgan ESG Asia Credit Index (JESG JACI) tracks the total return performance of the Asia ex-Japan U.S. dollar-denominated debt instruments across the Asian fixed income asset class. The index applies an environmental, social, and governance (ESG) scoring and screening methodology to tilt toward green bond issues. It is not possible to invest directly in an index.

Notice to Investors

BAHRAIN

The making available of this document is not intended to constitute, and should not be construed as amounting to, the conduct of a regulated investment service (as defined in volume 4 of the Rulebook issued by the Central Bank of Bahrain) within or from the Kingdom of Bahrain. All services described in this document are to be performed outside of Bahrain. This document has not been filed with or reviewed by the Central Bank of Bahrain, the Bahrain Bourse or the Ministry of Industry and Commerce of the Kingdom of Bahrain and accordingly those institutions take no responsibility for the accuracy of the statements and information contained in this document, nor shall they have any liability to any person for any loss or damage resulting from reliance on any statements or information contained herein.

KUWAIT

These confidential materials are not for general circulation to the public in Kuwait. Interests in any investment opportunities detailed are for information purposes only and have not been licensed for offering in Kuwait by the Capital Markets Authority, the Kuwait Central Bank or any other relevant Kuwaiti governmental agency. The offering of interests in any funds in Kuwait on the basis of a private placement or public offering is, therefore, restricted in accordance with Law No. 7 of 2010 and the bylaws thereto (as amended). No private or public offering of any investment opportunities detailed is being made in Kuwait, and no agreement relating to the entering into of any related agreement will be concluded in Kuwait. No marketing or solicitation or inducement activities are being used to offer or market interests in any funds in Kuwait.

OMAN

The information contained in this document neither constitutes a public offer of securities in the Sultanate of Oman as contemplated by the Commercial Companies Law of Oman (Sultani Decree 4/74) or the Capital Market Law of Oman (Sultani Decree 80/98), nor does it constitute an offer to sell, or the solicitation of any offer to buy Non-Omani securities in the Sultanate of Oman as contemplated by Article 139 of the Executive Regulations to the Capital Market Law (issued vide CMA Decision 1/2009). Additionally, this document is not intended to lead to the conclusion of any contract of whatsoever nature within the territory of the Sultanate of Oman. The Investor represents that he/she is a sophisticated investor (as described in Article 139 of the Executive Regulations of the Capital Market Law) and has such experience in business and financial matters that he/ she is capable of evaluating the merits and risks of an investment in securities. The investor acknowledges that an investment in securities is speculative and involves a high degree of risk.

QATAR

This document is provided on an exclusive basis to the specifically intended recipient thereof, upon that person's request and initiative, and for the recipient's personal use only.

Nothing in this document constitutes, is intended to constitute, shall be treated as constituting or shall be deemed to constitute, any offer or sale of securities in the State of Qatar or in the Qatar Financial Centre or the inward marketing of securities or an attempt to do business, as a bank, an investment company or otherwise in the State of Qatar or in the Qatar Financial Centre other than in compliance with any laws applicable in the State of Qatar or in the Qatar Financial Centre governing the issue, offering and sale of securities. This document and the underlying instruments have not been approved, registered or licensed by the Qatar Central Bank, the Qatar Financial Centres Regulatory Authority, the Qatar Financial Markets Authority or any other regulator in the State of Qatar.

Recourse against Manulife Asset Management and those involved with it, may be limited or difficult and may have to be pursued in a jurisdiction outside Qatar and the Qatar Financial Centre.

This document and any related documents have not been reviewed or approved by the Qatar Financial Centre's Regulatory Authority or the Qatar Central Bank. Any distribution of this document by the recipient to third parties in Qatar or the Qatar Financial Centre beyond the terms hereof is not authorised and shall be the liability of such recipient.

THE KINGDOM OF SAUDI ARABIA (THE "KINGDOM")

This document is not for general circulation to the public in the Kingdom and may not be distributed except to such persons as would be permitted under the Offers of Securities Regulations issued by the Capital Market Authority. Interests in any investment opportunities detailed are for information purposes only and have not been licensed for offering in the Kingdom by the Capital Markets Authority or any other relevant agency and the Capital Market Authority does not make any representation as to the accuracy or completeness of this document, and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. All persons receiving this document should conduct their own due diligence in the accuracy of the information relating to the investment opportunities detailed herein. No private or public offering of any investment opportunities detailed are being made in the Kingdom by virtue of this document, and no agreement relating to the entering into of any related agreement will be concluded in the Kingdom. No marketing or solicitation or inducement activities are being used to offer or market interests in any funds in the Kingdom. If you do not understand the contents of this document you should consult an authorised financial advisor.

UNITED ARAB EMIRATES

This presentation has not been approved or licensed by the UAE Central Bank, the UAE Securities and Commodities Authority (SCA), the Dubai Financial Services Authority (DFSA) or any other relevant licensing authorities in the UAE, and does not constitute a public offer of securities in the UAE in accordance with the commercial companies law, Federal Law No. 8 of 1984 (as amended), SCA Resolution No.(37) of 2012 (as amended) or otherwise.

This presentation is strictly private and confidential and is being issued to a limited number of institutional and individual investors who qualify as sophisticated investors and must not be provided to any person other than the original recipient, and may not be reproduced or used for any other purpose.

Investment Considerations

General Risks
Any characteristics, guidelines, constraints, or other information provided for this material was selected by the firm as representative of the investment strategy and is provided for illustrative purpose only, may change at any time, and may differ for a specific account. Each client account is individually managed; actual holdings will vary for each client and there is no guarantee that a particular client's account will have the same characteristics as described herein. Any information about the holdings, asset allocation, or sector diversification is historical and is not an indication of future performance or any future portfolio composition, which will vary. Portfolio holdings are representative of the strategy, are subject to change at any time, are not a recommendation to buy or sell a security, and do not represent all of the securities purchased, sold or recommended for the portfolio. It should not be assumed that an investment in these securities was or will be profitable. Top ten holdings information combines share listings from the same issuer, and related depositary receipts, into a singular holding to accurately present aggregate economic interest in the referenced company.

No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment. Diversification or asset allocation does not guarantee a profit or protect against the risk of a loss in any market. The indices referenced herein are broad-based securities market indices and used for illustrative purposes only. The indices cited are widely accepted benchmarks for investment performance within their relevant regions, sectors or asset classes, and represent non-managed investment portfolios.

If derivatives are employed, note that investing in derivative instruments involves risks different from, or possibly greater than, the risks associated with investing directly in securities and other traditional investments and, in a down market, could become harder to value or sell at a fair price.

GIPS Performance
Unless otherwise noted, all performance represents composite data. Gross of fees returns do not include advisory fees and other expenses an investor may incur, which when deducted will reduce returns. Changes in exchange rates may have an adverse effect. Actual fees may vary depending on, among other things, the applicable fee schedule, portfolio size and/or investment management agreement. Unless otherwise noted, returns greater than 1 year are annualized; calendar year returns for each one-year period end in December. Discrepancies may occur due to rounding. Past performance does not guarantee future results.

Performance information shown is generally for discretionary strategies/solutions and managed by a Manulife entity which is GIPS compliant and falls under the definition of a corresponding Manulife GIPS firm. Some investment strategies/solutions may not be included in a GIPS compliant firm under certain circumstances, such as SMA/UMA business in Canada.

Asset class risks
Principal risk factors that have an impact on the performance of our equity strategies include risks arising from economic and market events, portfolio turnover rates, governmental regulations, local, national and international political events, volatility in the commodities and equity markets, and changes in interest rates and currency values as well as environmental, social and corporate governance factors.

The principal risks associated with investing in a fixed income investment strategy include economic and market events, government regulations, geopolitical events, credit risk, interest rate risk, and risks associated with credit ratings, counterparties, foreign securities, currency exchange, hedging, derivatives and other strategic transactions, high portfolio turnover, liquidity, mortgage-backed and asset-backed securities, call or prepayment risk, and issuer stability along with environmental, social and corporate governance risk factors. The market value of fixed income securities will fluctuate in response to changes in interest rates, currency values and the credit worthiness of the issuer.

Principal risk factors that impact upon the performance of our asset allocation strategies include all the risks associated with the underlying funds and asset classes in which they are invested, in addition to overall asset allocation investment decisions. In addition, the underlying funds' performance may be lower than expected.

Information about SFDR
Unless otherwise noted, any references in this presentation to ESG or sustainability reflect the general approach of Manulife Investment Management to integrating sustainability risk considerations into our investment decision-making processes. Further details on Manulife Investment Management's general approach to sustainability are available at www.manulifeim.com/institutional /global/en/sustainability.

The source for all information shown is Manulife Investment Management, unless otherwise noted.

ESG Integration and Engagement
Any ESG-related case studies shown here are for illustrative purposes only, do not represent all of the investments made, sold, or recommended for client accounts, and should not be considered an indication of the ESG integration, performance, or characteristics of any current or future Manulife Investment Management product or investment strategy.

Manulife Investment Management conducts ESG engagements with issuers but does not engage on all issues, or with all issuers, in our portfolios. We also frequently conduct collaborative engagements in which we do not set the terms of engagement but lend our support in order to achieve a desired outcome. Where we own and operate physical assets, we seek to weave sustainability into our operational strategies and execution. The relevant case studies shown are illustrative of different types of engagements across our in-house investment teams, asset classes and geographies in which we operate. While we conduct outcome-based engagements to enhance long term-financial value for our clients, we recognize that our engagements may not necessarily result in outcomes which are significant or quantifiable. In addition, we acknowledge that any observed outcomes may be attributable to factors and influences independent of our engagement activities.

We consider that the integration of sustainability risks in the decision-making process is an important element in determining long-term performance outcomes and is an effective risk mitigation technique. Our approach to sustainability provides a flexible framework that supports implementation across different asset classes and investment teams. While we believe that sustainable investing will lead to better long-term investment outcomes, there is no guarantee that sustainable investing will ensure better returns in the longer term. In particular, by limiting the range of investable assets through the exclusionary framework, positive screening and thematic investment, we may forego the opportunity to invest in an investment which we otherwise believe likely to outperform over time. Please see our ESG policies for details.

Important Information

© 2024 Manulife Investment Management. All rights reserved. Manulife, Manulife Investment Management, Stylized M Design, and Manulife Investment Management & Stylized M Design are trademarks of The Manufacturers Life Insurance Company and are used by it, and by its affiliates under license.

This information is for the exclusive use of the intended institutional investors or their agents and may not be transmitted, reproduced or used in whole or in part for any other purpose, nor may it be disclosed or made available, directly or indirectly, in whole or in part, to any other person without our prior written consent.

About Manulife Investment Management

Manulife Investment Management is the brand for the global wealth and asset management segment of Manulife Financial Corporation. Our mission is to make decisions easier and lives better by empowering investors for a better tomorrow. Serving more than 17 million individuals, institutions, and retirement plan members, we believe our global reach, complementary businesses, and the strength of our parent company position us to help investors capitalize on today's emerging global trends. We provide our clients access to public and private investment solutions across equities, fixed income, multi-asset, alternative, and sustainability-linked strategies, such as natural capital, to help them make more informed financial decisions and achieve their investment objectives. Not all offerings are available in all jurisdictions. For additional information, please visit manulifeim.com.

This material has not been reviewed by, is not registered with any securities or other regulatory authority, and may, where appropriate, be distributed by the following Manulife entities in their respective jurisdictions. Additional information about Manulife Investment Management may be found at manulifeim.com/institutional

Australia: Manulife Investment Management Timberland and Agriculture (Australasia) Pty Ltd, Manulife Investment Management (Hong Kong) Limited. **Canada:** Manulife Investment Management Limited, Manulife Investment Management Distributors Inc., Manulife Investment Management (North America) Limited, Manulife Investment Management Private Markets (Canada) Corp. **Mainland China**: Manulife Overseas Investment Fund Management (Shanghai) Limited Company. **European Economic Area:** Manulife Investment Management (Ireland) Ltd. which is authorised and regulated by the Central Bank of Ireland **Hong Kong:** Manulife Investment Management (Hong Kong) Limited. **Indonesia:** PT Manulife Aset Manajemen Indonesia. **Japan:** Manulife Investment Management (Japan) Limited. **Malaysia:** Manulife Investment Management (M) Berhad 200801033087 (834424-U) **Philippines**: Manulife Investment Management and Trust Corporation. **Singapore:** Manulife Investment Management (Singapore) Pte. Ltd. (Company Registration No. 200709952G) **South Korea:** Manulife Investment Management (Hong Kong) Limited. **Switzerland:** Manulife IM (Switzerland) LLC. **Taiwan:** Manulife Investment Management (Taiwan) Co. Ltd. **United Kingdom:** Manulife Investment Management (Europe) Ltd**.** which is authorised and regulated by the Financial Conduct Authority **United States:** John Hancock Investment Management LLC, Manulife Investment Management (US) LLC, Manulife Investment Management Private Markets (US) LLC and Manulife Investment Management Timberland and Agriculture Inc. **Vietnam:** Manulife Investment Fund Management (Vietnam) Company Limited.

No Manulife entity makes any representation that the contents of this presentation are appropriate for use in all locations, or that the transactions, securities, products, instruments or services discussed in this presentation are available or appropriate for sale or use in all jurisdictions or countries, or by all investors or counterparties. All recipients of this presentation are responsible for compliance with applicable laws and regulations.

This material is intended for the exclusive use of recipients in jurisdictions who are allowed to receive this information under their applicable law. The opinions expressed are those of the author(s) and are subject to change without notice. Our investment teams may hold different views and make different investment decisions. These opinions may not necessarily reflect the views of Manulife Investment Management or its affiliates There can be no assurance that actual outcomes will match the assumptions or that actual returns will match any expected returns. The information and/or analysis contained in this material has been compiled or arrived at from sources believed to be reliable, but Manulife Investment Management does not make any representation as to their accuracy, correctness, usefulness or completeness and does not accept liability for any loss arising from the use of the information and/or analysis contained here. Neither Manulife Investment Management or its affiliates, nor any of their directors, officers or employees shall assume any liability or responsibility for any direct or indirect loss or damage or any other consequence of any person acting or not acting in reliance on the information contained here.

The information in this material may contain projections or other forward-looking statements regarding future events, targets, management discipline or other expectations, and is only current as of the date indicated. The information in this material including statements concerning financial market trends, are based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons. This material was prepared solely for informational purposes and does not constitute, and is not intended to constitute, a recommendation, professional advice, an offer, solicitation or an invitation by or on behalf of Manulife Investment Management or its affiliates to any person to buy or sell any security or to adopt any investment strategy, and shall not form the basis of, nor may it accompany nor form part of, any right or contract to buy or sell any security or to adopt any investment strategy. Nothing in this material constitutes investment, legal, accounting, tax or other advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. Neither Manulife Investment Management nor its affiliates provide legal or tax advice, and you are encouraged to consult your own lawyer, accountant, or other advisor before making any financial decision. Prospective investors should take appropriate professional advice before making any investment decision. In all cases where historical performance is presented, note that past performance does not guarantee future results and you should not rely on it as the basis for making an investment decision.

Important Information (continued)

The distribution of the information contained in this presentation may be restricted by law and persons who access it are required to comply with any such restrictions. The contents of this presentation are not intended for distribution to, or use by, any person or entity in any jurisdiction or country in which such distribution or use would be contrary to any applicable laws or regulations. By accepting this material, you confirm that you are aware of the laws in your own jurisdiction relating to the provision and sale of the funds, portfolios or other investments discussed in this presentation and you warrant and represent that you will not pass on or use the information contained in this presentation in a manner that could constitute a breach of such laws by any Manulife entity or any other person.

Australia: Manulife Investment Management (Hong Kong) Limited (Manulife IM (HK)) is exempt from the requirement to hold an Australian financial services license under the Corporations Act in respect to the financial services being offered in this material. Manulife IM (HK) is regulated by the Securities and Futures Commission of Hong Kong ("SFC") under Hong Kong laws, which differ from Australian laws. This presentation is directed at wholesale investors only.

Mainland China: This material is prepared solely for informational purposes and does not constitute an offer to sell or the solicitation of an offer to buy any securities in Mainland China to any person to whom it is unlawful to make the offer or solicitation in Mainland China. The securities may not be offered, sold or delivered, or offered or sold or delivered to any person for reoffering or resale or redelivery, in any such case directly or indirectly, in Mainland China in contravention of any applicable laws.

The issuer does not represent that this material may be lawfully distributed, or that any securities may be lawfully offered, in compliance with any applicable registration or other requirements in Mainland China, or pursuant to an exemption available thereunder, or assume any responsibility for facilitating any such distribution or offering. In particular, no action has been taken by the issuer which would permit a public offering of any securities or distribution of this material in Mainland China. Accordingly, the securities are not being offered or sold within Mainland China by means of this material or any other document. Neither this material nor any advertisement or other offering material may be distributed or published in Mainland China, except under circumstances that will result in compliance with any applicable laws and regulations.

Further, neither this material nor any funds/strategies mentioned in this material (if any) has been submitted to or approved by the China Securities Regulatory Commission or other relevant Chinese government authorities (which, for the purposes of this paragraph, does not include the authorities in Hong Kong SAR, Macau SAR or Taiwan Region), unless otherwise expressly indicated. Securities denominated in foreign exchange or with the underlying investments in the offshore markets may only be offered or sold to investors of Mainland China that are authorized and qualified to buy and sell such securities. Prospective investors resident in Mainland China are responsible for obtaining all relevant and necessary approvals from the Chinese government authorities, including but not limited to the State Administration of Foreign Exchange (if needed), before investing.

Hong Kong: This material is provided to Professional Investors, as defined in the Hong Kong Securities and Futures Ordinance and the Securities and Futures (Professional Investor) Rules, in Hong Kong only. It is not intended for and should not be distributed to, or relied upon, by members of the public or retail investors.

Malaysia: This material was prepared solely for informational purposes and is not an offer or solicitation by anyone in any jurisdictions or to any person to whom it is unlawful to make such an offer or solicitation.

Singapore: This material is intended for Accredited Investors and Institutional Investors as defined in the Securities and Futures Act.

South Korea: This material is intended for Qualified Professional Investors under the Financial Investment Services and Capital Market Act ("FSCMA"). Manulife Investment Management does not make any representation with respect to the eligibility of any recipient of these materials to acquire any interest in any security under the laws of Korea, including, without limitation, the Foreign Exchange Transaction Act and Regulations thereunder. An interest may not be offered, sold or delivered directly or indirectly, or offered, sold or delivered to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea, except in compliance with the FSCMA and any other applicable laws and regulations. The term “resident of Korea” means any natural person having his place of domicile or residence in Korea, or any corporation or other entity organized under the laws of Korea or having its main office in Korea.

Switzerland: This material is intended for Professional Clients, including Institutional Clients, as defined in the Federal Financial Services Act ("FinSA") and its implementing ordinance, at the exclusion of Professional Clients with an opting-out pursuant to Art. 5 (1) FinSA ("Opting-Out Clients"), and/or Qualified Investors pursuant to the Federal Collective Investment Schemes Act ("CISA") and its implementing ordinances, at the exclusion of Opting-Out Clients and Managed/Advisory Retail Clients pursuant to Art. 10 (3ter) CISA where relevant. The information provided in this material is for information purpose only and does not constitute an offer, a solicitation or a recommendation to contract a financial instrument or a financial service as defined under FinSA. This material does not constitute an implicit or explicit investment advice. The information provided herein is general in nature and does not constitute an advertisement of financial products in Switzerland pursuant to FinSA and its implementing ordinance.

United Kingdom: This communication is directed only at investment professionals and any investment or investment activity to which it relates is available only to such persons.

European Economic Area The data and information presented is directed solely at persons who are Professional Investors in accordance with the Markets in Financial Instruments Directive (2004/39/EC) as transposed into the relevant jurisdiction. Further, the information and data presented does not constitute, and is not intended to constitute, "marketing" as defined in the Alternative Investment Fund Managers Directive.

United States: Manulife Investment Management (US) LLC (Manulife IM US) and Manulife Investment Management (North America) Limited (Manulife IM NA) are indirect wholly owned subsidiaries of Manulife. John Hancock Investment Management LLC and Manulife Investment Management (US) LLC are affiliated SEC-registered investment advisors using the brand name John Hancock Investment Management. This material is not intended to be, nor shall it be interpreted or construed as, a recommendation or providing advice, impartial or otherwise.