

October 20, 2020

ONE Investment

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

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Manulife Investment Management

Part of a leading global financial services group

Manulife

Protecting
customer assets
since **1887**

35,000 employees
serving **30** million
customers worldwide

\$1.2T in assets
under management
and administration

- Global wealth and asset management
- Financial advice
- Insurance

Manulife Investment Management

- Institutional asset management
- Retirement
- Retail investments

1,000+
institutional
accounts

\$900B in assets
under management
and administration

13 Million retirement
plan participants and
investor accounts

230,787
retirement plans
served globally

Source: MFC Statistical Information Package. Manulife Investment Management is the unified global brand for Manulife's global wealth and asset management business, which serves individual investors and institutional clients in three businesses: retirement, retail and institutional asset management (public and private markets). Global Wealth and Asset Management AUMA at June 30, 2020 which includes \$203.2 billion of assets managed on behalf of other segments and \$149.5B of assets under administration. Assets shown in Canadian Dollars.

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A passion for providing solutions

Backed by the full resources of a leading global financial institution

Fixed income

Diverse strategies built on centralized research, autonomous teams, and a heritage of risk management.

140+
investment
professionals

10
teams around
the globe

\$248.5B
in assets under
management¹

Multi-asset solutions

Active allocation, deeper diversification, and tailored solutions built over 25 years of multi-asset innovation.

50+
investment
professionals

25+
Years of multi-
asset investing

\$185.4B
in assets under
management²

Alpha-focused equity

Customizable, differentiated strategies pursuing specialized and durable sources of alpha.

140+
investment
professionals

10
teams around
the globe

\$115.3B
in assets under
management³

Private markets

Capitalizing on inefficient markets, diversification potential, and seeking attractive risk-adjusted returns.

280+
investment
professionals

95+
Years of
experience⁴

\$148.9B
in assets under
management and
administration⁵

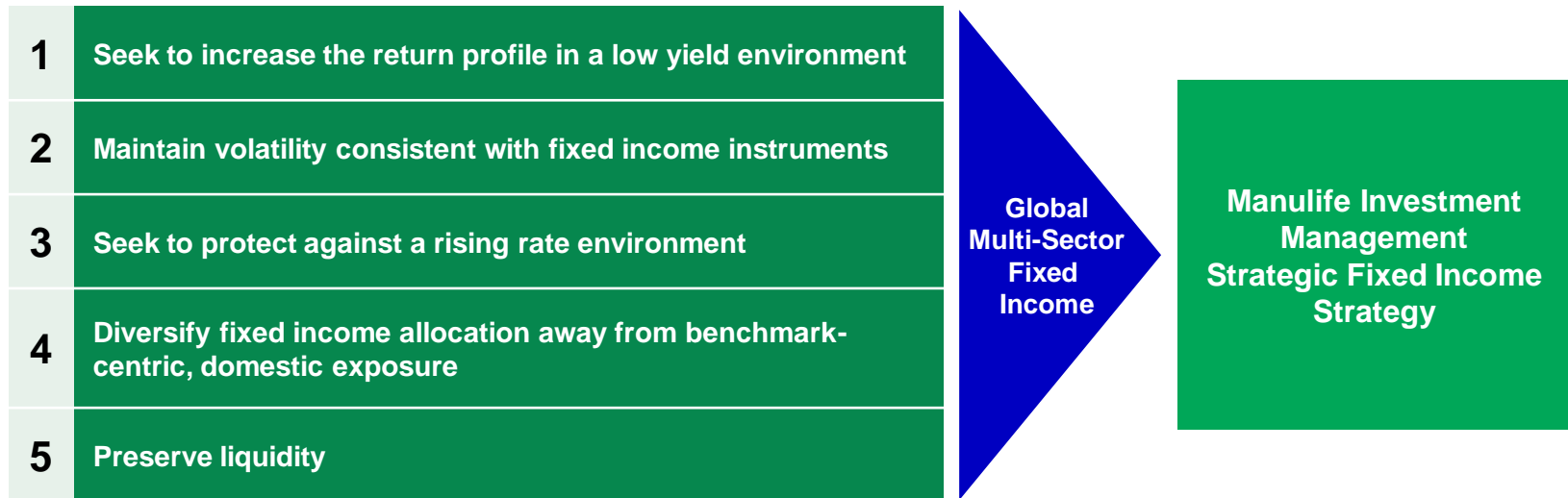
Source: Manulife Financial Corporation as of June 30, 2020. Excludes subadvised AUM. Assets shown in Canadian Dollars. ¹ AUM includes money market, index bonds and absolute return rates assets and excludes liability driven investing (LDI) assets; includes certain equity and fixed income portions of balanced investments. The methodologies used to compile the total assets under management are subject to change. ² AUM includes all asset allocation, index and liability driven investing (LDI) assets; \$51.5B is invested into other Manulife IM strategies outside MAST. ³ AUM includes certain equity and fixed income portions of balanced investments. The methodologies used to compile the total assets under management are subject to change. ⁴ Includes significant experience investing on behalf of the Manulife general account. ⁵ AUM information, on a fair value basis, represents real estate equity and debt, infrastructure, private equity and credit, private placements, oil and gas, timber and agriculture assets managed by Manulife IM on behalf of the Manulife General Account, \$28.7B for external clients, and \$430M of unfunded committed capital of Manulife IM Private Markets (US) LLC. The methodologies used to compile the total assets under management are subject to change and may not reflect regulatory AUM as reported on certain affiliates' Form ADV.

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Global Multi-Sector Fixed Income

A Response to Challenging Fixed Income Markets

Typical Plan Sponsor Fixed Income Investment Objectives



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Global Multi-Sector Fixed Income Team

Roles and Experience

Daniel S. Janis, III – Head and Senior Portfolio Manager (36 Years' Experience – Boston)

Boston

Thomas C. Goggins
Senior Portfolio Manager
33 Years' Experience

Charles Tomes
Associate Portfolio Manager
12 Years' Experience

Peter Azzinaro
Global Macro Strategist
28 Years' Experience

Joseph Rothwell, CFA
Senior Investment Analyst
12 Years' Experience

David Zielinski, CFA
Client Portfolio Manager
24 Years' Experience

London

Christopher Chapman, CFA
Portfolio Manager
21 Years' Experience

Hong Kong

Kisoo Park
Senior Portfolio Manager
34 Years' Experience

Global Multi-Sector Portfolio Implementation – Boston

Christopher Camell
Senior Portfolio Analyst

Christopher Smith, CFA, CAIA
Senior Portfolio Analyst

Andrew Moylan, CFA
Portfolio Analyst

Additional Resources

Credit & Securitized Asset Research

Financial Services:
Donald Tucker, CFA – Head of US FI Research

Tech/Media/Telecom/Consumer:
Spencer Godfrey, CFA (Team Leader)

Industrial/Utilities/Energy:
Pranay Sonalkar (Team Leader)

Emerging Markets:
Richard Segal (Team Leader)

Securitized Asset Research:
William Paolino (Team Leader)

Additional Credit Research: 15 Analysts

Trading

Jason Fromer
Head of US FICC Trading
11 Traders (trade by sector specialty)

Macroeconomic and Strategy

Frances Donald
Global Chief Economist & Head of Global Macroeconomic Strategy
5 Macroeconomic Strategists

Asia Team (Investment Professionals in 10 Markets)

China, Hong Kong, Indonesia, Japan, Malaysia, Philippines,
Taiwan, Thailand, Vietnam, Singapore

Investment Risk & Quantitative Analytics and ESG Research & Integration

Peter Mennie, ASIP
Global Head
10 Quantitative Analysts
7 ESG Analysts

Client Portfolio Managers

Richard Baker
Dylan Ngai, CFA

As of June 30, 2020

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Strategic Fixed Income Strategy

Investment Philosophy & Process

Philosophy

We believe strong, consistent returns can be generated by investing primarily in a portfolio of global government, corporate and securitized debt, including emerging markets and high yield securities. Currency management is employed to further diversify the portfolio, mitigate risk and add value. By expanding the investment universe to include multiple sectors and currencies, we believe we increase our potential to add value while reducing risk.

Process

- Consistent adherence to disciplined investment style and process which utilizes diverse sources of alpha



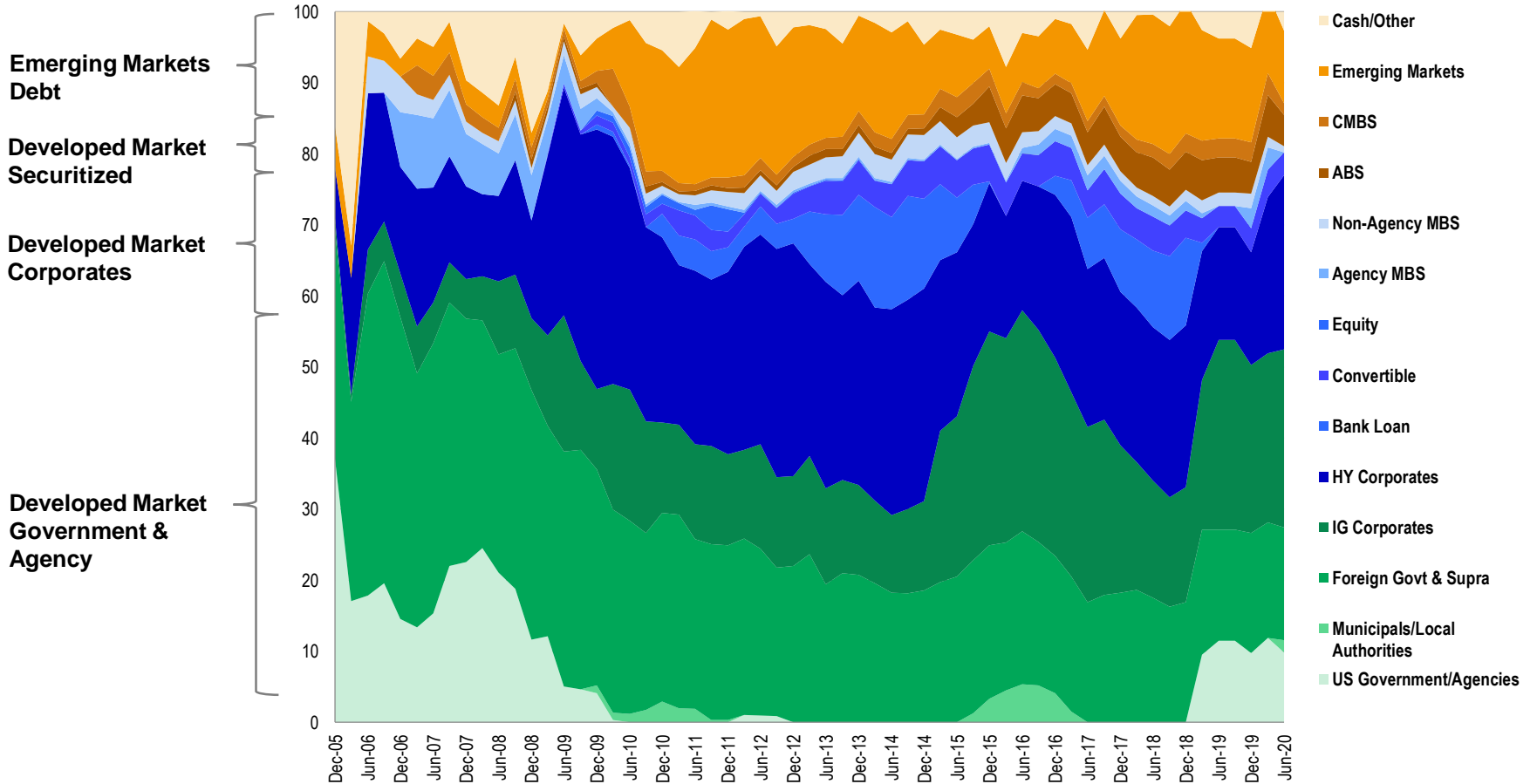
- Using a comprehensive investment process, we seek to:
 - Invest in attractive sectors based on our top-down view of macro economic conditions
 - Engage in an intensive bottom-up research process to identify relative value opportunities within those sectors
 - Make opportunistic currency investments to add value and further diversify our portfolio position

For illustrative purposes only.

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Strategic Fixed Income Strategy

Dynamic Sector Allocation



As of June 30, 2020

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Strategic Fixed Income Strategy

Multi-Dimensional Risk Management

Investment Philosophy

- Conduct Top-Down Macroeconomic Analysis
- Identify Attractive Sectors
- Conduct Fundamental Analysis
- Portfolio Construction & Risk Management

Senior Management Oversight

- Identify and monitor risks
- Operational risk oversight
- Operating Committee
- Derivative usage and counterparty selection policies



Compliance Monitoring

- Bloomberg
- Pre-trade compliance
- Over-night compliance
- Investigation, documentation and resolution of violations

Guideline

Limit

Average Quality Min	Investment Grade
Industry Max	25%
Single Foreign Gov't Max	25%
Average Holding Size	0.5–1.5% Greater diversification for lower quality bonds

Risk Management

- Dedicated risk management team
- Daily reporting
- Volatility forecasts
- Tracking error decomposition
- Value at Risk (VaR)
- Scenario analysis/stress testing
- ESG exposure analysis

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Portfolio Structure & Performance

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Strategic Fixed Income Strategy

Characteristics as of August 31, 2020

Characteristic	Strategic Fixed Income (C\$) Strategy	Bloomberg Barclays Multiverse Index
Average Rating	BAA1	A1
Average Coupon (%)	3.73	2.74
Average Life (Years)	4.88	8.80
Yield to Maturity (%)	2.10	1.16
Yield to Worst (%)	1.89	1.14
Effective Duration (Years)	3.52	7.14

Top Ten Issuers	Portfolio Weight (%)
United States Treasury Note/Bond	8.61
Indonesia Treasury Bond	2.65
US Bancorp	1.97
HCA	1.54
1011778 BC ULC / New Red Finance	1.43
CSC Holdings LLC	1.39
Post Holdings	1.37
Ball Corp	1.36
Singapore Government Bond	1.21
Bausch Health Cos	1.17
Total	22.70

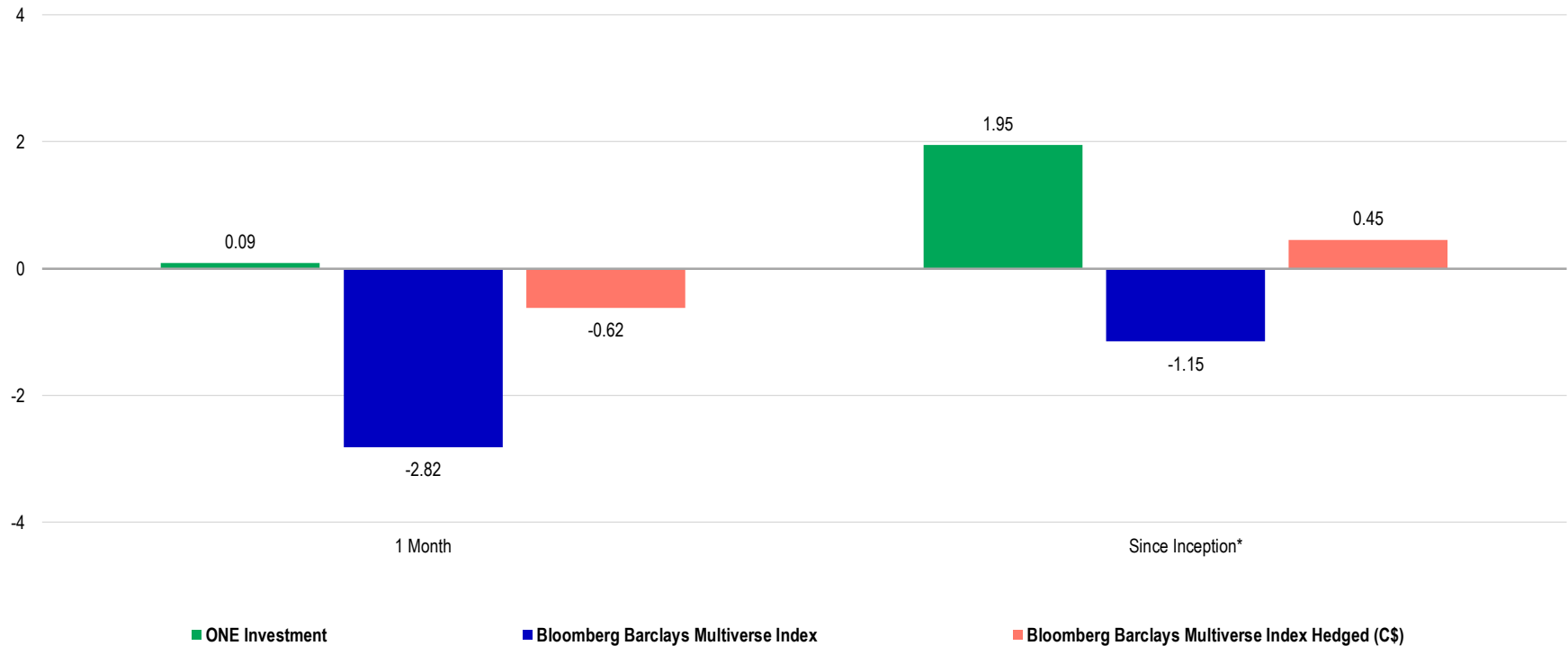
In CAD

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Sector Allocation (%)	Strategic Fixed Income (C\$) Strategy	Bloomberg Barclays Multiverse Index
US Government	10.58	14.23
US Treasuries	9.11	13.39
US Agency	0.00	0.57
Municipal	1.46	0.26
Credit	50.82	20.53
IG Corporates	23.47	17.62
HY Corporates	24.15	2.90
Bank Loans	0.00	0.00
Convertibles	3.21	0.00
Equities	0.00	0.00
Securitized	6.02	12.85
Agency MBS	0.00	9.68
Non-Agency MBS	0.61	0.00
ABS	3.99	2.36
CMBS	1.42	0.82
Non-US Developed	15.57	39.35
Govt & Agency	13.67	37.41
Supranational	1.91	1.95
Emerging Markets	10.73	13.04
Emerging Markets — USD	4.49	3.55
Emerging Markets — Non USD	4.79	9.49
Cash/Other	6.28	0.00

One Investment Results as of August 31, 2020

Annualized Returns (%)



Source: Manulife Investment Management

*Since Inception Date: July 7, 2020

See page 21 for important information regarding this page.

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Appendix

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Biographies

Daniel S. Janis, III is head of Global Multi-Sector Fixed Income at Manulife Investment Management. He is a senior managing director, senior portfolio manager and the lead portfolio manager for the company's global multi-sector fixed income strategies, responsible for asset allocation, global bond research and currency management. His areas of expertise include global economics, foreign exchange, derivatives and risk management. Prior to joining the company, Dan was a vice president and proprietary risk manager for BankBoston. Earlier in his career, he worked as a vice president for Morgan Stanley in the foreign exchange department and managed their forward desk from 1991 to 1997. He holds certification from the Association of International Bond Dealers.

Education: Harvard University, AB in Economics, 1983

Joined Company: 1999

Began Career: 1984

Thomas C. Goggins is a senior managing director and senior portfolio manager on the Global Multi-Sector Fixed Income Team at Manulife Investment Management. He is responsible for portfolio management, global bond research, security selection and risk management for the company's global multi-sector fixed income strategies. Prior to joining the company, Tom held positions at Putnam Investments, Transamerica Investments, SAC Capital and Fontana Capital.

Education: University of Wisconsin, BBA, 1981; J.L. Kellogg Graduate School of Management at Northwestern University, MA in Finance and Accounting, 1987

Joined Company: 1995; rejoined 2009

Began Career: 1987

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Biographies

Kisoo Park is a managing director and senior portfolio manager on the Global Multi-Sector Fixed Income Team at Manulife Investment Management. He is responsible for portfolio management, global bond research and currency management for the company's global multi-sector fixed income strategies. Kisoo joined Manulife Investment Management from a hedge fund firm based in Hong Kong, where he was a founding member and COO. Prior to that, he was the CIO responsible for tactical asset allocation investing in global equities, fixed income, commodities, FX and interest rate asset classes at Prince Asset Management, Hong Kong. Earlier in his career, Kisoo held positions at Bank of Montreal, Fleet National Bank, Morgan Stanley and Bank of New England, where he began his career specializing in treasury products, FX and interest rate trading.

Education: Tufts University, BA in Economics, 1986; University of Chicago, Graduate School of Business, 2007

Joined Company: 2011

Began Career: 1986

Christopher Chapman, CFA, is a managing director and portfolio manager on the Global Multi-Sector Fixed Income Team at Manulife Investment Management. Chris is responsible for portfolio management, global sovereign debt and currency research, portfolio construction, and risk management for the company's global multi-sector fixed income strategies. Prior to this position, Chris was a senior investment analyst with the Global Multi-Sector Fixed Income Team. Before that, he worked in several other areas of the firm, including as an investment risk analyst on the Quantitative Research Team. Chris began his career at State Street Bank. He is a CFA charterholder and a member of CFA Society Boston, Inc.

Education: Stonehill College, BSBA in Management, 1999; Boston College, MSF, 2003

Joined Company: 2005

Began Career: 1999

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Biographies

David W. Zielinski, CFA, is a managing director and client portfolio manager on the Global Multi-Sector Fixed Income Team at Manulife Investment Management. He is responsible for supporting our client facing teams in the effective communication and positioning of our global multi-sector fixed income strategies with clients, prospects and consultants. Prior to joining the company, David was a vice president and senior product engineer for Global Fixed Income at State Street Global Advisors (SSgA). Prior to that, he was a portfolio manager in currency management with SSgA. He began his career with MassMutual Financial Group as an investment analyst, and later worked at Barings LLC as an investment analyst in quantitative management. He is a CFA charterholder.

Education: Bryant University, BS in Finance, 1997; Babson College, MBA, 2004

Joined Company: 2010

Began Career: 1997

Mark Bischoff, CFA, is managing director, relationship management, at Manulife Investment Management. He is responsible for managing Canadian institutional and sub-advisory client relationships on behalf of Manulife. Prior to joining the company, Mark was principal at State Street Global Advisors, Ltd. (Canada), where he was responsible for business development, relationship management and SSgA's sales and marketing efforts in the province of Ontario.

Mark is a member of the Institutional Asset Management Committee of the CFA Society Toronto and a member of the Ontario Regional Council of the Association of Canadian Pension Management. He is also a licensed Life Insurance and A&S agent with the Financial Services Commission of Ontario.

Education: University of Toronto, BComm, 1994

Joined Company: 2010

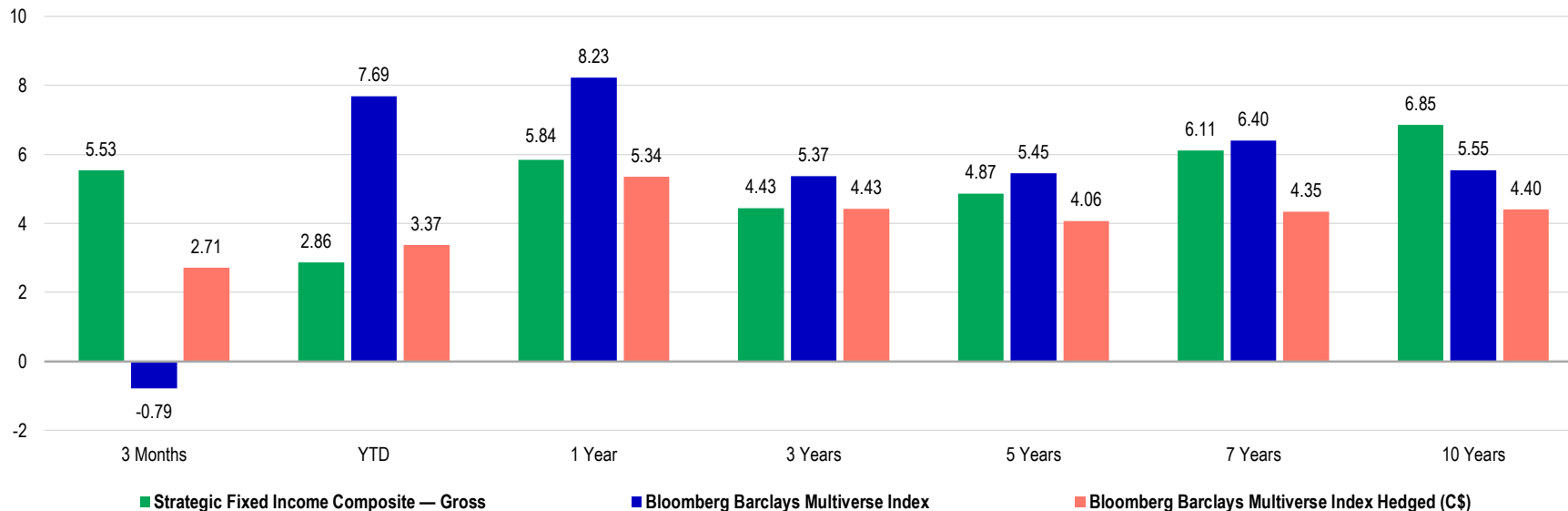
Began Career: 1994

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Strategic Fixed Income Strategy

Investment Results as of August 31, 2020

Annualized Returns (%)



Calendar Year Returns (%)

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Strategic Fixed Income Composite-Canada (Gross)	9.44	-0.56	4.63	5.19	7.63	10.25	6.51	11.39	4.15	10.93
Bloomberg Barclays Multiverse Index	1.72	7.52	0.62	-0.71	15.98	9.54	4.37	2.52	8.17	0.32
Excess Return	7.72	-8.08	4.01	5.90	-8.36	0.71	2.14	8.87	-4.02	10.61
Bloomberg Barclays Multiverse Index Hedged (C\$)	7.67	0.87	2.96	4.28	1.48	8.29	0.89	7.00	6.25	5.39
Excess Return	1.77	-1.43	1.67	0.91	6.15	1.96	5.62	4.39	-2.10	5.54

In CAD
Composite inception date: December 2005

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Strategic Fixed Income Strategy

Benchmark Definitions

Index	Definition
Bloomberg Barclays Multiverse Index	The Bloomberg Barclays Multiverse Index provides a broad-based measure of the global fixed income bond market. The index represents the union of the Global Aggregate Index and the Global High Yield Index and captures investment grade and high yield securities in all eligible currencies.
Bloomberg Barclays Multiverse Index Hedged	The Bloomberg Barclays Multiverse Index provides a broad-based measure of the global fixed income bond market. The index represents the union of the Global Aggregate Index and the Global High Yield Index and captures investment grade and high yield securities in all eligible currencies, hedged to Canadian dollar.
FTSE Canada Universe Bond Index	The FTSE Canada Universe Bond Index is a market capitalization-weighted index designed to be a broad measure of the Canadian investment-grade, fixed income market, including Government of Canada, provincial and corporate bonds with maturities of more than one year and a credit rating of BBB or higher.
Bloomberg Barclays US Aggregate Bond Index	The Bloomberg Barclays US Aggregate Bond Index represents securities that are US domestic, taxable, dollar-denominated. The index covers the US investment-grade fixed-rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.
BofA Merrill Lynch Global Corporate Index	The BofA Merrill Lynch Global Corporate Index tracks the performance of investment grade corporate debt publicly issued in the major domestic and eurobond markets. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date and a fixed coupon schedule.
BofA Merrill Lynch Global High Yield Index	The BofA Merrill Lynch Global High Yield Index tracks the performance of USD, CAD, GBP and EUR denominated below investment grade corporate debt publicly issued in the major domestic or Eurobond markets. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date.
JP Morgan CEMBI Diversified Index	The JP Morgan Corporate Emerging Markets Bond Index (CEMBI) is a market capitalization weighted index consisting of liquid USD-denominated emerging market corporate bonds.
JP Morgan EMBI Global Diversified Index	JP Morgan EMBI Global Diversified Index is a uniquely weighted index that tracks total returns for U.S. dollar-denominated debt instruments issued by emerging market sovereign and quasi-sovereign entities, including Brady bonds, loans and Eurobonds.
JP Morgan GBI GBI-EM Global Diversified Index	The JPMorgan GBI-EM is a comprehensive emerging markets debt benchmark that track local currency bonds issued by Emerging Market governments.

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Investment Considerations

A widespread health crisis such as a global pandemic could cause substantial market volatility, exchange trading suspensions and closures, and affect portfolio performance. For example, the novel coronavirus disease (COVID-19) has resulted in significant disruptions to global business activity. The impact of a health crisis and other epidemics and pandemics that may arise in the future, could affect the global economy in ways that cannot necessarily be foreseen at the present time. A health crisis may exacerbate other pre-existing political, social and economic risks. Any such impact could adversely affect the portfolio's performance, resulting in losses to your investment.

Any performance information shown is the investment strategy composite gross of fees, including advisory and investment management fees and other expenses an investor would incur, but net of transaction costs, unless otherwise noted; deduction of such expenses would reduce returns. Past performance is not indicative of future results. Net performance results reflect the application of the highest incremental rate of the standard investment advisory or management fee schedule to gross performance results, unless otherwise indicated. 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. For example, if \$100,000 were invested and experienced a 10% annual return compounded monthly for 10 years, its ending value, without giving effect to the deduction of advisory or investment management fees, would be \$270,704 with

annualized compounded return of 10.47%. If an advisory or investment management fee of 0.95% of the average market value of the account were deducted monthly for the 10-year period, the annualized compounded return would be 9.43% and the ending dollar value would be \$246,355. Unless otherwise noted, returns greater than one year are annualized; calendar year returns for each one year period end in December. Discrepancies may occur due to rounding.

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, e.g., SMA/UMA business in Canada or UMA models in the US.

Any characteristics, guidelines, constraints or other information provided for this material is representative of the investment strategy and is provided for illustrative purpose only. They may change at any time and may differ for a specific account. Such information presented was selected by the firm as a representative account that is deemed to best represent the investment strategy. 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, 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 nor protect against 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.

Source for information shown is Manulife Investment Management, unless otherwise noted.

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Investment Considerations

Manulife Investment Management claims compliance with the Global Investment Performance Standards (GIPS®). Manulife Investment Management ("the Firm") was created on January 1, 2018 as a result of a consolidation of six Manulife Asset Management entities, (1) Manulife Asset Management US ("MAM US") comprised of Manulife Asset Management (US) LLC, Manulife Asset Management (North America) Limited ("MAM NA"), and John Hancock Trust Company ("JHTC"), (2) Manulife Asset Management (Europe) Limited ("MAMUK"), (3) Manulife Asset Management (Japan) ("MAMJ"), (4) Manulife Asset Management (Hong Kong) Limited ("MAM HK"), (5) Manulife Asset Management (Singapore) Pte. Ltd. ("MAMS") and (6) Manulife Asset Management Limited ("MAML") including its subsidiary Manulife Asset Management Private Markets (Canada) Corp. ("MAMPCC"). The predecessor firms claimed compliance with GIPS®. Investors interested in these strategies can access this information through their local Manulife IM affiliate. To receive a complete list and description of Manulife Investment Management's composites and/or a presentation that adheres to the GIPS standards, contact Institutional Sales at 1-888-332-7132, or visit us at www.manulifeim.com/institutional."

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Manulife Investment Management is the global wealth and asset management segment of Manulife Financial Corporation. We draw on more than 150 years of financial stewardship to partner with clients across our institutional, retail, and retirement businesses globally. Our specialist approach to money management includes the highly differentiated strategies of our fixed-income, specialized equity, multi-asset solutions, and private markets teams—along with access to specialized, unaffiliated asset managers from around the world through our multimanager model.

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