

First quarter 2025

Core & Core Plus Fixed Income Strategies

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



Core & Core Plus Fixed Income Strategies

Dependable, Predictable, and Repeatable

Experienced Investment Team

- PMs average 28 years of investment experience and over 10 years of firm experience
- Investment team is exclusively responsible for all investment decisions related to the strategy

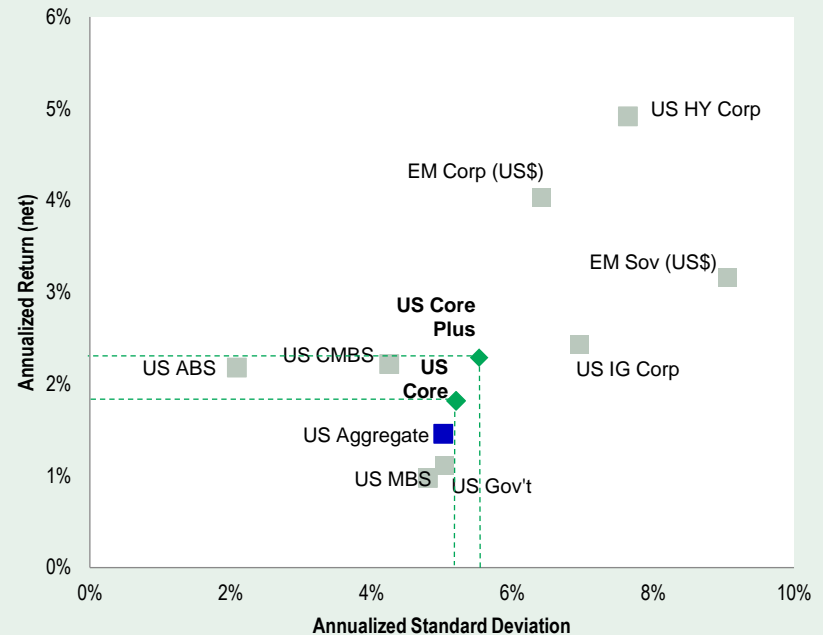
Fundamental Bottom-Up Philosophy and Process

- We believe security selection and sector allocation are primary drivers of relative performance
- Active duration bets and other top-down macro calls are not a meaningful part of the process
- Expertise across corporate credit and securitized assets

Seeks to focus on Risk Efficiency

- Consistent long-term returns
- Multiple statistical measures support team's bottom-up approach

Fixed Income Asset Classes 10-Year Risk/Return Profile
As of March 31, 2025



Source: eVestment, Morningstar, Manulife Investment Management as of March 31, 2025

Performance calculated in USD. Returns are net of fees.

US Gov't Bonds = Bloomberg US Government Bond Index, World Gov't = FTSE World Government Bond Index, US Aggregate = Bloomberg US Aggregate Bond Index, US IG Corp = Bloomberg US Corporate Index, US HY Corp = BofA ML US High Yield Master II Index, EM Corporates (US\$) = JPMorgan CEMBI Diversified Index, US CMBS = Bloomberg US CMBS Index, US ABS = Bloomberg US ABS Index, US MBS = Bloomberg US MBS Bond Index

Returns greater than one year are annualized. Past performance is not indicative of future results. Performance is shown in USD (net). 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 adverse effects.

U.S. core and core plus fixed-income team

Investment Team

Portfolio Management 28 Avg Years Experience

Jeffrey N. Given, CFA¹
Senior Portfolio Manager

Howard C. Greene, CFA¹
Senior Portfolio Manager

Connor Minnaar, CFA
Portfolio Manager

Pranay Sonalkar, CFA
Portfolio Manager

Client Portfolio Managers 19 Avg Years Experience

Lee M. Giunta, CFA

Andy Shafter, CTP

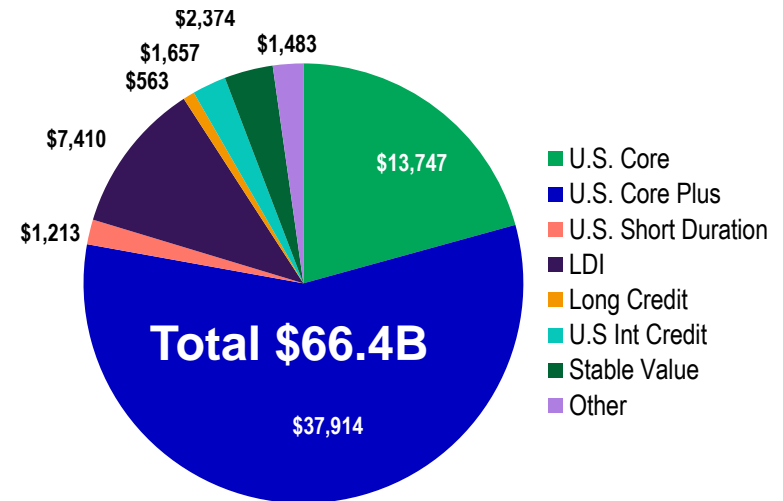
Ednize Silveira

Implementation Analysts 6 Avg Years Experience

Jack Field

Dinko Slavov

Assets under Management²



Research and trading

Spencer Godfrey, CFA
Head of Global Developed-Market Fixed Income Research

Corporate Credit
13 analysts
14 avg years experience

Securitized Assets
5 analysts
18 avg years experience

Christopher A. Coccoluto
Head of Global Fixed Income Trading

16 traders
18 avg years experience

Investment risk and quantitative analytics ESG research & integration

Amirali Assef, CFA
Global Head of Investment
Risk and Quantitative Analytics
Risk analysts: 11

Brian Kernohan
Chief Sustainable Investment
Officer
ESG analysts: 16

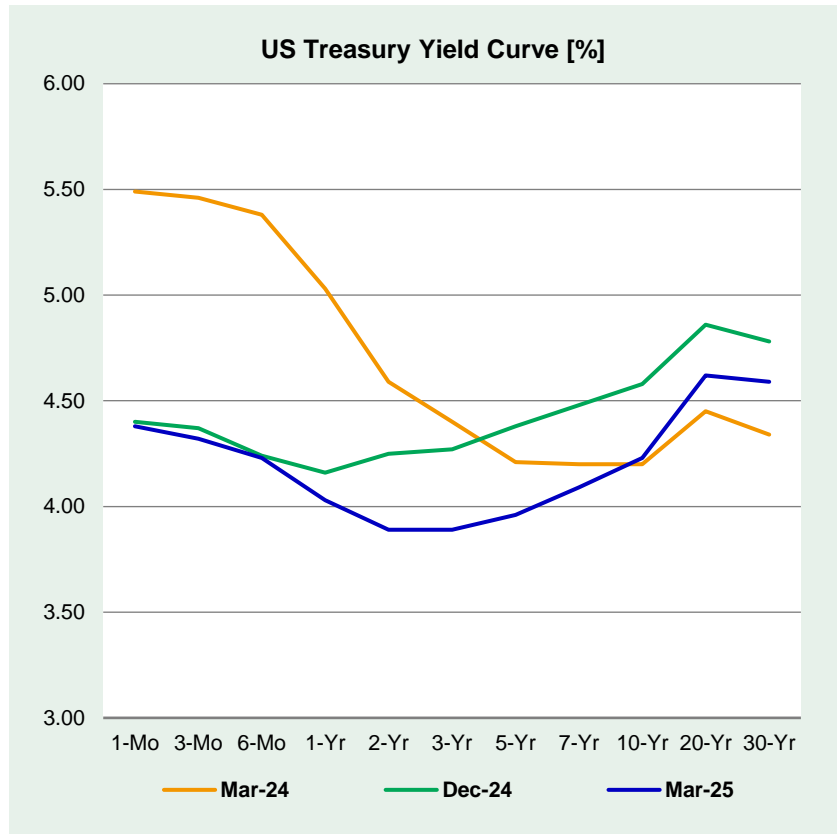
As of March 31, 2025

¹ As co-leads, they have joint management responsibilities for all aspects of the team. ² AUM does not include Money Market strategies.

Core & Core Plus Fixed Income Strategies

Rate volatility continued though yields finished lower across the curve

Yields declined amid heightened volatility with intermediate yields experiencing the most significant rally.



US Treasury Yields [%]

Date	Mar 2024	Dec 2024	Mar 2025	Q1 Chg	YoY Chg
3-Month	5.46	4.37	4.32	-0.05	-1.14
2-Year	4.59	4.25	3.89	-0.36	-0.70
5-Year	4.21	4.38	3.96	-0.42	-0.25
10-Year	4.20	4.58	4.23	-0.35	0.03
30-Year	4.34	4.78	4.59	-0.19	0.25

US Treasury Yield Curve Steepness [%]

Date	Mar 2024	Dec 2024	Mar 2025	Q1 Chg	YoY Chg
3mos10s	-1.26	0.21	-0.09	-0.30	1.17
2s5s	-0.38	0.13	0.07	-0.06	0.45
2s10s	-0.39	0.33	0.34	0.01	0.73
5s30s	0.13	0.40	0.63	0.23	0.50

Source: US Treasury. As of March 31, 2025.

Core & Core Plus Fixed Income Strategies

Persistent rate volatility supports a duration-neutral, bottom-up approach

Elevated uncertainty in the future path of Fed monetary policy is expected to continue driving rate volatility.

Dec 2025 Implied Fed Funds Rate

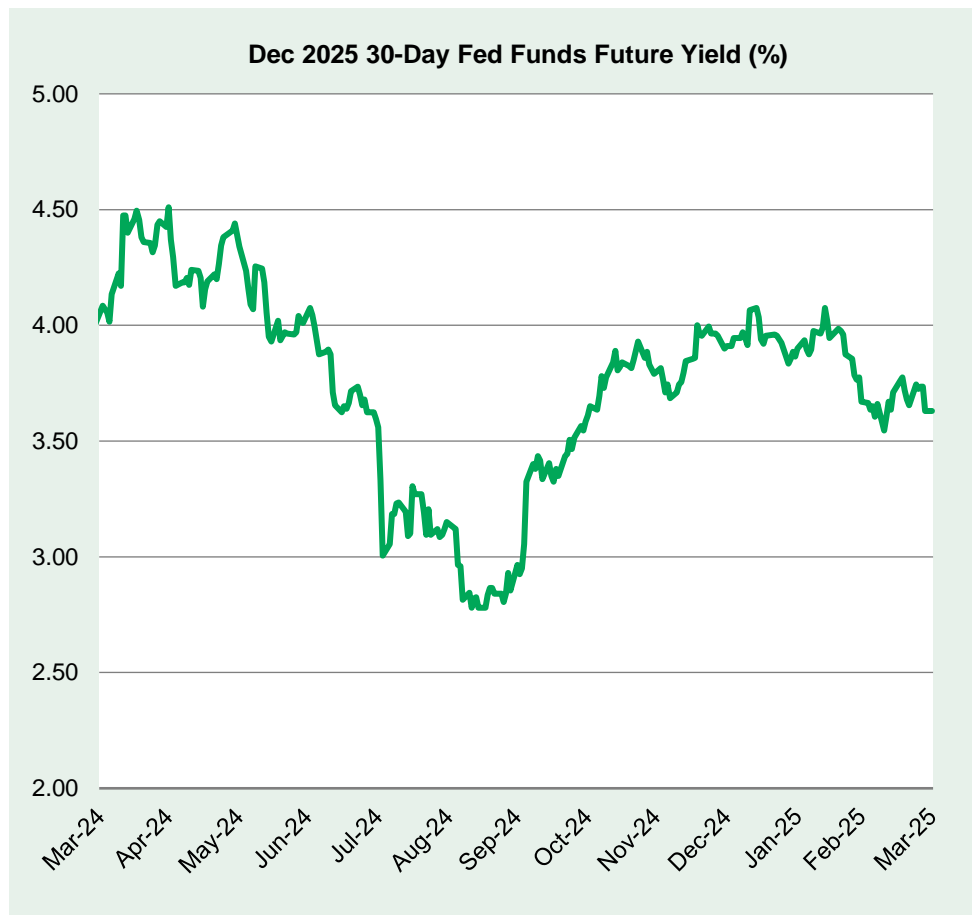
September 2024 2.95%

December 2024 3.90%

January 2025 3.86%

February 2025 3.64%

March 2025 3.57%

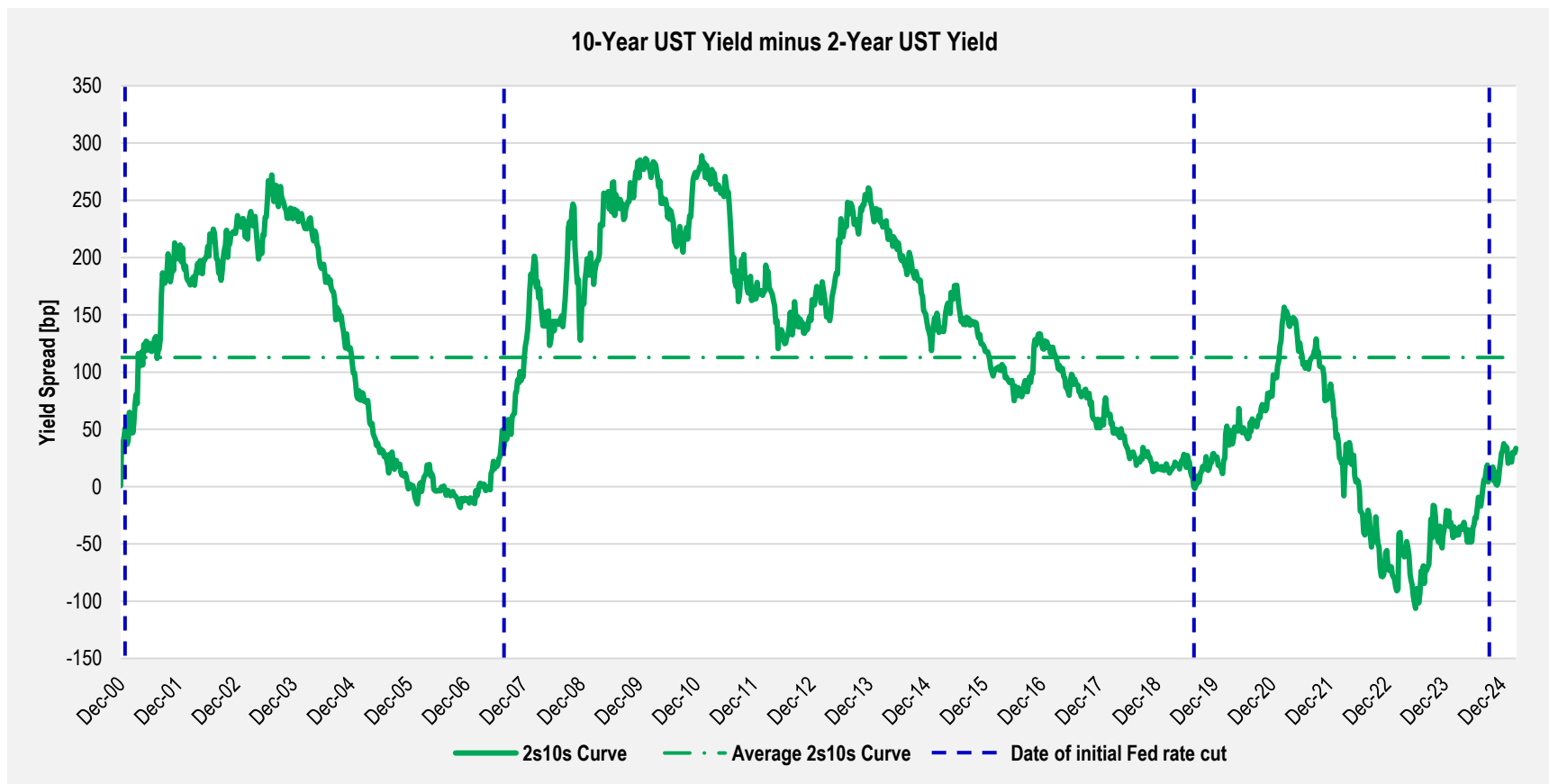


Source: Bloomberg. As of March 31, 2025. No forecasts are guaranteed.

Core & Core Plus Fixed Income Strategies

Further yield curve steepening likely in multiple market scenarios

- The yield curve typically steepens throughout a Federal Reserve easing cycle.
- The peak yield spread between the 2-yr and 10-yr UST yield has exceeded 150 bp in each of the prior 3 cycles.



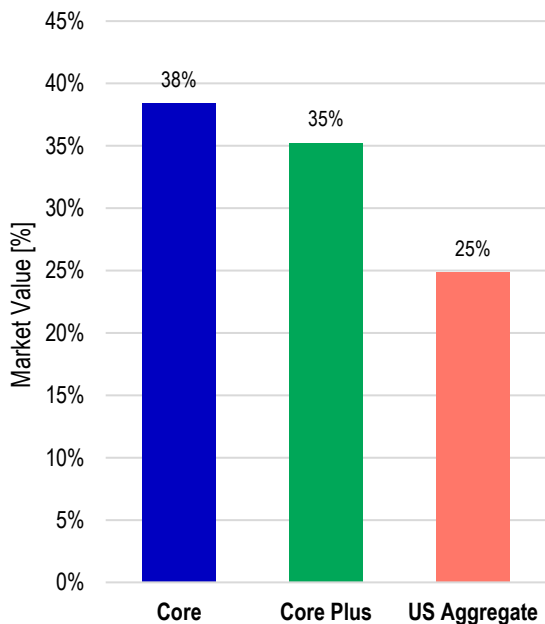
Source: Bloomberg. As of March 31, 2025. Average 2s10s curve calculated for the period beginning December 31, 2000, ending December 31, 2024.

Core & Core Plus Fixed Income Strategies

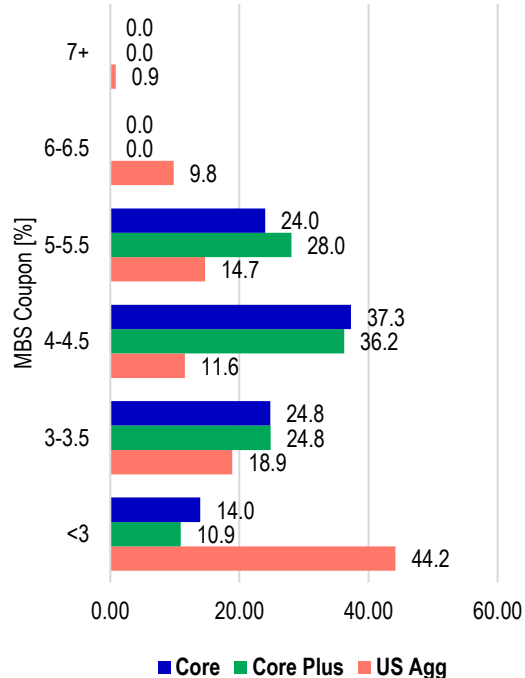
Consistent approach to MBS in late cycle environment

Agency MBS remains attractive with opportunity to add value through bottom-up active management.

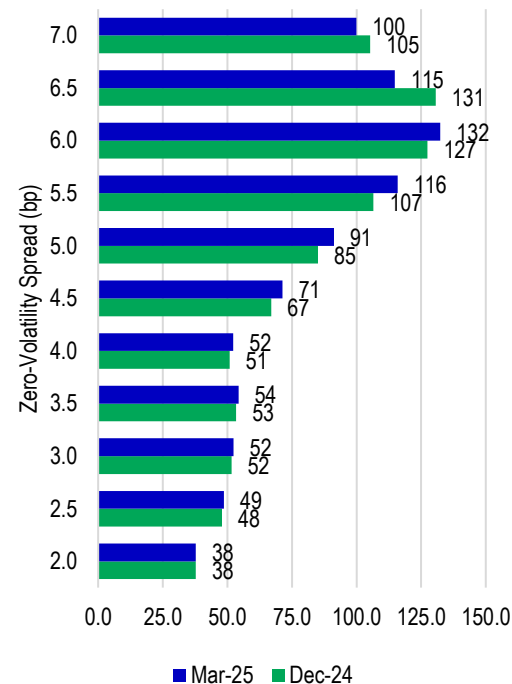
Historic OW to Agency MBS



Emphasis on higher coupon pools



Mid-stack spread levels attractive



Past performance is not indicative of future results.

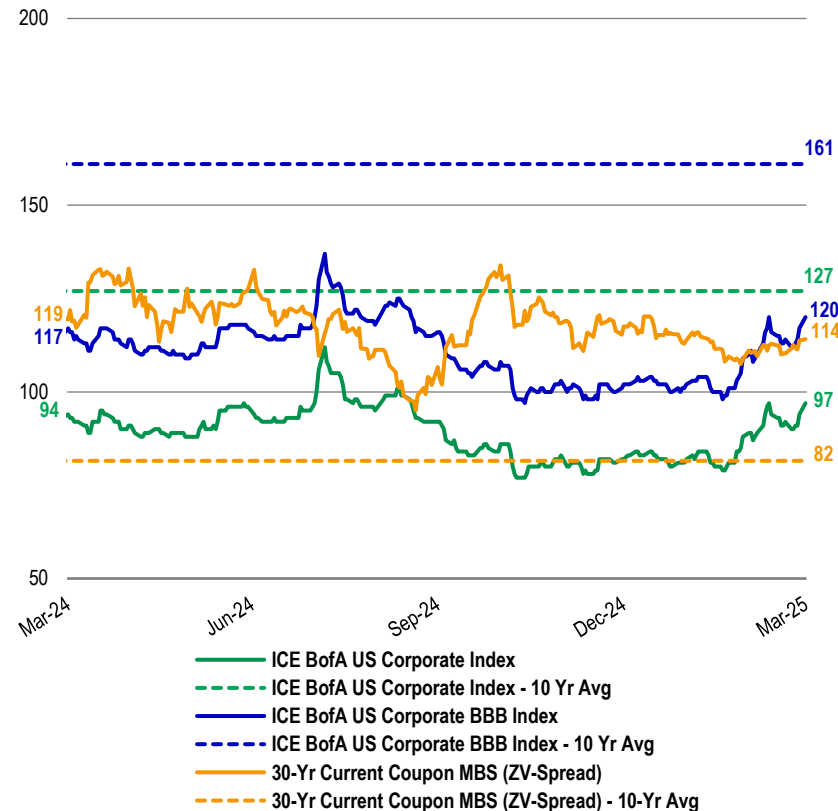
Source: Bloomberg, JPMorgan as of March 31, 2025. It is not possible to invest directly in an index. See slide 23 for index definitions.

Core & Core Plus Fixed Income Strategies

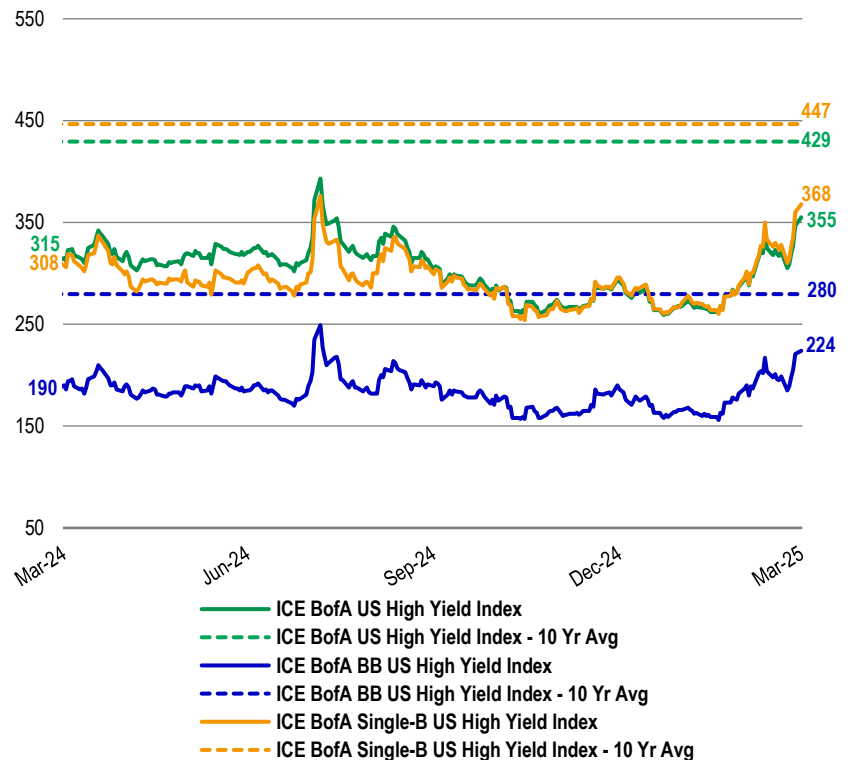
Corporate bond spreads widened while mortgage spreads were stable

Corporate spreads widened as risk-off sentiment emerged, though spreads remain inside long-term averages.

Investment Grade Spreads



High Yield Spreads

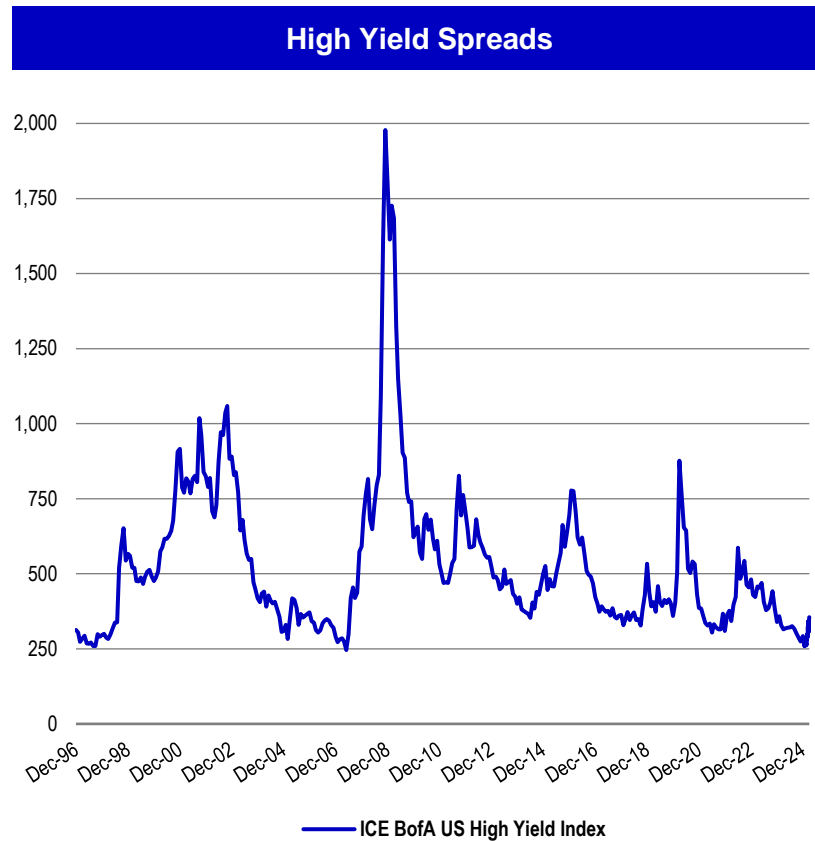
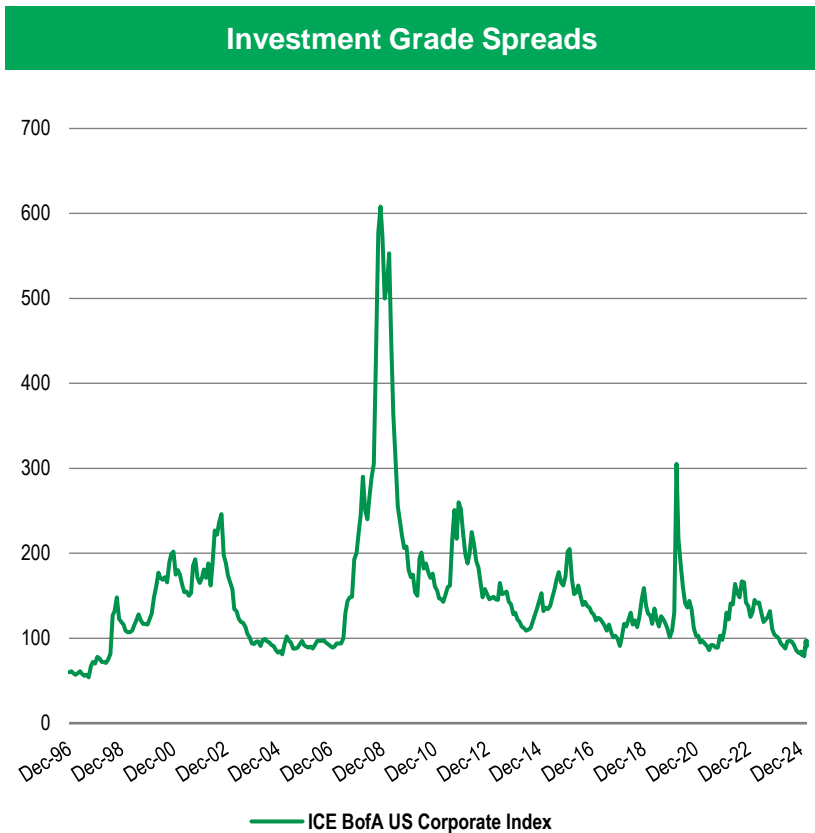


Source: Bank of America Merrill Lynch, JPMorgan. As of March 31, 2025. See slide 23 for index definitions.

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Corporate bond spreads widened, though still at the tight end of the range

Despite widening in Q1, spreads remain historically tight and typically widen materially in recessionary environments.



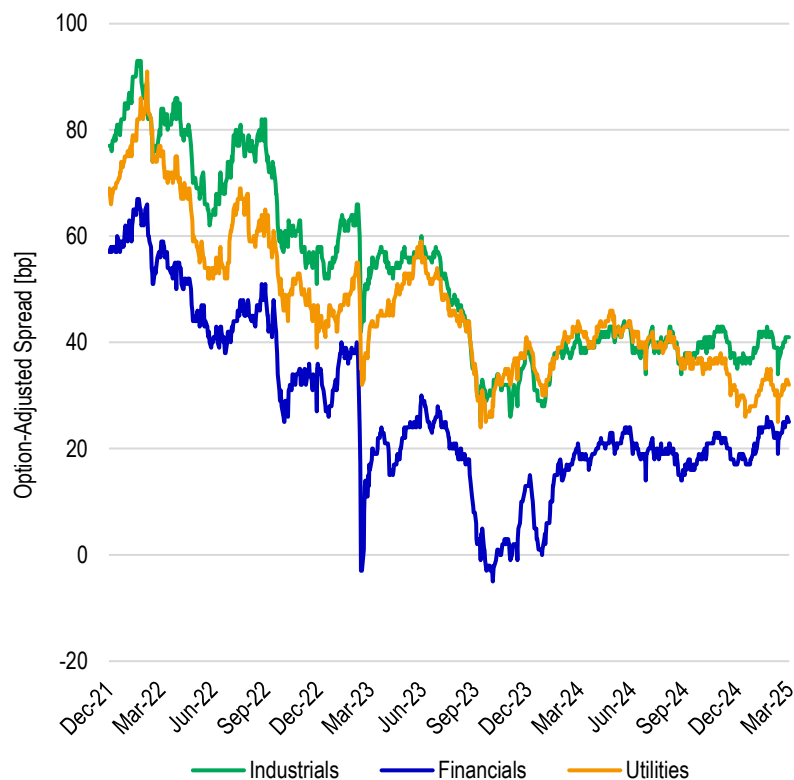
Source: Bank of America Merrill Lynch, JPMorgan. As of March 31, 2025. See slide 23 for index definitions.

Core & Core Plus Fixed Income Strategies

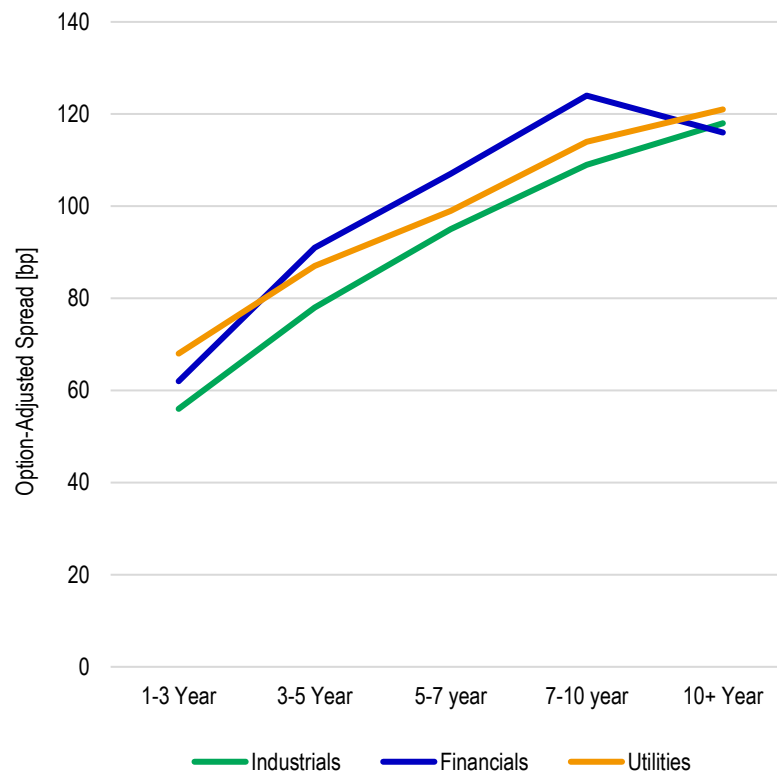
Intermediate financials and utilities relatively attractive

- Financials and utilities appear relatively attractive versus industrials across most points on the curve.
- Corporate credit curves are historically flat with lower term premium for longer-maturity corporate bonds.

Sector spread curves historically flat*



Intermediate financials and utilities appear attractive



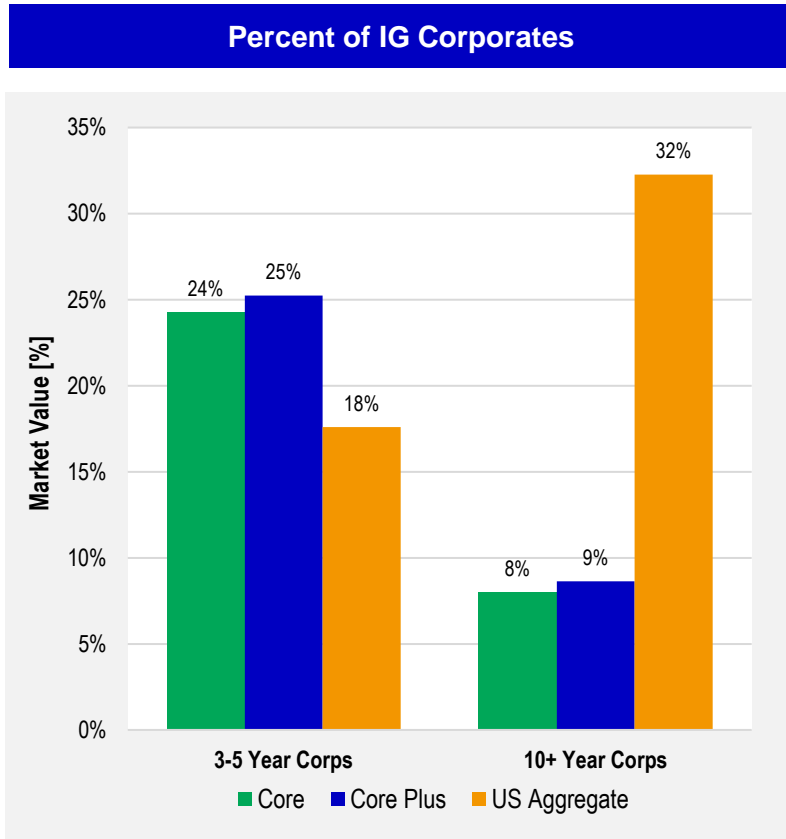
Source: ICE Data Indices. As of March 31, 2025.

*Curve steepness measured by the spread differential between the ICE 10+ Year Industrial, Financials, and Utilities Indices and the ICE 3-5 Year Industrial, Financials, and Utilities Indices.

Core & Core Plus Fixed Income Strategies

A focus on intermediate maturity corporate credit to potentially protect portfolio

Defensive posture extends to positioning along the yield curve where intermediate maturities tend to outperform in spread widening environments.



Post GFC Credit Spread Widening Environments

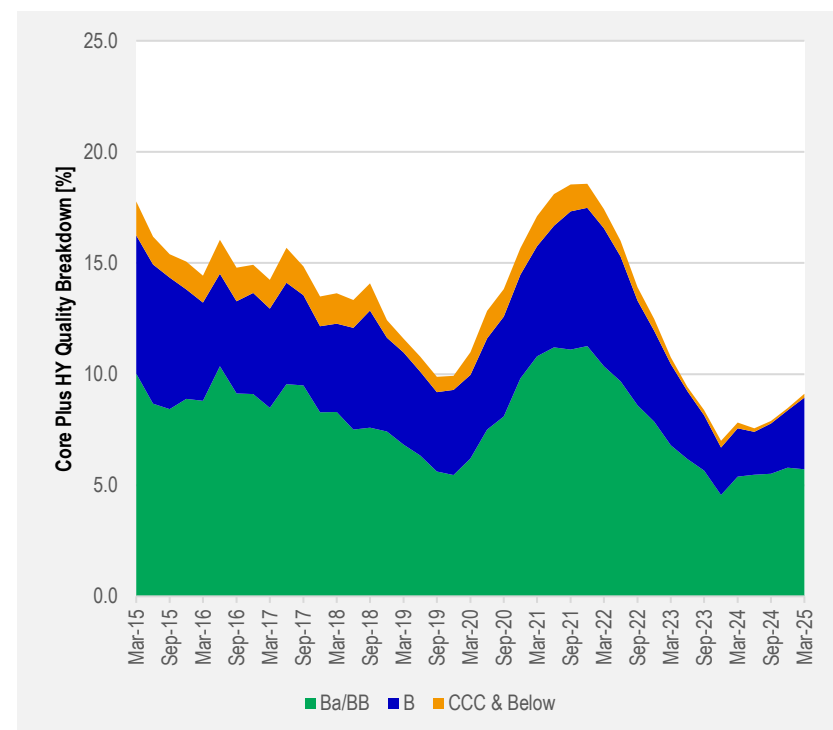
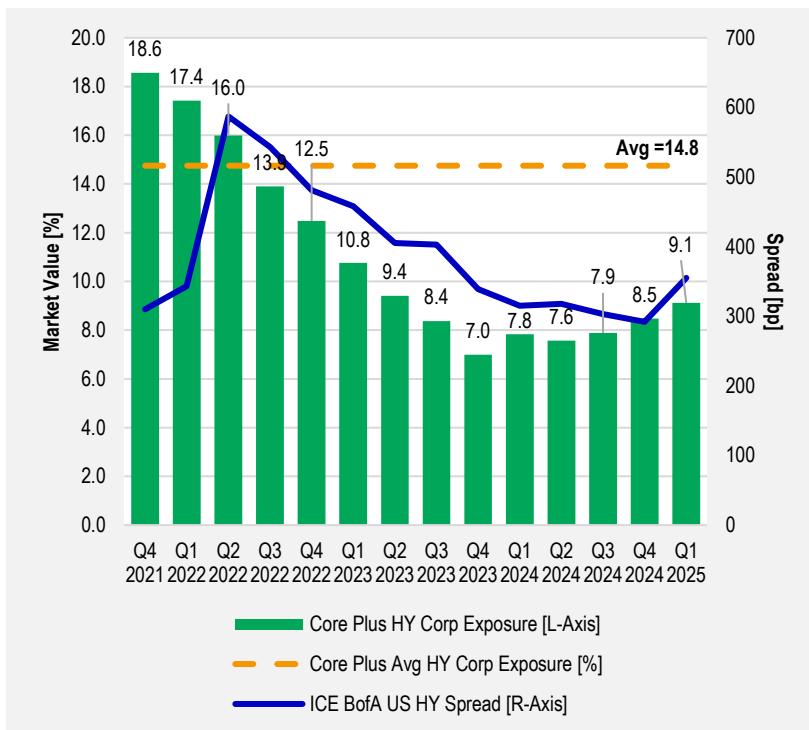
	3- 5 Year Corps		10+ Year Corps	
	Spread Change [bp]	Excess Return [%]	Spread Change [bp]	Excess Return [%]
Apr 2011 – Dec 2011	122	-3.20	89	-11.39
Jul 2014 – Feb 2016	94	-1.64	118	-15.07
Jan 2018 – Dec 2018	73	-1.31	72	-7.76
Oct 2021 – Oct 2022	89	-1.86	62	-5.05
Feb 2025 – Mar 2025	10	-0.20	8	-0.83

Source: Bloomberg, ICE BofA Indices. As of March 31, 2025. 3-5 Year Corps represented by the ICE BofA 3-5 Year Corporate Index. 10+ Year Corps represented by ICE BofA 10+ Year Corporate Index. Excess returns calculated versus similar maturity US government security. Post GFC represents the period following the Great Financial Crisis.

Core & Core Plus Fixed Income Strategies

Lower high yield exposure continued with valuations still tight

- Within Core Plus, high yield exposure remains at the low end of the historic range with a higher quality emphasis.
- Stable corporate fundamentals support valuations and can provide select opportunities for incremental yield.
- Tariff uncertainty has driven spreads wider in the short-term and calls for a more cautious approach.



Source: Bloomberg, ICE Data Indices. As of March 31, 2025.

Core & Core Plus Fixed Income Strategies

Security selection and incremental yield key with valuations tight

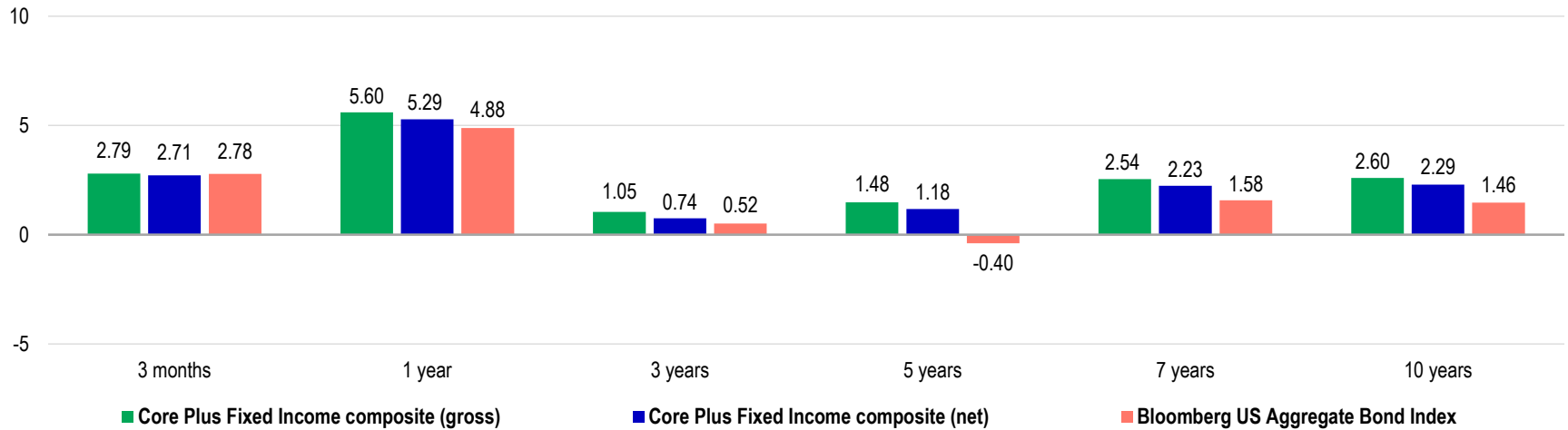
Sector	Market Factors	Implementation	Q1 Marginal Adjustments
Corporate Credit	<ul style="list-style-type: none"> • Later stage of current cycle highlights importance of security selection • Valuations remain inside long-term averages 	<ul style="list-style-type: none"> • High yield exposure kept at longer-term lows • Overweight to financials and utilities • Focus on intermediate maturities 	<ul style="list-style-type: none"> • Seeking select opportunities to reduce risk • Relative value trades to add incremental yield
ABS	<ul style="list-style-type: none"> • High quality exposure • Source of shorter maturity exposure 	<ul style="list-style-type: none"> • Lower exposure to consumer ABS • Looking to more non-traditional sectors with yield advantages 	<ul style="list-style-type: none"> • Modest decline
CMBS	<ul style="list-style-type: none"> • Elevated uncertainty in commercial real estate • Valuations appear attractive relative to high quality corporates 	<ul style="list-style-type: none"> • Security selection key with a focus on structure, credit enhancement, and property type • Majority of exposure in GNMA multifamily interest-only securities 	<ul style="list-style-type: none"> • Stable allocation
Agency MBS	<ul style="list-style-type: none"> • Spreads remain wide due to Fed, higher rates, elevated rate volatility 	<ul style="list-style-type: none"> • Focus on middle of the coupon stack specified pools, primarily conventional 30-year • Coupon, loan balance, servicer are key to prepayment protection 	<ul style="list-style-type: none"> • Added slightly • Adjusted coupon positioning marginally
Treasuries	<ul style="list-style-type: none"> • Sensitive to factors such as inflation and economic growth • Federal Reserve pivot towards less restrictive monetary policy 	<ul style="list-style-type: none"> • Efficient market, difficult to add value from a bottom-up perspective 	<ul style="list-style-type: none"> • Focus on intermediate and longer-term maturities

As of March 31, 2025. The views and opinions expressed are subject to change as market and other conditions warrant and are not meant as investment advice.

Core Plus Fixed Income composite

Investment results as of March 31, 2025

Annualized returns (%)



Calendar year returns (%)

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Core Plus Fixed Income composite (gross)	2.66	6.92	-14.06	0.25	9.62	10.89	-0.44	5.68	5.33	0.81
Core Plus Fixed Income composite (net)	2.35	6.60	-14.32	-0.05	9.29	10.56	-0.73	5.36	5.02	0.50
Bloomberg US Aggregate Bond Index	1.25	5.53	-13.01	-1.54	7.51	8.72	0.01	3.54	2.65	0.55
Excess return (gross)	1.41	1.39	-1.05	1.79	2.11	2.17	-0.45	2.14	2.69	0.26
Excess return (net)	1.10	1.07	-1.31	1.49	1.78	1.84	-0.75	1.82	2.37	-0.05

Composite inception date: December 1, 2010.

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.

US Core Plus Fixed Income Strategy

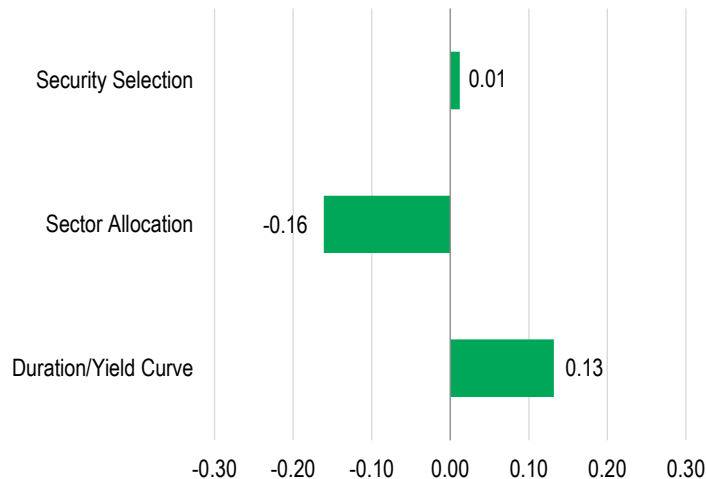
Strategy performed in-line with the benchmark in volatile first quarter

Returns	Q1 2025
Core Plus Fixed Income Composite – Gross	2.79
Core Plus Fixed Income Composite – Net	2.71
Bloomberg US Aggregate Bond Index	2.78
Excess Return (Gross)	0.01
Excess Return (Net)	-0.07

Q1 2025 Key Contributors/Detractors*

- Duration and yield curve positioning added the most value in an elevated rate volatility environment.
 - A slightly longer duration relative to the benchmark contributed positively, as did the Strategy's overweight to the 5-yr key rate and underweight to the 30-yr key rate.
- Sector allocation detracted, driven primarily by the Strategy's non-benchmark allocation to high yield corporates. An overweight to Agency MBS contributed positively.
- Security selection was mixed but slightly contributed. Positioning within Agency MBS and CMBS added value, offset by underperformance within IG corporates.

Q1 2025 Performance Attribution*



Source: Bloomberg, Manulife Investment Management

*Due to modeling differences, performance attribution may vary from actual excess return. Past performance is not indicative of future results. Performance is shown in USD. Gross performance results do not reflect the deduction of investment management fees and are net of commissions and foreign withholding tax. Changes in exchange rates may have adverse effects. Net performance results reflect the application of the highest incremental rate of the standard investment advisory fee schedule to gross performance results. See slide 14 for detailed performance information. This information is supplemental to the GIPS report included as a part of this presentation.

US Core Plus Fixed Income Strategy

YoY portfolio characteristics as of March 31, 2025

Key Sector Allocation (%)	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025	YoY Change
Corporate Credit	36.23	35.10	34.78	35.56	35.49	-0.74
IG Corporates	28.40	27.54	26.89	27.08	26.37	-2.03
HY Corporates	7.83	7.57	7.89	8.48	9.12	1.29
Securitized	42.53	43.70	42.40	42.88	43.10	0.57
Agency MBS	33.86	34.97	34.59	34.67	35.23	1.37
Non-Agency MBS	1.73	1.68	1.49	1.47	1.39	-0.34
ABS	5.17	5.34	4.74	4.78	4.44	-0.73
CMBS	1.77	1.72	1.58	1.95	2.03	0.26
Emerging Markets	1.67	1.73	1.41	1.51	1.51	-0.16
US Treasuries	19.06	18.73	20.93	19.67	19.12	0.06
Cash & Other	0.51	0.74	0.48	0.39	0.78	0.27

In USD

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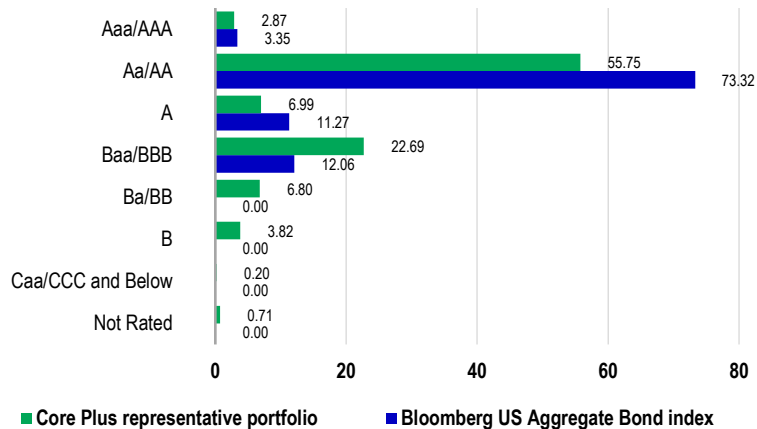
Core Plus Fixed Income Strategy

Representative portfolio characteristics as of March 31, 2025

Characteristic	Core Plus representative portfolio	Bloomberg US Aggregate Bond Index
Average Rating ¹	A1/A2	Aa2/Aa3
Average Coupon (%)	4.60	3.61
Average Life (Years)	8.73	8.35
Yield to Maturity (%)	5.34	4.60
Yield to Worst (%)	5.30	4.60
Effective Duration (Years)	6.23	6.09

Sector Allocation (%)	% Market Value		% Duration	
	Core Plus rep portfolio	Index	Core Plus rep portfolio	Index
US Government	19.17	45.94	32.04	43.65
US Treasuries	19.12	44.80	31.96	43.58
US Agency	0.00	0.66	0.00	0.35
Municipal	0.05	0.48	0.08	0.72
Credit	35.81	23.76	29.30	26.83
IG Corporates	26.37	23.76	24.12	26.83
HY Corporates	9.12	0.00	5.17	0.00
Bank Loans	0.30	0.00	0.00	0.00
Convertibles	0.01	0.00	0.02	0.00
Equities	0.01	0.00	0.00	0.00
Securitized	43.10	26.83	37.43	25.49
Agency MBS	35.23	24.87	33.02	24.29
Non-Agency MBS	1.39	0.00	1.26	0.00
ABS	4.44	0.45	2.03	0.20
CMBS	2.03	1.50	1.12	1.01
Foreign Developed	0.26	2.21	0.19	1.42
Govt & Agency	0.26	0.89	0.19	0.62
Supranationals	0.00	1.33	0.00	0.80
Emerging Markets	1.51	1.26	1.04	1.60
Emerging Markets — USD	1.51	1.26	1.04	1.60
Emerging Markets — Non-USD	0.00	0.00	0.00	0.00

Quality (%)



In USD

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US Core Fixed Income composite

Investment results as of March 31, 2025

Annualized returns (%)



Calendar year returns (%)

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Core Fixed Income composite (gross)	2.30	6.40	-13.64	-0.71	9.17	9.15	0.40	4.55	3.60	1.03
Core Fixed Income composite (net)	2.00	6.08	-13.90	-1.01	8.84	8.82	0.10	4.24	3.29	0.73
Bloomberg US Aggregate Bond Index	1.25	5.53	-13.01	-1.54	7.51	8.72	0.01	3.54	2.65	0.55
Excess return (gross)	1.05	0.87	-0.63	0.83	1.66	0.43	0.39	1.01	0.96	0.48
Excess return (net)	0.75	0.55	-0.89	0.53	1.34	0.10	0.09	0.70	0.65	0.18

Composite inception date: January 1996.

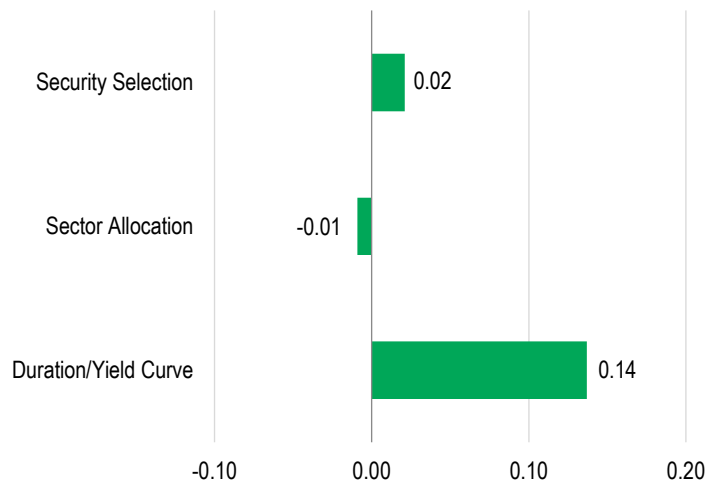
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US Core Fixed Income Strategy

Duration and yield curve positioning added value amid continued volatility

Returns	Q1 2025
Core Fixed Income Composite – Gross	2.88
Core Fixed Income Composite – Net	2.80
Bloomberg US Aggregate Bond Index	2.78
Excess Return (Gross)	0.10
Excess Return (Net)	0.02

Q1 2025 Performance Attribution*



Source: Bloomberg, Manulife Investment Management

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Q1 2025 Key Contributors/Detractors*

- Duration and yield curve positioning added the most value in an elevated rate volatility environment.
 - A slightly longer duration relative to the benchmark contributed positively, as did the Strategy's overweight to the 5-yr key rate and underweight to the 30-yr key rate.
- Security selection was mixed but added value overall. Positioning within Agency MBS and CMBS helped, offset by underperformance within IG corporates.
- Sector allocation had little impact on performance. An overweight to Agency MBS was a leading contributor, though this was countered by underperformance from the Strategy's overweight to IG corporates and ABS.

US Core Fixed Income Strategy

YoY portfolio characteristics as of March 31, 2025

Key Sector Allocation (%)	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025	YoY Change
Corporate Credit	30.56	30.72	29.60	31.00	29.47	-1.09
IG Corporates	30.50	30.69	29.58	30.98	29.47	-1.03
HY Corporates	0.06	0.03	0.02	0.02	0.00	-0.06
Securitized	47.60	50.80	48.42	49.36	49.45	1.85
Agency MBS	36.70	39.06	37.58	37.92	38.41	1.71
Non-Agency MBS	2.01	2.22	2.08	2.09	2.00	-0.01
ABS	6.94	7.55	6.80	7.05	6.65	-0.29
CMBS	1.95	1.97	1.95	2.30	2.40	0.45
Emerging Markets	0.50	0.52	0.61	0.62	0.59	0.09
US Treasuries	20.64	17.17	20.77	18.17	19.82	-0.82
Cash & Other	0.71	0.79	0.60	0.84	0.67	-0.04

In USD

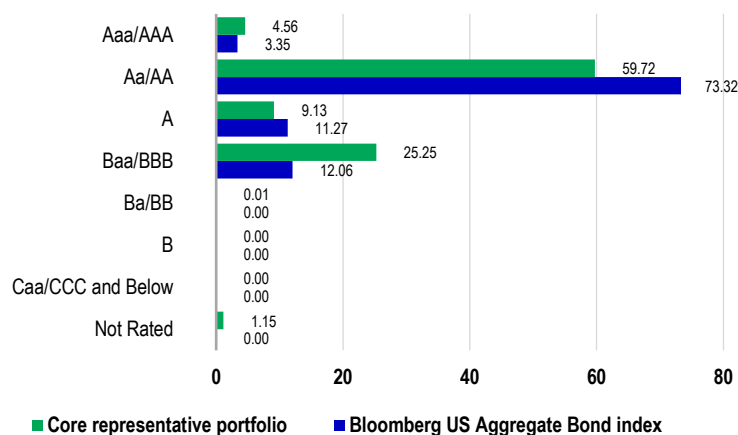
Holdings, sector weightings, market capitalisation and portfolio characteristics are subject to change at any time and are for illustrative and reference purpose only. Holdings, sector weightings, market capitalisation and portfolio characteristics of individual client portfolios in the program may differ, sometimes significantly, from those shown. 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. The specific investment identified and described is not representative of all of the investments purchased, sold, or recommended for the strategy. It should not be assumed that any investment identified has or will be profitable. There can be no guarantee that similar investment opportunities will be available in the future or that the strategy will be able to exploit similar investment opportunities should they arise. The Bloomberg U.S. Aggregate Bond Index tracks the performance of U.S. investment-grade bonds in government, asset-backed, and corporate debt markets. It is not possible to invest directly in an index.

Core Fixed Income Strategy

Representative portfolio characteristics as of March 31, 2025

Characteristic	Core representative portfolio	Bloomberg US Aggregate Bond Index
Average Rating ¹	Aa3/A1	Aa2/Aa3
Average Coupon (%)	4.30	3.61
Average Life (Years)	8.55	8.35
Yield to Maturity (%)	5.03	4.60
Yield to Worst (%)	5.01	4.60
Effective Duration (Years)	6.21	6.09

Quality (%)



Sector Allocation (%)	% Market Value		% Duration	
	Core rep portfolio	Index	Core rep portfolio	Index
US Government	20.15	45.94	30.54	44.65
US Treasuries	19.82	44.80	29.81	43.58
US Agency	0.00	0.66	0.00	0.35
Municipal	0.34	0.48	0.73	0.72
Credit	29.48	23.76	26.79	26.83
IG Corporates	29.47	23.76	26.78	26.83
HY Corporates	0.00	0.00	0.00	0.00
Bank Loans	0.00	0.00	0.00	0.00
Convertibles	0.01	0.00	0.01	0.00
Equities	0.00	0.00	0.00	0.00
Securitized	49.45	26.83	42.13	25.49
Agency MBS	38.41	24.87	36.12	24.29
Non-Agency MBS	2.00	0.00	1.68	0.00
ABS	6.65	0.45	3.09	0.20
CMBS	2.40	1.50	1.25	1.01
Foreign Developed	0.14	2.21	0.08	1.42
Govt & Agency	0.14	0.89	0.08	0.62
Supranationals	0.00	1.23	0.00	0.80
Emerging Markets	0.59	1.26	0.45	1.60
Emerging Markets — USD	0.59	1.26	0.45	1.60
Emerging Markets — Non-USD	0.00	0.00	0.00	0.00

In USD

Holdings, sector weightings, market capitalisation and portfolio characteristics are subject to change at any time and are for illustrative and reference purpose only. Holdings, sector weightings, market capitalisation and portfolio characteristics of individual client portfolios in the program may differ, sometimes significantly, from those shown. 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 compliant presentation included as a part of this material. The specific investment identified and described is not representative of all of the investments purchased, sold, or recommended for the strategy. It should not be assumed that any investment identified has or will be profitable. There can be no guarantee that similar investment opportunities will be available in the future or that the strategy will be able to exploit similar investment opportunities should they arise.

Appendix

Benchmark Definitions

Index	Definition
Bloomberg US Aggregate Bond Index	The Bloomberg 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.
FTSE World Government Bond Index	The FTSE World Government Bond Index is a market capitalization weighted bond index consisting of the government bond markets of multiple countries. The index includes government bonds that meet certain investability criteria, including, but not limited to, a fixed-rate coupon, an investment grade quality rating, a remaining maturity of one year or longer and a minimum issuance size.
Bloomberg US Government Index	Comprised of the US Treasury and US Agency Indices, the US Government Index contains securities issued by the US Government.
Bloomberg US Corporate Index	The Bloomberg US Corporate Index represents publicly issued US corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and quality requirements. To qualify, bonds must be SEC-registered.
BofA Merrill Lynch US High Yield Master II Index	The BofA Merrill Lynch US High Yield Master II Index is composed of bonds in the form of publicly placed nonconvertible, coupon-bearing US domestic debt and must carry a maturity of at least one year. Issues must be rated by Standard & Poor's or Moody's Investors Service as less than investment grade (i.e., BBB or Baa) but not in default (i.e., DD1 or less). This index excludes floating rate debt, equipment trust certificates and Title 11 securities.
JP Morgan Emerging Markets Bond Index (EMBI) Global Diversified Index	The JP Emerging Markets Bond Index (EMBI) Global Diversified Index tracks the performance of U.S. dollar-denominated Brady bonds, Eurobonds, and traded loans issued by sovereign and quasisovereign entities. The index caps its exposure to countries with larger amounts of outstanding debt.
JP Morgan CEMBI Broad Diversified	The JP Morgan Corporate Emerging Markets Bond Index (CEMBI) is a market capitalization weighted index consisting of liquid USD-denominated emerging market corporate bonds
Bloomberg US CMBS Index	The Bloomberg CMBS ERISA-Eligible Index is the ERISA-eligible component of the Bloomberg CMBS Index. This index, which includes investment grade securities that are ERISA eligible under the underwriters exemption, is the only CMBS sector that is included in the US Aggregate Index.
Bloomberg US ABS Index	The Bloomberg Asset-Backed Securities (ABS) Index has three subsectors (credit cards, autos and utilities). The index includes pass-through, bullet, and controlled amortization structures. The ABS Index includes only the senior class of each ABS issue and the ERISA-eligible B and C tranche.
Bloomberg US MBS Index	The Bloomberg US MBS Index represents the universe of fixed-rate US agency issued mortgage-backed securities guaranteed by the United States government.

Manulife Investment Management

Core Plus Fixed Income Composite

Prelim – Only Schedule of Year End Returns updated per SEC Marketing Rule

Creation Date: January 1, 2018

Inception Date: January 1, 1985

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	6.92	6.60	5.53	7.67	7.14	18	0.32	31,200	486,485
2022	-14.06	-14.32	-13.01	6.98	5.77	17	0.35	27,718	422,291
2021	0.25	-0.05	-1.54	4.53	3.35	16	0.41	31,845	455,705
2020	9.62	9.29	7.51	4.45	3.36	16	0.56	27,110	421,097
2019	10.89	10.56	8.72	2.61	2.87	15	0.38	22,422	422,034
2018	-0.44	-0.73	0.01	2.53	2.84	15	0.06	17,299	392,058
2017	5.68	5.36	3.54	2.59	2.78	14	0.22	14,336	N/A
2016	5.33	5.02	2.65	2.84	2.98	12	0.19	8,005	N/A
2015	0.81	0.50	0.55	3.12	2.88	8	0.19	5,018	N/A
2014	7.27	6.95	5.97	3.12	2.63	7	0.28	4,172	N/A

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 (%)
12/31/24	Composite	2.66	0.72	2.53	7.23	2.35	0.42	2.23	6.69
Date	Return	1 Year	5 Year	10 Year	SI				
12/31/24	Benchmark	1.25	-0.33	1.35	5.88				

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.

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Composite Description: The Core Plus Fixed Income strategy seeks to generate a high rate of total return consistent with prudent risk, through investment in a diversified core plus portfolio which includes investment grade debt and the opportunistic use of high yield, emerging market and non-US dollar-denominated bonds. There is a \$25 million asset requirement to be eligible for inclusion in the strategy.

Fee Schedule: This report is intended for institutional investors and the standard investment advisory fee schedule was 0.30% on the first 75 million; 0.25% on the next 75 million; 0.20% thereafter.

Benchmark Description: The Bloomberg U.S. Aggregate Bond Index includes government securities, mortgage-backed securities, asset-backed securities and corporate securities to simulate the universe of bonds in the market. The maturities of the bonds in the index are more than one year.

Derivatives Disclosure: As part of the investment process, financial derivatives may be used to manage risk, namely currency exposure. The strategy may engage in foreign currency transactions, such as forwards, futures and options for hedging purposes. The strategy may also engage in exchange-traded interest rate futures and options for investment or hedging purposes but these would not act as the primary return drivers. Derivative instruments are only used when and as guidelines and/or regulations permit.

Manulife Investment Management

Core Fixed Income Composite

Prelim – Only Schedule of Year End Returns updated per SEC Marketing Rule

Creation Date: January 1, 2018

Inception Date: January 1, 1996

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	6.40	6.08	5.53	7.28	7.14	<=5	N/A	4,924	486,485
2022	-13.64	-13.90	-13.01	6.14	5.77	<=5	N/A	2,930	422,291
2021	-0.71	-1.01	-1.54	3.82	3.35	<=5	N/A	3,853	455,705
2020	9.17	8.84	7.51	3.75	3.36	<=5	N/A	3,447	421,097
2019	9.15	8.82	8.72	2.76	2.87	<=5	N/A	2,156	422,034
2018	0.40	0.10	0.01	2.63	2.84	<=5	N/A	1,400	392,058
2017	4.55	4.24	3.54	2.68	2.78	<=5	N/A	1,325	N/A
2016	3.60	3.29	2.65	2.87	2.98	<=5	N/A	652	N/A
2015	1.03	0.73	0.55	3.06	2.88	<=5	N/A	401	N/A
2014	7.04	6.72	5.97	2.87	2.63	<=5	N/A	288	N/A

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 (%)
12/31/24	Composite	2.30	0.38	2.03	5.02	2.00	0.08	1.72	4.70
Date	Return	1 Year	5 Year	10 Year	SI				
12/31/24	Benchmark	1.25	-0.33	1.35	4.11				

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.

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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 Core Fixed Income strategy seeks to generate a high rate of total return consistent with prudent risk, through investment in a diversified core strategy of investment grade debt. There is a \$500,000 asset requirement to be eligible for inclusion in the strategy.

Fee Schedule: This report is intended for institutional investors and the standard investment advisory fee schedule is 0.30% on the first 25 million; 0.25% on the next 50 million; 0.20% thereafter.

Benchmark Description: The Bloomberg U.S. Aggregate Bond Index includes government securities, mortgage-backed securities, asset-backed securities and corporate securities to simulate the universe of bonds in the market. The maturities of the bonds in the index are more than one year.

Derivatives Disclosure: As part of the investment process, financial derivatives may be used to manage risk, namely currency exposure. The strategy may engage in foreign currency transactions, such as forwards, futures and options for hedging purposes. The strategy may also engage in exchange-traded interest rate futures and options for investment or hedging purposes but these would not act as the primary return drivers. Derivative instruments are only used when and as guidelines and/or regulations permit.

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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

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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.

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