

Marketing Communication

Not for Retail distribution: This marketing communication is intended exclusively for Professional, Institutional or Wholesale Investors / Clients, as defined by applicable local laws and regulation. Circulation must be restricted accordingly.

US High Yield Market Update

Mike Graham Head of US High Yield & Senior US High Yield Portfolio Manager

January 26, 2023

Investment involves risk, including loss of capital

AXA IM US High Yield - Performance Comparison

As of December 31, 2022

Strategy GIPS Composite			A	nnualized	%		Strategy		Jan-23	-2023
	2022	1 year	2 1/02/05	Even	10 years	Since	AUM	Inception	Yield-to-	
AXA IM US Short Duration HY	Q4	1 year	3 years	5 years	10 years	inception	(\$mil)	Date	Worst	OAS
Net Returns	3.06	-4.98	0.68	2.23	2.71	4.66	\$5,494	30-Sep-01	7.05	279
Gross Returns	3.17	-4.55	1.13	2.68	3.18	5.15			7.05	275
									-	
Strategy GIPS Composite			A	nnualized	%		Strategy		Jan-23	-2023
	2022	1 year	3 years	5 years	10 years	Since	AUM	Inception	Yield-to-	
AXA IM US Enhanced High Yield	Q4	туса	5 years	Jyears	IU years	inception	(\$mil)	Date	Worst	OAS
Net Returns	7.45	-14.84	-0.93			2.89	\$141	31-Dec-18	9.72	307
Gross Returns	7.70	-14.01	0.02			3.87			5.72	307
Strategy GIPS Composite			A	nnualized	%		Strategy		Jan-23	-2023
	2022	1.voor	2 10075	5 years	10 years	Since	AUM	Inception	Yield-to-	
AXA IM US Core High Yield	Q4	1 year	3 years	5 years	10 years	inception	(\$mil)	Date	Worst	OAS
Net Returns	4.37	-9.55	0.56	2.43	3.97	6.83	\$2,866	30-Sep-01		
Gross Returns	4.50	-9.11	1.04	2.92	4.47	7.34			8.19	425
ICE BoA US High Yield Index	3.98	-11.22	-0.23	2.12	3.94	6.88			8.17	428
Strategy GIPS Composite			A	nnualized 9	%		Strategy		Jan-23	-2023
	2022	1	2.000	E vice re	10	Since	AUM	Inception	Yield-to-	
AXA IM US Dynamic High Yield	Q4	1 year	3 years	5 years	10 years	inception	(\$mil)	Date	Worst	OAS
Net Returns	4.72	-12.70	1.45	3.48		4.76				
Gross Returns	4.87	-12.17	2.06	4.10		5.39	\$935	28-Feb-14	11.00	719
ICE BoA US High Yield Index	3.98	-11.22	-0.23	2.12	3.94	3.32			8.17	428

Investment in US High Yield markets involves risks including the loss of capital and some specific risks. The value of investments, and the income from them, can fall as well as rise and investors may not get back the amount originally invested. Source: AXA IM US Inc. As of Dec. 31, 2022. Performance shown gross of fees is calculated before expenses, carried interest, taxation costs and other expenses the investor may incur. An investor's return will be reduced by management fees and other expenses. Please see the

2 carried interest, taxation costs and other expenses the investor may incur. An investor's return will be reduced by management rees and other expenses, please see the Appendix for further information about the effect of management fees. Past performance is not indicative of future results. The above information presented is supplemental to the GIPS-compliant presentation included in the GIPS Disclosure Notes. No assurance can be given that the strategy will be successful or achieve its objectives.





Market Update

Asset Class Comparison - Performance and Yield Comparison

Markets rebound at the end of 2022 and into 2023

		As of Decer	nber 31, 20	As o	f January 20	, 2023	
USD (H) Currency	2022 Total Return	2022 4Q Total Return	Yield-to- Worst	Option Adjusted Spread	2023 YTD Total Return	Yield-to- Worst	Option Adjusted Spread
Credit Suisse Lev Loan Index	-1.06	2.33	10.28	369	2.03	9.46	369
Euro High Yield Index (H USD)	-9.33	5.71	7.96	515	3.07	7.22	463
US Corporates 1-10yrs	-9.63	2.70	5.43	127	2.20	5.01	118
US High Yield BB Rated	-10.57	4.33	7.26	308	3.17	6.63	281
US High Yield B Rated	-10.58	4.33	9.34	515	3.62	8.48	461
US High Yield Index	-11.22	3.98	8.99	481	3.58	8.17	435
Euro Corporate Index (H USD)	-11.92	2.10	4.22	167	2.36	3.85	153
US Corporate Index	-15.44	3.53	5.51	138	3.38	5.08	129
US Corporates BBB Rated	-15.86	4.06	5.83	172	3.57	5.37	160
US Treasury 10 year	-16.28	0.65	3.83	N/A	2.98	3.49	4
US High Yield CCC and lower	-16.32	1.12	15.87	1170	5.25	14.13	1050
S&P 500 Index	-18.11	7.56	1.76*	N/A	3.55	1.69*	N/A
Russell 2000 Index	-20.44	6.23	1.63*	N/A	6.06	1.53*	N/A

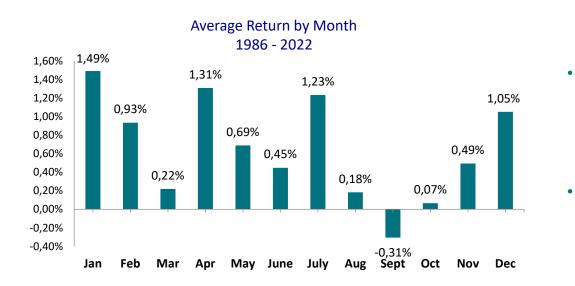
*12M Gross Dividend Yield



January Effect

5

Historically the US High Yield market produces a positive return in January



	н	igh-yiel	d retur	Со	unt	%	
	Average	Median	Max	Positive Return	Negative Return	Positive Return	
1st half of Jan.	0.96%	0.88%	4.63%	-2.97%	18	6	75%
2nd half of Jan.	0.30%	0.22%	2.34%	-1.93%	15	9	63%

- The positive return in January is often driven by Supply and Demand Technicals, particularly in the first 2 weeks of the month.
- Improved market sentiment as it relates to the probability and severity of a potential recession provided further strength to the US high yield market's return in January.



2023 Outlook

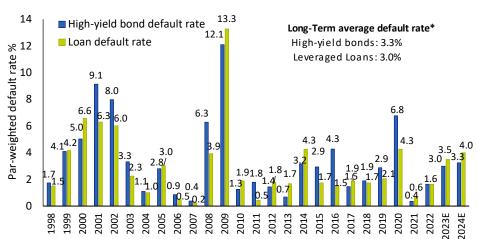
Key areas of focus include:

- **1.** Central banks and their ability to fight inflation
- 2. Default expectations and the severity of an economic downturn
- 3. Floating rate debt exposure
- 4. Credit rating downgrades at senior levels of capital structures
- 5. Returns across credit quality the potential for dispersion and decompression
- 6. Volatility and liquidity pressures in other fixed income and risk asset classes
- 7. Higher carry produces higher returns



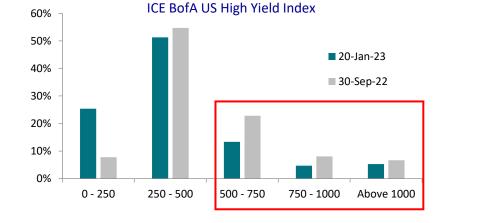
Default Expectations

Monitoring investors expectation for defaults in 2023 and 2024

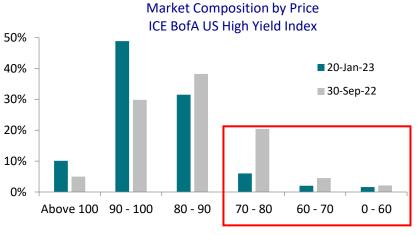


High-yield bond and loan default rates¹

- Our bottom-up analysis of the US High Yield index projects a 2-4% default rate for 2023, on the low end of market expectations.
- Higher projections are typically the product of top-down macro models where the percentage of the market trading at distressed levels and lending standards points to higher defaults.



Market Composition by Spread

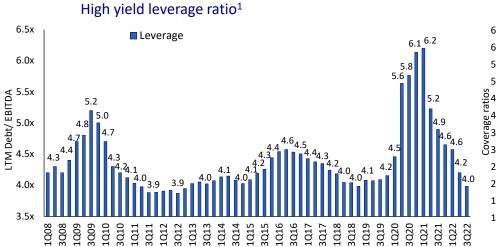


to Managers

7 Source: J.P. Morgan: 1) Default Monitor January 3, 2023. *High-yield bonds Long-Term default rate since 1997, Leveraged Loans Long-Term default rate since 1998. Due to the subjective aspect of these analyses, the effective evolution of the economic variables and values of the financial markets could be significantly different for the projections which are communicated in this material. For illustrative purposes only. Past performance is not indicative of future results.

Market Fundamentals

Leverage and coverage metrics



High yield coverage ratio² EBITDA-CAPEX/Int Exp EBITDA/Int Exp 6.5x 6.0x 5.5x 5.0x .5x 4.0x 3.5x 3.0x 2.5x 2.0x 1.5x 1.0x 1Q10 3Q10 1Q11 3Q11 1Q12 3Q12 1Q13 3Q13 1Q14 1Q14 1009 3009 1Q16 3Q16 1Q17 3Q.18 3Q19 1Q20 3Q20 1Q08 3Q08 1Q15 3Q15 3Q17 1Q18 1Q19 1Q21 1Q22 3Q22 3Q21

Leverage by Rating ³

	Debt/EBITDA 3Q22*	Debt/EBITDA 3Q21*	Change y/y	Change y/y
BB	3.27x (3.08x)	4.30x (3.79x)	-1.03x	-24%
В	4.81x (3.98x)	6.23x (4.60x)	-1.42x	-23%
ссс	7.72x (6.40x)	8.03x (6.12x)	-0.31x	-4%

Coverage by Rating ³

	EBITDA/Net Interest Expense 3Q22	EBITDA/Net Interest Expense 3Q21	Change y/y	Change y/y %
BB	8.07x (8.59x)	6.13x (6.97x)	1.95x	32%
В	4.49x (5.32x)	3.39x (4.54x)	1.10x	32%
CCC	2.29x (2.85x)	2.04x (2.74x)	0.25x	12%

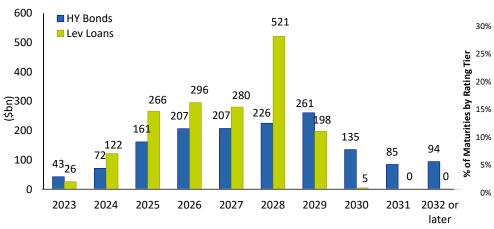
Note: Issuer ratings are computed based on weighted average debt outstanding. BB includes Split BBB and BB, B includes Split BB and B, while CCC includes Split B and CCC. *Numbers shown in parenthesis are excluding the Gaming/Leisure and Transportation sectors



Source: 1) US High Yield Credit Fundamentals 3Q 2022 (data is one quarter lagged); 2) US High Yield Credit Fundamentals 3Q 2022 (data is one quarter lagged); 3) Sources: J.P. Morgan; Capital IQ. For illustrative purposes only. Past performance is not indicative of future results.

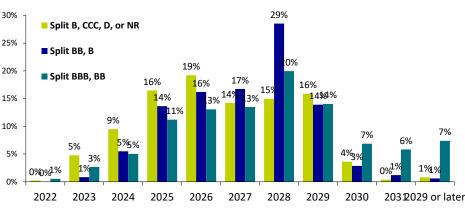
Maturity Schedules

Maturity schedules remain manageable for most issuers

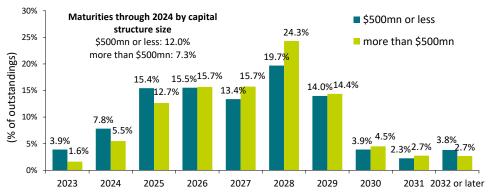


High yield and institutional loan maturities

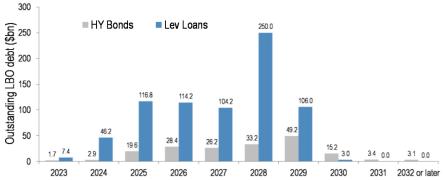




Maturity by Capital Structure size (HY bonds and Lev Loans)



LBO Maturity Schedule (HY bonds and Lev Loans)



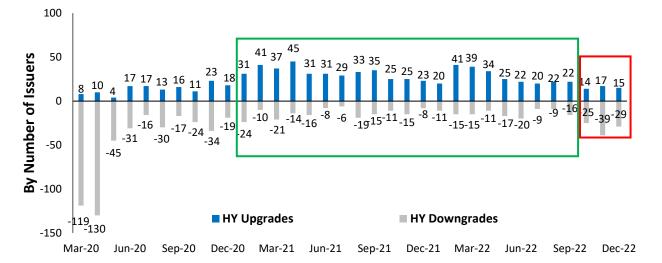


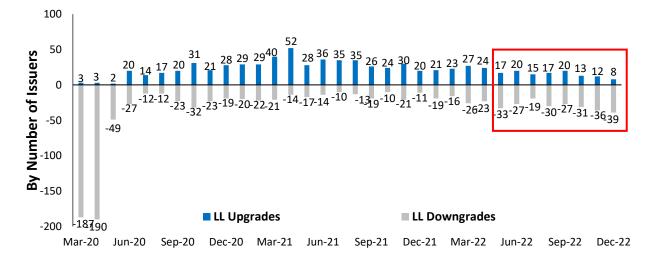
Credit Rating Trends

US High Yield and US Leveraged Loans

- US High Yield experienced more upgrades than downgrades from Jan-21 to Sept-22.
- However, during the last 3 months the market has experienced more downgrades than upgrades.

- The US Leverage Loan market has experienced 8 consecutive months where downgrades have exceeded upgrades.
- Key focus in this market will be the downgrades from single B to triple C ratings.







Higher Returns Follow Higher Yields

ICE US	High	Yield	Index	(H0A0)	
---------------	------	-------	-------	--------	--

Year	YTW at beginning of year	Annual Return (%)	Year	YTW at beginning of year	Annual Return (%)
2000	11.02	-5.12	2012	8.09	15.58
2001	14.14	4.48	2013	6.11	7.42
2002	12.67	-1.89	2014	5.67	2.5
2003	11.9	28.15	2015	6.65	-4.64
2004	7.56	10.87	2016	8.76	17.49
2005	6.93	2.74	2017	6.17	7.48
2006	8.24	11.77	2018	5.84	-2.27
2007	7.75	2.19	2019	7.95	14.41
2008	9.61	-26.39	2020	5.41	6.17
2009	19.43	57.51	2021	4.24	5.36
2010	8.83	15.19	2022	4.32	-11.22
2011	7.38	4.38	2023	8.99	???

Since 1999:

- The US high yield market has never experienced back-to-back calendar years of negative returns.
- Following years with negative returns, the average return in the next year was +24.4%.
- Following negative returning years, the next year had double-digit returns 80% of the time.
- When the Dec. 31st yield-to-worst of the preceding year was greater than 8%, only three years (2000, 2002 and 2008) followed with a negative return
- Seasonality: January returns have been positive 83% of the time.





A CONTRACT STREET, 1992

Update on AXA IM US High Yield Strategies

US Short Duration High Yield

Yield-to-worst near highest since the Credit Crisis

As of December month-end, US SDHY was capturing almost 90% of the yield-to-worst of the broad US high yield market.

Since the 2008-2009 Credit Crisis, there were only:

- 2 other (brief) periods where SDHY had higher yields:
 - Late Sept/early Oct. 2011: US downgrade
 - Late Mar/ early April 2020: Onset of the pandemic

AXA IM US SHORT DURATION HY

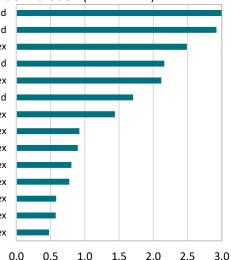
Weekly Yield to Worst

- 1 week where SDHY had a lower average price :
 - Late March 2020: Onset of pandemic

11%

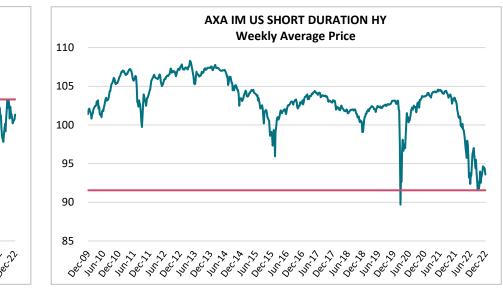


Yield % Per Unit of Duration (YTW ÷ DTW)



Investment

Managers

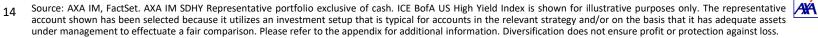


13 Source: AXA IM, FactSet – Dec 31, 2009 - December 31, 2022. AXA IM US SDHY Representative portfolio exclusive of cash. The representative account shown has been selected because it utilizes an investment setup that is typical for accounts in the relevant strategy and/or on the basis that it has adequate assets under management to effectuate a fair comparison. Please refer to the appendix for additional information. Diversification does not ensure profit or protection against loss.

Summary Statistics

AXA IM Short Duration HY Strategy – December 31, 2022

Representative Portfolio \$3,811 Services 17.0% 6.6% 257% US SD High Yid Strategy \$6,408 INDEX ICE Bofa ML US HY Index Media 10.0% 9.0% 111% CHARACTERISTICS AXA IM Index ICE Bofa ML RATING AXA IM Index Real Estate 8.1% 4.0% 203% Ave Years to Maturity 7.89% 9.01% BBB Holdings 1.7% 0.0% Technology & Electronics 6.3% 5.2% 120% Yield To Worst 7.8% 8.99% BB Holdings 4.54% 50.8% Leisure 6.0% 7.7% 78% Qurrent Yield 5.91% 6.78% B Holdings 4.1% 10.9% Basic Industry 5.9% 7.8% 77% Average Coupon 5.52% 5.77% Not Rated 1.8% 0.0% Financial Services 5.1% 5.1% 101% Option Adjusted Spread 347 481 US YEARS TO MATURITY AXA IM Index Energy 4.7% 12.2%												
UL SD High Yild Strategy\$6,408INDEXICE Bofa ML US HY IndexMediaMedia10.0%9.0%111%CHARACTERISTICSAXA IMIndexConsumer Goods8.2%3.8%216%Ave Years to Maturity3.15.5AAA Holdings2.6%0.0%Capital Goods6.3%5.2%114%Yield To Worst7.88%8.99%BB Holdings1.7%0.0%Technology & Electronics6.0%7.5%6.6%114%Qurrent Yield To Worst7.86%8.99%BB Holdings40.3%38.4%HealthCare6.0%7.7%7.7%7.7%Qurrent Yield To Worst2.64.2CCC or Under8.1%10.9%Basic Industry5.9%7.8%77%Quration To Worst2.64.2CCC or Under8.1%10.9%Basic Industry5.9%5.1%5.1%101%Option Adjusted Spread347481CCC or Under8.1%0.0%Financial Services5.1%5.1%101%Option Adjusted Spread3.19.33.5 Years3.3%2.6%1.6%1.5%4.3%3.4%10.9%1.6%1.5%4.3%3.4%Number of Bostion4.139.33.5 Years5.3%1.6%1.5%4.4%3.4%4.4%3.4%Number of Bostion4.131925.7 Years5.3%2.27%Automotive1.5%4.4%3.4%Number of Bostion4.131925.7 Years0.3%3.27% <td< th=""><th>ASSETS UNDER MANAG</th><th>SEMENT (\$</th><th>millions)</th><th>DATA AS C</th><th>DF</th><th>12/31/2022</th><th></th><th>ICE BofA ML S</th><th>ECTOR</th><th>AXA IM</th><th>Index</th><th>AXA/ Index</th></td<>	ASSETS UNDER MANAG	SEMENT (\$	millions)	DATA AS C	DF	12/31/2022		ICE BofA ML S	ECTOR	AXA IM	Index	AXA/ Index
Character RSTICS AXA IM Index ICE BofA ML RATING AXA IM Index Real Estate 8.1% 4.0% 203% Ave Years to Maturity 3.1 5.5 AAA Holdings 2.6% 0.0% Capital Goods 7.5% 6.6% 114% Yield to Maturity 7.89% 9.01% BBB Holdings 1.7% 0.0% Technology & Electronics 6.3% 5.2% 120% Vield to Maturity 7.89% 8.99% BB Holdings 45.4% 50.8% Leisure 6.0% 7.7% 77% Duration To Worst 2.6 4.2 CCC or Under 8.1% 10.9% Basic Industry 5.9% 7.8% 76% Average Coupon 5.52% 5.77% Not Rated 1.8% 0.0% Financial Services 5.1% 5.1% 101% Option Adjusted Spread 8.6 18.2 YEARS TO MATURITY AXA IM Index Energy 4.7% 12.2% 39% Number of Issuers 131 905 3-5 Years 0.3%	Representative Portfolio	\$3,811						Services		17.0%	6.6%	257%
CHARACTERISTICS AXA IM Index ICE BofA ML RATING AXA IM Index Real Estate 8.1% 4.0% 203% Ave Years to Maturity 3.1 5.5 AAA Holdings 2.6% 0.0% Capital Goods 7.5% 6.6% 114% Yield to Maturity 7.89% 9.01% BBB Holdings 1.7% 0.0% Technology & Bectronics 6.3% 5.2% 120% Quirent Yield 5.91% 6.78% B Holdings 45.4% 50.8% Leisure 6.0% 7.8% 77% Quirent Yield 5.91% 6.78% B Holdings 40.3% 38.4% Healthcare 6.0% 7.8% 77% Average Coupon 5.52% 5.77% Not Rated 1.8% 0.0% Energy 5.1% 5.1% 101% Option Adjusted Spread 8.6 18.2 VEARS TO MATURITY AXA IM Index Energy 4.7% 12.2% 39% Number of Issuers 131 905 3-5 Years 50.8% 29.7%	US SD High Yld Strategy	\$6,408		INDEX	ICE Bofa ML	US HY Index	(Media		10.0%	9.0%	111%
Ave Years to Maturity 3.1 5.5 AAA Holdings 2.6% 0.0% Capital Goods 7.5% 6.6% 114% Yield to Maturity 7.89% 9.01% BBB Holdings 1.7% 0.0% Technology & Electronics 6.3% 5.2% 120% Yield To Worst 7.88% 8.99% BB Holdings 45.4% 50.8% Leisure 6.0% 7.8% 77% Ourrent Yield 5.91% 6.78% B Holdings 40.3% 38.4% Healthcare 6.0% 7.8% 77% Average Coupon 5.52% 5.77% Not Rated 1.8% 0.0% Financial Services 5.1% 5.1% 101% Average Price 347 481 1.3? 0.0% Telecormunications 4.3% 6.6% 14.2% 39% Average Price 34 86 1.3? 905 3.5 Years 50.8% 29.7% Automotive 1.5% 4.4% 34% Number of Issuers 131 905 3.5 Years 0.3%								Consumer Good	ls	8.2%	3.8%	216%
Yield to Maturity 7.89% 9.01% BBB Holdings 1.7% 0.0% Technology & Bectronics 6.3% 5.2% 120% Yield To Worst 7.88% 8.99% BB Holdings 45.4% 50.8% Leisure 6.0% 7.8% 77% Qurrent Yield 5.91% 6.78% B Holdings 40.3% 38.4% Healthcare 6.0% 7.8% 77% Qurrent Yield 5.91% 6.78% DCCC or Under 8.1% 10.9% Basic Industry 5.9% 7.8% 76% Average Coupon 5.52% 5.77% Not Rated 1.8% 0.0% Financial Services 5.1% 5.1% 101% Option Adjusted Spread 347 481 YEARS TO MATURITY AXA IM Index Energy 4.7% 12.2% 39% Average Price 94 86 18.2 YEARS TO MATURITY AXA IM Index Energy 4.3% 6.5% 66% Cash Position 4.1% NA 1-3 Years 3.4% 0.0% Telecommunications 4.3% 6.5% 66%	CHARACTERISTICS	AXA IM	Index	ICE BofA N	IL RATING	AXA IM	Index	Real Estate		8.1%	4.0%	203%
Yield To Worst 7.88% 8.99% BB Holdings 45.4% 50.8% Leisure 6.0% 7.8% 77% Qurrent Yield 5.91% 6.78% BB Holdings 40.3% 38.4% Healthcare 6.0% 7.8% 77% 78% Duration To Worst 2.6 4.2 CCC or Under 8.1% 10.9% Basic Industry 5.9% 7.8% 76% Average Coupon 5.52% 5.77% Not Rated 1.8% 0.0% Financial Services 5.1% 5.1% 101% Option Adjusted Spread 347 481	Ave Years to Maturity	3.1	5.5	AAA Holdin	igs	2.6%	0.0%	Capital Goods		7.5%	6.6%	114%
Current Yield 5.91% 6.78% B Holding 40.3% 38.4% Healthcare 6.0% 7.7% 78% Duration To Worst 2.6 4.2 CCC or Under 8.1% 10.9% Basic Industry 5.9% 7.8% 76% Average Coupon 5.52% 5.77% Not Rated 1.8% 0.0% Financial Services 5.1% 5.1% 101% Option Adjusted Spread 347 481 Retail 8.6 18.2 YEARS TO MATURITY AXA IM Index Energy 4.7% 12.2% 39% Average Price 94 86 18.2 YEARS TO MATURITY AXA IM Index Energy 4.7% 12.2% 39% Cash Position 4.1% N/A 1-3 Years 45.5% 16.5% U.S. Treasuries 2.6% 0.0% N/A Number of Issuers 131 905 3-5 Years 0.3% 32.7% Transportation 1.0% 2.3% 44% Number of Positions 183 1928 5-7 Years 0.3% 3.7% Banking 0.0% 0.6% 1.6% <td>Yield to Maturity</td> <td>7.89%</td> <td>9.01%</td> <td>BBB Holding</td> <td>gs</td> <td>1.7%</td> <td>0.0%</td> <td>Technology & E</td> <td>lectronics</td> <td>6.3%</td> <td>5.2%</td> <td>120%</td>	Yield to Maturity	7.89%	9.01%	BBB Holding	gs	1.7%	0.0%	Technology & E	lectronics	6.3%	5.2%	120%
Duration To Worst 2.6 4.2 CCC or Under 8.1% 10.9% Basic Industry 5.9% 7.8% 7.6% Average Coupon 5.52% 5.77% Not Rated 1.8% 0.0% Financial Services 5.1% 5.1% 5.1% 101% Option Adjusted Spread 347 481	Yield To Worst	7.88%	8.99%	BB Holdings	3	45.4%	50.8%	Leisure		6.0%	7.8%	77%
Average Coupon5.52%5.77%Not Rated1.8%0.0%Financial Services5.1%5.1%5.1%101%Option Adjusted Spread347481Retail5.0%5.4%94% <t< td=""><td>Current Yield</td><td>5.91%</td><td>6.78%</td><td>B Holdings</td><td></td><td>40.3%</td><td>38.4%</td><td>Healthcare</td><td></td><td>6.0%</td><td>7.7%</td><td>78%</td></t<>	Current Yield	5.91%	6.78%	B Holdings		40.3%	38.4%	Healthcare		6.0%	7.7%	78%
Option Adjusted Spread Duration Times Spread347481FearRetail5.0%5.4%94%Duration Times Spread Average Price9486Less than 1 Year3.4%0.0%Telecommunications4.3%6.5%66%Cash Position4.1%N/A1-3 Years45.5%16.5%U.S. Treasuries2.6%0.0%N/ANumber of Issuers1319053-5 Years50.8%29.7%Automotive1.5%4.4%34%Number of Positions18319285-7 Years0.3%32.7%Transportation1.0%2.3%44%Average ML RatingB1B17-10 Years0.0%17.4%Insurance0.6%1.6%41%Over 10 Years0.0%3.7%Banking0.0%0.0%0.0%0.0%0.0%0.0%TOP FIVE SECURITIESCoupon (%)MaturityICE Bof A RatingIssue Size (\$MM)ICE Bof A ML IndustryVield to PriceVield to Vorst (%) to WorstVield to PortfoldIRB Holding Corp.7.0006/15/2025B2750Restaurants99.757.112.21.5BWAY Holding Co., Inc.5.5004/15/2024B31,480Packaging97.227.801.21.3B&G Foods, Inc.5.2504/01/2025CCC1500Food - Wholesale87.6911.612.01.3	Duration To Worst	2.6	4.2	CCC or Und	ler	8.1%	10.9%	Basic Industry		5.9%	7.8%	76%
Duration Times Spread 8.6 18.2 YEARS TO MATURITY AXA IM Index Energy 4.7% 12.2% 39% Average Price 94 86 Less than 1 Year 3.4% 0.0% Telecommunications 4.3% 6.5% 66% Cash Position 4.1% NVA 1-3 Years 45.5% 16.5% U.S. Treasuries 2.6% 0.0% NVA Number of Issuers 131 905 3-5 Years 50.8% 29.7% Automotive 1.5% 4.4% 34% Number of Positions 183 1928 5-7 Years 0.3% 32.7% Transportation 1.0% 2.3% 44% Average ML Rating B1 B1 7-10 Years 0.0% 17.4% Insurance 0.6% 1.6% 41% Over 10 Years 0.0% 3.7% Banking 0.0% 0.0% 2.7% Mutinstry Yield to Worst Worst (%) to Worst Portotice IRB Holding Corp. 7.000 6/15/2025 B2 750	Average Coupon	5.52%	5.77%	Not Rated		1.8%	0.0%	Financial Servic	es	5.1%	5.1%	101%
Average Price 94 86 Less than 1 Year 3.4% 0.0% Telecommunications 4.3% 6.5% 66% Cash Position 4.1% N/A 1-3 Years 45.5% 16.5% U.S. Treasuries 2.6% 0.0% Number of lasuers 131 905 3-5 Years 50.8% 29.7% Automotive 1.5% 4.4% 34% Number of Issuers 131 905 3-5 Years 50.8% 29.7% Automotive 1.5% 4.4% 34% Number of Positions 183 1928 5-7 Years 0.3% 32.7% Transportation 1.0% 2.3% 44% Average ML Rating B1 B1 7-10 Years 0.0% 17.4% Insurance 0.6% 1.6% 4.4% 44% TOP FIVE SECURITIES Coupon (%) Maturity ICE BofA Issue Size ICE BofA ML Industry Current Price Vield to Worst (%) Duration % of to Worst Portfolic IRB Holding Corp. 7.000 6/15/2025 B2 <th< td=""><td>Option Adjusted Spread</td><td>347</td><td>481</td><td></td><td></td><td></td><td></td><td>Retail</td><td></td><td>5.0%</td><td>5.4%</td><td>94%</td></th<>	Option Adjusted Spread	347	481					Retail		5.0%	5.4%	94%
Cash Position 4.1% NA 1-3 Years 45.5% 16.5% U.S. Treasuries 2.6% 0.0% NA Number of Issuers 131 905 3-5 Years 50.8% 29.7% Automotive 1.5% 4.4% 34% Number of Positions 183 1928 5-7 Years 0.3% 32.7% Transportation 1.0% 2.3% 44% 34% Average ML Rating B1 B1 B1 7-10 Years 0.0% 17.4% Insurance 0.6% 1.6% 4.4% 34% TOP FIVE SECURITIES Coupon (%) Maturity ICE Bof A Rating Issue Size (SMM) ICE Bof A (SMM) Issue Size (SMM) Ice Bof A (SMM) Industry Yield to Worst (%) Duration Worst (%) % of Portfolic RB Holding Corp. 7.000 6/15/2025 B2 750 Restaurants 99.75 7.11 2.2 1.3 BWAY Holding Co., Inc. 6.750 7/15/2024 B3 1,480 Packaging 97.22 7.80 1.2 1.3 B&G Foods, Inc. 5.250 4/01/2025 CCC1	Duration Times Spread	8.6	18.2	YEARS TO	MATURITY	AXA IM	Index	Energy		4.7%	12.2%	39%
Number of Issuers 131 905 3-5 Years 50.8% 29.7% Automotive 1.5% 4.4% 34% Number of Positions 183 1928 5-7 Years 0.3% 32.7% Transportation 1.0% 2.3% 44% Average ML Rating B1 B1 B1 7-10 Years 0.0% 17.4% Insurance 0.6% 1.6% 41% TOP FIVE SECURITIES Coupon (%) Maturity ICE BofA Rating Issue Size (SMM) ICE BofA ML Industry Current Price Yield to Worst (%) Duration % of Portfolice IRB Holding Corp. 7.000 6/15/2025 B2 750 Restaurants 99.75 7.11 2.2 1.5 BWAY Holding Co., Inc. 5.500 4/15/2024 B3 1,480 Packaging 97.22 7.80 1.2 1.3 B&G Foods, Inc. 5.250 4/01/2025 CCC1 500 Food - Wholesale 87.69 11.61 2.0 1.3	Average Price	94	86	Less than 1	Year	3.4%	0.0%	Telecommunicat	tions	4.3%	6.5%	66%
Number of Positions 183 1928 5-7 Years 0.3% 32.7% Transportation 1.0% 2.3% 44% Average ML Rating B1 B1 B1 B1 B1 B1 D1 7-10 Years 0.0% 17.4% Insurance 0.6% 1.6% 41% TOP FIVE SECURITIES Coupon (%) Maturity ICE Bof A Rating Issue Size (\$MM) ICE Bof A (\$MM) Industry Yield to Worst (%) Duration % of Portfolic IRB Holding Corp. 7.000 6/15/2025 B2 750 Restaurants 99.75 7.11 2.2 1.5 CD&R Smokey Buyer, Inc. 6.750 7/15/2025 B3 625 Personal & Household Products 85.81 13.53 2.1 1.3 BWAY Holding Co., Inc. 5.500 4/15/2024 B3 1,480 Packaging 97.22 7.80 1.2 1.3 B&G Foods, Inc. 5.250 4/01/2025 CCC1 500 Food - Wholesale 87.69 11.61 2.0 1.3 <td>Cash Position</td> <td>4.1%</td> <td>N/A</td> <td>1-3 Years</td> <td></td> <td>45.5%</td> <td>16.5%</td> <td>U.S. Treasuries</td> <td></td> <td>2.6%</td> <td>0.0%</td> <td>N/A</td>	Cash Position	4.1%	N/A	1-3 Years		45.5%	16.5%	U.S. Treasuries		2.6%	0.0%	N/A
Average ML Rating B1 7-10 Years Over 10 Years 0.0% 17.4% Insurance 0.6% 1.6% 41% TOP FIVE SECURITIES Coupon (%) Maturity ICE BofA Issue Size (\$MM) ICE BofA ML Industry Current Price Yield to Duration % of Portfolio IRB Holding Corp. 7.000 6/15/2025 B2 750 Restaurants 99.75 7.11 2.2 1.3 BWAY Holding Co., Inc. 5.500 4/15/2024 B3 1,480 Packaging 97.22 7.80 1.2 1.3 B&G Foods, Inc. 5.250 4/01/2025 CCC1 500 Food - Wholesale 87.69 11.61 2.0 1.3	Number of Issuers	131	905	3-5 Years		50.8%	29.7%	Automotive		1.5%	4.4%	34%
Over 10 Years0.0%3.7%Banking0.0%0.9%0%TOP FIVE SECURITIESCoupon (%)MaturityICE BofA RatingISsue Size (\$MM)ICE BofA ML IndustryCurrent PriceYield to Worst (%)Duration to Worst% of PortfolicIRB Holding Corp.7.0006/15/2025B2750Restaurants99.757.112.21.5CD&R Smokey Buyer, Inc.6.7507/15/2025B3625Personal & Household Products85.8113.532.11.3BWAY Holding Co., Inc.5.5004/01/2025CCC1500Food - Wholesale87.6911.612.01.3	Number of Positions	183	1928	5-7 Years		0.3%	32.7%	Transportation		1 .0%	2.3%	44%
TOP FIVE SECURITIES Coupon (%) Maturity ICE BofA Rating Issue Size (\$MM) ICE BofA ML Industry Current Price Yield to Worst (%) Duration % of Portfolic IRB Holding Corp. 7.000 6/15/2025 B2 750 Restaurants 99.75 7.11 2.2 1.5 CD&R Smokey Buyer, Inc. 6.750 7/15/2025 B3 625 Personal & Household Products 85.81 13.53 2.1 1.3 BWAY Holding Co., Inc. 5.500 4/15/2024 B3 1,480 Packaging 97.22 7.80 1.2 1.3 B&G Foods, Inc. 5.250 4/01/2025 CCC1 500 Food - Wholesale 87.69 11.61 2.0 1.3	Average ML Rating	B1	B1	7-10 Years		0.0%	17.4%	Insurance		0.6%	1.6%	41%
TOP Five SECORTIES Maturity Rating (\$MM) ICE BorA ML Industry Price Worst (%) to Worst Portfolic IRB Holding Corp. 7.000 6/15/2025 B2 750 Restaurants 99.75 7.11 2.2 1.5 CD&R Smokey Buyer, Inc. 6.750 7/15/2025 B3 625 Personal & Household Products 85.81 13.53 2.1 1.3 BWAY Holding Co., Inc. 5.500 4/15/2024 B3 1,480 Packaging 97.22 7.80 1.2 1.3 B&G Foods, Inc. 5.250 4/01/2025 CCC1 500 Food - Wholesale 87.69 11.61 2.0 1.3				Over 10 Ye	ars	0.0%	3.7%	Banking		0.0%	0.9%	0%
IRB Holding Corp. 7.000 6/15/2025 B2 750 Restaurants 99.75 7.11 2.2 1.5 CD&R Smokey Buyer, Inc. 6.750 7/15/2025 B3 625 Personal & Household Products 85.81 13.53 2.1 1.3 BWAY Holding Co., Inc. 5.500 4/15/2024 B3 1,480 Packaging 97.22 7.80 1.2 1.3 B&G Foods, Inc. 5.250 4/01/2025 CCC1 500 Food - Wholesale 87.69 11.61 2.0 1.3	TOP FIVE SECURITIES			Maturity			ICE Bof/	A ML Industry				
BWAY Holding Co., Inc. 5.500 4/15/2024 B3 1,480 Packaging 97.22 7.80 1.2 1.3 B&G Foods, Inc. 5.250 4/01/2025 CCC1 500 Food - Wholesale 87.69 11.61 2.0 1.3	IRB Holding Corp.		7.000	6/15/2025			Re	staurants	99.75			
B&G Foods, Inc. 5.250 4/01/2025 CCC1 500 Food - Wholesale 87.69 11.61 2.0 1.3	CD&R Smokey Buyer, Inc		6.750	7/15/2025	B3	625	Personal & H	ousehold Products	85.81	13.53	2.1	1.3
	BWAY Holding Co., Inc.		5.500	4/15/2024	B3	1,480	P	ackaging	97.22	7.80	1.2	1.3
CommScope Finance LLC 6.000 3/01/2026 B2 1,500 Tech Hardware & Equipment 91.91 8.99 2.7 1.3	B&G Foods, Inc.		5.250	4/01/2025	CCC1	500	Food	- Wholesale	87.69	11.61	2.0	1.3
	CommScope Finance LLC	>	6.000	3/01/2026	B2	1,500	Tech Hard	ware & Equipment	91.91	8.99	2.7	1.3

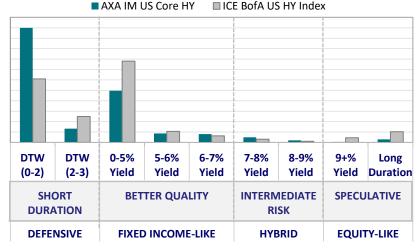




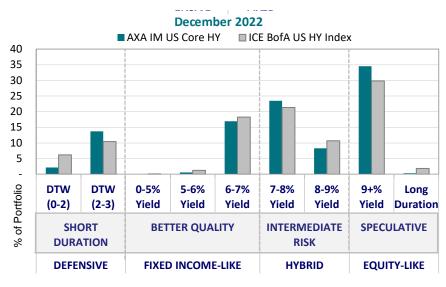
US Core High Yield Top-Down Risk Positioning

Actively managed using custom market segmentation

- Macro positioning of our US Core High Yield strategy has evolved over the past year.
- At the end of 3Q 2021, the strategy had a more defensive positioning, with a significant overweight to shorter duration securities that resulted in a duration of 2.5 compared to the benchmark's duration of 3.9.
- At the end of 2021 and throughout 2022, we have allowed the short duration overweight to decline, making room for securities with longer maturities which are now attractively priced. This has resulted in a macro positioning that is more in-line with the benchmark from a duration and yield standpoint.



September 2021



December 2021 AXA IM US Core HY ICE BofA US HY Index DTW DTW 0-5% 5-6% 6-7% 7-8% 8-9% 9+% Long (0-2)(2-3) Yield Yield Yield Yield Yield Yield Duration SHORT **BETTER QUALITY INTERMEDIATE SPECULATIVE** DURATION RISK DEFENSIVE FIXED INCOME-LIKE **HYBRID** EQUITY-LIKE

DTW = duration-to-worst

Sources: AXA Investment Managers, FactSet as of December 31, 2022. Index: ICE BofA US High Yield Index. AXA US Core High Yield representative portfolio. The representative account shown has been selected because it utilizes an investment setup that is typical for accounts in the relevant strategy and/or on the basis that it has adequate assets under management to effectuate a fair comparison. Please refer to the appendix for additional information. Past performance is not indicative of future results. For illustrative purposes only.

of Portfolio

%



15

Summary Statistics

AXA IM Core HY Strategy – December 31, 2022

	•										
CHARACTERISTICS	AXA IM	Index	DATA AS	DATA AS OF 12/31/2022		INDEX	K	ICE Bof A ML US High Yield			
Years to Maturity	5.3	5.5									
Yield to Maturity	9.06%	9.01%	ASSETS U	UNDER MANA	GEMENT (\$	millions)	ICE BofA ML	SECTOR	AXA IM	Index	AXA / Inde
Yield To Worst	9.06%	8.99%	Represen	Representative Portfolio* \$1,957			Services		12.4%	6.6%	186%
Current Yield	6.93%	6.78%	US Core H	IY Strategy	\$5,	582	Energy		11.4%	12.2%	93%
Duration To Worst	4.2	4.2					Healthcare		10.2%	7.7%	133%
Average Coupon	6.03%	5.77%	ICE BofA	ML RATING	AXA IM	Index	Technology &	Electronics	9.8%	5.2%	188%
Option Adjusted Spread	485	481	AAA Hold	ings	0.0%	0.0%	Media		9.8%	9.0%	108%
Duration Times Spread	18.1	18.2	BBB Holdi	ngs	0.4%	0.0%	Basic Industry		8.5%	7.8%	108%
Average Price	87	86	BB Holding	gs	29.9%	50.8%	Leisure		6.8%	7.8%	88%
Cash Position	3.6%	N/A	B Holdings	6	50.2%	38.4%	Capital Goods		6.5%	6.6%	99%
Number of Issuers	200	905	CCC or Ur	nder	18.5%	10.9%	Consumer Goo	ods	5.7%	3.8%	150%
Number of Positions	254	1928	Not Rated		0.9%	0.0%	Telecommunic	ations	4.4%	6.5%	67%
Average ML Rating	B2	B1					Financial Serv	ices	3.8%	5.1%	74%
			_				Retail		3.5%	5.4%	66%
MATURITY	AXA IM	Index	DURATIO	N TO WORST	AXA IM	Index	Real Estate		3.3%	4.0%	82%
Less Than 1 Year	0.0%	0.0%	Less Thar	า 1	0.0%	0.5%	Insurance		1.3%	1.6%	84%
1 - 3 Years	14.5%	16.5%	1 - 3		25.4%	26.1%	Transportation	1	1.3%	2.3%	57%
3 - 5 Years	31.9%	29.7%	3 - 5		43.2%	41.6%	Automotive		1.2%	4.4%	28%
5 - 7 Years	34.9%	32.7%	5 - 7		28.4%	27.0%	Banking		0.0%	0.9%	0%
7 - 10 Years	17.3%	17.4%	7 - 10		2.6%	3.2%	Utility		0.0%	3.1%	0%
Over 10 Years	1.4%	3.7%	Over 10		0.3%	1.6%					
TOP 5 SECURITIES		Coupon (%)	Maturity	ICE Bof A Rating	lssue Size		E BofA ML Industry	Current Price		Duration to Worst	
Matthews International		5.250	12/01/2025	B2	300		port-Services	94.25	7.48	2.6	1.1
Getty Images, Inc.		9.750	3/01/2027	B3	300		Advertising	98.71	10.13	3.2	1.1
Watco Companies, Inc.		6.500	6/15/2027	CCC1	500		Rail	95.00	7.85	3.8	0.9
Verscend Escrow Corp.		9.750	8/15/2026	CCC1	1,100	He	alth Services	97.97	10.43	2.9	0.9
Illuminate Buyer LLC		9.000	7/01/2028	CCC1	460		Chemicals	83.72	13.26	4.1	0.9
····											

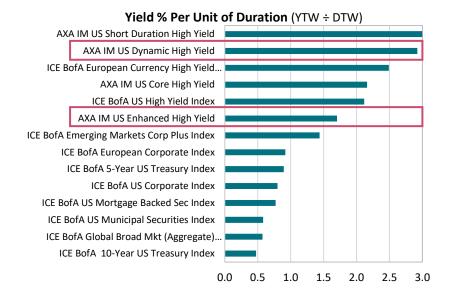
16 Source: AXA IM, FactSet. AXA IM Core HY representative portfolio exclusive of cash. Index: BofA Merrill Lynch US High Yield Index. The representative account shown has been selected because it utilizes an investment setup that is typical for accounts in the relevant strategy and/or on the basis that it has adequate assets under management to effectuate a fair comparison. Please refer to the appendix for additional information. Diversification does not ensure profit or protection against loss.

Investment

US Enhanced High Yield and US Dynamic High Yield

Two liquid alternative options for return-seeking clients looking for a complement to, or replacement to equity







17 Sources: AXA Investment Managers, ICE BofA, Credit Suisse. As of December 31, 2022. ICE BofA and Credit Suisse Indices shown for illustrative purposes only. The Arepresentative accounts shown have been selected because they utilize an investment setup that is typical for accounts in the relevant strategy and/or on the basis that they has adequate assets under management to effectuate a fair comparison. Please refer to the appendix for additional information.

Summary Overview

US Enhanced High Yield Strategy

V - Enhanc	ed High Yield	I		Index	ICE Bof A	ML US Hig	gh Yield		ICE BofA M	IL SECTOR	ENH HY	SDHY	Index
	\$147,022,563	}							Services		15.4%	17.0%	6.6%
Cash	\$144,414,767	,		ICE BofA M	L RATING	ENH HY	SDHY	Index	Media		11.3%	10.0%	9.0%
sh	\$368,069,140)		A Holdings		0.0%	2.6%	0.0%	Real Estate		9.0%	8.1%	4.0%
	255%			BBB Holdings	3	1.7%	1.7%	0.0%	Consumer C	Goods	8.6%	8.2%	3.8%
R + 130bps)) 5.60%			BB Holdings		42.4%	45.4%	50.8%	Capital Goo	ds	7.1%	7.5%	6.6%
	1.7%			B Holdings		43.7%	40.3%	38.4%	Basic Indus	try	6.7%	5.9%	7.8%
				CCC or Unde	r	10.6%	8.1%	10.9%	Healthcare		6.6%	6.0%	7.7%
Levered	Unlevered	SDHY	Index	Not Rated		1.7%	1.8%	0.0%	Energy		6.0%	4.7%	12.2%
	3.3	3.1	5.5	Average ML	Rating	B1	B1	B1	Leisure		5.5%	6.0%	7.8%
12.14% ¹	8.17%	7.89%	9.01%						Telecommu	nications	5.3%	4.3%	6.5%
12.11%	8.15%	7.88%	8.99%	YEARS TO N	IATURITY	ENH HY	SDHY	Index	Retail		5.3%	5.0%	5.4%
7.15% ¹	6.21%	5.91%	6.78%	Less than 1	Year	0.0%	3.4%	0.0%	Technology	& Electronics	5 .2%	6.3%	5.2%
7.1 ²	2.8	2.6	4.2	1-3 Years		42.9%	45.5%	16.5%	Financial Se	ervices	4.7%	5.1%	5.1%
	5.78%	5.52%	5.77%	3-5 Years		56.6%	50.8%	29.7%	Transportat	ion	1.4%	1.0%	2.3%
l	374	347	481	5-7 Years		0.5%	0.3%	32.7%	Insurance		1.2%	0.6%	1.6%
	9.3	8.6	18.2	7-10 Years		0.0%	0.0%	17.4%	Automotive		0.6%	1.5%	4.4%
	93	94	86	Over 10 Yea	rs	0.0%	0.0%	3.7%	Banking		0.0%	0.0%	0.9%
	118	131	905						Utility		0.0%	0.0%	3.1%
	159	183	1928										
		Coupon (%)	Maturity	Rating	lssue Size		Industry		Current Price	Yield to Worst (%)			% Weight
;		6.750	7/15/2026	B3	700	Print	ing & Publi	shing	94.68	8.52	3.	.0	1.7
		6.375	5/01/2025	B1	1,500	Sup	port-Serv	ices	98.77	6.95	2.	.1	1.7
		5.500	4/15/2024	B3	1,480		Packaging	J	97.22	7.80	1.	.2	1.7
		9.750	3/01/2027	B3	300		Advertisin	g	98.71	10.13	3.	.2	1.6
Corporation	l	5.250	12/01/2025	B2	300	Sup	port-Serv	ices	94.25	7.48	2	.6	1.6
	ash h R + 130bps Levered 12.14% ¹ 12.11% 7.15% ¹ 7.1 ²	\$147,022,563 \$ash \$144,414,767 h \$368,069,140 255% R+130bps) 5.60% 1.7% Levered Unlevered 3.3 12.14% ¹ 8.17% 12.11% ¹ 8.15% 7.15% ¹ 6.21% 7.1 ² 2.8 5.78% 374 9.3 93 118 159	h \$368,069,140 255% R+130bps) 5.60% 1.7% Levered Unlevered SDHY 3.3 3.1 12.14% ¹ 8.17% 7.89% 12.11% 8.15% 7.88% 7.15% ¹ 6.21% 5.91% 7.1 ² 2.8 2.6 5.78% 5.52% 374 347 9.3 8.6 93 94 118 131 159 183 Coupon (%) 5.500 9.750	S147,022,563 xash \$144,414,767 h \$368,069,140 255% R+130bps) 5.60% 1.7% Index 3.3 3.1 5.5 12.14% 8.17% 7.89% 9.01% 12.11% 8.15% 7.88% 8.99% 7.15% ¹ 6.21% 5.91% 6.78% 7.11 ² 2.8 2.6 4.2 5.78% 5.52% 5.77% 374 347 481 9.3 8.6 18.2 93 94 86 118 131 905 159 18.3 1928 Coupon (%) Maturity 5.500 4/15/2024 9.750 3/01/2027	\$147,022,563 iash \$144,414,767 iash \$144,414,767 iash \$144,414,767 iash \$144,414,767 iash \$368,069,140 255% BBB Holdings R+130bps) 5.60% BB Holdings 1.7% Index Not Rated Average ML Verage ML 12.14% 8.17% 7.89% 9.01% 12.14% 8.17% 7.89% 9.01% 12.14% 8.15% 7.88% 8.99% YEARS TO N 13.11 6.21% 5.52% 5.77% 3-5 Years 374 347 481 5-7 Years 9.3 9.4 86 Over 10 Year 9.3 9.4 86 Over 10 Year 9.3 9.4	\$147,022,563 itash \$144,414,767 h \$368,069,140 A Holdings 255% BBB Holdings R + 130bps) 5.60% BB Holdings 1.7% B Holdings CCC or Under CCC or Under Levered Unlevered SDHY Index 12.14% 8.17% 7.89% 9.01% 12.11% 8.15% 7.88% 8.99% YEARS TO MATURITY 7.12 2.8 2.6 4.2 1-3 Years 7.12 2.8 2.6 4.2 1-3 Years 9.3 8.6 18.2 7-10 Years 9.3 8.6 18.2 7-10 Years 9.3 9.4 86 Over 10 Years 93 94 86 Over 10 Years	\$147,022,563 tash \$144,414,767 h \$368,069,140 255% BB Holdings 0.0% BB Holdings 1.7% Levered Unlevered SDHY Index 1.7% B Holdings 42.4% BB Holdings 42.4% 1.7% B Holdings 43.7% CCC or Under 10.6% Not Rated 1.7% 2.11% 8.15% 7.88% 8.99% 7.1 ² 2.8 2.6 4.2 5.78% 5.52% 5.77% 3.5 Years 56.6% 374 347 481 5-7 Years 0.0% 9.3 8.6 18.2 7-10 Years 0.0% 9.3 9.4 86 Over 10 Years 0.0% 9.3 9.4 86 Over 10 Years 0.0% 9.3 9.6 18.2 7-10 Years 0.0% 9.3 9.6 18.2 7-10 Years 0.0% 9.3	\$147,022,563 iash \$144,414,767 h \$368,069,140 255% BBB Holdings 0.0% 2.6% BBB Holdings 1.7% 1.7% 1.7% Levered Unlevered SDHY Index 3.3 3.1 5.5 BBB Holdings 43.7% 40.3% Levered Unlevered SDHY Index Not Rated 1.7% 1.8% 7.12 2.8 2.6 4.2 1-3 Years 42.9% 45.5% 3.74 3.47 481 5-7 Years 0.0% 3.4% 7.12 2.8 2.6 4.2 1-3 Years 42.9% 45.5% 3.74 347 481 5-7 Years 0.0% 0.0% 0.0% 9.3 8.6 18.2 7-10 Years 0.0% 0.0% 0.0% 9.3 9.6 18.2 7-10 Years 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	\$147,022,563 Bash \$144,414,767 h \$368,069,140 255% BBB Holdings 0.0% 2.6% 0.0% 3568,069,140 BBB Holdings 1.7% 0.0% 0.0% 2.6% 0.0% 368,069,140 BBB Holdings 1.7% 0.0%	\$147,022,563 Services aash \$144,414,767 ICE BofA ML RATING ENH HY SDHY Index h \$368,069,140 A Holdings 0.0% 2.6% 0.0% Real Estate 255% BBB Holdings 1.7% 1.7% 0.0% Consumer O 1.7% Services BBB Holdings 42.4% 45.4% 50.8% Capital Goo 1.7% Services BHoldings 43.7% 40.3% 38.4% Basic Indus 1.7% Services BHoldings 43.7% 40.3% 38.4% Basic Indus 12.14% 8.17% 7.89% 9.01% Average ML Rating B1 B1 Leisure 12.14% 8.17% 7.89% 9.01% VEARS TO MATURITY ENH HY SDHY Index 12.14% 8.17% 5.91% 6.78% Less than 1 Year 0.0% 3.4% 0.0% Financial Se 5.78% 5.52% 5.77% 3-5 Years 56.6% 50.8% 29.7% Tr	\$147,022,563 Services aash \$144,414,767 ICE BofA ML RATING ENH HY SDHY Index Media aash \$144,414,767 A Holdings 0.0% 2.6% 0.0% Real Estate 255% BBB Holdings 1.7% 1.7% 0.0% Consumer Goods 1.7% BBB Holdings 42.4% 45.4% 50.8% Capital Goods 1.7% BHoldings 43.7% 40.3% 38.4% Basic Industry Levered Unlevered SDHY Index Not Rated 1.7% 1.8% 0.0% 12.14% 8.17% 7.89% 9.01% Percend BH B1 B1 Leisure 12.14% 8.17% 7.89% 9.01% Percend Less than 1 Year 0.0% 3.4% 0.0% 7.12 2.8 2.6 4.2 1-3 Years 42.9% 45.5% 16.5% Financial Services 7.12 2.8 2.6 4.2 1-3 Years 0.0% 0.0% <td>St47,022,563 Services 15.4% A Holdings 0.0% 2.6% 0.0% Services 17.4% 1.7% 1.7% 1.7% Consumer Goods 8.6% Services 1.7% 1.7% 0.0% Consumer Goods 7.1% Levered Unlevered SDHY Index Average ML Rating B1 B1 Leistre 5.6% 7.12 2.8 2</td> <td>\$147,022,563 Services 15.4% 17.0% ash \$144,414,767 ICE Bo1A ML RATING ENH HY SDHY Index h \$368,069,140 A Holdings 0.0% 2.6% 0.0% Real Estate 9.0% 8.1% 255% BBB Holdings 1.7% 1.7% 0.0% Consumer Goods 8.6% 8.2% 1.7% 1.7% 1.7% 1.7% 0.0% Satisfies 6.6% 6.0% 8.1% 1.7% 1.7% 1.7% 1.7% 0.0% Satisfies 6.6% 6.0% 1.7% 1.7% 1.7% 1.8% 0.0% Satisfies 6.6% 6.0% 1.7% 7.8% 9.01% Not Rated 1.7% 1.8% 0.0% Energy 6.6% 6.0% 12.14% 8.17% 7.89% 9.01% VEARS TO MATURITY ENH HY SDHY Index Telecommunications 5.3% 6.6% 6.0% 7.1² 2.8 2.6 4.2 1-3 Years 42.9% 45.5% 16.5% Financial Services 4.7% 5.1%</td>	St47,022,563 Services 15.4% A Holdings 0.0% 2.6% 0.0% Services 17.4% 1.7% 1.7% 1.7% Consumer Goods 8.6% Services 1.7% 1.7% 0.0% Consumer Goods 7.1% Levered Unlevered SDHY Index Average ML Rating B1 B1 Leistre 5.6% 7.12 2.8 2	\$147,022,563 Services 15.4% 17.0% ash \$144,414,767 ICE Bo1A ML RATING ENH HY SDHY Index h \$368,069,140 A Holdings 0.0% 2.6% 0.0% Real Estate 9.0% 8.1% 255% BBB Holdings 1.7% 1.7% 0.0% Consumer Goods 8.6% 8.2% 1.7% 1.7% 1.7% 1.7% 0.0% Satisfies 6.6% 6.0% 8.1% 1.7% 1.7% 1.7% 1.7% 0.0% Satisfies 6.6% 6.0% 1.7% 1.7% 1.7% 1.8% 0.0% Satisfies 6.6% 6.0% 1.7% 7.8% 9.01% Not Rated 1.7% 1.8% 0.0% Energy 6.6% 6.0% 12.14% 8.17% 7.89% 9.01% VEARS TO MATURITY ENH HY SDHY Index Telecommunications 5.3% 6.6% 6.0% 7.1 ² 2.8 2.6 4.2 1-3 Years 42.9% 45.5% 16.5% Financial Services 4.7% 5.1%

Source: AXA IM, FactSet as of December 31, 2022. AXA IM Enhanced HY (ENH HY) and AXA IM Short Duration HY (SDHY) Representative portfolios. SOFR=Secured Overnight Financing Rate. All Data measured on Gross Exposure, exclusive of cash except for Portfolio Overview section. ¹Levered Yield = Unlevered Yield + (Debt/Equity) × (Unlevered 18 YTW - Cost of financing). ²Levered DTW= Unlevered DTW × Gross Exposure. ICE BofA US High Yield Index is shown for illustrative purposes only. The representative account shown has been selected because it utilizes an investment setup that is typical for accounts in the relevant strategy and/or on the basis that it has adequate assets under

management to effectuate a fair comparison. Please refer to the appendix for additional information. Diversification does not ensure profit or protection against loss.



Summary Statistics

AXA IM Dynamic HY Strategy – December 31, 2022

POSITION COUNTS	AXA IM	Index	AUM / NOTIONAL EXP	OSURE		All Data as of 12	2/31/2022		-
Number of Issuers	119	905	Portfolio Total AUM	\$935,1	20,203	Index: ICE Bof A	VIL US HY	Index	•
Number of Cash Bonds	108	1,928	Notional AUM	\$1,147,9					
Number of CDS Positions	29	N/A	Gross Exposure:	123%					
			Cash*:	3.5	5%				
For Cash Bonds only (e	xcludes Cl	DS)				ICE BofA ML SE	CTOR	AXA IM	Index
CHARACTERISTCS	AXA IM	Index	ICE BofA ML RATING	AXA IM	Index	Services		13.8%	6.6%
Yield to Maturity	12.12%	9.01%	AAA Holdings	0.0%	0.0%	Basic Industry		12.6%	7.8%
Yield To Worst	12.12%	8.99%	BBB Holdings	0.0%	0.0%	Media		10.8%	9.0%
Current Yield	8.85%	6.78%	BB Holdings	3.2%	50.8%	Technology & Ele	ectronics	9.5%	5.2%
Duration To Worst	4.1	4.2	B Holdings	36.8%	38.4%	Capital Goods		9.2%	6.6%
Average Coupon	7.08%	5.77%	CCC or Under	59.8%	10.9%	Financial Service	s	9.0%	5.1%
Option Adjusted Spread	801	481	Not Rated	0.2%	0.0%	Energy		8.3%	12.2%
Duration Times Spread	30.2	18.2	Average ML Rating	CCC1	B1	Consumer Goods	6	6.6%	3.8%
Average Price	80	86				Healthcare		6.3%	7.7%
Avg Years to Maturity	5.5	5.5				Leisure		5.0%	7.8%
						Retail		3.7%	5.4%
DURATION TO WORST	AXA IM	Index	MATURITY	AXA IM	Index	Insurance		2.8%	1.6%
Less Than 1	0.0%	0.5%	Less Than 1 Year	0.0%	0.0%	Telecommunication	ons	1.5%	6.5%
1 - 3	19.0%	26.1%	1 - 3 Years	7.6%	16.5%	Automotive		0.5%	4.4%
3 - 5	52.8%	41.6%	3 - 5 Years	28.0%	29.7%	Transportation		0.3%	2.3%
5 - 7	26.8%	27.0%	5 - 7 Years	52.7%	32.7%	Banking		0.0%	0.9%
7 - 10	1.4%	3.2%	7 - 10 Years	10.3%	17.4%	Real Estate		0.0%	4.0%
Over 10	0.0%	1.6%	Over 10 Years	1.4%	3.7%	Utility		0.0%	3.1%
Top 5 Cash Bond Positions	Coupon (%)	Maturity Date	ICE BofA Issue Size Rating (\$mil)	ICE BofA	ML Industry	Current Price	Yield to Worst	Duration to Worst	% of Portfolio
W.R. Grace Holdings LLC	5.625	8/15/2029		Ch	emicals	80.73	9.63	5.1	2.7

	. ,		-	(ψΠΠ)					
W.R. Grace Holdings LLC	5.625	8/15/2029	B3	1,155	Chemicals	80.73	9.63	5.1	2.7
Illuminate Buyer LLC	9.000	7/01/2028	CCC1	460	Chemicals	83.72	13.26	4.1	2.5
BWAY Holding Co., Inc.	7.250	4/15/2025	CCC2	1,200	Packaging	92.47	11.05	2.0	2.4
Getty Images, Inc.	9.750	3/01/2027	B3	300	Advertising	98.71	10.13	3.2	2.1
Garda World Security Corporation	6.000	6/01/2029	CCC1	500	Support-Services	81.25	10.03	5.0	2.0

Source: AXA Investment Managers, FactSet. AXA IM Dynamic HY rep portfolio exclusive of cash. *Cash includes cash and cash equivalents. Index is the ICE BofA US High Yield Index. The representative account shown has been selected because it utilizes an investment setup that is typical for accounts in the relevant strategy and/or on the basis that it has adequate assets under management to effectuate a fair comparison. Please refer to the appendix for additional information. Diversification does not ensure a profit or protection against loss. As of the date of this presentation, AXA Investment Managers US Inc. is not a registered commodity trading adviser (CTA) or commodity pool

operator (CPO), and relies on applicable exemptions from CTA and CPO registration requirements in respect of such trading.



19

Additional Risks

US High Yield

20

CREDIT RISK - If an issuer of bonds defaults on its obligations to pay income or repay capital, it may result in a decrease in portfolio value. The value of a bond (and subsequently, the portfolio) is also affected by changes in credit rating downgrades and/ or market perceptions of the risk of future default. Investment grade issuers are regarded as less likely to default than issuers of high yield bonds. High-yield, lower-rated, securities involve greater risk than higher-rated securities. Portfolios that invest in them may be subject to greater levels of credit and liquidity risk than portfolios that do not.

RISK OF CAPITAL LOSS – Any investment in our high yield strategies are not guaranteed and returns can be negative. The performance of a portfolio may not be consistent with the objectives of investors and their investment may not be fully returned.

INTEREST RATE RISK - Fluctuations in interest rates will change the value of bonds, impacting the value of the investment portfolio. Often, when interest rates rise, the value of the bonds fall and vice versa. The valuation of bonds will also change according to market perceptions of future movements in interest rates.

LIQUIDITY RISK - Some investments may trade infrequently and in small volumes and the risk of low liquidity level in certain market conditions might lead to difficulties in valuing, purchasing or selling bonds.

HIGH YIELD BOND RISK - The portfolio will be exposed to a risk related to investments in high yield financial instruments. These instruments present higher default risks than those of the investment grade category. In case of default, the value of these instruments may decrease significantly, which would affect the value of the portfolio. Lower-rated securities generally tend to reflect short-term corporate and market developments to a greater extent than higher-rated securities which respond primarily to fluctuations in the general level of interest rates.

RE-INVESTMENT RISK - Reinvestment risk describes the risk that, as interest rates or market environment changes, the future coupons and principal from any bond may have to be reinvested in a less favorable rate environment. This is more likely to occur during periods of declining interest rates when issuers can issue bonds with lower levels of coupon. Re-investment risk may be greater with callable bonds.

Investing involves risk and past performance does not guarantee future results. Fixed income securities are subject to interest rate risk, credit risk, prepayment risk and market risk. High yield and investment grade securities are subject to a greater risk of capital loss, credit risk, and default risk and liquidity risk. Investors in offshore vehicles advised or sub-advised, in whole or in part, by the Adviser employing the investment strategy described herein may be subject to currency exchange risk. There is no guarantee that the objectives of the investment strategy described herein will be achieved. The risk information provided herein is not sufficient to support an investment decision, and is qualified in its entirety by the more complete disclosures, risk factors and other terms available upon request from AXA Investment Managers.





Appendix

US Core High Yield Composite

GIPS Compliant Performance Presentation

Investment Strategy Objective

Generates total returns by investing in the full maturity spectrum of noninvestment grade debt of U.S. companies with improving fundamentals. The portfolios in this composite are managed with a total return investment strategy and aim to provide risk-adjusted out-performance, given their respective benchmarks and constraints.

Composite Benchmark

ICE BofA Merill Lynch US High Yield Index (H0A0)

General Information

Reporting date	December 31, 2022
Composite Inception Date	September 30, 2001
Composite Creation Date	September 30, 2001
Composite Currency	USD

Cumulative (%)	1 m o	3 m o	6 m o	YTD
Composite (Gross)	-0.26	4.50	4.24	-9.11
Composite (Net)	-0.30	4.37	4.00	-9.55
Benchmark	-0.75	3.98	3.28	-11.22

Annualized (%)	1 year	3 year	5 year	Since inception		Quarterly ((%)	2022 1Q	2022 2Q	2022 3Q	2022 4Q
Composite (Gross) -9.11		1.04	2.92	7.34		Composite (Gross)	-3.58	-9.57	-0.24	4.50
Composite (Net)	-9.55	0.56	2.43	6.83		Composite (Net)	-3.70	-9.68	-0.36	4.37
Benchmark	-11.22	-0.23	2.12	6.88		Benchmark		-4.51	-9.97	-0.68	3.98
Calendar year (%)		2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Composite (Gross)		5.04	8.04	13.30	-1.20	8.07	15.83	-4.47	2.08	9.88	16.06
Composite (Net)		4.54	7.53	12.77	-1.68	7.55	15.29	-4.92	1.59	9.37	15.51
Benchmark		5.36	6.17	14.41	-2.26	7.48	17.49	-4.64	2.50	7.42	15.58
Internal Dispersion (Std	I. Deviation)	0.15	0.28	0.19	0.07	0.35	0.16	0.07	0.05	0.10	0.08
As of end of period		2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Composite Assets (USI	D mil)	4,758	5,575	4,649	4,221	5,010	5,578	6,882	7,549	8,490	5603
# of Portfolios in Compo	osite	12	12	11	11	11	11	10	8	7	6
Total Strategy Assets (USD mil)		10,076	8,915	7,264	6,329	7,716	7,513	8,172	8,951	9,405	6,052
Total Firm Discr.Assets (USD mil)		291,036	250,851	208,569	191,910	223,150	177,183	182,303	215,895	225,582	196,489
Total Firm Assets (USD) mil)	618,555	689,782	618,264	583,866	650,149	555,036	558,650	668,139	686,214	658,109

22 Source: AXA IM Past results are not indicative of future performance. No assurances can be made that profits will be achieved or that substantial losses will not be incurred. Returns assume the reinvestment of distributions. More information on the fees and expenses charged to clients of the investment adviser is available in Part II of the adviser's Form ADV.



US Short Duration High Yield Composite

GIPS Compliant Performance Presentation

Investment Strategy Objective

Aims to generate high current income by investing in better-quality, noninvestment grade debt of U.S. companies with an expected redemption of three years or less.

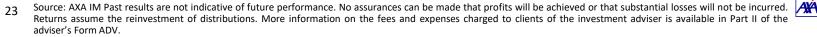
Composite Benchmark

The "US Short Duration High Yield" composite is not show n against a benchmark, since the strategy is an absolute return strategy and not managed against a benchmark.

December 31, 2022
September 30, 2001
September 30, 2001
USD

Cumulative (%)	1 mo	3 m o	6 m o	YTD
Composite (Gross)	-0.29	3.17	3.35	-4.55
Composite (Net)	-0.33	3.06	3.12	-4.98

Annualized (%)	1 year	3 year	5 year	Since inception		Quarterly	(%)	2022 1Q	2022 2Q	2022 3Q	2022 4Q
Composite (Gross)	-4.55	1.13	2.68	5.15		Composite (Gross)		-1.39	-6.34	0.17	3.17
Composite (Net)	-4.98	0.68	2.23	4.66		Composite	(Net)	-1.50	-6.45	0.06	3.06
Calendar year (%)		2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Composite (Gross)		3.80	4.38	8.50	1.69	3.98	6.38	1.23	1.51	5.46	7.87
Composite (Net)		3.34	3.93	8.06	1.22	3.48	5.88	0.77	1.03	4.96	7.35
Internal Dispersion (Std. Deviation)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.10	0.04
As of end of period		2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Composite Assets (USD n	mil)	6,507	5,772	5,712	5,575	8,217	10,039	11,014	12,390	20,483	17,520
# of Portfolios in Composit	te	5	5	7	4	4	5	4	3	12	12
Total Strategy Assets (US	SD mil)	8,161	7,131	7,109	8,351	13,335	18,867	18,648	19,681	24,991	21,182
Total Firm Discr.Assets (USD mil)		291,036	250,851	208,569	191,910	223,150	177,183	182,303	215,895	225,582	196,489
Total Firm Assets (USD m	nil)	618,555	689,782	618,264	583,866	650,149	555,036	558,650	668,139	686,214	658,109





US Dynamic High Yield Composite

GIPS Compliant Performance Presentation

Investment Strategy Objective

Seeks to generate high income by investing in US high yield debt securities and credit default sw aps. This is a total return investment strategy that aims to provide risk-adjusted out-performance, given their respective benchmarks and constraints

Composite Benchmark

BofA Merill Lynch US High Yield Index (H0A0)

December 31, 2022
February 28, 2014
February 22, 2017
USD

Cumulative (%)	1 m o	3 m o	6 m o	YTD
Composite (Gross)	-0.44	4.87	5.52	-12.17
Composite (Net)	-0.49	4.72	5.21	-12.70
Benchmark	-0.75	3.98	3.28	-11.22

Annualized (%)	1 Year	3 Year	5 Year	Since inception		Quarterly (%)	2022 1Q	2022 2Q	2022 3Q	2022 4Q
Composite (Gross)	-12.17	2.06	4.10	5.39		Composite (Gross)	-3.77	-13.50	0.62	4.87
Composite (Net)	-12.70	1.45	3.48	4.76		Composite (Net)	-3.92	-13.64	0.47	4.72
Benchmark	-11.22	-0.23	2.12	3.32		Benchmark		-4.51	-9.97	-0.68	3.98
Calendar year (%)		2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Composite (Gross)		7.41	12.67	19.64	-3.87	12.15	24.4	N/A	N/A	N/A	N/A
Composite (Net)		6.77	12.01	18.93	-4.45	11.48	23.67	N/A	N/A	N/A	N/A
Benchmark		5.36	6.17	14.41	-2.26	7.48	17.49	N/A	N/A	N/A	N/A
As of end of period		2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Composite Assets (USD) mil)	1,444	740	319	214	232	122	N/A	N/A	N/A	N/A
# of Portfolios in Compos	site	1	1	1	1	1	1	N/A	N/A	N/A	N/A
Total Strategy Assets (L	JSD mil)	1,444	740	318	247	287	122	N/A	N/A	N/A	N/A
Total Firm Discr.Assets	(USD mil)	291,036	250,851	208,569	191,910	223,150	177,183	182,303	215,895	225,582	196,489
Total Firm Assets (USD	mil)	618,555	689,782	618,264	583,866	650,149	555,036	558,650	668,139	686,214	658,109

24 Source: AXA IM Past results are not indicative of future performance. No assurances can be made that profits will be achieved or that substantial losses will not be incurred. Returns assume the reinvestment of distributions. More information on the fees and expenses charged to clients of the investment adviser is available in Part II of the adviser's Form ADV.



US Enhanced High Yield Composite

GIPS Compliant Performance Presentation

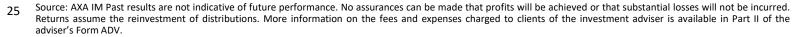
Investment Strategy Objective

Aims to generate high current income by investing in better-quality, noninvestment grade (high yield) debt of U.S. companies with an expected redemption of three years or less (i.e. short duration) and in Total Return Swaps derived on single-name better-quality, short duration high yield bonds of U.S. companies. Portfolios in this composite may utilize leverage.

Com

General Information	
Reporting date	December 31, 2022
Composite Inception Date	December 31, 2018
Composite Creation Date	December 31, 2018
Composite Currency	USD

Composite Benchm		Cum ulativ	e (%)	1 mo	3 m o	6 m o	YTD				
The "US Enhanced Hig	gh Yield" com	inst a		Composite	(Gross)	-1.53	7.70	5.44	-14.01		
benchmark, since the managed against a be		Composite	(Net)	-1.61	7.45	4.95	-14.84				
Annualized (%)	1 year	3 year	5 year	Since		Quarterly	(%)	2022	2022	2022	2022
Composite (Gross)	-14.01	0.02	Jyeai	inception 3.87				-3.49	2Q -15.51	<u>3Q</u> -2.09	4Q 7.70
Composite (Net)	-14.84	-0.93		2.89		Composite (Gross) Composite (Net)		-3.49	-15.72	-2.32	7.45
Calendar year (%)		2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Composite (Gross)		6.46	9.32	16.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Composite (Net)		5.46	8.28	15.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As of end of period		2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Composite Assets (US	SD mil)	359	320	101	N/A	N/A	N/A	N/A	N/A	N/A	N/A
# of Portfolios in Comp	osite	1	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Strategy Assets (USD mil)		359	320	101	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Firm Discr.Assets (USD mil)		291,036	250,851	208,569	191,910	223,150	177,183	182,303	215,895	225,582	196,48
Total Firm Assets (USD mil)		618,555	689,782	618,264	583,866	650,149	555,036	558,650	668,139	686,214	658,10





GIPS® Performance Disclosure Notes

Claim of Compliance

AXA IM claims compliance with the Global Investment Performance Standards (GIPS[®]) and has prepared and presented this report in compliance with the GIPS standards. AXA IM has been independently verified for the periods from December 31, 1999 through December 31, 2018. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with GIPS standards. The US Core High Yield and the US Short Duration High Yield Composites have been examined since inception. GIPS verification and performance examination reports are available upon request. Select AXA IM funds under management that are included in select GIPS composites are subject from time to time to "swing" pricing. In order to ensure that AXA IM maintains its GIPS compliance standards, it has developed a comprehensive set of policies and procedures to account for such swing price impacts. As with other policies and procedures, the GIPS standards are reviewed and revised on an as needed basis.

Presentation of the Firm

AXA IM is an active long-term, responsible multi-asset manager with investment centers in the Americas, Asia Pacific and Europe offering the following investment capabilities:

Framlington Equity - an active, fundamental, bottom-up stock selection approach for core equities and thematic equity strategies incorporating specialist investment capabilities and responsible investing (RI).

Equity QI (Quant Investing) - offering quantitative investing by the use of technology and modelling to deliver fundamental strategies including advanced factor, systematic alpha and targeted outcome, underpinned by environmental, social and governance (ESG) principles.

Active Fixed Income Europe & Asia - a robust, repeatable process, which involves bottom-up credit analysis and top-down macroeconomic research to deliver outcome-oriented solutions that span the fixed income spectrum.

US Active Fixed Income and European & Global High Yield - a range of high yield strategies investing within and across regions, sectors and maturities. Dedicated high yield teams employ a consistent investment process which has been tested over a range of market cycles and conditions.

Fixed Income for AXA and Buy & Maintain - a strong bottom-up credit analysis and top-down macroeconomic research approach for traditional, benchmarked to fully flexible strategies which employ several different investment styles, including active and buy-and-maintain.

Structured Finance - a broad range of alternative sources of return from across the credit continuum, beyond traditional credit investments, to suit various risk/return and liquidity profiles through standalone and multi-strategy investments.

Multi Asset - a combined fundamental top-down and bottom-up analysis with embedded risk monitoring to all client types for outcome-oriented and customized multi-asset solutions. Chorus - a research and technology-driven approach to deliver stable and sustainable, positive returns regardless of market conditions offering clients a differentiated proposition with low correlation to traditional assets..

Composite List and Description

A complete list and description of all composites is available on request.

Portfolio Valuation

Portfolios are valued according to the market closing prices each day, except for certain portfolios valued in Germany, which use the closing price of the previous day, and the UK, where the price used is the 2pm price of the same day. In order to apply this valuation policy, the NAV of the day following the valuation date is used for certain portfolios. Dividends paid on securities in the portfolio are accounted for using ex-dividend date and are gross of any withholding taxes. Buy and sell transactions are taken into account using trade-date valuation after confirmation of the trade by the counterparty, except in Germany where settlement date valuation is used. Accrued interest on debt securities is recorded each time the portfolio is valued. All proceeds, including realized and unrealized gains or losses in the portfolio are included in the value of assets. There are minor exceptions to these general rules for specific types of portfolios. Some securities in portfolios of US High Yield composites are valued by reference to broker quotes.

Minimum Asset Level & Total Firm Assets

The minimum portfolio size for the US High Yield and US Investment Grade composites is 10,000,000 USD. If the portfolio falls below 10,000,000 USD for more than three months it is excluded from the performance calculations for the following month. For all other composites, the upper threshold is defined at 10,000,000 EUR the lower threshold at 8,000,000 EUR, with a 6-month grace period. AUM figures for the Firm include all portfolios falling within the definition of the Firm.



GIPS® Performance Disclosure Notes (Continued)

Significant Cash Flows

If the average cash balance of a portfolio is above 10% for a specific month, the entire portfolio is temporarily removed from the composite performance for that particular month. Additional information regarding the treatment of significant cash flows is available upon request.

Currency Used to Express Performance

Composite performance figures are presented in the currency of the composite.

Performance Results / Fees

Composite returns are calculated gross of fees. Gross of fees returns are calculated gross of management and custodial fees and net of all trading expenses. The management fee schedule is as follows:

US Core High Yield Composite: First \$50 million: 0.48%; next \$50 million: 0.44%, next \$50 million: 0.41%, next \$50 million: 0.39%, Amount above \$200 million: 0.37%.

US Short Duration High Yield Composite: Flat fee: 0.45%.

US Dynamic High Yield Composite: Flat fee: 0.60%.

US Enhanced High Yield Composite: Flat fee: 0.95%

US Investment Grade Corporate Bond Composites: First \$50 Million: 0.26%; next \$50 million: 0.24%; next \$50 million: 0.20%; next \$50 million: 0.18%. Amount above \$200 million: 0.17%.

Benchmarks

The composite may be managed against a specific benchmark as indicated on the composite page. The extent to which any given composite invests in countries or regions not included in the benchmark depends on the limits (if any) specified in the investment management contracts of the individual portfolios in the composite. In general, such investment is marginal and is typically less than 10% for any given portfolio.

Compliance with Local Laws

This performance presentation does not conflict with any relevant local laws in any of the AXA IM management centers included in the Firm perimeter as at 31/12/2016.

Calculation Methods

Composite performance is calculated on a monthly basis as follows:

- The portfolios entering the performance calculation are determined according to the Minimum Asset Level described above.
- Each portfolio brings its own specific start and end dates to the calculation, depending on the particular valuation dates of the portfolio.
- The performance of each portfolio is calculated using the start and end dates relevant to the period in question, and using daily-weighted cash flows.

• The performance of a composite is calculated as a weighted average (using each portfolio's assets under management as at each portfolio's specific start date for the period in question) of the performances of the portfolios.

• Quarterly, annual, cumulative and since-inception returns are calculated by linking the composite monthly returns through compounded multiplication.

The benchmark performance is calculated in a similar fashion, using the same portfolio-related weights and date values, and replacing the portfolio values by the composite benchmark values. The calculation of the composite benchmark return is always comparable in terms of time periods and asset-weightings to the calculation of the composite return.

Dispersion

Dispersion is the weighted average (using the AUM of each portfolio at the start of the period) of the tracking error between the composite and those portfolios satisfying the Minimum Asset Level test (see above) for the whole period. Composites dispersion is defined as the standard deviation of the returns of the portfolios for the period in question, taking into account the relative size of the portfolios. It is only displayed if there are at least 5 such portfolios.



Representative Portfolios and Indices used

Gross Performance: Performance shown gross of fees is calculated before the deduction of applicable management fees and other expenses. An investor's actual return will be reduced by management fees and other expenses the investor may incur. Further information on the firm's fees may be found in its Form ADV Part 2 (for US investors) or provided upon request. The collection of management fees produces a compounding effect on the total rate of return net of management fees. [As an example, the effect of management fees on the total value of an investor's portfolio assuming a) quarterly fee assessment, b) \$1,000,000 investment, c) portfolio return of 8% a year, and d) 1.00% annual investment management fee would be \$10,416 in the first year, and cumulatively \$59,816 over five years and \$143,430 over ten years.] Net Performance: Performance shown net of fees is calculated after the deduction of management fees and other applicable expenses. The risk information provided herein is not sufficient to support an investment decision, and is qualified in its entirety by the more complete disclosures, risk factors and other terms available upon request from AXA Investment Managers.

Representative Accounts: Such accounts have been selected based on objective, non-performance based criteria, including, but not limited to the size and the overall duration of the management of the account, the type of investment strategies and the asset selection procedures in place. Therefore, the results portrayed relate only to such accounts and are not indicative of the future performance of such accounts or other accounts, products and/or services described herein. In addition, these results may be similar to the applicable GIPS composite results, but they are not identical and are not being presented as such. Account performance will vary based upon the inception date of the account, restrictions on the account, along with other factors, and may not equal the performance of the representative accounts presented herein. The performance results for representative accounts are gross of all fees and do reflect the reinvestment of dividends or other earnings. The examples of securities provided for each representative account presentation are for illustrative purposes only and are intended to reflect the typical securities, sectors, and/or geographies that could be deployed by the strategy to generate the target returns. These examples do not represent all of the securities purchased, sold or recommended for the client's accounts, and should not be considered a buy/sell recommendation. An investor's actual experience may vary.

The ICE BofA US High Yield Index is composed of high-yield corporate bonds and other distressed securities. Taxable and tax-exempt US municipal, DRD eligible and defaulted securities are excluded from the Index. Indices are rebalanced monthly by market capitalization. The BofA Merrill Lynch High Yield Index is an unmanaged index consisting of U.S. dollar denominated bonds that are rated BB1/BB+ or lower, but not currently in default. No assurance can be given that the strategy/fund will be successful or that investors will not lose some or all of their capital.

The ICE BofA US Corporate Master Index is composed investment grade corporate bonds. Taxable and tax-exempt US municipal, DRD eligible and defaulted securities are excluded from the Index. Indices are rebalanced monthly by market capitalization.

The ICE BofA 1-3 Year US corporate Index is composed of investment grade corporate bonds including securities with a remaining term to final maturity of less than 3 years. Taxable and taxexempt US municipal, DRD eligible and defaulted securities are excluded from the Index. Indices are rebalanced monthly by market capitalization.

The Bloomberg Barclays Capital US Corporate Credit – Intermediate Index is composed dollar-denominated investment grade debt from U.S. and non-U.S. industrial, utility, and financial institutions issuers of intermediate maturities (1-10 years). Subordinated issues, securities with normal call and put provisions and sinking funds, medium-term notes (if they are publicly underwritten), 144A securities with registration rights, and global issues that are SEC-registered are included. Structured notes with embedded swaps or other special features, as well as private placements, floating-rate securities, and Eurobonds are excluded from the U.S. Corporate Index.

The Bloomberg Barclays Capital US Corporate Credit Index is composed of dollar-denominated investment grade debt from U.S. and non-U.S. industrial, utility, and financial institutions issuers. Subordinated issues, securities with normal call and put provisions and sinking funds, medium-term notes (if they are publicly underwritten), 144A securities with registration rights, and global issues that are SEC-registered are included. Structured notes with embedded swaps or other special features, as well as private placements, floating-rate securities, and Eurobonds are excluded from the U.S. Corporate Index.

An index is unmanaged and is not available for direct investment.



Important Information

No assurance can be given that our investment strategies will be successful. Investors can lose some or all of their capital invested. Our strategies are subject to risks including, but not limited to: equity; emerging markets; global investments; investments in small and micro capitalisation universe; investments in specific sectors or asset classes specific risks, liquidity risk, credit risk, counterparty risk, legal risk, valuation risk, operational risk and risks related to the underlying assets.

Disclaimer

Not for Retail distribution: This marketing communication is intended exclusively for Professional, Institutional or Wholesale Clients / Investors only, as defined by applicable

local laws and regulation. Circulation must be restricted accordingly.

This marketing communication does not constitute on the part of AXA Investment Managers a solicitation or investment, legal or tax advice. This material does not contain sufficient information to support an investment decision.

Due to its simplification, this document is partial and opinions, estimates and forecasts herein are subjective and subject to change without notice. There is no guarantee forecasts made will come to pass. Data, figures, declarations, analysis, predictions and other information in this document is provided based on our state of knowledge at the time of creation of this document. Whilst every care is taken, no representation or warranty (including liability towards third parties), express or implied, is made as to the accuracy, reliability or completeness of the information contained herein. Reliance upon information in this material is at the sole discretion of the recipient. This material does not contain sufficient information to support an investment decision.

Before making an investment, investors should read the relevant Prospectus and the Key Investor Information Document / scheme documents, which provide full product details including investment charges and risks. The information contained herein is not a substitute for those documents or for professional external advice.

The products or strategies discussed in this document may not be registered nor available in your jurisdiction. Please check the countries of registration with the asset manager, or on the web site https://www.axa-im.com/en/registration-map, where a fund registration map is available. In particular units of the funds may not be offered, sold or delivered to U.S. Persons within the meaning of Regulation S of the U.S. Securities Act of 1933. The tax treatment relating to the holding, acquisition or disposal of shares or units in the fund depends on each investor's tax status or treatment and may be subject to change. Any potential investor is strongly encouraged to seek advice from its own tax advisors.

For more information on sustainability-related aspects please visit https://www.axa-im.com/what-is-sfdr



For investors located in the European Union : Please note that the management company reserves the right, at any time, to no longer market the product(s) mentioned in this communication in the European Union by filing a notification to its supervision authority, in accordance with European passport rules. In the event of dissatisfaction with AXA Investment Managers products or services, you have the right to make a complaint, either with the marketer or directly with the management company (more information on AXA IM complaints policy is available in English: https://www.axa-im.com/important-information/comments-and-complaints). If you reside in one of the European Union countries, you also have the right to take legal or extra-judicial action at any time. The European online dispute resolution platform allows you to submit a complaint form (available at:

https://ec.europa.eu/consumers/odr/main/index.cfm?event=main.home.chooseLanguage) and provides you with information on available means of redress (available at: https://ec.europa.eu/consumers/odr/ main/?event=main.adr.show2). Summary of investor rights in English is available on AXA IM website https://www.axa-im.com/importantinformation/summary-investor-rights. Translations into other languages are available on local AXA IM entities' websites. AXA WF US High Yield Bonds, AXA WF US Short Duration High Yield Bonds, AXA WF US Dynamic High yield Bonds, AXA WF US Enhanced High Yield Bonds are sub-funds of AXA World Funds. AXA WORLD FUNDS 's registered office is 49, avenue J.F Kennedy L-1885 Luxembourg, The Company is registered under the number B. 63.116 at the "Registre de Commerce et des Sociétés" The Company is a Luxembourg SICAV UCITS IV approved by the CSSF and managed by AXA Funds Management, a société anonyme organized under the laws of Luxembourg with the Luxembourg Register Number B 32 223RC, and whose registered office is located at 49, Avenue J.F. Kennedy L-1885 Luxembourg, Issued in the UK by AXA Investment Managers UK Limited, which is authorised and regulated by the Financial Conduct Authority in the UK. Registered in England and Wales No: 01431068. Registered Office: 22 Bishopsgate London EC2N 4BQ. In other jurisdictions, this document is issued by AXA Investment Managers SA's affiliates in those countries. Austria: The current prospectus of the funds AXA WF US High Yield Bonds, AXA WF US Short Duration High Yield Bonds, AXA WF US Dynamic High yield Bonds, AXA WF US Enhanced High Yield Bonds as well as the Key Investor Information Documents were published in electronic form on www.axa-im.at on and by deposition at AXA Investment Managers Deutschland GmbH Thurn-und-Taxis-Platz 6, D-60313 Frankfurt am Main, Germany, as well as at the information centre and paying agent UniCredit Bank Austria, UniCredit Bank Austria AG, Rothschildplatz 1, 1020 Wien, Austria Investors and interested persons in Austria receive the prospectus in German language, the Key Investor Information Documents in German, the fund rules (Fondsbestimmungen) and the annual and semi-annual report of the [xxx] free of charge at AXA Investment Managers Deutschland GmbH, at the information centre and paying agent mentioned above and on www.axa-im.at. With this information and paying agent, further information and documents regarding the product may be examined as well as redemption requests may be filed. The issue prices and redemption prices are also available at this information centre and paying agent and on www.axa-im.at. Belgium: In Belgium, this document is intended for Professional Clients only, as defined by local laws and the MIFID directive, and is distributed by AXA IM Benelux SA/NV, 1 Place du Trône – 1000 Brussels Belgium. Denmark, Finland, Norway, Sweden: This document is intended for informational purposes only, and in no event is intended for retail customers and/or end investors. The information contained herein is for professional clients and eligible counterparties as defined by local laws and the MIFID directive, it is presumed, therefore, experience, knowledge and expertise to make their own investment decisions and properly assess their risks. France: Issued by AXA INVESTMENT MANAGERS PARIS, a company incorporated under the laws of France, having its registered office located at Tour Majunga, 6 place de la Pyramide, 92800 Puteaux, registered with the Nanterre Trade and Companies Register under number 353 534 506, and a Portfolio Management Company, holder of AMF approval no. GP 92-08, issued on 7 April 1992. In other jurisdictions, this document is issued by AXA Investment Managers SA's affiliates in those countries. Germany: For professional clients only. Not for retail investors This is promotional material, not a regular mandatory document and is not suitable for any kind of sales services, consulting or financial services vis-à-vis retail clients. The information in this document is exclusively addressed to professional clients who receive this document directly from AXA Investment Managers Deutschland GmbH / its affiliated companies. It is to be treated strictly confidential. The recipients are not allowed to pass this document and the information contained herein on to a third party, in whole or in part, without the prior written consent of AXA Investment Managers Deutschland GmbH / its affiliated companies. You will receive the latest prospectus in German, Key Investor Information Document ("KIID") in your national language and the most recent annual and semi-annual report upon request free of charge and in paper form at AXA Investment Managers Deutschland GmbH Thurn-und-Taxis-Platz 6, D-60313 Frankfurt am Main, Germany or from our distribution partners or under www.axa-im.de. Italy: This document is intended for informational purposes only, and in no event is intended for retail customers and/or end investors. The information contained herein is for professional clients and eligible counterparties as defined by local laws and the MIFID directive, it is presumed, therefore, experience, knowledge and expertise to make their own investment decisions and properly assess their risks. Liechtenstein: Investors and interested persons in the Principality of Liechtenstein receive the prospectus in German, the Key Investor Information Documents in German language, the annual and semi-annual report of the AXA AXA WF US High Yield Bonds, AXA WF US Dynamic High yield Bonds, AXA WF US Enhanced High Yield Bonds free of charge at AXA Investment Managers Deutschland GmbH Thurn-und-Taxis-Platz 6. D-60313 Frankfurt am Main, Germany or in electronic form on www.axa-im.li. or free of charge at the following paying agent: LGT Bank AG, Herrengasse 12, FL-9490 Vaduz. Luxembourg: In Luxembourg, this document is intended for Professional Clients only, as defined by local laws and the MIFID directive, and is distributed by AXA IM Benelux SA/ NV, 1 Place du Trône – 1000 Brussels Belgium. Netherlands: In the Netherlands, this document is intended for Professional Clients only, as defined by local laws and the MIFID directive, and is distributed by AXA IM Paris - Netherlands Branch, Beethoven 500 – 4th Floor, Beethovenstraat 518 – 1082 PR Amsterdam - the Netherlands. Portugal: In Portugal, this document is distributed by AXA Investment Managers Paris, Spanish Branch, has its registered office in Madrid, Paseo de la Castellana no. 93, 6th floor, is registered in the Madrid Mercantile Register, sheet H-727252, and is registered with the CNMV under 38 number as UCITS management company of the European Economic Space, with Branch. Spain: This document is intended for informational purposes only, and in no event is intended for retail customers and/or end investors. The information contained herein is for professional clients and eligible counterparties as they are defined in Articles 78bis and 79 ter of the Spanish Securities Market Act (Lev del Mercado de Valores), it is presumed, therefore, experience, knowledge and expertise to make their own investment decisions and properly assess their risks. Switzerland: This document is intended exclusively for Professional Investors according to Swiss law. Circulation must be restricted accordingly. Any reproduction of this information, in whole or in part, is prohibited. UK: The AXA WF US High Yield Bonds, AXA WF US Short Duration High Yield Bonds, AXA WF US Dynamic High yield Bonds, AXA WF US Enhanced High Yield Bonds are recognised by the UK Financial Conduct Authority and is available for sale in the UK.



Singapore: In Singapore, this document is issued by AXA Investment Managers Asia (Singapore) Ltd. (Registration No. 199001714W). This document is for use only by Institutional Investors as defined in Section 4A of the Securities and Futures Act (Cap. 289) and must not be relied upon by retail clients or investors. Circulation must be restricted accordingly.

Hong Kong: In Hong Kong, this document is issued by AXA Investment Managers Asia Limited (SFC License No. AAP809), which is authorized and regulated by Securities and Futures Commission. This document is to be used only by persons defined as "professional investor" under Part 1 of Schedule 1 to the Securities and Futures Ordinance (SFO) and other regulations, rules, guidelines or circulars which reference "professional investor" as defined under Part 1 of Schedule 1 to the SFO. This document must not be relied upon by retail investors. Circulation must be restricted accordingly. For Hong Kong Investors: the authorization of any fund by the Securities and Futures Commission in Hong Kong ("SFC") does not imply official approval or recommendation. SFC authorization of a fund is not a recommendation or endorsement of a fund nor does it guarantee the commercial merits of a fund or its performance. It does not ment the fund is suitable for all investors nor is it an endorsement of its suitability for any particular investor or class of investors. Where any of the Funds is not authorized by the SFC, the information contained herein in connection with such unauthorized Fund is solely for the use of professional investors in Hong Kong. Materials exempted from authorization by the SFC have not been reviewed by the SFC.

Chile: For Chilean investors: This private offer commences on 31 December 2022 and it avails itself of the General Regulation No. 345 of the Superintendence of Securities and Insurance. This offer relates to securities not registered with the Securities Registry or the Registry of Foreign Securities of the Superintendence of Securities and Insurance, and therefore such securities are not subject to oversight by the latter. Being unregistered securities, there is no obligation on the issuer to provide public information in Chile regarding such securities; and These securities may not be subject to a public offer until they are registered in the corresponding Securities Registry. ESTA OFERTA PRIVADA SE INICIA EL DIA 31 DECEMBER 2023 SE ACOGE A LAS DISPOSICIONES DE LA NORMA DE CARÁCTER GENERAL N° 336 DE LA SUPERINTENDENCIA DE VALORES Y SEGUROS; ESTA OFERTA VERSA SOBRE VALORES NO INSCRITOS EN EL REGISTRO DE VALORES OE VALORES EXTRANJEROS QUE LLEVA LA SUPERINTENDENCIA DE VALORES Y SEGUROS, POR LO QUE TALES VALORES NO ESTÁN SUJETOS A LA FISCALIZACIÓN DE ÉSTA; POR TRATAR DE VALORES NO INSCRITOS NO EXISTE LA OBLIGACIÓN POR PARTE DEL EMISOR DE ENTREGAR EN CHILE INFORMACIÓN PÚBLICA RESPECTO DE LOS VALORES SOBRE LOS QUE VERSA ESTA OFERTA; ESTOS VALORES NO PODRÁN SER OBJETO DE OFERTA PÚBLICA MIENTRAS NO SEAN INSCRITOS EN EL REGISTRO DE VALORES CORRESPONDIENTE.

