

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

## **US High Yield Webinar**

Mike Graham, Head of US High Yield & Senior US High Yield Portfolio Manager Pete Vecchio, Senior US High Yield Portfolio Manager

September 27, 2023



# Market upda

1

## Asset Class Comparison – Performance and Yield Comparison

Market consensus for higher quality fixed income in 2023 has not worked

	As of	December 31	, 2022	As of S	September 21	., 2023
USD (H) Currency	2022 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	10.28	369	10.04	9.79	379
Euro High Yield Index (H USD)	-9.33	7.96	515	8.25	7.57	435
US Corporates 1-10yrs	-9.63	5.43	127	1.85	5.97	113
US High Yield BB Rated	-10.57	7.26	308	4.12	7.50	263
US High Yield B Rated	-10.58	9.34	515	7.09	8.89	398
US High Yield Index	-11.22	8.99	481	6.34	8.78	389
Euro Corporate Index (H USD)	-11.92	4.22	167	4.32	4.37	145
US Corporate Index	-15.44	5.51	138	1.04	5.99	120
US Corporates BBB Rated	-15.86	5.83	172	1.69	6.25	148
US Treasury 10 year	-16.28	3.83	N/A	-2.93	4.48	0
US High Yield CCC and lower	-16.32	15.87	1170	13.57	13.84	894
S&P 500 Index	-18.11	1.76*	N/A	14.14	1.59*	N/A
Russell 2000 Index	-20.44	1.63*	N/A	2.28	1.76*	N/A

\*12M Gross Dividend Yield

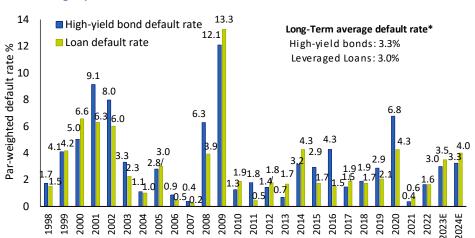




## **Default expectations**

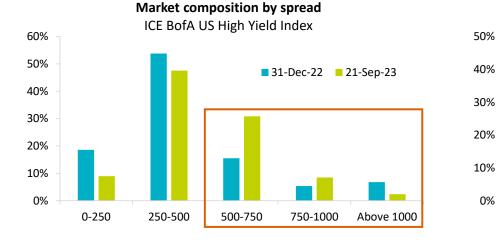
4

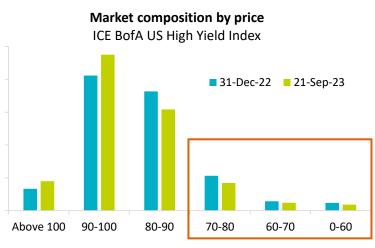
#### Monitoring investors expectation for defaults in 2023 and 2024



#### High-yield bond and loan default rates<sup>1</sup>

- Our bottom-up analysis of the US High Yield ٠ 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.





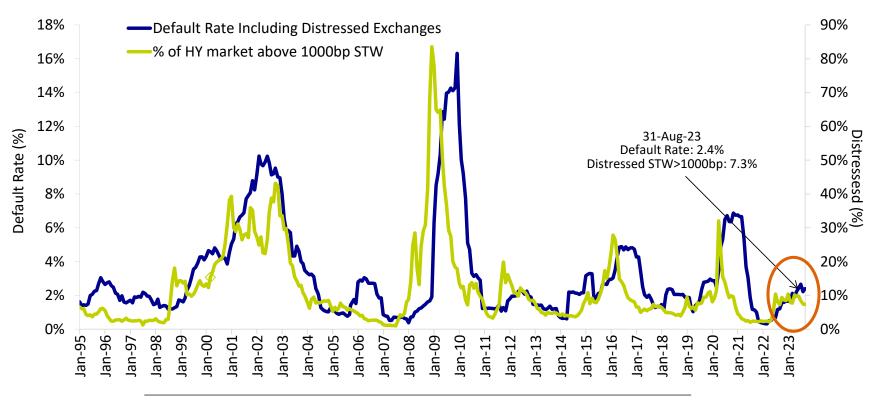
#### Investment AXA Managers

Source: J.P. Morgan: 1) Default Monitor September 1, 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. As Ade for REGERS GDE D dicative of future results.

0%

## Default rate update

Pick-up in defaults driven by distressed exchanges; spreads remain range bound



12M trailing par- weighted default rate	Incl. distressed exchanges	Change 2023 YTD	Excl. distressed exchanges	Change 2023 YTD
US HY bonds	2.40%	+0.75%	1.29%	+0.45%
Leveraged loans	2.92%	+1.28%	2.24%	+1.27%



Source: J.P. Morgan: Default Monitor September 1, 2023. 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.
AXA IM - RESTRICTED

### **Market fundamentals**

#### Leverage and coverage metrics

High yield leverage ratio<sup>1</sup> 6.5x Leverage 6.1 6.2 6.0x 5.8 5.6 FITM Debt/ EBITDA 2.0x 4.2x 4.2x 5.2 4.2 4.0x 3.5x 3Q20 1021 3021 1022 3022 1023

High yield coverage ratio<sup>2</sup> 6.5x 6.0x 5.5x 5.0x 9.4.5x 3.5x 2.5x 2.5x

Leverage by Rating <sup>3</sup>

	Debt/EBITDA 2Q23*	Debt/EBITDA 1Q23*	Change y/y	Change y/y
BB	3.60x	3.28x	0.12x	3.4%
В	4.64x	4.58x	-0.45x	-8.8%
ссс	7.14x	6.90x	-0.26x	-3.5%

#### Coverage by Rating <sup>3</sup>

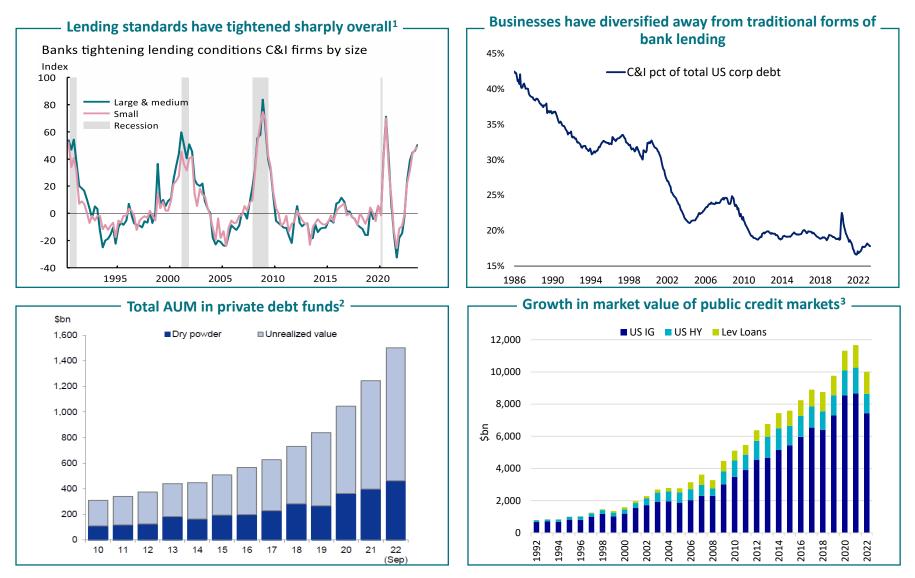
	EBITDA/Net Interest Expense 2Q23	EBITDA/Net Interest Expense 1Q23	Change y/y	Change y/y %
BB	7.27x	7.53x	-0.03x	-0.4%
В	4.32x	4.47x	0.09x	2.1%
CCC	2.15x	2.21x	-0.72x	-25.2%

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 2Q 2023 (data is one quarter lagged); 2) US High Yield Credit Fundamentals 2Q 2023 (data is one quarter lagged); 3) Sources: J.P. Morgan; Capital IQ. For illustrative purposes only. Past performance is not indicative of future results.

### Lending standards have tightened, but the credit lending market has evolved over the years



(1) Source: Refinitiv Datastream, AXA IM Research, as of August 23, 2023. (2) Source: Preqin, Goldman Sachs Global Investment Research, as of September 2022. (3) Sources: ICE BofA Indices for US Investment Grade and US High Yield, Credit Suisse Leveraged Loan Index for Lev Loans. 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 reAXEA IM - RESTRICTED



## **Dispersion within US HY remains elevated**



**H0A0** Index Dispersion Proportion of face value in the US HY index marked outside +/-

- Despite CCC bonds outperforming year-to-date, 17% (53 out of 319 issues) have negative year-to-date total returns.
- Of the CCC-rated bonds that began the year with a price below 70, 31% (37 out of 120) have negative year-to-date total returns.

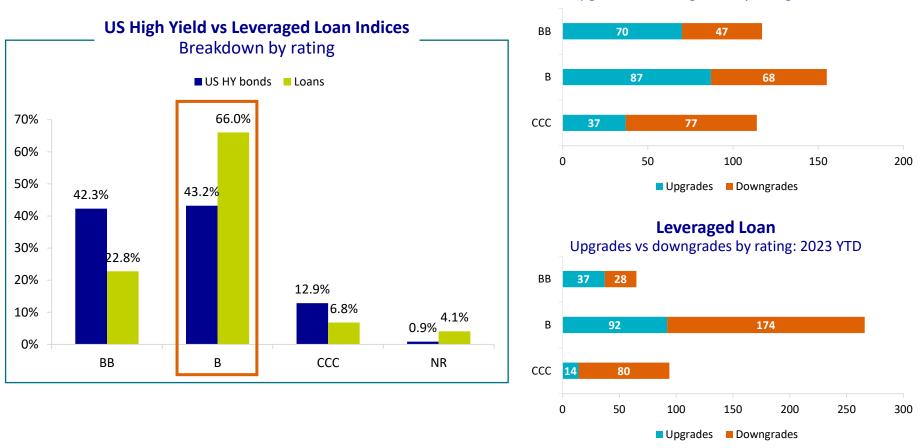


**CCC** Dispersion Proportion of face value marked outside +/- 400bps of that rating's

## **Credit rating trends**

9

#### US High Yield and US Leveraged Loans



#### **US High Yield** Upgrades vs downgrades by rating: 2023 YTD

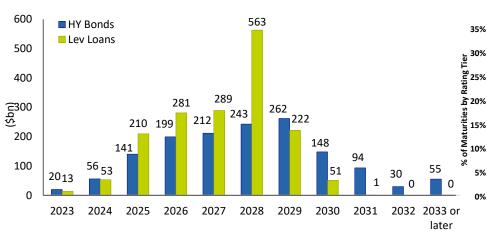
Note: Issuer ratings are computed based on weighted average debt outstanding. BB includes Split BBB and BB, B includes Split BB and B, while CCC includes Split B and CCC.



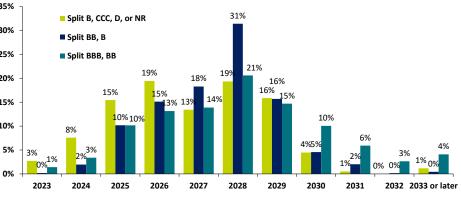
## **Maturity schedules**

High yield and institutional loan maturities

#### Maturity schedules remain manageable for most issuers

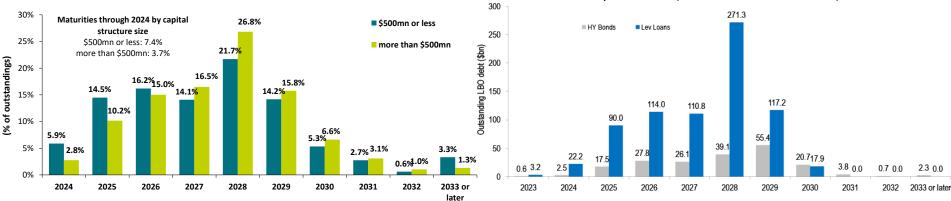


#### Maturity by Rating (HY bonds and Lev Loans)



LBO Maturity Schedule (HY bonds and Lev Loans)

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





Source: J.P. Morgan: Maturity Schedule HY Bonds and Loans, data as of May 31, 202AXAr IMIstrative on Indicative of future results.



A CONTRACTOR OF A CONTRACT OF A CONTRACT

## Update on AXA IM US High Yield Strategies

## **AXA IM US High Yield - Performance Comparison**

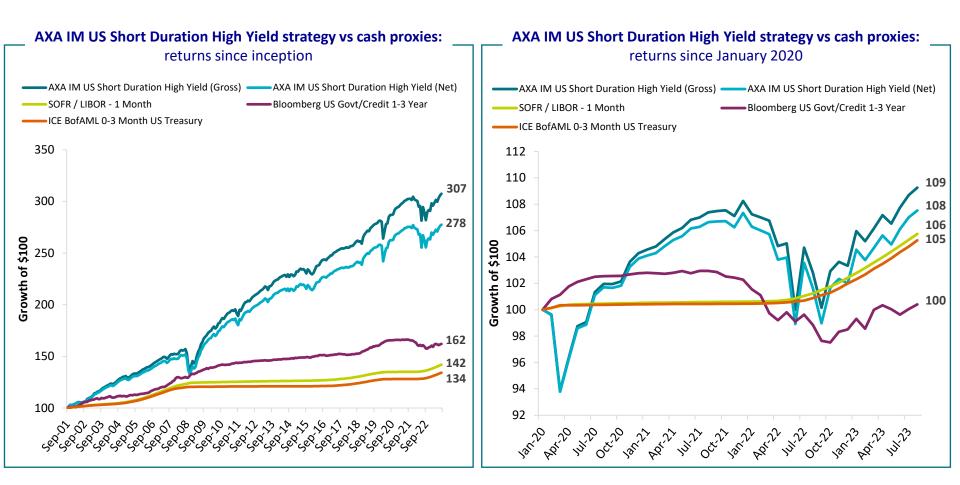
#### As of August 31, 2023

Strategy GIPS Composite			A	nnualized	%		Strategy		Sep-21-2	2023
	YTD	1 yoar	2 10215	Everre	10 years	Since	AUM	Inception	Yield-to-	OAS
AXA IM US Short Duration HY	2023	1 year	3 years	5 years	10 years	inception	(\$mil)	Date	Worst	UAS
Net Returns	5.42	5.79	1.88	2.87	3.02	4.77	\$5,974	30-Sep-01	7.98	281
Gross Returns	5.73	6.27	2.33	3.32	3.49	5.26	<i>\$3,374</i>	30-3cp-01	7.50	201
							1			
Strategy GIPS Composite			A	nnualized	%		Strategy		Sep-21-2	.023
	YTD	1 year	3 years	5 years	10 years	Since	AUM	Inception	Yield-to-	OAS
AXA IM US Enhanced High Yield	2023	i year	J years	5 years	10 years	inception	(\$mil)	Date	Worst	0/13
Net Returns	8.87	7.41	0.44	N/A	N/A	4.35	\$140	31-Dec-18	8.07 (unlev	<sup>()</sup> 287
Gross Returns	9.55	8.43	1.40	N/A	N/A	5.34	<b>9140</b>	51-Det-10	9.77 (lev)	207
							-			
Strategy GIPS Composite			Α	nnualized	%		Strategy		Sep-21-2	.023
	YTD	1 year	3 years	5 years	10 years	Since	AUM	Inception	Yield-to-	OAS
AXA IM US Core High Yield	2023	тусат	5 years	J years	IU years	inception	(\$mil)	Date	Worst	UAS
Net Returns	6.67	6.67	1.82	3.37	4.14	6.93			8.69	373
Gross Returns	7.01	7.18	2.31	3.87	4.64	7.44	\$5,729	30-Sep-01	0.09	5/5
ICE BofA US High Yield Index	7.22	7.01	1.86	3.16	4.39	7.01			8.81	390
								-		
Strategy GIPS Composite			Α	nnualized	%		Strategy		Sep-21-2	2023
	YTD	1	2	<b>F</b>	10	Since	AUM	Inception	Yield-to-	0.45
AXA IM US Dynamic High Yield	2023	1 year	3 years	5 years	10 years	inception	(\$mil)	Date	Worst	OAS
Net Returns	10.78	9.29	3.70	5.27	N/A	5.55			11.09	622
Gross Returns	11.22	9.94	4.33	5.90	N/A	6.18	\$905	28-Feb-14	11.09	622
ICE BofA US High Yield Index	7.22	7.01	1.86	3.16	N/A	3.84			8.81	390

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 Aug. 31, 2023. 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 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 address of the successful or achieve its objectives.



Return comparison with money markets / cash

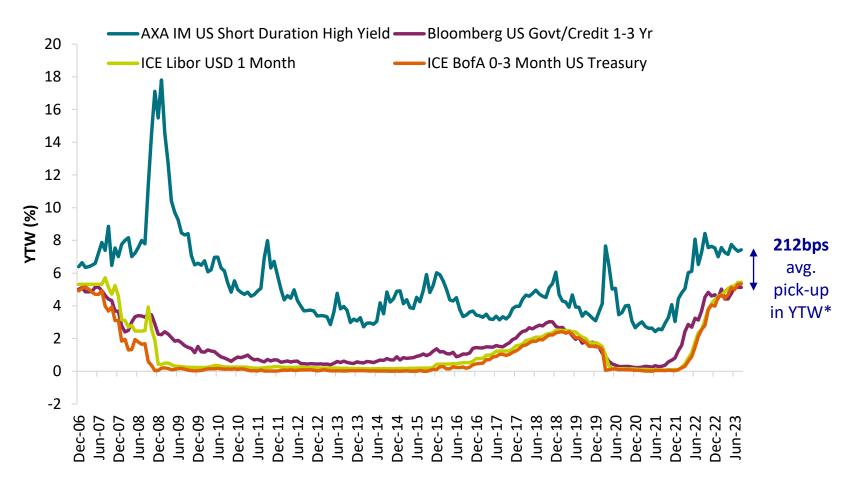


Source: AXA IM, as of Aug. 31, 2023. Performance shown gross of fees is calculated before expenses, carried interest, taxation costs and other expenses the investor may incur. An investor's return will be reduced by management fees and other expenses. Please see the Appendix for further information about 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.



Yield-to-worst vs money markets / cash

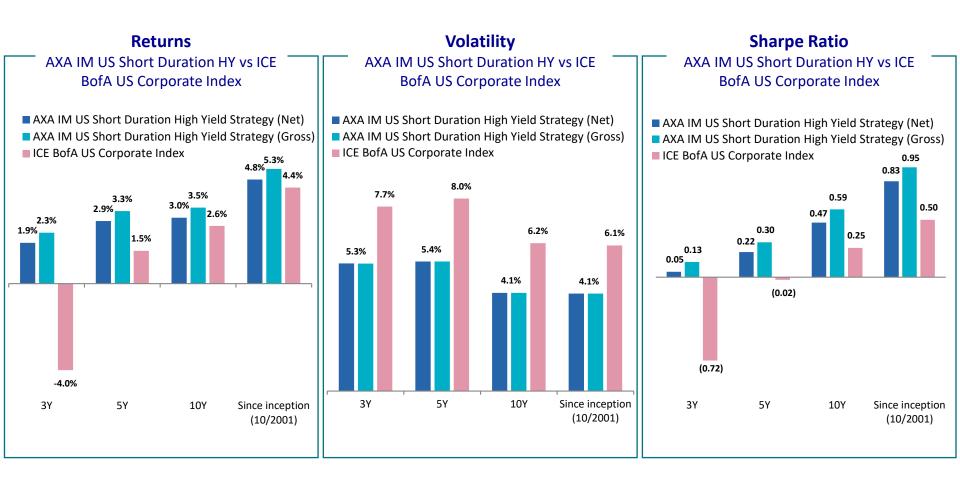
#### AXA IM US Short Duration High Yield strategy vs cash proxies: YTW evolution





Source: AXA IM, Bloomberg, as of Aug. 31, 2023. \* Average pick up in yield-to-worst (YTW) compared to the three other indices used in this comparison. Please note that AXA IM's US Short Duration High Yield strategy has no benchmark and comparative indices AXAs (Vfor Reference Data).

Risk/return comparison vs US Investment Grade

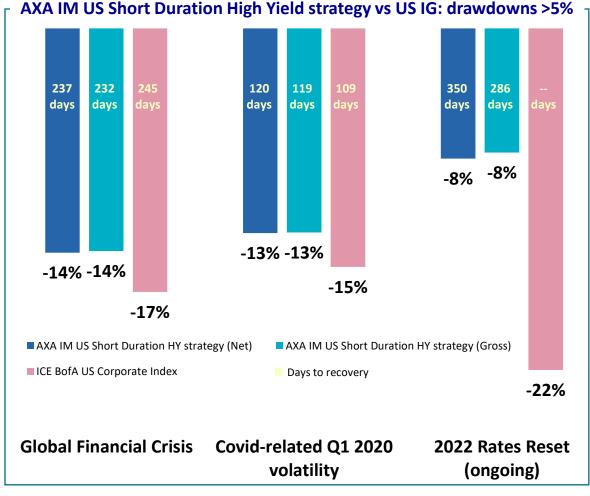


Source: AXA IM, as of Aug. 31, 2023. **Performance shown gross of fees** is calculated before expenses, carried interest, taxation costs and other expenses the investor may incur. An investor's return will be reduced by management fees and other expenses. Please see the Appendix for further information 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 obje**AXAsIM** - **RESTRICTED** 



Drawdown comparison vs US Investment Grade

Since our strategy's inception, there have only been <u>3</u> drawdowns greater than 5% vs <u>7</u> for US IG



On all 3 occasions, the strategy has protected downside better than US IG

Source: AXA IM, as of Aug. 31, 2023. 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 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. The above interest is objectives.



#### Yield-to-worst near highest since the Credit Crisis

As of August month-end, US SDHY was capturing roughly 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 :

11%

10%

9% 8%

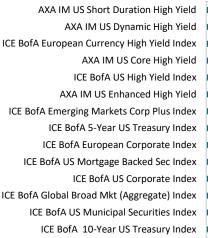
7% 6%

5% 4%

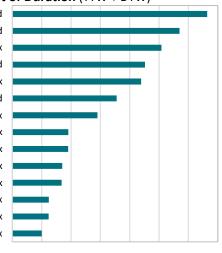
3%

2% –

Late March 2020: Onset of pandemic

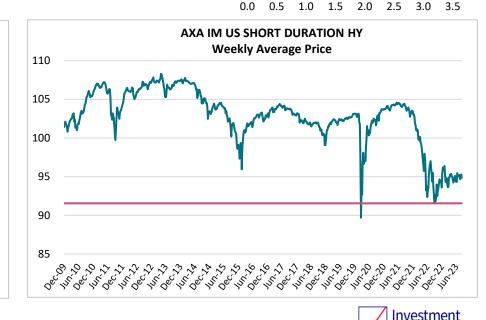


#### Yield % Per Unit of Duration (YTW ÷ DTW)



Managers

AXA

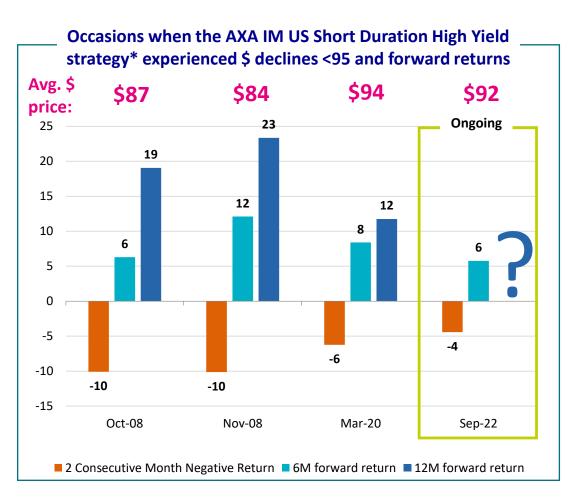


17 Source: AXA IM, FactSet from Dec 31, 2009 - August 31, 2023. AXA IM US SDHY Representative portfolio exclusive of cash. The representative account shown has been selected because it utilizes an investment setup that is typical for accounts in the relevant strategy and/or on the basis that it has adequate 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.

18

objectives.

The strategy has historically bounced-back following periods of negative returns



Prior to 2022, there were only <u>12 occasions</u> when the strategy experienced 2 consecutive negative return months. On 3 of these occasions, the \$ price declined <\$95, but bounced back strongly with positive forward returns

## Current average price of the strategy: <u>\$95</u>

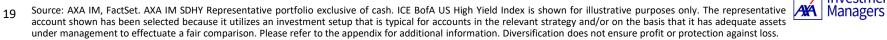
Sources: AXA IM. As of August 31, 2023. \*AXA IM SDHY Representative Portfolio stream (data prior to March 2004 is based on legacy portfolios managed in the same investment strategy). US SDHY Composite inception date: September 30, 2001. Past performance is not indicative of future results. Net Performance: Performance shown net of fees is calculated after the deduction of all management fees. Return may increase or decrease as a result of currency fluctuations. 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



## **Summary Statistics**

#### AXA IM Short Duration HY Strategy – August 31, 2023

Representative Portfolio     \$3,150     INDEX     CEB of a ML US HY Index     Services     14.1%     6.6%     212%       US SD High Yld Strategy     \$5,974     INDEX     ICE Bof a ML US HY Index     Media     11.7%     9.1%     128%       CHARACTERISTICS     AXA IM     Index     ICE Bof A ML RATING     AXA IM     Index     Financial Services     7.9%     5.0%     159%       Ave Years to Maturity     7.62%     8.52%     BBB Holdings     0.0%     0.0%     Consumer Goods     7.6%     3.7%     206%       Yield to Maturity     7.62%     8.52%     BB Holdings     3.8%     0.0%     Capital Goods     7.5%     6.8%     109%       Quiration To Worst     7.59%     8.47%     B Holdings     39.2%     39.1%     Basic Industry     5.8%     7.8%     7.8%     7.8%       Quiration To Worst     2.3     3.9     CCC or Under     8.2%     11.5%     Energy     5.8%     11.3%     51%       Average Price     95     89     Less than 1 Year     2.5%     0.0%     Telec												
LUS SD Hgh Yld Strategy     \$5,974     INDEX     ICE Bof a ML US HY Index     Media     11.7%     9.1%     128%       CHARACTERISTICS     AXA IM     Index     ICE Bof A ML RATING     AXA IM     Index     Financial Services     7.9%     5.0%     159%       Ave Years to Maturity     7.62%     8.52%     BBB Holdings     0.0%     0.0%     Consumer Goods     7.6%     3.7%     206%       Yield to Maurity     7.62%     8.52%     BBB Holdings     3.8%     0.0%     Capital Goods     7.6%     8.7%     109%       Qurrent Yield     6.08%     6.67%     B Holdings     3.8%     0.0%     Capital Goods     7.6%     5.6%     109%       Qurrent Yield     6.08%     6.67%     B Holdings     3.8%     0.0%     Health care     5.8%     7.8%     7.6%     8.7%       Qurrent Yield     6.08%     6.67%     B Holdings     3.8%     0.0%     Health care     5.2%     7.9%     6.6%       Duration To Worst     2.3     3.9     CCC or Under     8.2%     11.5%	ASSETS UNDER MANAG	EMENT (\$	millions)	DATA AS (	OF	8/31/2023		ICE BofA ML	SECTOR	AXA IM	Index	AXA/ Index
CHARACTERISTICS     AXA IM     Index     Real Estate     8.5%     4.1%     209%       CHARACTERISTICS     AXA IM     Index     ICE BofA ML RATING     AXA IM     Index     Financial Services     7.9%     5.0%     159%       Ave Years to Maturity     7.62%     8.52%     BBB Holdings     0.0%     Consumer Goods     7.6%     3.7%     206%       Vield to Maturity     7.62%     8.52%     BBB Holdings     47.5%     49.4%     Technology & Bectronics     6.8%     5.6%     121%       Current Yield     6.08%     6.67%     B Holdings     39.2%     39.1%     Basic Industry     5.8%     7.8%     7.5%       Duration Times Spread     5.79%     5.92%     Not Rated     1.2%     0.0%     Healthcare     5.2%     7.9%     66%       Option Adjusted Spread     259     385     Less than 1 Year     2.5%     0.0%     Telecommunications     4.0%     5.4%     75%       Cash Position     2.2%     NA     1.3 Years     60.3%     21.6%     Transportation     2.3%	Representative Portfolio	\$3,150						Services		14.1%	6.6%	212%
CHARACTERISTICS     AXA IM     Index     ICE BofA ML RATING     AXA IM     Index     Financial Services     7.9%     5.0%     159%       Ave Years to Maturity     7.62%     8.52%     BBB Holdings     0.0%     0.0%     Consumer Goods     7.6%     3.7%     206%       Yield to Maturity     7.62%     8.52%     BBB Holdings     3.8%     0.0%     Capital Goods     7.6%     3.7%     206%       Yield To Worst     7.59%     8.47%     BB Holdings     3.8%     0.0%     Capital Goods     7.5%     6.8%     109%       Qurrent Yield     6.08%     6.67%     B Holdings     39.2%     39.1%     Basic Industry     5.8%     11.3%     51%       Average Coupon     5.79%     5.92%     Not Rated     1.2%     0.0%     Healthcare     5.2%     7.9%     66%       Option Adjusted Spread     259     385     1.2%     0.0%     Telecommunications     4.0%     5.6%     8.7%       Average Price     95     89     Less than 1 Year     2.5%     0.0% <td< td=""><td>US SD High Yld Strategy</td><td>\$5,974</td><td></td><td>INDEX</td><td>ICE Bofa ML</td><td>US HY Index</td><td></td><td>Media</td><td></td><td>11.7%</td><td>9.1%</td><td>128%</td></td<>	US SD High Yld Strategy	\$5,974		INDEX	ICE Bofa ML	US HY Index		Media		11.7%	9.1%	128%
Ave Years to Maturity     2.7     5.0     AAA Holdings     0.0%     Consumer Goods     7.6%     3.7%     206%       Yield to Maturity     7.62%     8.52%     BBB Holdings     3.8%     0.0%     Capital Goods     7.5%     6.8%     109%       Yield To Worst     7.59%     8.47%     BB Holdings     47.5%     49.4%     Technology & Electronics     6.8%     5.6%     121%       Current Yield     6.08%     6.67%     B Holdings     39.2%     39.1%     Basic Industry     5.8%     7.8%     7.5%       Quration To Worst     2.3     3.9     CCC or Under     8.2%     11.5%     Energy     5.8%     11.3%     51%       Average Coupon     5.79%     5.92%     Not Rated     1.2%     0.0%     Healthcare     5.2%     7.9%     66%       Duration Times Spread     5.6     13.7     YEARS TO MATURITY     AXA IM     Index     Retail     4.9%     5.6%     87%       Number of Issuers     132     886     3-5 Years     0.3%     21.6%     Transportat								Real Estate		8.5%	4.1%	209%
Yield to Maturity   7.62%   8.52%   BBB Holdings   3.8%   0.0%   Capital Goods   7.5%   6.8%   109%     Yield To Worst   7.5%   8.47%   BB Holdings   47.5%   49.4%   Technology & Electronics   6.8%   5.6%   121%     Current Yield   6.08%   6.67%   B Holdings   39.2%   39.1%   Basic Industry   5.8%   7.8%   66.8%   1.3%   1.3%   51%     Average Coupon   5.76   3.92   Not Rated   1.2%   0.0%   Healthcare   5.2%   7.9%   6.6%   87%     Quration Times Spread   5.6   13.7   YEARS TO MATURITY   AXA IM   Index   Retai	CHARACTERISTICS	AXA IM	Index	ICE BofA N	IL RATING	AXA IM	Index	Financial Serv	ices	7.9%	5.0%	159%
Yield To Worst   7.59%   8.47%   BB Holdings   47.5%   49.4%   Technology & Bectronics   6.8%   5.6%   121%     Current Yield   6.08%   6.67%   B Holdings   39.2%   39.1%   Basic hdustry   5.8%   7.8%   7.8%   75%     Duration To Worst   2.3   3.9   CCC or Under   8.2%   11.5%   Energy   5.8%   11.3%   51%     Average Coupon   5.79%   5.92%   Not Rated   1.2%   0.0%   Healthcare   5.2%   7.9%   66%     Option Adjusted Spread   259   385   Eisure   5.0%   8.1%   61%     Duration Times Spread   5.6   13.7   YEARS TO MATURITY   AXA IM   Index   Retail   4.9%   5.6%   8.1%   61%     Average Price   95   89   Less than 1 Year   60.3%   21.6%   Transportation   2.3%   2.2%   108%     Number of Issuers   132   886   3-5 Years   0.0%   32.5%   Insurance   0.8%   1.8%   43%     Average ML Rating   B1   B1   7-	Ave Years to Maturity	2.7	5.0	AAA Holdin	ngs	0.0%	0.0%	Consumer Goo	ods	7.6%	3.7%	206%
Current Yield     6.67%     B Holdings     39.2%     39.1%     Basic Industry     5.8%     7.8%     7.8%     7.8%       Duration To Worst     2.3     3.9     CCC or Under     8.2%     11.5%     Energy     5.8%     11.3%     51%       Average Coupon     5.79%     5.92%     Not Rated     1.2%     0.0%     Healthcare     5.8%     11.3%     51%       Option Adjusted Spread     259     385     13.7     YEARS TO MATURITY     AXA IM     Index     Retail     4.9%     5.6%     87%       Average Price     95     89     Less than 1 Year     2.5%     0.0%     Telecommunications     4.0%     5.4%     75%       Cash Position     2.2%     NA     1-3 Years     60.3%     21.6%     Transportation     2.3%     2.2%     108%       Number of Positions     178     1865     5-7 Years     0.0%     32.5%     Insurance     0.3%     0.6%     0.6%     0.6%     0.6%     0.6%     0.6%     0.6%     0.6%     0.6%     0.6% <td>Yield to Maturity</td> <td>7.62%</td> <td>8.52%</td> <td>BBB Holding</td> <td>gs</td> <td>3.8%</td> <td>0.0%</td> <td>Capital Goods</td> <td></td> <td>7.5%</td> <td>6.8%</td> <td>109%</td>	Yield to Maturity	7.62%	8.52%	BBB Holding	gs	3.8%	0.0%	Capital Goods		7.5%	6.8%	109%
Duration To Worst     2.3     3.9     CCC or Under     8.2%     11.5%     Energy     5.8%     11.3%     51%       Average Coupon     5.79%     5.92%     Not Rated     0.0%     Healthcare     5.2%     7.9%     66%       Option Adjusted Spread     259     385	Yield To Worst	7.59%	8.47%	BB Holdings	3	47.5%	49.4%	Technology &	Electronics	6.8%	5.6%	121%
Average Coupon     5.79%     5.92%     Not Rated     1.2%     0.0%     Health car     5.2%     7.9%     66%       Option Adjusted Spread     259     385	Current Yield	6.08%	6.67%	B Holdings		39.2%	39.1%	Basic Industry		5.8%	7.8%	75%
Option Adjusted Spread     259     385     Leisure     5.0%     8.1%     61%       Duration Times Spread     5.6     13.7     YEARS TO MATURITY     AXA IM     Index     Retail     4.9%     5.6%     87%       Average Price     95     89     Less than 1 Year     2.5%     0.0%     Telecommunications     4.0%     5.4%     75%       Cash Position     2.2%     NA     1-3 Years     60.3%     21.6%     Transportation     2.3%     2.2%     108%       Number of Issuers     132     886     3-5 Years     37.2%     32.1%     Automotive     2.1%     5.2%     41%       Number of Positions     178     1865     5-7 Years     0.0%     32.5%     Insurance     0.8%     1.8%     43%       Average ML Rating     B1     B1     7-10 Years     0.0%     2.4%     Utility     0.0%     0.0%     0.0%     0.0%     0.0%     0.0%     0.0%     0.0%     0.0%     0.0%     0.0%     0.0%     0.0%     0.0%     0.0%     0	Duration To Worst	2.3	3.9	CCC or Und	ler	8.2%	11.5%	Energy		5.8%	11.3%	51%
Duration Times Spread     5.6     13.7     YEARS TO MATURITY     AXA IM     Index     Retail     4.9%     5.6%     87%       Average Price     95     89     Less than 1 Year     2.5%     0.0%     Telecommunications     4.0%     5.6%     87%       Cash Position     2.2%     N/A     1-3 Years     60.3%     21.6%     Transportations     2.3%     2.2%     108%       Number of Issuers     132     886     3-5 Years     37.2%     32.1%     Automotive     2.1%     5.2%     41%       Number of Positions     178     1865     5-7 Years     0.0%     32.5%     Insurance     0.8%     0.8%     0%     0%     0%     0.0%	Average Coupon	5.79%	5.92%	Not Rated		1.2%	0.0%	Healthcare		5.2%	7.9%	66%
Average Price     95     89     Less than 1 Year     2.5%     0.0%     Telecommunications     4.0%     5.4%     75%       Cash Position     2.2%     N/A     1-3 Years     60.3%     21.6%     Transportation     2.3%     2.2%     108%       Number of Issuers     132     886     3-5 Years     37.2%     32.1%     Automotive     2.1%     5.2%     41%       Number of Positions     178     1865     5-7 Years     0.0%     32.5%     Insurance     0.8%     1.8%     43%       Average ML Rating     B1     B1     7-10 Years     0.0%     11.4%     Banking     0.0%     0.8%     0.8%     0.8%     0%       TOP FIVE SECURITIES     Coupon (%)     Maturity     ICE BofA     ISsue Size (\$MM)     ICE BofA ML Industry     Vield to Price     Duration     % of Worst (%)     % of Portfoli       B8G Foods, Inc.     5.250     4/01/2025     CCC1     500     Food - Wholesale     97.81     6.73     1.5     1.5       Labl Escrow Issuer LLC     6.750     7/15/2	Option Adjusted Spread	259	385					Leisure		5.0%	8.1%	61%
Cash Position     2.2%     N/A     1-3 Years     60.3%     21.6%     Transportation     2.3%     2.2%     108%       Number of Issuers     132     886     3-5 Years     37.2%     32.1%     Automotive     2.1%     5.2%     41%       Number of Positions     178     1865     5-7 Years     0.0%     32.5%     Insurance     0.8%     1.8%     43%       Average ML Rating     B1     B1     7-10 Years     0.0%     1.4%     Banking     0.0%     0.8% </td <td>Duration Times Spread</td> <td>5.6</td> <td>13.7</td> <td>YEARS TO</td> <td>MATURITY</td> <td>AXA IM</td> <td>Index</td> <td>Retail</td> <td></td> <td>4.9%</td> <td>5.6%</td> <td>87%</td>	Duration Times Spread	5.6	13.7	YEARS TO	MATURITY	AXA IM	Index	Retail		4.9%	5.6%	87%
Number of Issuers     132     886     3-5 Years     37.2%     32.1%     Automotive     2.1%     5.2%     41%       Number of Positions     178     1865     5-7 Years     0.0%     32.5%     Insurance     0.8%     1.8%     43%       Average ML Rating     B1     B1     B1     7-10 Years     0.0%     2.4%     Utility     0.0%     0.8%     0.0% <td>Average Price</td> <td>95</td> <td>89</td> <td>Less than 1</td> <td>l Year</td> <td>2.5%</td> <td>0.0%</td> <td>Telecommunic</td> <td>ations</td> <td>4.0%</td> <td>5.4%</td> <td>75%</td>	Average Price	95	89	Less than 1	l Year	2.5%	0.0%	Telecommunic	ations	4.0%	5.4%	75%
Number of Positions     178     1865     5-7 Years     0.0%     32.5%     Insurance     0.8%     1.8%     43%       Average ML Rating     B1     B1     B1     B1     B1     D1     7-10 Years     0.0%     11.4%     Banking     0.0%     0.8%     0.8%     0.8%     0.8%     0.8%     0.8%     0.8%     0.8%     0.0%	Cash Position	2.2%	N/A	1-3 Years		60.3%	21.6%	Transportation	1	2.3%	2.2%	108%
Average ML RatingB1 $7 \cdot 10$ Years Over 10 Years Over 10 Years0.0%11.4% BankingBanking0.0%0.8%0.%TOP FIVE SECURITIESCoupon (%)MaturityICE Bof A RatingIssue Size (\$MM)ICE Bof A (\$MM)ICE Bof A (\$MM)BankingO.0%0.0%0.0%0.0%0.0%0.0%B&G Foods, Inc.5.2504/01/2025CCC1500Food - Wholesale97.816.731.51.5Labl Escrow Issuer LLC6.7507/15/2026B3700Printing & Publishing97.747.642.51.5IRB Holding Corp.7.0006/15/2025B2750Resturants100.006.980.71.4	Number of Issuers	132	886	3-5 Years		37.2%	32.1%	Automotive		2.1%	5.2%	41%
Over 10 Years0.0%2.4%Utility0.0%0.0%0.0%0.0%TOP FIVE SECURITIESCoupon (%)MaturityICE BofA RatingISsue Size (\$MM)ICE BofA ML IndustryCurrent PriceYield to Worst (%)Duration to Worst% of PortfoliB&G Foods, Inc.5.2504/01/2025CCC1500Food - Wholesale97.816.731.51.5Labl Escrow Issuer LLC6.7507/15/2026B3700Printing & Publishing97.747.642.51.5Crestw ood Midstream Partners LP5.7504/01/2025BB3500Gas Distribution99.156.321.51.5IRB Holding Corp.7.0006/15/2025B2750Restaurants100.006.980.71.4	Number of Positions	178	1865	5-7 Years		0.0%	32.5%	Insurance		0.8%	1.8%	43%
TOP FIVE SECURITIESCoupon (%)MaturityICE BofA RatingIssue Size (\$MM)ICE BofA ML IndustryCurrent PriceYield to Worst (%)Duration to Worst% of PortfoliB&G Foods, Inc.5.2504/01/2025CCC1500Food - Wholesale97.816.731.51.5Labl Escrow Issuer LLC6.7507/15/2026B3700Printing & Publishing97.747.642.51.5Crestw ood Midstream Partners LP5.7504/01/2025BB3500Gas Distribution99.156.321.51.5IRB Holding Corp.7.0006/15/2025B2750Restaurants100.006.980.71.4	Average ML Rating	B1	B1	7-10 Years		0.0%	11.4%	Banking		0.0%	0.8%	0%
TOP Five SECORTIES     Maturity     Rating     (\$MM)     ICE BofA ML Industry     Price     Worst (%) to Worst     Portfoli       B&G Foods, Inc.     5.250     4/01/2025     CCC1     500     Food - Wholesale     97.81     6.73     1.5     1.5       Labl Escrow Issuer LLC     6.750     7/15/2026     B3     700     Printing & Publishing     97.74     7.64     2.5     1.5       Crestw ood Midstream Partners LP     5.750     4/01/2025     BB3     500     Gas Distribution     99.15     6.32     1.5     1.5       IRB Holding Corp.     7.000     6/15/2025     B2     750     Restaurants     100.00     6.98     0.7     1.4				Over 10 Ye	ears	0.0%	2.4%	Utility		0.0%	0.0%	0%
Labl Escrow Issuer LLC     6.750     7/15/2026     B3     700     Printing & Publishing     97.74     7.64     2.5     1.5       Crestw ood Midstream Partners LP     5.750     4/01/2025     BB3     500     Gas Distribution     99.15     6.32     1.5       IRB Holding Corp.     7.000     6/15/2025     B2     750     Restaurants     100.00     6.98     0.7     1.4	TOP FIVE SECURITIES		-	Maturity			ICE Bof	A ML Industry				
Crestw ood Midstream Partners LP     5.750     4/01/2025     BB3     500     Gas Distribution     99.15     6.32     1.5       IRB Holding Corp.     7.000     6/15/2025     B2     750     Restaurants     100.00     6.98     0.7     1.4	B&G Foods, Inc.			4/01/2025	CCC1	500	Food	l - Wholesale	97.81			
IRB Holding Corp. 7.000 6/15/2025 B2 750 Restaurants 100.00 6.98 0.7 1.4	Labl Escrow Issuer LLC		6.750	7/15/2026	B3	700	Printin	ig & Publishing	97.74	7.64	2.5	1.5
	Crestw ood Midstream Pa	rtners LP	5.750	4/01/2025	BB3	500	Gas	Distribution	99.15	6.32	1.5	1.5
Gray Television, Inc. 5.875 7/15/2026 B2 500 Media Content 91.49 9.32 2.5 1.4	IRB Holding Corp.		7.000	6/15/2025	B2	750	Re	estaurants	100.00	6.98	0.7	1.4
	Gray Television, Inc.		5.875	7/15/2026	B2	500	Me	dia Content	91.49	9.32	2.5	1.4

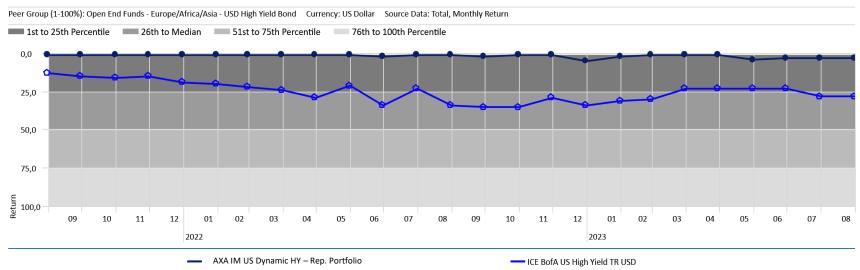




#### Consistent top percentile performer

		1M	3M	6M	2023 YTD	1Y (p.a.)	3Y (p.a.)	5Y (p.a.)
Morningstar rating as of	AXA IM US Dynamic HY – Rep. Portfolio (Net)	0.90	5.25	5.97	10.64	9.10	3.54	5.11
8/31/2023	ICE BofA US High Yield Index	0.29	3.37	4.54	7.22	7.01	1.86	3.16
****	EAA Fund USD High Yield Bond	-0.10	2.81	3.31	5.55	5.47	0.75	1.98
	Percentile ranking	1	2	3	1	3	3	1

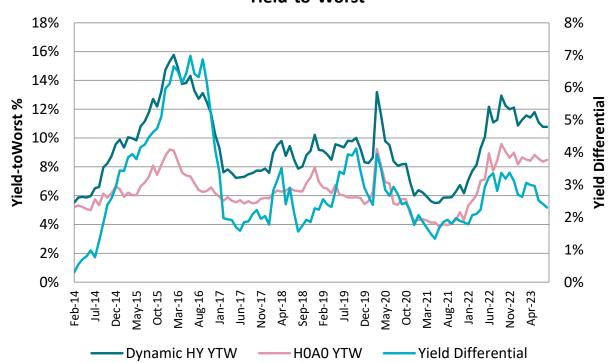
#### **3Y Ranking Evolution**



Source: AXA IM, Morningstar Direct, as of August 31, 2023. Inception date: 1/17/2014. 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 reAXA IM - RESTRICTED



The strategy's yield advantage to US High Yield market is key driver of long-term outperformance



Yield-to-Worst

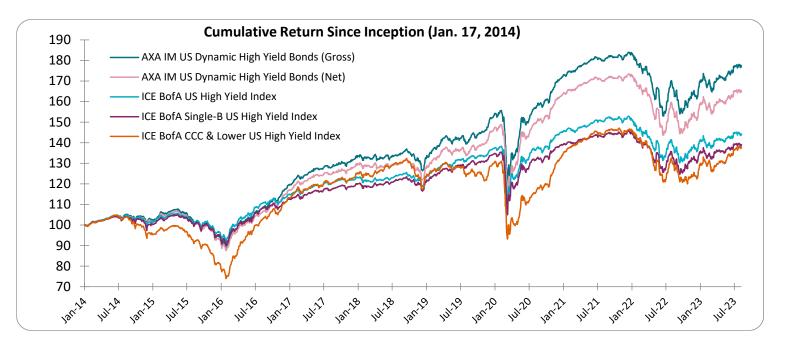
• The focus is to avoid "giving away" the return from yield advantage through defaults or sales at significant losses. Historically the strategy has achieved this, with only 1 default and manageable sales at losses

AXA IM US Dynamic HY	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Significant losses 20-30%	0	3	2	2	0	0	1	0	1	2
Significant losses >30%	0	7	6	2	2	1	6	0	2	0
Total sign. losses >20%	<u>0</u>	<u>10</u>	<u>8</u>	<u>4</u>	<u>2</u>	<u>1</u>	<u>7</u>	<u>0</u>	<u>3</u>	<u>2</u>



Annual and cumulative returns since inception compared to single B and triple C indices

Annual Total Return	2014*	2015	2016	2017	2018	2019	2020	2021	2022	2023 YTD
AXA IM US Dynamic HY (Net) AXA IM US Dynamic HY (Gross)	2.16 2.88	-8.64 -7.99	23.50 24.40	11.36 12.19	-4.55 -3.83	18.72 19.63	11.81 12.65		-12.86 -12.20	10.78 11.22
ICE BofA US High Yield Index ICE BofA Single-B US High Yield Index ICE BofA CCC & Lower US High Yield Index	1.43 0.30	-4.64 -5.00 -15.02	17.49 16.94 36.46	7.48 6.76 10.59	-2.27 -1.54 -4.15	14.41 14.36 9.11	6.17 3.66 2.86		-11.22 -10.58 -16.32	7.22 7.78 13.62

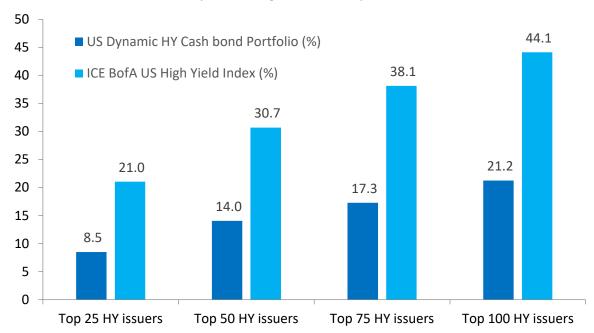


Source: AXA IM, Inc. As of August 31, 2023. \*Since Fund Inception Date of January 17, 2014. Benchmark is the ICE BofA US High Yield Index. Performance shown net of fees is calculated after the deduction of all management fees. Return may increase or decrease as a result of currency fluctuations. Please 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.



#### AXA IM - RESTRICTED

The composition of the Dynamic High Yield strategy tends to be very different to the broad US HY market



#### **Dynamic High Yield Composition**

% of Cash Bond Portfolio	Current (August-23)	Dec-22	Dec-21	Dec-20	Dec-19
Total CCC Exposure	52.9%	57.7%	53.8%	46.6%	55.1%
Largest 25% of issuers in CCC index**	4.3%	4.3%	3.1%	1.9%	2.5%
Largest 50% of issuers in CCC index**	14.3%	16.3%	14.6%	9.9%	14.9%
Largest 75% of issuers in CCC index**	18.2%	36.1%	29.6%	24.9%	35.9%



## US Dynamic High Yield's Role in a Balanced Fixed Income and Equity Portfolio

- Each US high yield strategy offered at AXA IM has a different risk/reward profile, and each can play a different role within a balanced equity and fixed income portfolio.
- Within US asset classes, we believe US Dynamic High Yield is positioned between the US high yield market and the equity market from a risk/reward perspective.
- Dynamic High Yield can be competitive with equity returns in risk-on markets (2016, 2017, 2019) and can provide better drawdown protection and less volatility in most risk-off markets (2018, 2022).

LEGEND:	
SDHY	AXA IM US Short Duration HY GIPS Composite
Core HY	AXA IM US Core High Yield GIPS Composite
Dyn HY	AXA IM US Dynamic High Yield GIPS Composite
Enh HY	US Enhanced High Yield GIPS Composite
US IG	ICE US Corporate Index (C0A0)
10Y Tr	ICE 10 Year Treasury (GA10)
US HY	ICE US High Yield index (H0A0)
Loans	Credit Suisse Leveraged Loan index
S&P 500	Standard & Poor 500 index
Russell	Russ = Russell 2000 index

#### **Performance by Calendar Years**

201	L5	20	16	<b>20</b> 1	L <b>7</b>	202	18	20	19	202	20	202	21	202	22	YTD 2	2023
S&P 500	1.38	Dyn HY	23.67	S&P 500	21.83	SDHY	1.22	S&P 500	31.49	Russell	19.96	S&P 500	28.71	Loans	-1.06	S&P 500	18.73
10Y Tr	0.91	Russell	21.31	Russell	14.65	Loans	1.14	Russell	25.53	S&P 500	18.40	Russell	14.82	SDHY	-4.98	Dyn HY	10.78
SDHY	0.77	US HY	17.49	Dyn HY	11.48	10Y Tr	-0.03	Dyn HY	18.93	Dyn HY	12.01	Dyn HY	6.77	Core HY	-9.55	Russell	8.96
Loans	-0.38	Core HY	15.29	Core HY	7.55	Core HY	-1.68	Enh HY	15.22	10Y Tr	10.58	Enh HY	5.46	US HY	-11.22	Loans	8.95
US IG	-0.63	S&P 500	11.96	US HY	7.48	US IG	-2.25	US HY	14.41	US IG	9.81	Loans	5.40	Dyn HY	-12.70	Enh HY	8.87
Russell	-4.41	Loans	9.89	US IG	6.48	US HY	-2.26	US IG	14.23	Enh HY	8.28	US HY	5.36	Enh HY	-14.84	US HY	7.22
US HY	-4.64	US IG	5.96	Loans	4.25	S&P 500	-4.38	Core HY	12.77	Core HY	7.53	Core HY	4.54	US IG	-15.44	Core HY	6.67
Core HY	-4.92	SDHY	5.88	SDHY	3.48	Dyn HY	-4.45	10Y Tr	8.91	US HY	6.17	SDHY	3.34	10Y Tr	-16.28	SDHY	5.42
Dyn HY	-8.53	10Y Tr	-0.16	10Y Tr	2.04	Russell	-11.01	Loans	8.17	SDHY	3.93	US IG	-0.95	S&P 500	-18.11	US IG	2.97
Enh HY		Enh HY		Enh HY		Enh HY		SDHY	8.06	Loans	2.78	10Y Tr	-3.68	Russell	-20.44	10Y Tr	-1.23

Sources: AXA Investment Managers, ICE BofA. As of August 31, 2023. Market indices are shown for illustrative purposes only. **Performance shown net of fees** is calculated after 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 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. **Past performance is not a AXA IM - RESTRICTED** 



24

## **Summary Statistics**

#### AXA IM Dynamic HY Strategy – August 31, 2023

POSITION COUNTS	AXA IM	Index
Number of Issuers	122	886
Number of Cash Bonds	117	1,866
Number of CDS Positions	27	N/A

For Cash Bonds only (excludes CDS)						
CHARACTERISTCS	AXA IM	Index				
Yield to Maturity	10.79%	8.52%				
Yield To Worst	10.77%	8.47%				
Current Yield	8.55%	6.67%				
Duration To Worst	3.8	3.9				
Average Coupon	7.36%	5.92%				
Option Adjusted Spread	622	385				
Duration Times Spread	20.9	13.7				
Average Price	86	89				
Avg Years to Maturity	5.0	5.0				
DURATION TO WORST	AXA IM	Index				
Less Than 1	0.2%	2.4%				
1 - 3	24.6%	27.8%				
3 - 5	67.1%	49.2%				
5 - 7	6.7%	17.8%				
7 - 10	1.3%	1.9%				

0.0%

0.9%

AUM / NOTIONAL EXPOSURE						
<b>\$905,4</b> 1	4,847					
\$1,081,6	62,961					
119	%					
3.2%						
AXA IM	Index					
0.1%	0.0%					
0.0%	0.0%					
4.2%	49.4%					
42.9%	39.1%					
52.9%	11.5%					
0.0%	0.0%					
B3	B1					
	\$905,41 \$1,081,6 119 3.2 AXA IM 0.1% 0.0% 4.2% 42.9% 52.9% 0.0%					

			Tel
MATURITY	AXA IM	Index	Ins
Less Than 1 Year	0.1%	0.0%	Ret
1 - 3 Years	13.2%	21.6%	Au
3 - 5 Years	35.8%	32.1%	Rea
5 - 7 Years	47.2%	32.5%	So
7 - 10 Years	2.4%	11.4%	Bai
Over 10 Years	1.3%	2.4%	Tra

#### All Data as of 8/31/2023

Index: ICE Bof A ML US HY Index

ICE BofA ML SECTOR	AXA IM	Index
Services	15.4%	6.6%
Technology & Electronics	<b>12.0%</b>	5.6%
Basic Industry	11 <b>.9</b> %	7.8%
Capital Goods	10.7%	6.8%
Media	10.3%	9.1%
Energy	7.9%	11.3%
Financial Services	6.9%	5.0%
Healthcare	6.7%	7.9%
Consumer Goods	5.3%	3.7%
Leisure	4.8%	8.1%
Telecommunications	2.5%	5.4%
Insurance	2.4%	1.8%
Retail	2.1%	5.6%
Automotive	0.6%	5.2%
Real Estate	0.4%	4.1%
Sovereign	0.1%	0.0%
Banking	0.0%	0.8%
Transportation	0.0%	2.2%

Top 5 Cash Bond Positions	Coupon (%)	Maturity Date	ICE BofA Rating	Issue Size (\$mil)	ICE BofA ML Industry	Current Price	Yield to Worst	Duration to Worst	% of Portfolio
Lummus Technology Holdings V L	9.000	7/01/2028	CCC1	460	Chemicals	92.57	11.02	3.7	2.5
Mauser Packaging Solutions Holdir	9.250	4/15/2027	CCC2		Packaging	90.61	12.55	2.8	2.5
W.R. Grace Holdings LLC	5.625	8/15/2029	B3	1,155	Chemicals	84.57	9.03	4.8	2.4
Olympus Water US Holding Corp.	6.250	10/01/2029	CCC2	400	Chemicals	80.51	10.69	4.6	2.1
Clydesdale Acquisition Holdings, Ir	8.750	4/15/2030	CCC2	1,110	Packaging	90.43	10.81	4.7	1.8

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 Managers 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.



25

Over 10

## New launch: AXA IM US Core High Yield B/BB strategy

A natural extension of our successful Core High Yield strategy

			new strategy
the market –		US Core High Yield Strategy	US Core High Yield B/BB Strategy <sup>2</sup>
rity selection,	Benchmark	ICE BofA US High Yield Index	ICE BofA US High Yield BB-B Constrained Index
ember 2001) <sup>1</sup>	Maturity Spectrum	Full spectrum of the US high yield universe	Full spectrum of the US high yield universe
volatility	Volatility vs. US high yield market	Lower (approximately 3/4 of market vol)	Lower (similar to Core HY)
et return and Iefault risk	Inception date	September 2001	Estimated – Q4 2023 (although running in mandate form since December 2014)
he HY market	Market exposure	Total exposure up to 100%	Total exposure up to 100%
<u>rns (%)</u> <b>20 Year</b>	Duration to Worst <sup>3</sup>	3.7	3.8
<b>6.23</b> 6.61	Yield to Worst <sup>3</sup>	8.33%	7.80%
4.09 2.72	Avg. Rating	B2	B1
6.59 5.92	(% CCC) <sup>3</sup>	(16.1% CCC)	(0% CCC)
7.46	Derivatives?	No	No

Key attributes of <u>US Core HY</u> strategy:

- 1. Consistent returns through multiple market cycles with **lower volatility** than the market leading to a **higher Sharpe ratio**
- 2. Unique combination of **bottom-up** fundamental credit expertise, driving security selection with a strong **top-down overlay**
- 3. Extremely low default record (5 vs 670 for US HY market since launch in September 2001)<sup>3</sup>

#### Key attributes of <u>US HY B/BB</u> universe:

- 1. Historically capturing a large % of the overall US HY market return, with less volatility
- Over a 20-year period (annualized) delivering 94% of the US HY market return and outperforming US IG by >200bps
- 3. Excluding CCC & below rated securities and associated exponentially higher default risk
- Targeted at investors who want an up-in-quality investment approach to the HY marked due to regulatory or capital risk requirements

	Index Total Returns	Annualized Returns (%)			
		5 Year	10 Year	20 Year	
HUC4	ICE BofA BB-B US High Yield Constrained Index	3.30	4.39	6.23	
H0A0	ICE BofA US High Yield Index	3.16	4.38	6.61	
C0A0	ICE BofA US Corporate Index	1.51	2.64	4.09	
G0Q0	ICE BofA US Treasury Index	0.14	1.00	2.72	
H0A1	ICE BofA BB US High Yield Index	3.79	4.75	6.59	
H0A2	ICE BofA Single-B US High Yield Index	2.80	4.01	5.92	
H0A3	ICE BofA CCC & Lower US High Yield Index	1.32	4.03	7.46	

Source: AXA IM as of August 31, 2023. (1) J.P. Morgan Default Monitor as of September 1, 2023. Data from January 1, 2002 to August 31, 2023 for AXA IM Core HY representative portfolio stream (data prior to October 2006 is based on legacy portfolios managed in the same investment strategy) and ICE BofA US High Yield Index. (2)
Please note that the data provided relates to a model portfolio which has not yet been launched. (3) AXA IM Core HY representative portfolio exclusive of cash. Universe: 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.



Proposed new strategy



## Q&A

## **Additional Risks**

#### **US High Yield**

28

**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 arAXANEVTerRESTRIGGED on request from AXA Investment Managers.

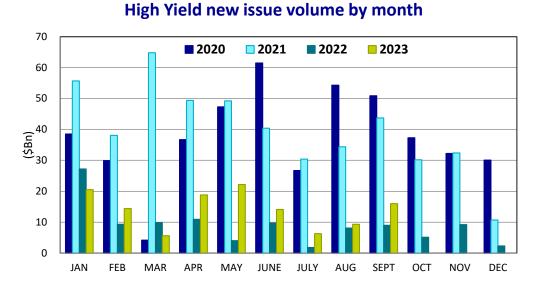




## Appendix

## New issue activity

Refinancing activity still driving new issue volumes; strong forward calendar into year-end



#### High Yield new issue activity

YEAR-TO-DATE (\$bn)		Total Vol.	Avg Mo. Volu	me
	2023	127.0	14.1	
	2022	106.5	8.9	
Change from pric	or year	19%	59%	
Septer	mber*	<u>\$Bn</u>	<u>Count</u>	
Total volume	e (\$bn)	15.8	25	
Prior I	month	9.3		
Change from prior i	nonth	70%		

#### YTD USE OF PROCEEDS (as a % of total volume)

	Refinancing	62%
Acquisition f	inancing/LBO	23%
Gene	ral Corporate	15%
	Dividend	1%



## **Higher Returns Follow Higher Yields**



ICE US High Yield Index (H0A0)

2022's interest rate reset has left the US High Yield market with much improved return prospects



31 Source: ICE as of Dec 31, 2022. Source: ICE as of August 31, 2023. YTW = Yield-to-Worst. ICE BofA US High Yield Index is shown for illustrative purposes only. YTW = Yield-to-Worst. ICE BofA US High Yield Index is shown for illustrative purposes only.

## **Historical Total Return Outcomes**

A potential pause in Fed rate hikes, and higher yields, have historically led to favorable total returns in HY

-					-			
		ICE US F	ICE US HY Index			IY Index I	Forward F	Returns
Month of last hike	Fed Funds Terminal Rate	HY Spread at end of hiking cycle	HY Yield at end of hiking cycle		3 mo.	6 mo.	9 mo.	12 mo.
Dec-18	2.50%	567bp	7.95		7.27%	9.88%	10.88%	14.08%
Jun-06	5.25%	359bp	8.59		3.46%	8.03%	11.21%	11.83%
May-00	6.50%	661bp	12.56		3.57%	-4.42%	4.15%	3.33%
Mar-97	5.50%	325bp	9.67		4.48%	9.53%	11.91%	15.72%
Feb-95	6.00%	437bp	10.58		6.51%	8.96%	11.93%	16.51%
Average		470bp	9.87		5.06%	6.40%	10.02%	12.30%

#### High Yield Forward Performance Post a Pause in Fed Policy Hikes

		Histor	ical High-Yi	eld Bond Per	formance by Yield Bud	ket						
	High-yield annualized returns							High-yield annualized returns				
Average return	6m	12m	18m	24m	Median return	6m	12m	18m	24m			
<6.00%	0.45	1.16	1.08	1.94	<6.00%	1.09	2.49	2.42	1.82			
6.00% - 6.99%	2.50	5.19	6.04	5.83	6.00% - 6.99%	3.40	6.44	6.33	5.97			
7.00% - 7.99%	3.26	6.59	5.32	4.64	7.00% - 7.99%	3.05	6.61	7.71	7.65			
8.00% - 8.99%	4.29	7.05	5.17	4.88	8.00% - 8.99%	4.98	8.87	5.79	4.56			
9.00% - 9.99%	6.96	10.69	10.23	9.54	9.00% - 9.99%	6.90	13.12	12.05	10.54			
10.00% - 10.99%	-0.11	1.49	5.64	6.18	10.00% - 10.99%	1.07	1.57	3.72	5.87			
11.00% - 11.99%	2.42	12.00	11.27	10.85	11.00% - 11.99%	0.99	8.64	13.60	13.69			
12.00%+	8.06	15.33	13.52	13.12	12.00%+	2.63	3.49	8.80	12.13			

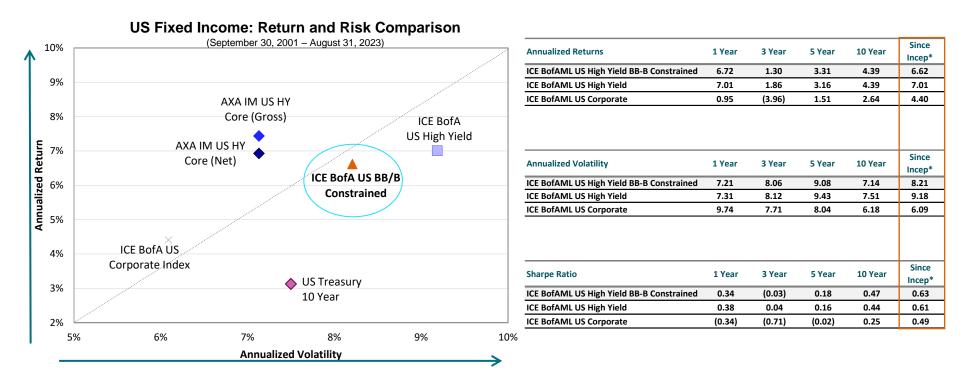
Note: Time period used January 1987 - Present



32 Sources: AXA Investment Managers, FactSet, JP Morgan as of July 31, 2023. Index: ICE BofA US High Yield Index. Past performance is not indicative of future results. For illustrative purposes only.

## New launch: AXA IM US Core High Yield B/BB strategy – Risk-Return Profile

Return and risk comparison since inception



Since launch of our US Core HY composite in 2001, the US High Yield BB-B Constrained universe has delivered...

1. ~220bps of outperformance (annualized) vs the broad US IG market with higher volatility

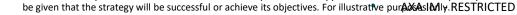
Investment

Managers

AXA

- 2. 94% of the broad US HY market return with less volatility
- 3. Higher Sharpe ratio than both the broad US IG and US HY markets

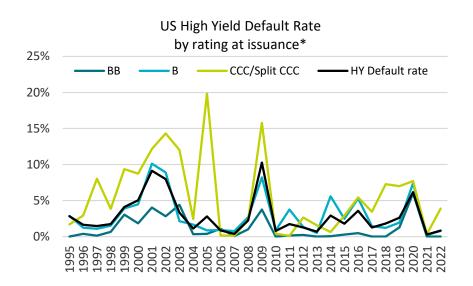
Sources: AXA Investment Managers. Index: ICE BofA US High Yield Index. As of August 31, 2023. \*Composite Inception Date: September 30, 2001. Past performance is not indicative of future results. Net Performance: Performance shown net of fees is calculated after the deduction of all management fees. Return may increase or decrease as a result of currency fluctuations. The above information presented is supplemental to the GIPS-compliant presentation included in the GIPS Disclosure Notes. No assurance can

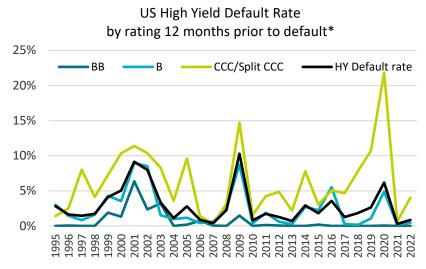


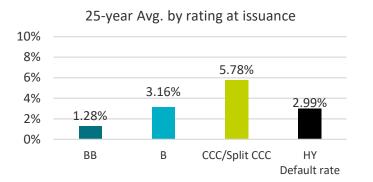
33

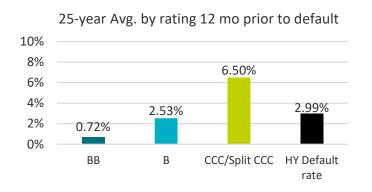
## Default history of the US High Yield market by rating

Excluding the triple-C rated portion market can help to mitigate default risk











Source: JP Morgan as of December 31, 2022. \*Evolution of default rate taking into account full calendar year data, including distressed exchanges. For illustrative purposes only. Investing involves risk and past performance does not guarantee future results. NAXAUMCERESTRECTED hat the strategy will be successful or achieve its objectives.

## **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**

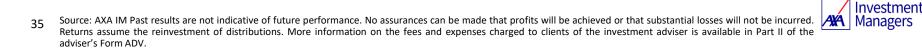
The "US Short Duration High Yield" composite is not show n against a benchmark, since the strategy is an absolute return strategy and not managed against a benchmark.

#### **General Information**

Reporting date	August 31, 2023
Composite Inception Date	September 30, 2001
Composite Creation Date	September 30, 2001
Composite Currency	USD

Cumulative (%)	1 mo	3 m o	6 m o	YTD
Composite (Gross)	0.52	2.56	3.86	5.73
Composite (Net)	0.48	2.45	3.63	5.42

Annualized (%)	1 year	3 year	5 year	10 year	Since inception		Quarterly (%)		2022 3Q	2022 4Q	2023 1Q	2023 2Q
Composite (Gross)	6.27	2.33	3.32	3.49	5.26		Composite	(Gross)	0.17	3.17	2.74	1.48
Composite (Net)	5.79	1.88	2.87	3.02	4.77		Composite	Composite (Net)		3.06	2.63	1.37
Calendar year (%)			2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Composite (Gross)			-4.55	3.80	4.38	8.50	1.69	3.98	6.38	1.23	1.51	5.46
Composite (Net) Internal Dispersion (Std. Deviation)			-4.98	3.34	3.93	8.06	1.22	3.48	5.88	0.77	1.03	4.96
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.10
As of end of period			2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Composite Assets (USI	D mil)		5,494	6,507	5,772	5,712	5,575	8,217	10,039	11,014	12,390	20,483
# of Portfolios in Compo	osite		4	5	5	7	4	4	5	4	3	12
Total Strategy Assets (USD mil)			6,550	8,161	7,131	7,109	8,351	13,335	18,867	18,648	19,681	24,991
Total Firm Discr.Assets (USD mil)				291,036	250,851	208,569	191,910	223,150	177,183	182,303	215,895	225,582
Total Firm Assets (USD mil)			618,555	689,782	618,264	583,866	650,149	555,036	558,650	668,139	686,214	



## **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.

1 year 3 year 5 year 10 year

#### **Composite Benchmark**

Total Firm Discr.Assets (USD mil)

Total Firm Assets (USD mil)

Annualized (%)

ICE Bof A Merill Lynch US High Yield Index (H0A0)

		General Information							
of non-		Reporting date		August 31, 2023					
entals. The		Composite Inception Date	е	September	30, 2001				
ment their	Composite Creation Date	September 30, 2001							
		Composite Currency	USD						
		Cumulative (%)	1 m o	3 m o	6 m o				
		Composite (Gross)	0.32	3.15	4.61				
	-	Composite (Net)	0.28	3.03	4.36				
		Benchmark	0.29	3.37	4.54				
Since inception		Quarterly (%)	2022 3Q	2022 4Q	2023 1Q				
7.44		Composite (Gross)	-0.24	4.50	3.60				

/ initialized ( / ii)	. you	o you.	o you.	io you	inception				3Q	4Q	1Q	2Q								
Composite (Gross)	7.18	7.18 2.31		3.87	4.64	7.44		Composite (	(Gross)	-0.24	4.50	3.60	1.61							
Composite (Net)	6.67	1.82	3.37	4.14	6.93		Composite (Net)		-0.36	4.37	3.47	1.49								
Benchmark	7.01	1.86	3.16	4.39	7.01		Benchmark		-0.68	3.98	3.72	1.63								
Calendar year (%)			2022	2021	2020	2019	2018	2017	2016	2015	2014	2013								
Composite (Gross)			-9.11	5.04	8.04	13.30	-1.20	8.07	15.83	-4.47	2.08	9.88								
Composite (Net)		-9.55	4.54	7.53	12.77	-1.68	7.55	15.29	-4.92	1.59	9.37									
Benchmark		enchmark ternal Dispersion (Std. Deviation)			nark	mark		rk	imark		-11.22	5.36	6.17	14.41	-2.26	7.48	17.49	-4.64	2.50	7.42
Internal Dispersion (Std						0.23	0.15	0.28	0.19	0.07	0.35	0.16	0.07	0.05	0.10					
As of end of period			2022	2021	2020	2019	2018	2017	2016	2015	2014	2013								
Composite Assets (USI	D mil)		2,866	4,758	5,575	4,649	4,221	5,010	5,578	6,882	7,549	8490								
# of Portfolios in Composite			10	12	12	11	11	11	11	10	8	7								
Total Strategy Assets (	ssets (USD mil)	tal Strategy Assets (USD mil)	egy Assets (USD mil)	l Strategy Assets (USD mil)	ategy Assets (USD mil)	Total Strategy Assets (USD mil) 6,518 10,076 8,915 7,264 6,329	7,716	7,513	8,172	8,951	9,405									

208,569

618,264

191,910

583,866

223,150

650.149

177,183 555,036

36 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.

250,851

689.782

291,036

618.555



225,582

686.214

182,303

558.650

215,895

668,139

**YTD** 

7.01

6.67 7.22

2023

## **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

Annualized (%)

BofA Merill Lynch US High Yield Index (H0A0)

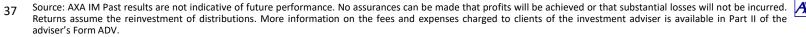
1 Year

3 Year

5 Year

General Infor	mation				
Reporting date			August 31,	2023	
Composite Ince	ption Date	•	February 28	3, 2014	
Composite Crea	ation Date		February 22	2, 2017	
Composite Curr	ency		USD		
Cumulative (%	%)	1 mo	3 mo	6 m o	YTE
Composite (Gro	oss)	0.97	5.46	6.39	11.2
Composite (Net	.)	0.92	5.30	6.08	10.7
Benchmark		0.29	3.37	4.54	7.22
Quarterly (%)		2022	2022	2023	2023
	<u>,</u>	3Q	4Q	1Q	2Q
Composite (Gro	DSS)	0.62	4.87	4.70	3.3
Composite (Net	:)	0.47	4.72	4.55	3.16
Benchmark		-0.68	3.98	3.72	1.6
2018	2017	2016	2015	2014	201

				inception				3Q	4Q	1Q	2Q
Composite (Gross) 9.94		4.33	5.90	6.18		Composite (Gro		0.62	4.87	4.70	3.31
Composite (Net)	9.29	3.70	5.27	5.55		Composite (Net)		0.47	4.72	4.55	3.16
Benchmark	7.01	1.86	3.16	3.84		Benchmark		-0.68	3.98	3.72	1.63
Calendar year (%)		2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Composite (Gross)		-12.17	7.41	12.67	19.64	-3.87	12.15	24.4	N/A	N/A	N/A
Composite (Net)		-12.70	6.77	12.01	18.93	-4.45	11.48	23.67	N/A	N/A	N/A
Benchmark		-11.22	5.36	6.17	14.41	-2.26	7.48 17.49 N/A	N/A	N/A		
As of end of period		2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Composite Assets (USD	mil)	936	1,444	740	319	214	232	122	N/A	N/A	N/A
# of Portfolios in Compos	site	1	1	1	1	1	1	1	N/A	N/A	N/A
Total Strategy Assets (USD mil) Total Firm Discr Assets (USD mil)		936	1,444	740	318	247	287	122	N/A	N/A	N/A
			291,036	250,851	208,569	191,910	223,150	177,183	182,303	215,895	225,582
Total Firm Assets (USD r	mil)		618,555	689,782	618,264	583,866	650,149	555,036	558,650	668,139	686,214



Since

A CONTRACTOR OF A



## **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 Sw aps derived on single-name better-quality, short duration high yield bonds of U.S. companies. Portfolios in this composite may utilize leverage.

#### Composite Benchmark

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

Annualized (%)	1 year	3 year	5 year	Since inception		Quarterly (%)		2022 3Q	2022 4Q	2023 1Q
Composite (Gross)	8.43	1.40		5.34		Composite	(Gross)	-2.09	7.70	5.34
Composite (Net)	7.41	0.44		4.35		Composite	(Net)	-2.32	7.45	5.09
Calendar year (%)		2022	2021	2020	2019	2018	2017	2016	2015	2014
Composite (Gross)		-14.01	6.46	9.32	16.31	N/A	N/A	N/A	N/A	N/A
Composite (Net)		-14.84	5.46	8.28	15.22	N/A	N/A	N/A	N/A	N/A
As of end of period		2022	2021	2020	2019	2018	2017	2016	2015	2014
Composite Assets (US	SD mil)	141	359	320	101	N/A	N/A	N/A	N/A	N/A
# of Portfolios in Comp	osite	1	1	1	1	N/A	N/A	N/A	N/A	N/A
Total Strategy Assets (USD mil)		141	359	320	101	N/A	N/A	N/A	N/A	N/A
Total Firm Discr.Asset	s (USD mil)		291,036	250,851	208,569	191,910	223,150	177,183	182,303	215,895
Total Firm Assets (US	D mil)		618,555	689,782	618,264	583,866	650,149	555,036	558,650	668,139

**General Information** 

Composite Inception Date

**Composite Creation Date** 

**Composite Currency** 

Cumulative (%)

Composite (Net)

Composite (Gross)

August 31, 2023

December 31, 2018

December 31, 2018

6 m o

5.37

4.87

USD

3 mo

3.98

3.74

1 m o

0.41

0.33

Reporting date

38 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.

## Anagers

**YTD** 

9.55

8.87

2023 2Q 1.79 1.55

**2013** N/A N/A

2013 N/A N/A 225,582 686,214

## **GIPS®** Performance Disclosure Notes

#### **Claim of Compliance**

AXA IM claims compliance with the Global Investment Performance Standards (GIPS<sup>®</sup>) 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, 2021. 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<sup>®</sup> 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 document is intended exclusively for Professional, Institutional, Qualified or Wholesale Investors / Clients, as defined by applicable local laws and regulation. Circulation must be restricted accordingly.

This document is being provided for informational purposes only. The information contained herein is confidential and is intended solely for the person to which it has been delivered. It may not be reproduced or transmitted, in whole or in part, by any means, to third parties without the prior consent of the AXA Investment Managers US Inc. (the "Adviser"). This communication does not constitute on the part of AXA Investment Managers a solicitation or investment, legal or tax advice. 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 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 <a href="https://www.axa-im.com/en/registration-map">https://www.axa-im.com/en/registration-map</a>, where a fund registration map is available.

Past performance is not a guide to current or future performance, and any performance or return data displayed does not take into account commissions and costs incurred when issuing or redeeming units. References to league tables and awards are not an indicator of future performance or places in league tables or awards and should not be construed as an endorsement of any AXA IM company or their products or services. Please refer to the websites of the sponsors/issuers for information regarding the criteria on which the awards/ratings are based. 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. Exchange-rate fluctuations may also affect the value of their investment. Due to this and the initial charge that is usually made, an investment is not usually suitable as a short term holding.

Information concerning portfolio holdings and sector allocation is subject to change and, unless otherwise noted herein, is representative of the portfolio for the investment strategy described herein at a fixed point in time. The performance information shown herein reflects the performance of a composite of accounts that does not necessarily reflect the performance that any particular account investing in the same or similar securities may have had during the period. Actual portfolios may differ as a result of client-imposed investment restrictions, the timing of client investments and market, economic and individual company considerations. The holdings shown herein should not be considered a recommendation or solicitation to buy or sell any particular security, do not represent all of the securities purchased, sold or recommended for any particular advisory client, and in the aggregate may represent only a small percentage of an account's portfolio holdings.

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 subadvised, 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 Adviser is not a tax or legal advisor. Prospective investors should consult their tax and/or legal advisors before making tax-related and/or legal-related investment decisions.

AXA INVESTMENT MANAGERS PARIS, a company incorporated under the laws of France, having its registered office located at Tour Majunga – La Défense 9 – 6, place de la Pyramide – 92800 Puteaux, registered with the Nanterre Trade and Companies Register under number 353 534 506, 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.



## Disclaimer

In Singapore, this document has been issued by AXA Investment Managers Asia (Singapore) Ltd. (Registration No. 199001714W). In other countries, this document has been issued by AXA Investment Managers Asia Limited. References to "AXA IM Asia" below shall be references to AXA Investment Managers Asia (Singapore) Ltd. or AXA Investment Managers Asia Limited as appropriate.

This document and the information contained herein are intended for the use of professional or institutional investors and/or accredited investors only and should not be relied upon by retail investors. They have been prepared and issued for private informational and educational purposes only at the sole request of the specified recipients, and not intended for general circulation. They are strictly confidential, and must not be reproduced, circulated, distributed, redistributed or otherwise used, in whole or in part, in any way without the prior written consent of AXA IM Asia. They are not intended for distribution to any persons or in any jurisdictions for which it is prohibited.

To the maximum extent permitted by law, AXA IM Asia makes no warranty as to the accuracy or suitability of any information contained herein and accepts no responsibility whatsoever for errors or misstatements, whether negligent or otherwise. Such information may be subject to change without notice. The data contained herein, including but not limited to any backtesting, simulated performance history, scenario analysis and investment guidelines, are based on a number of key assumptions and inputs, and are presented for indicative and/or illustrative purposes only.

The information contained in this document is not an indication whatsoever of possible future performance and must be considered on this basis. Where information, contents or materials are provided by or quoted from any third party ("Third Party Information"), AXA IM Asia does not accept any responsibility or liability for such Third Party Information, and cannot and does not provide, and shall not be taken to provide, any warranty as to the accuracy, suitability, completeness or correctness of such Third Party Information. Any views, opinions or recommendations (if any) that may be contained in such Third Party Information, unless otherwise stated, do not reflect or constitute views, opinions or recommendations of AXA IM Asia.

This document has been prepared without taking into account the specific personal circumstances, investment objectives, financial situation or particular needs of any particular person. Nothing contained within this document shall constitute an offer to enter into, or a term or condition of, any business, trade, contract or agreement with the recipient or any other party. This document shall not be deemed to constitute investment, tax or legal advice, or an offer for sale or solicitation to invest in any particular fund. If you are unsure about the meaning of any information contained in this document, please consult your financial or other professional advisers. The data, projections, forecasts, anticipations, hypothesis and/or opinions herein are subjective, and are not necessarily used or followed by AXA IM Asia or its affiliates who may act based on their own opinions and as independent departments within the organization.

Investment involves risks. You should be aware that investments may increase or decrease in value and that past performance is no guarantee of future returns, you may not get back the amount originally invested. Investors should not make any investment decision based on this material alone.

If any fund is highlighted in this communication (the "Fund"), its offering document or prospectus contains important information on selling restrictions and risk factors, you should read them carefully before entering into any transaction. It is your responsibility to be aware of and to observe all applicable laws and regulations of any relevant jurisdiction. AXA IM Asia does not intend to offer any Fund in any country where such offering is prohibited.

For Hong Kong investors: The authorisation 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 mean 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.



## Disclaimer

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

As an exempt financial adviser under the Financial Advisers Act ("FAA"), AXA IM Asia is exempted from complying with certain business conduct rules (including but not limited to Sections 25, 27 and 36 of the FAA) when providing financial advisory services to Accredited Investors or Expert Investors, each as defined in the Financial Advisers Regulations.

In Korea, AXA Investment Managers Asia (Singapore) Ltd is a registered Cross Border Investment Advisor/Discretionary Investment Management Company under the Financial Investment Services and Capital Markets Act (the "Act"). The activities referenced under the Act are 5-2-2 Investment Advisory Business and 6-2-2 Discretionary Investment Management Business, respectively. Its financial services are available in Korea only to Professional Investors within the meaning of Article 10 of Enforcement Decree of the Financial Investment Services and Capital Markets Act.

To the extent that any fund is mentioned in this document, neither the fund nor AXA IM Asia is making any representation with respect to the eligibility of any recipients of this document to acquire the units/shares in the fund under the laws of Korea, including but without limitation the Foreign Exchange Transaction Act and Regulations thereunder. The units/shares have not been registered under the Financial Investment Services and Capital Markets Act of Korea, and none of the units/shares may be offered, sold or delivered, or offered or sold to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except pursuant to applicable laws and regulations of Korea.

In Taiwan, 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 and the information contained herein are intended for the use of professional or institutional investors and should not be relied upon by retail investors. They have been prepared and issued for private informational and educational purposes only at the sole request of the specified recipients, and not intended for general circulation. They are strictly confidential, and must not be reproduced, circulated, distributed, redistributed or otherwise used, in whole or in part, in any way without the prior written consent of AXA IM Asia. They are not intended for distribution to any persons or in any jurisdictions for which it is prohibited.

If any fund is highlighted in this communication (the "Fund"), its offering document or prospectus contains important information on selling restrictions and risk factors, you should read them carefully before entering into any transaction. It is your responsibility to be aware of and to observe all applicable laws and regulations of any relevant jurisdiction. AXA IM Asia does not intend to offer any Fund in any country where such offering is prohibited.

The offer, distribution, sale or re-sale of fund units/shares in Taiwan requires approval from and/or registration with Taiwanese regulatory authorities. To the extent that any units/shares of the Funds are not so licensed or registered, such units/shares are made available in Taiwan on a private placement basis only to banks, bills houses, trust enterprises, financial holding companies and other qualified entities or institutions (collectively, "Qualified Institutions") and other entities and individuals meeting specific criteria ("Other Qualified Investors") pursuant to the private placement provisions of the Rules Governing Offshore Funds. No other offer or sale of such units/shares in Taiwan is permitted. Taiwanese purchasers of such units/shares may not sell or otherwise dispose of their holdings except by redemption, transfer to a Qualified Institution or Other Qualified Investor, transfer by operation of law or other means approved by the Taiwan Financial Supervisory Commission.

For Malaysian investors: as the recognition by the Malaysian Securities Commission pursuant to Section 212 of the Malaysian Capital Markets and Services Act 2007 has not been / will not be obtained nor will this document be lodged or registered with the Malaysian Securities Commission, the shares referred to hereunder (if any) are not being and will not be deemed to be issued, made available, offered for subscription or purchase in Malaysia and neither this document nor any other document or other material in connection therewith should be distributed, caused to be distributed or circulated in Malaysia.



## Disclaimer

For Thailand investors: nothing in this document shall constitute in any manner whatsoever a proposal to make available, offer for subscription or purchase or to issue an invitation to purchase or subscribe for any securities in Thailand or a proposal to implement any of the foregoing in Thailand nor has this document been

approved by or registered with the Securities and Exchange Commission of Thailand ("SEC"). No person receiving a copy of this document may treat the same as constituting an invitation or offer to him in Thailand and such person shall not distribute or make available this document in Thailand. The issuer of this document shall not be liable in any manner whatsoever in the event this document is distributed or made available to any person in Thailand receiving a copy of this document. Since no application for approval has been or will be made to the SEC for the offering of the securities, or for the registration of this document, the securities shall not be offered for subscription or purchased or made available, whether directly or indirectly, in Thailand. It is the sole responsibility of recipients wishing to take any action upon this document to satisfy themselves as to the full observance of the laws of Thailand, to comply with all applicable laws, including but not limited.

For Investors in People's Republic of China (PRC): this document does not constitute a public offer of the product, whether by sale or subscription in the PRC. The product is not being offered or sold directly or indirectly in the PRC to or for the benefit of, legal or natural persons of the PRC. Further, no legal or natural persons of the PRC may directly or indirectly purchase any of the product or any beneficial interest herein without obtaining all prior PRC's governmental approvals that are required, whether statutorily or otherwise. Persons who come into possession of this document are required by the issuer and its representatives to observe these restrictions.

For Brunei investors: This document has not been delivered to, licensed or permitted by Autoriti Monetari Brunei Darussalam. Nor has it been registered with the Registrar of Companies. This document is for informational purposes only and does not constitute an invitation or offer to the public. As such, it must not be distributed or redistributed to and may not be relied upon or used by any person in Brunei other than the person to whom it is directly communicated and who belongs to a class of persons as defined under Section 20 of the Brunei Securities Market Order, 2013.

For Filipino investors: The shares or units referred to in this document (if any) have not been registered with the Securities and Exchange Commission under the Securities Regulation Code. Any future offer or sale thereof is subject to registration requirements under the Code unless such offer or sale qualifies as an exempt transaction.

For Vietnam investors: This document does not contemplate an offer to sell the interests in any funds in Vietnam. The document has not been approved by the State Securities Commission of Vietnam or any other competent authorities in Vietnam which takes no responsibility for its contents. No offer to purchase the interests in any funds will be made in Vietnam and this document is intended to be read by the addressee only and must not be passed to, issued to, or shown to the public generally. The value of the interests in any funds, the possibility of gaining profit and the level of risk stipulated in this document is purely for reference purposes only and may change at any time depending on market status. Investment in fund(s) does not carry any assurance that investors will make a profit. Investors should themselves carefully balance the risks and the level of those risks before they make any decision to invest in any funds. It is investors' responsibilities to ensure that they are eligible to make investment in any funds. Investors are responsible for obtaining all applicable approvals and complying with requirements under Vietnamese laws.

For Macau investors: Investment instruments involve a variety of significant risks. Considering the complexity of investments, these products are generally unsuitable for unsophisticated investors. The customer should not deal with investments unless it understands their nature and the extent of its exposure to the attendant risks. The customer should not deal with investment is suitable to its circumstances, experience, financial position and resources.

For Indonesia investors: Nothing in this document shall be construed as constituting an offer to sell nor a solicitation to buy securities, directly or indirectly, in Indonesia or to citizens of Indonesia (wherever located), entities or residents in Indonesia in a manner which constitutes a public offering under the laws and regulations of Indonesia.

Investments generally carry higher risks and are not a substitute for savings or time deposits. Investments in this product are not covered by the Macau Deposit Protection Scheme. Investments do not guarantee a yield, return or income. Past performance is not a guarantee of future performance. The income from the investments will fluctuate in either direction depending on prevailing market conditions. The investment can be subject to the risk of loss of the entire principal/notional amount of the investment. The customer may lose some or all of its investment. If the customer has any reservations, the customer should carefully consider whether the product is suitable for it.



45 © AXA Investment Managers 2023. All rights reserved

Sf Ref-31994