

# Monthly Market Monitor

May 2023



FIXED INCOME

EQUITIES

**ALTERNATIVES** 

**ASSET ALLOCATION** 

MORE

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Morgan Stanley Investment Management Monthly Market Monitor presents a concise review of economic and asset class data through clear and impactful charts. Providing timely information across a broad array of markets and investment topics, this guide serves as a helpful resource in providing connectivity between changing market events and implications for investor portfolios. Use the Monthly Market Monitor as a critical desk reference that enables more informed discussion and understanding of financial markets.

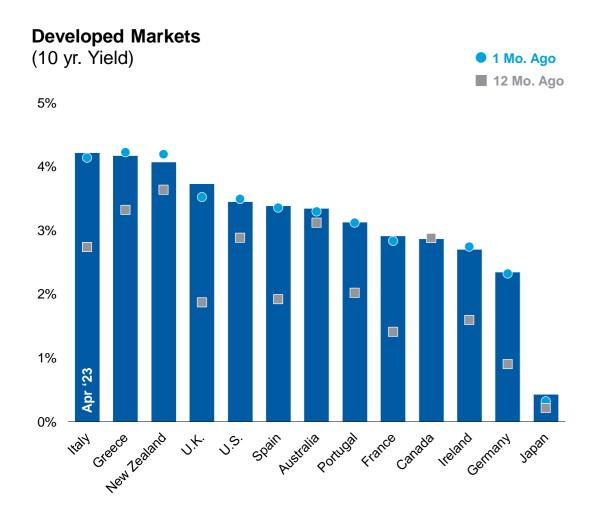
FIXED INCOME	EQUITIES	ALTERNATIVES	ASSET ALLOCATION IDEAS	ADDITIONAL INFORMATION
3	15	26	32	41

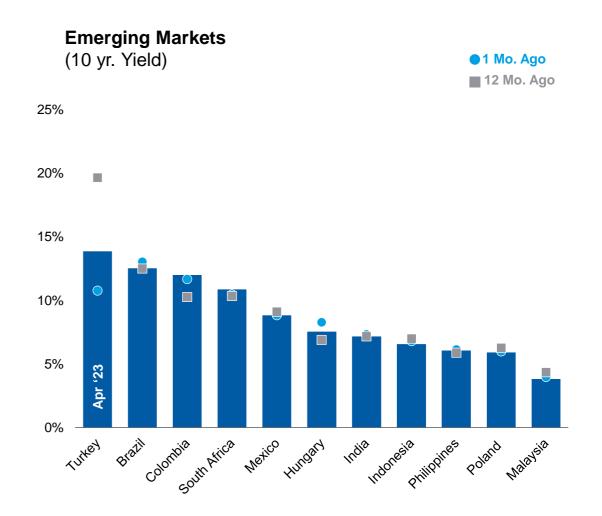
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If you are viewing this book on your computer or tablet, click or tap on the colored title box to jump to the beginning of each section.

Data provided is for informational use only. See end of report for important additional information.

## Sovereign Bond Yields





#### Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Factset as of 4/30/23. Data provided is for informational use only. See end of report for important additional information.

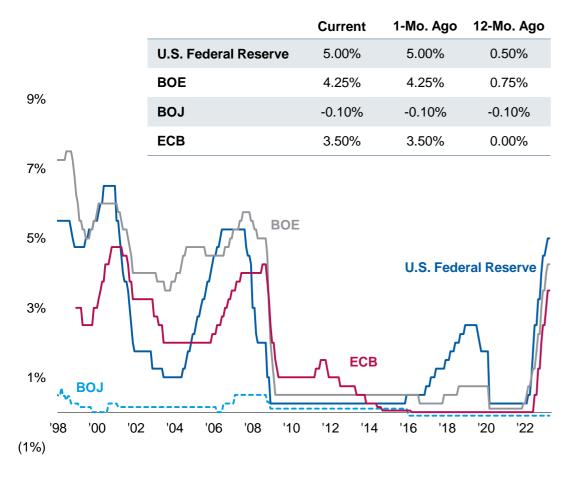
## Key Rates (%)

Security	Current	12-Mo. Ago	Average	Minimum	Maximum
1-Week SIFMA	3.86	0.44	2.11	0.60	4.35
Secured Overnight Financing Rate	4.81	0.28	3.08	0.28	4.87
1-Mo LIBOR	5.06	0.80	3.34	0.80	5.06
3-Mo LIBOR	5.30	1.29	3.81	1.33	5.30
2-Yr Treasury	4.06	2.64	3.83	2.46	5.06
5-Yr Treasury	3.54	2.88	3.56	2.67	4.44
10-Yr Treasury	3.45	2.86	3.43	2.61	4.23
30-Yr Treasury	3.67	2.93	3.55	2.93	4.35
2-Yr Japan	-0.04	-0.06	-0.05	-0.11	0.04
10-Yr Japan	0.43	0.22	0.30	0.16	0.51
2-Yr German Bund	2.72	0.17	1.73	0.05	3.31
10-Yr German Bund	2.35	0.90	1.85	0.77	2.75
2-Yr UK Gilt	3.79	1.53	2.93	1.20	4.45
10-Yr UK Gilt	3.73	1.87	3.03	1.70	4.55
Bloomberg US Agg	4.35	3.40	4.25	3.30	5.21
Bloomberg Global Agg	3.52	2.52	3.32	2.51	3.99
Bloomberg US Corporate	5.10	4.22	5.07	4.15	6.13
Bloomberg US Long Corporate	5.27	4.71	5.32	4.69	6.37
Bloomberg US Municipal	3.39	3.16	3.39	2.73	4.22
Bloomberg US Long Municipal	4.23	3.84	4.27	3.68	5.07
US High Yield	8.42	6.85	8.43	6.97	9.61
US Loans	10.37	4.83	8.51	5.12	10.52

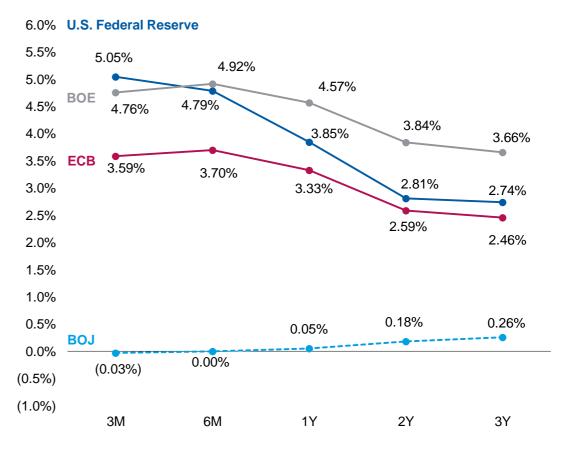
Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Bloomberg, Leveraged Commentary & Data (LCD), and Factset as of 4/30/23. Current represents most recent month. Average, minimum, and maximum measure a 12-month period ending most recent month. Data provided is for informational use only. US High Yield is represented by ICE BofA US High Yield Index. US Loans is represented by Morningstar LSTA U.S. Leveraged Loan Index. Bloomberg indices and ICE BofA US HY index using yield to worst. Morningstar LSTA U.S. Leveraged Loan Index using yield to maturity. See end of report for important additional information.

## **Monetary Policy**

### **Central Bank Policy Rates**



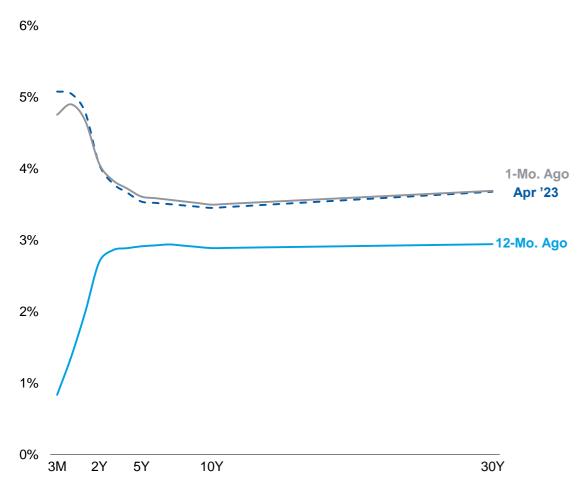
### Market Expectations for Future Central Bank Rates



Source: Bloomberg, Factset as of 4/30/23. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

## U.S. Treasury Yields

### **U.S. Treasury Yield Curves**



_		Yie	Ids & Perform	ormance					
Sacurity		Yield (%)		Total Re	eturn (%)				
Security -	Current	1-Mo. Ago	12-Mo. Ago	1-Mo.	12-Mo.				
3-mo. Treasury	5.07	4.75	0.84	0.31	2.81				
6-mo. Treasury	5.04	4.89	1.37	0.34	2.93				
2-yr. Treasury	4.06	4.06	2.69	0.21	0.42				
3-yr. Treasury	3.78	3.83	2.86	0.47	0.55				
5-yr. Treasury	3.54	3.61	2.91	0.66	-0.06				
10-yr. Treasury	3.45	3.49	2.89	0.72	-1.68				
30-yr. Treasury	3.67	3.69	2.94	0.18	-11.53				

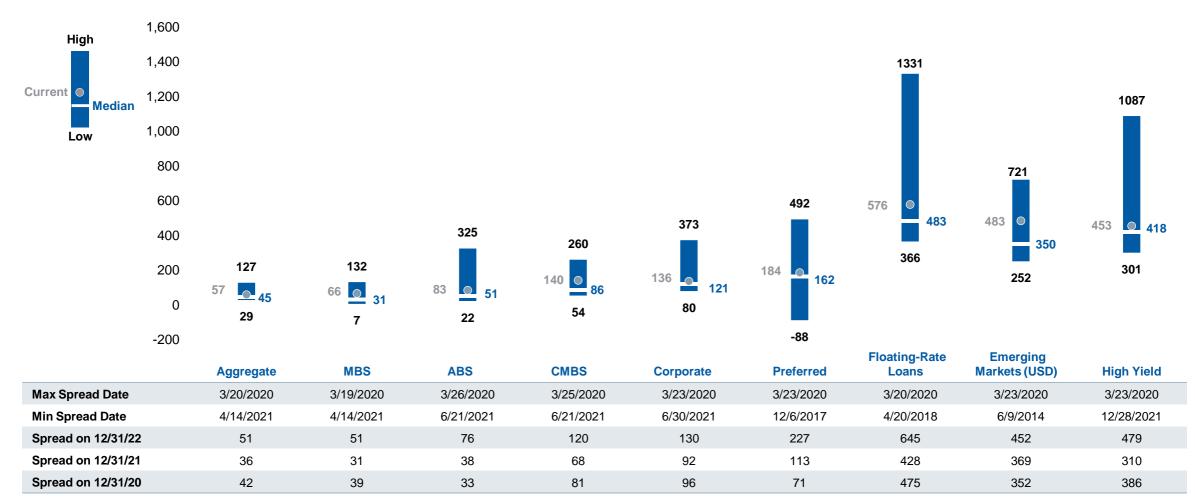
Source: Factset, Morningstar as of 4/30/23. Data provided is for informational use only. Past Performance is not a reliable indicator of future results. See end of report for important additional information.

### **Characteristics and Performance Analysis**

			Avera	iges			Total Returns (%)						
Index	Coupon (%)	Price (\$)	Yield to Worst (%)	Spread (bps)	Maturity (yrs.)	Duration (yrs.)	1-Mo.	3-Мо.	YTD	1Y	3Y	5Y	10Y
U.S. High Grade													
Bloomberg U.S. Aggregate Index	2.82	91.5	4.35	57	8.5	6.3	0.61	0.49	3.59	-0.43	-3.15	1.18	1.32
U.S. Treasury	2.17	91.7	3.79	-	7.9	6.3	0.54	1.03	3.56	-0.93	-4.24	1.01	0.87
U.S. Mortgage Backed Securities	2.84	89.9	4.48	66	7.5	5.9	0.52	-0.23	3.06	-0.88	-3.35	0.41	1.00
U.S. Asset Backed Securities	3.19	96.9	4.92	83	3.6	2.9	0.50	0.94	2.37	1.65	0.30	1.74	1.42
U.S. Commercial Mortgage Backed Securities	3.04	91.1	5.11	140	5.1	4.5	0.86	0.05	2.69	-0.81	-1.55	1.71	1.71
U.S. Corp. Investment Grade	3.84	92.0	5.10	136	11.0	7.2	0.77	0.28	4.29	0.68	-1.97	1.97	2.21
Bloomberg Municipal Bond Index	4.49	101.9	3.39	-	13.0	6.1	-0.23	-0.32	2.54	2.87	0.70	2.06	2.25
Bloomberg Taxable Municipal Bond Index	4.23	94.7	4.70	-	14.7	8.3	1.23	1.39	6.50	0.46	-1.82	2.10	2.78
ICE BofA US Inflation-Linked Treasury Index	0.79	95.6	1.48	-	7.8	5.1	0.13	1.59	3.58	-4.48	0.64	2.97	1.43
ICE BofA Preferred Index (Fixed Rate)	5.08	89.4	6.60	184	-	4.8	1.65	-3.85	5.05	1.74	0.40	2.34	3.69
U.S. High Yield													
ICE BofA US High Yield Index	5.84	88.6	8.42	453	5.3	3.8	0.97	0.78	4.72	1.04	4.87	3.12	3.94
Morningstar LSTA U.S. Leveraged Loan Index	L+3.61	93.7	10.37	576	4.4	-	1.05	1.60	4.31	3.39	7.31	3.76	3.81
Emerging Markets													
J.P. Morgan EM Bond Index (EMBI) Global Diversified	5.18	81.4	8.46	483	-	6.9	0.53	-0.74	2.40	-0.89	-0.58	-0.20	1.77
J.P. Morgan Corp. EM Bond Index (CEMBI) Broad Diversified	4.73	90.0	7.05	340	-	4.4	0.88	0.09	3.14	1.33	1.52	2.07	2.92
J.P. Morgan Govt. Bond Index-EM (GBI-EM) Global Diversified	5.21	-	6.53	-	-	5.0	0.86	1.70	6.06	6.56	-0.13	-1.62	-1.77
Global Developed Markets													
Bloomberg Global Aggregate Ex-U.S. Index	2.01	95.0	2.78	45	8.8	7.3	0.29	-0.12	3.35	-3.90	-4.68	-2.67	-1.13
FTSE World Government Bond Index	1.97	-	3.12	-	-	7.6	0.41	0.72	3.93	-3.51	-5.53	-1.90	-0.66
ICE BofA U.K. Gilts Index	2.30	85.7	3.87	-	13.7	9.8	-0.16	-0.22	4.93	-16.05	-11.16	-5.09	-1.89
ICE BofA European Union Government Bond Index	1.84	91.9	3.05	61	8.9	7.3	1.57	1.54	5.44	-4.22	-5.42	-3.58	-0.98
ICE BofA Developed Mkts HY Ex-Sub Fincl Index (USD Hedged)	5.36	88.3	8.18	478	3.9	3.5	0.87	0.81	4.62	1.17	4.70	3.07	4.06

Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Bloomberg, J.P. Morgan, ICE BofA Data Indices, LLC, Factset, and Leveraged Commentary & Data (LCD), as of 4/30/23. Data provided is for informational use only. See end of report for important additional information. Yield to maturity is shown for the Morningstar LSTA U.S. Leveraged Loan Index and the FTSE World Government Bond Index. Loan Index coupon value includes LIBOR (shown as "L+"). Loan Index spread represents the three-year discounted spread over LIBOR. Returns of the ICE BofA Developed Mtks HY Ex-Sub Financial Index are USD Hedged. The averages for the index are unhedged.

## Spread Analysis (bps)



Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Factset and Leveraged Commentary & Data (LCD) as of 4/30/23. Spread history measures past 10 years. Data provided is for informational use only. See end of report for important additional information. All fixed-income spreads are in basis points and measure option-adjusted yield spread relative to comparable maturity U.S. Treasuries using daily data. Loan Index spread represents the three-year discounted spread over LIBOR. Aggregate represented by Bloomberg US Aggregate Index. MBS represented by Bloomberg U.S. Mortgage Backed Securities (MBS) Index. ABS represented by Bloomberg U.S. Asset Backed Securities (ABS) Index. CMBS represented by Bloomberg U.S. Corporate represented by Bloomberg U.S. Corporate Investment Grade Index. Preferred represented by ICE BofA Fixed Rate Preferred Securities Index. Floating-Rate Loans represented by Morningstar LSTA U.S. Leveraged Loan Index. Emerging Markets(USD) represented by J.P. Morgan Emerging Markets Bond Index (EMBI) Global Diversified. High Yield represented by ICE BofA US High Yield Index.

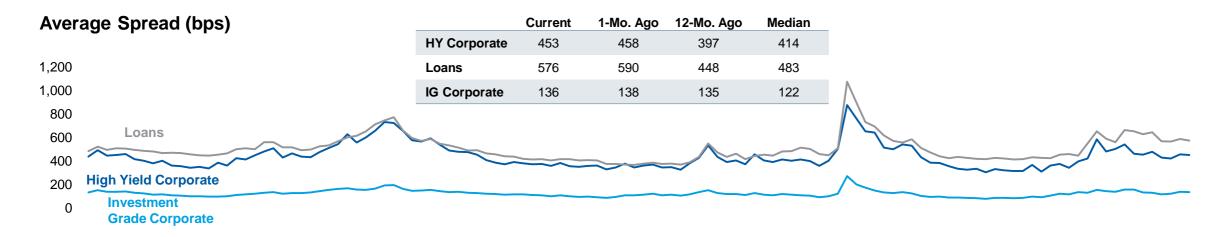
## **Corporate Bond Market Update**

	Averages							Total Returns (%)					
	Coupon (%)	Price (\$)	Yield to Worst (%)	Spread (bps)	Maturity (yrs.)	Duration (yrs.)	1-Mo.	3-Mo.	YTD	1Y	3Y	5Y	
U.S. High Grade													
Bloomberg U.S. Corp. Investment Grade Index	3.84	92.0	5.10	136	11.0	7.2	0.77	0.28	4.29	0.68	-1.97	1.97	
AAA Index	3.15	88.0	4.22	54	18.9	11.2	0.77	1.06	5.84	-0.30	-5.03	1.70	
AA Index	3.23	90.4	4.44	69	13.6	8.6	0.69	0.82	4.66	-0.20	-3.68	0.95	
A Index	3.64	92.7	4.91	116	10.6	7.1	0.79	0.31	4.13	0.51	-2.80	1.75	
BBB Index	4.12	91.7	5.39	166	10.9	7.0	0.76	0.15	4.36	1.00	-0.90	2.31	
J.S. High Yield													
ICE BofA U.S. High Yield Index	5.84	88.6	8.42	453	5.3	3.8	0.97	0.78	4.72	1.04	4.87	3.12	
BB Index	5.08	91.8	6.80	293	5.8	4.1	0.70	0.71	4.09	2.17	3.96	3.89	
B Index	6.18	89.5	8.75	481	4.8	3.4	1.02	0.87	4.87	0.53	4.73	2.70	
CCC Index	7.60	74.3	14.52	1070	4.6	3.2	1.98	0.66	6.92	-3.14	9.22	0.87	
Morningstar LSTA U.S. Leveraged Loan Index	L+3.61	93.7	10.37	576	4.4	-	1.05	1.60	4.31	3.39	7.31	3.76	
BBB Index	L+2.11	99.6	7.18	227	4.0	-	0.67	1.57	2.96	5.93	4.77	3.47	
BB Index	L+2.83	97.9	8.38	359	4.5	-	0.86	0.90	2.96	5.62	5.83	3.34	
B Index	L+3.85	94.8	10.51	590	4.4	-	1.15	1.90	5.00	3.50	7.74	4.08	
CCC Index	L+4.99	77.1	20.80	1636	3.7	-	1.48	2.33	5.45	-6.09	10.61	2.27	
D Index	-	31.3	-	-	-	-	0.11	-9.73	-8.35	-55.33	-20.51	-25.27	-1

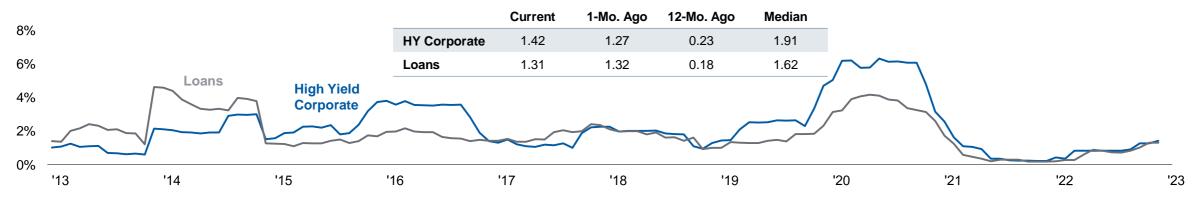
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## **Corporate Bond Market Update**



#### **Annual Default Rate**



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### Municipal Bond Market Update

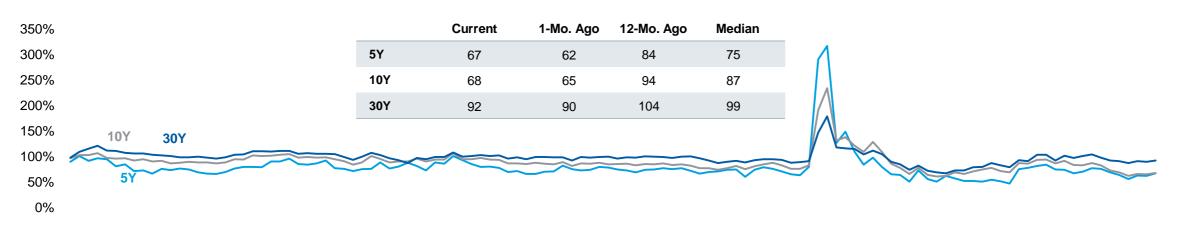
			Averages		Total Returns (%)							
	Coupon (%)	Price (\$)	Yield To Worst (%)	Maturity (yrs.)	Duration (yrs.)	1-Mo.	3-Мо.	YTD	1Y	3Y	5Y	10Y
Bloomberg Municipal Bond Index	4.49	101.9	3.39	13.0	6.1	-0.23	-0.32	2.54	2.87	0.70	2.06	2.25
AAA Index	4.42	103.1	3.06	10.5	5.5	-0.37	-0.50	2.12	2.83	-0.16	1.79	1.79
AA Index	4.53	103.6	3.22	13.2	6.1	-0.26	-0.35	2.38	3.17	0.32	1.95	2.09
A Index	4.47	99.4	3.75	13.8	6.1	-0.09	-0.17	2.91	2.70	1.29	2.28	2.64
BBB Index	4.35	94.2	4.48	17.0	7.6	-0.11	-0.16	3.60	1.75	2.95	2.64	2.92
5-Year Index	4.64	106.3	2.85	4.9	3.6	-0.45	-0.54	1.47	2.99	0.59	1.72	1.54
10-Year Index	4.54	106.9	2.88	9.9	5.3	-0.23	-0.17	2.53	4.93	1.19	2.59	2.50
22+ Year Index	4.37	95.3	4.23	26.4	10.3	-0.19	-0.61	4.07	0.84	0.04	1.73	2.61
Bloomberg High Yield Municipal Bond Index	4.56	64.1	5.69	20.0	7.6	0.58	-1.07	3.33	-0.40	4.10	3.10	3.53
Hospital	5.18	83.7	6.54	20.8	7.5	-0.49	-2.14	0.50	-5.73	2.16	0.87	3.20
IDR/PCR	4.27	37.8	5.92	20.0	7.7	1.23	-1.23	3.88	1.55	4.59	3.18	5.01
Tobacco	2.54	18.8	6.11	29.1	11.0	2.40	-3.01	4.00	2.87	4.51	3.81	6.36
Puerto Rico	3.65	54.7	5.17	20.1	8.6	2.51	-0.88	6.64	-0.05	5.85	9.35	0.36

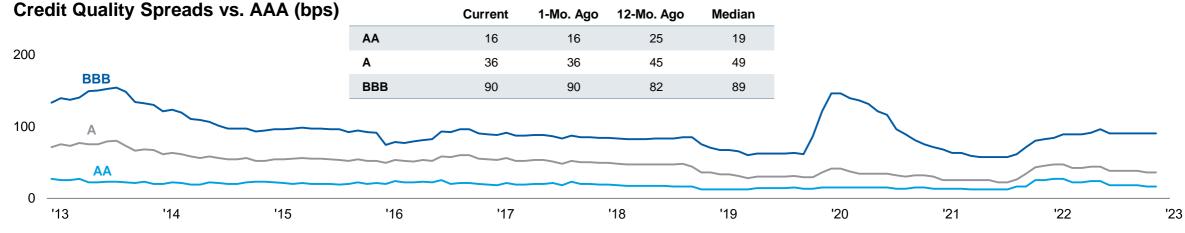
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## **Municipal Bond Market Update**

### AAA Muni-to-Treasury Yield Ratios

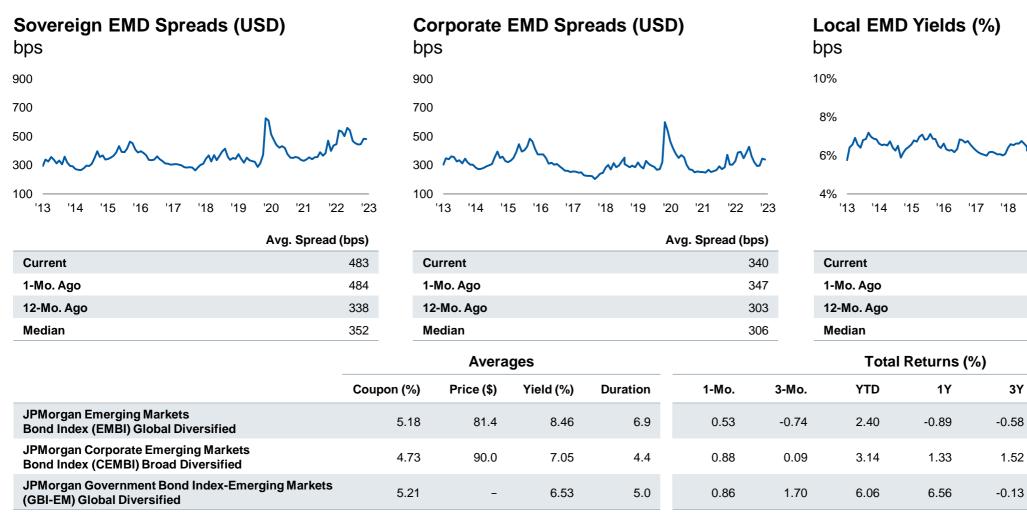




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It is not possible to invest directly in an index. Source: Bloomberg as of 4/30/23. Data provided is for informational use only. See end of report for important additional information. All spreads are in basis points and measure option-adjusted yield spread relative to comparable maturity U.S. Treasuries.

### **Emerging Markets Bond Market Update**



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'19

'20

5Y

-0.20

2.07

-1.62

'21

'22

Avg. Yield (%)

'23

6.53

6.59

6.77

6.34

10Y

1.77

2.92

-1.77

### Morgan Stanley | INVESTMENT MANAGEMENT

#### **FIXED INCOME**

## Asset Class Return Analysis (%)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD 4/23
Higher	High Yield <b>7.42</b>	Municipal <b>9.05</b>	Municipal <b>3.30</b>	High Yield <b>17.49</b>	EMD (Local Currency) <b>15.21</b>	Municipal <b>1.28</b>	Investment Grade <b>14.54</b>	Global Agg Ex-U.S. <b>10.11</b>	High Yield <b>5.36</b>	Bank Loan <b>-0.60</b>	EMD (Local Currency) <b>6.06</b>
	Bank Loan <b>5.29</b>	Investment Grade <b>7.46</b>	MBS 1.51	EMD (Hard Currency) <b>10.19</b>	Global Agg Ex-U.S. <b>10.51</b>	MBS <b>0.99</b>	EMD (Hard Currency) <b>14.42</b>	Investment Grade <b>9.89</b>	Bank Loan <b>5.20</b>	Municipal <b>-8.53</b>	High Yield <b>4.72</b>
	EMD (Corp. Bonds) <b>-0.60</b>	MBS 6.08	EMD (Corp. Bonds) <b>1.30</b>	Bank Loan <b>10.16</b>	EMD (Hard Currency) <b>9.32</b>	Treasury <b>0.86</b>	High Yield <b>14.41</b>	Treasury <b>8.00</b>	Municipal <b>1.52</b>	High Yield <b>-11.22</b>	Bank Loan <b>4.31</b>
	MBS -1.41	EMD (Hard Currency) <b>5.53</b>	EMD (Hard Currency) <b>1.23</b>	EMD (Local Currency) <b>9.94</b>	EMD (Corp. Bonds) <b>7.96</b>	Bank Loan <b>0.44</b>	EMD (Local Currency) <b>13.47</b>	EMD (Corp. Bonds) <b>7.13</b>	EMD (Corp. Bonds) <b>0.91</b>	EMD (Local Currency) <b>-11.69</b>	Investment Grade <b>4.29</b>
	Investment Grade -1.53	Treasury <b>5.05</b>	Treasury <b>0.84</b>	EMD (Corp. Bonds) <b>9.65</b>	High Yield <b>7.48</b>	EMD (Corp. Bonds) <b>-1.65</b>	EMD (Corp. Bonds) <b>13.09</b>	High Yield <b>6.17</b>	Investment Grade <b>-1.04</b>	MBS -11.81	Treasury <b>3.56</b>
	Municipal <b>-2.55</b>	EMD (Corp. Bonds) <b>4.96</b>	Investment Grade <b>-0.68</b>	Investment Grade <b>6.11</b>	Investment Grade <b>6.42</b>	Global Agg Ex-U.S. <b>-2.15</b>	Bank Loan <b>8.64</b>	EMD (Hard Currency) <b>5.88</b>	MBS <b>-1.04</b>	EMD (Corp. Bonds) <b>-12.26</b>	Global Agg Ex-U.S. <b>3.35</b>
	Treasury -2.75	High Yield <b>2.50</b>	Bank Loan <b>-0.69</b>	MBS <b>1.67</b>	Municipal <b>5.45</b>	High Yield <b>-2.26</b>	Municipal <b>7.54</b>	Municipal <b>5.21</b>	EMD (Hard Currency) <b>-1.51</b>	Treasury -12.46	EMD (Corp. Bonds) <b>3.14</b>
	Global Agg Ex-U.S. <b>-3.08</b>	Bank Loan <b>1.60</b>	High Yield <b>-4.6</b> 4	Global Agg Ex-U.S. <b>1.49</b>	Bank Loan <b>4.12</b>	Investment Grade - <b>2.51</b>	Treasury 6.86	MBS <b>3.87</b>	Treasury <b>-2.32</b>	Investment Grade -15.76	MBS <b>3.06</b>
	EMD (Hard Currency) <b>-6.58</b>	Global Agg Ex-U.S. <b>-3.08</b>	Global Agg Ex-U.S. <b>-6.02</b>	Treasury <b>1.04</b>	MBS <b>2.47</b>	EMD (Hard Currency) <b>-4.61</b>	MBS 6.35	Bank Loan <b>3.12</b>	Global Agg Ex-U.S. <b>-7.05</b>	EMD (Hard Currency) <b>-16.45</b>	EMD (Hard Currency) <b>2.76</b>
↓ Lower	EMD (Local Currency) <b>-8.98</b>	EMD (Local Currency) <b>-5.72</b>	EMD (Local Currency) <b>-14.92</b>	Municipal <b>0.25</b>	Treasury 2.31	EMD (Local Currency) -6.21	Global Agg Ex-U.S. <b>5.09</b>	EMD (Local Currency) <b>2.69</b>	EMD (Local Currency) <b>-8.75</b>	Global Agg Ex-U.S. <b>-18.70</b>	Municipal 2.54

Past performance is no guarantee of future results. It is not possible to invest directly in an index. In general, fixed income investments are subject to credit and interest rate risks. High yield investments may have a higher degree of credit and liquidity risk. Foreign securities are subject to currency, political, economic and market risks. Investors should carefully review the risks of each asset class prior to investing. Source: Morningstar as of 4/30/23. Data provided is for informational use only. See end of report for important additional information. Investment Grade represented by Bloomberg U.S. Corporate Index. MBS represented by Bloomberg U.S. Mortgage Backed Securities (MBS) Index. Treasury represented by Bloomberg U.S. Treasury Index. High Yield represented by ICE BofA US High Yield Index. Municipal represented by Bloomberg Municipal Bond Index. Bank Loan represented by Morningstar LSTA U.S. Leveraged Loan Index. Global Aggregate Ex-USD Index. EMD (Local Currency) represented by J.P. Morgan Government Bond Index-Emerging Markets (GBI-EM) Global Diversified. EMD (Hard Currency) represented by J.P. Morgan Corporate Emerging Market Bond Index (CEMBI) Broad Diversified. EMD (Corp. Bonds) represented by J.P. Morgan Corporate Emerging Market Bond Index (CEMBI) Broad Diversified.

### Performance: Market Barometer (%)

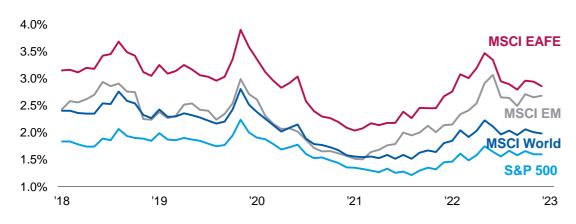


#### Past performance is no guarantee of future results.

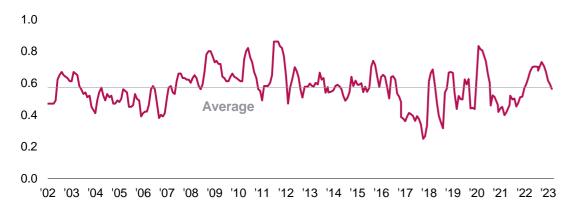
It is not possible to invest directly in an index. Source: Morningstar as of 4/30/23. Data provided is for informational use only. See end of report for important additional information. Returns over 1 year are annualized. Large Cap Value represented by Russell 1000 Value Index. Large Cap Core represented by Russell 1000 Index. Large Cap Growth represented by Russell 1000 Growth Index. Mid Cap Value represented by Russell Mid Cap Index. Mid Cap Growth represented by Russell Mid Cap Growth Index. Small Cap Value represented by Russell 2000 Value Index. Mid Cap Growth represented by Russell 2000 Growth Index. Small Cap Core represented by Russell 2000 Index. Small Cap Value represented by Russell 2000 Growth Index. Small Cap Core represented by Russell 2000 Growth Index. US represented by S&P 500 Index. International represented by MSCI EAFE Index. Emerging Markets represented by MSCI Emerging Markets Index.

## **Dividend Yields and Volatility Analysis**

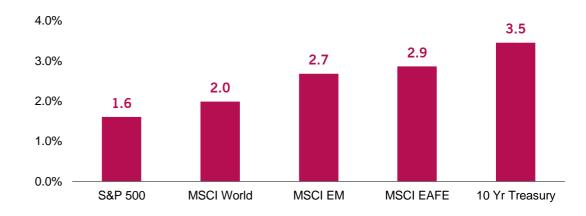
### **Historical Yields**



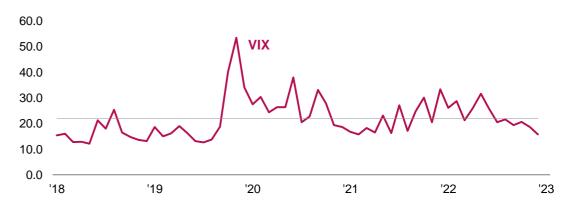
### Correlation of S&P 500 Stocks



#### **Current Yields**



### **CBOE Market Volatility Index (VIX)**

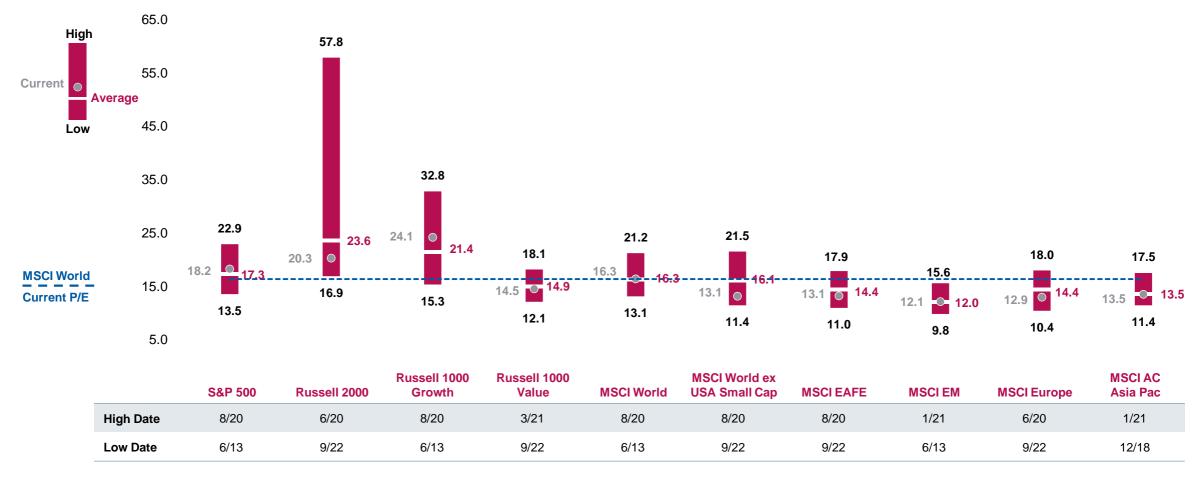


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It is not possible to invest directly in an index. Source: FactSet and Ned Davis Research as of 4/30/23. Correlation of S&P 500 Stocks is measured by the median 63-day rolling correlation of one day returns data provided is for informational use only. See end of report for important additional information.

## Valuation Analysis

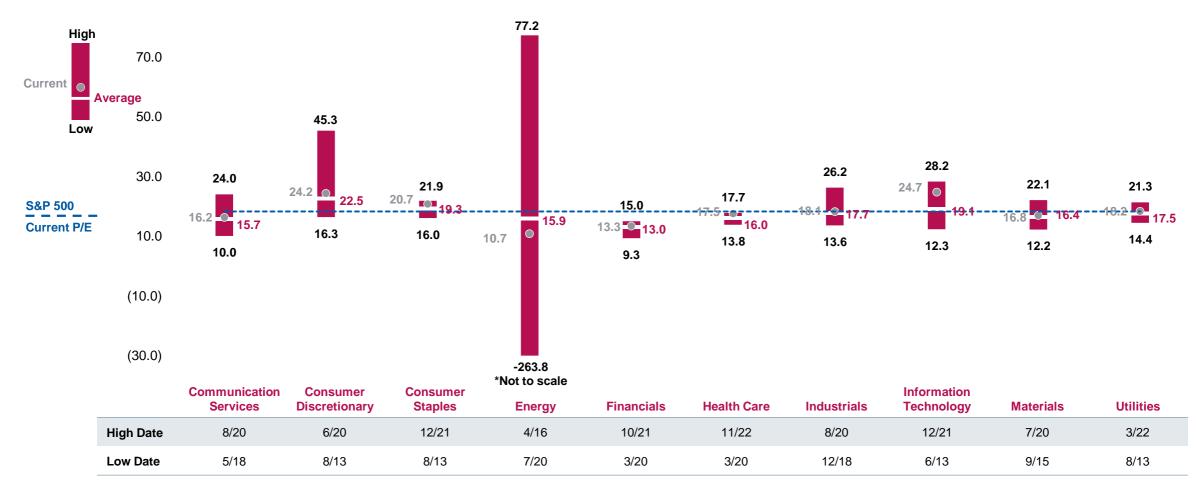
### Regions/Styles: Current NTM P/E vs. 10-Year High, Low, Average



Source: FactSet as of 4/30/23. NTM P/E is market price per share divided by expected earnings per share over the next twelve months. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

## Valuation Analysis

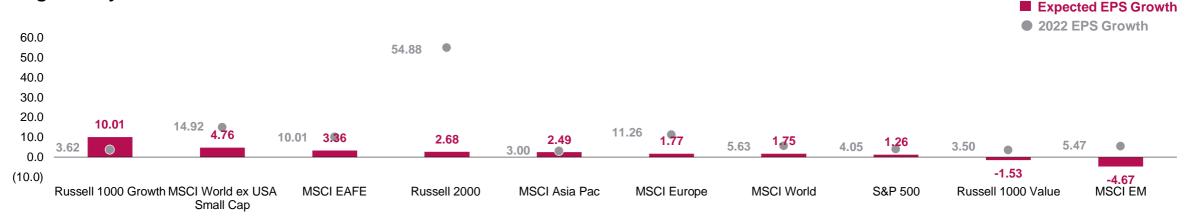
### S&P 500 Sectors: Current NTM P/E vs. 10-Year High, Low, Average



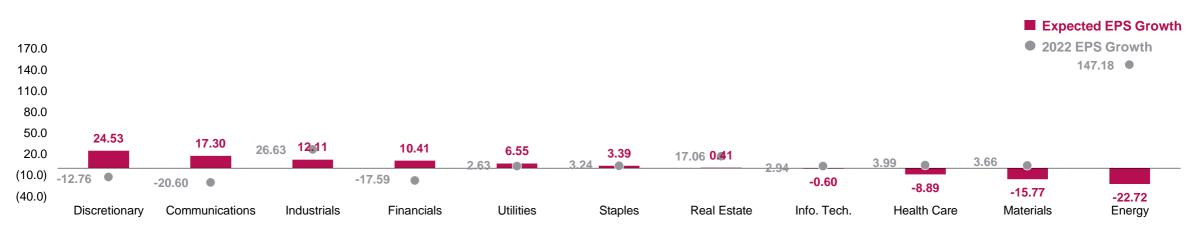
Source: FactSet as of 4/30/23. NTM P/E is market price per share divided by expected earnings per share over the next twelve months. The Real Estate sector is excluded from this 10-year chart since the sector was created on August 31, 2016. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

## **Corporate Earnings Growth**

### **Regions/Styles**



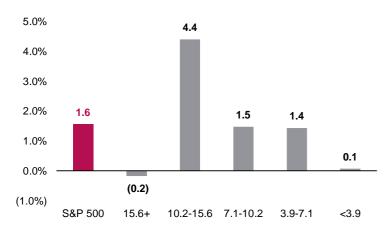
#### S&P 500 Sectors

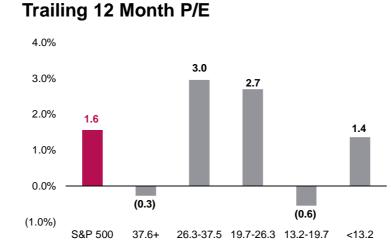


Source: FactSet as of 4/30/23. Expected EPS Growth is defined as the expected % change in the EPS growth from the beginning of the current calendar year though the end of the calendar year. 2022 EPS Growth is defined as the % change in EPS from the beginning of the year through the end of the year. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

## S&P 500 Index: 1-month Return Analysis

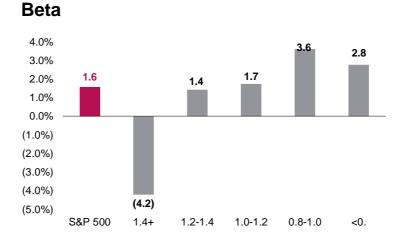
3-5 Year Earnings Growth



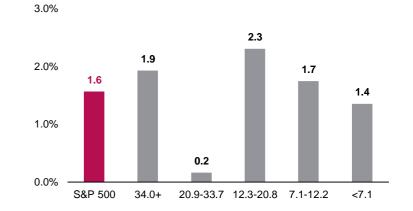


**Market Cap** 

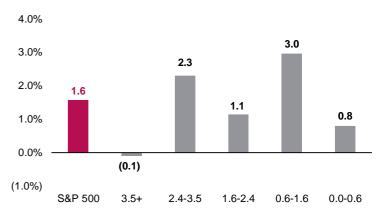




**Return On Equity** 



**Dividend Yield** 

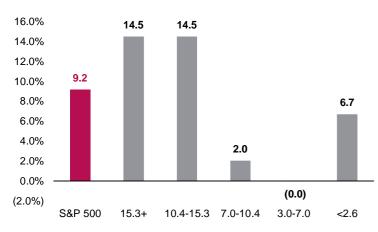


#### Past performance is no guarantee of future results.

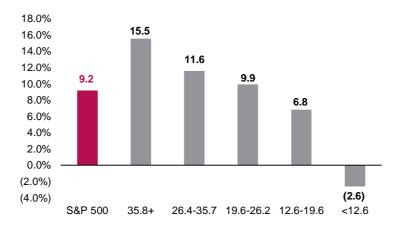
It is not possible to invest directly in an index. Source: FactSet as of 4/30/23. Data provided is for informational use only. See end of report for important additional information.

## S&P 500 Index: YTD Analysis

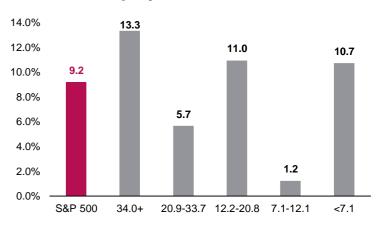
### 3-5 Year Earnings Growth



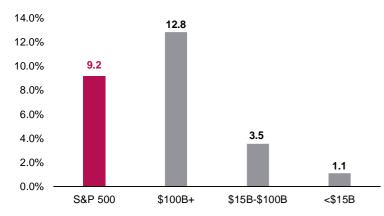
#### Trailing 12 Month P/E



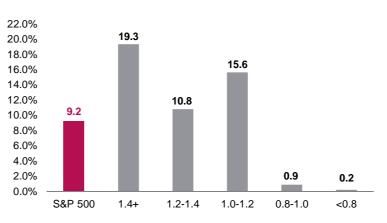
#### **Return On Equity**



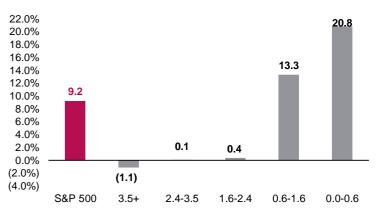
Market Cap



Beta



#### **Dividend Yield**



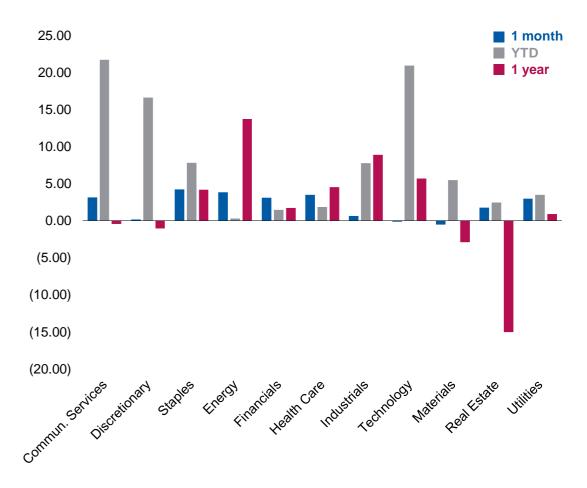
#### Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: FactSet as of 4/30/23. Data provided is for informational use only. See end of report for important additional information.

## Index Sectors: Return Analysis

S&P 500 Return % 25.00 1 month YTD 1 year 20.00 15.00 10.00 5.00 0.00 (5.00)(10.00)(15.00) Naterials Real Fate (20.00) conmun. services Discletionary Industrials Staples hinancials theath care Technology Utilities Energy



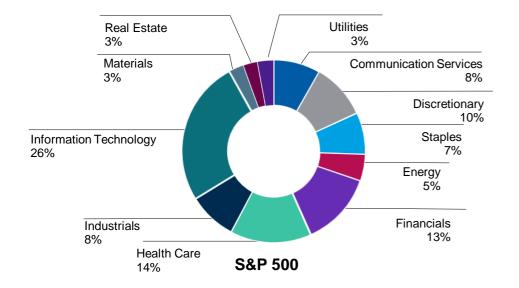


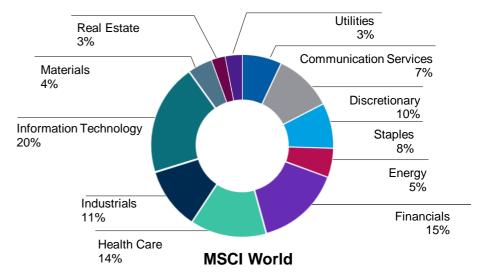
#### Past performance is no guarantee of future results.

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## **Current Characteristics and Sector Weights**

	S&P 500	R2000	R1000G	R1000V	MSCI World	MSCI World ex USA Small Cap	MSCI EAFE	MSCI EM	MSCI Europe	MSCI Asia Pac
Number of Holdings	503	1915	509	849	1507	2489	794	1377	423	1488
Maximum Market Cap	\$2,684.67B	\$27.83B	\$2,684.67B	\$1,273.39B	\$2,699.29B	\$8.48B	\$353.83B	\$402.25B	\$353.83B	\$402.25B
Minimum Market Cap	\$0.64B	\$0.00B	\$0.56B	\$0.30B	\$0.64B	\$0.07B	\$1.36B	\$0.11B	\$1.36B	\$0.11B
Dividend Yield	1.60	1.40	0.95	2.22	1.99	2.84	2.86	2.68	2.76	2.65
NTM PE	18.20	20.28	24.14	14.47	16.35	13.10	13.15	12.12	12.93	13.50
Price to Book	4.01	1.91	9.96	2.35	2.90	1.35	1.81	1.67	2.05	1.56
Price to Cash Flow	14.25	11.45	20.89	10.42	12.19	9.35	9.94	6.81	9.53	8.80
Price to Sales	2.33	1.07	3.57	1.59	1.89	0.85	1.30	1.22	1.38	1.19
Est 3-5 Yr EPS Growth	11.08	13.31	14.35	8.22	10.49	12.69	8.78	12.00	9.41	10.04
5Yr. Div Growth Rate	4.45	4.43	2.47	1.40	1.72	3.90	-1.44	1.95	-2.68	0.97





Source: FactSet as of 4/30/23. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

## Asset Class Return Analysis (%)

		1-Mo.	3-Мо.	YTD	1Y	3Y	5Y	10Y	2022	2021	2020	2019	2018
	S&P 500	1.56	2.72	9.17	2.66	14.52	11.45	12.20	-18.11	28.71	18.40	31.49	-4.38
	Russell 1000 Defensive	2.72	4.63	8.10	3.46	12.32	11.60	11.64	-16.43	26.93	13.93	30.47	-0.04
	Russell 1000 Dynamic	-0.25	-0.68	9.51	0.03	15.72	10.24	12.05	-21.94	25.57	27.69	32.35	-9.48
U.S.	Russell 2500	-1.30	-7.23	2.04	-3.32	13.63	6.32	8.89	-18.37	18.18	19.99	27.77	-10.00
Equities	Russell 1000 Growth	0.99	6.61	15.49	2.34	13.62	13.80	14.46	-29.14	27.60	38.49	36.39	-1.51
	Russell 1000 Value	1.51	-2.52	2.53	1.21	14.38	7.75	9.13	-7.54	25.16	2.80	26.54	-8.27
	Russell Mid Cap	-0.53	-4.43	3.51	-1.69	13.78	7.97	9.85	-17.32	22.58	17.10	30.54	-9.06
	Russell 2000	-1.80	-8.07	0.89	-3.65	11.90	4.15	7.88	-20.44	14.82	19.96	25.52	-11.01
	CBOE S&P 500 Buywrite BXM	1.15	2.87	7.17	-1.12	10.99	4.21	5.79	-11.37	20.47	-2.75	15.68	-4.77
	MSCI World	1.75	2.38	9.62	3.18	13.10	8.14	8.71	-18.14	21.82	15.90	27.67	-8.71
	MSCI EAFE	2.82	3.17	11.53	8.42	11.68	3.63	4.76	-14.45	11.26	7.82	22.01	-13.79
	MSCI EM	-1.13	-4.74	2.78	-6.51	4.33	-1.05	1.80	-20.09	-2.54	18.31	18.44	-14.58
Global	MSCI AC Asia Pac	-1.03	-3.88	3.68	-2.46	5.05	0.72	3.65	-17.22	-1.46	19.71	19.36	-13.52
Equities	MSCI ACWI	1.44	1.57	8.85	2.06	12.04	7.03	7.91	-18.36	18.54	16.25	26.60	-9.41
	MSCI Europe	4.15	5.96	15.15	12.03	14.36	4.63	5.34	-15.06	16.30	5.38	23.77	-14.86
	MSCI World Small Cap	-0.10	-4.66	4.18	-1.81	12.72	4.24	7.47	-18.76	15.75	15.96	26.19	-13.86
	MSCI World Ex USA Small Cap	1.76	-0.76	6.84	-1.72	9.96	1.58	5.43	-20.59	11.14	12.78	25.41	-18.07
	FTSE 100	5.12	4.78	11.90	8.29	13.94	2.97	3.76	4.70	17.36	-8.73	22.03	-14.08
	FTSE All Small	3.90	-1.26	5.42	-5.94	13.35	2.41	5.90	-13.37	22.15	10.77	22.63	-14.71
	STOXX Europe 600	4.10	5.76	14.87	11.30	14.08	4.64	5.51	-16.14	16.09	6.83	24.53	-15.05
	Nikkei 225 Average	0.59	1.65	8.01	4.16	5.53	2.27	5.66	-7.75	-4.69	23.99	21.35	-8.27
	S&P 500 Comm. Services	3.77	9.21	25.05	1.14	6.12	7.43	4.95	-39.89	21.57	23.61	32.69	-12.53
	S&P 500 Cons Disc	-0.95	0.01	15.03	-8.48	7.29	7.99	11.70	-37.03	24.43	33.30	27.94	0.83
Sectors	S&P 500 Cons Staples	3.59	5.39	4.45	2.24	13.51	12.40	9.67	-0.62	18.63	10.75	27.61	-8.38
	S&P 500 Energy	3.30	-4.21	-1.52	19.22	37.56	8.29	4.87	65.72	54.64	-33.68	11.81	-18.10
	S&P 500 Financials	3.18	-8.82	-2.56	-1.82	15.76	6.15	10.36	-10.53	35.04	-1.69	32.13	-13.03
	S&P 500 Health Care	3.07	0.51	-1.37	4.17	12.05	12.23	12.89	-1.95	26.13	13.45	20.82	6.47
	S&P 500 Industrials	-1.18	-1.42	2.24	7.04	17.90	8.79	11.15	-5.48	21.12	11.06	29.37	-13.29
	S&P 500 Info Tech	0.45	11.94	22.37	8.08	19.28	19.72	20.09	-28.19	34.53	43.89	50.29	-0.29
	S&P 500 Materials	-0.14	-4.44	4.14	-3.03	18.13	9.53	9.66	-12.27	27.28	20.73	24.58	-14.70
	S&P 500 Real Estate	0.97	-6.34	2.94	-15.92	7.13	7.77	6.74	-26.13	46.19	-2.17	29.01	-2.22
	S&P 500 Utilities	1.87	0.57	-1.44	-0.21	9.86	9.54	8.94	1.57	17.67	0.48	26.35	4.11

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## Asset Class Return Analysis (%)

Higher	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD 4/23
	Small-Cap 38.82	S&P 500 <b>13.69</b>	Growth <b>5.67</b>	Small-Cap <b>21.31</b>	Emerging Markets <b>37.28</b>	Growth -1.51	Growth <b>36.39</b>	Growth 38.49	S&P 500 <b>28.71</b>	Value <b>-7.54</b>	Growth 15.49
	Mid-Cap <b>34.76</b>	Value 13.45	International Small-Cap <b>5.46</b>	Value 1 <b>7.34</b>	International Small-Cap <b>31.04</b>	S&P 500 -4.38	S&P 500 <b>31.49</b>	Small-Cap <b>19.96</b>	Growth <b>27.60</b>	International -14.45	International 11.53
	Growth 33.48	Mid-Cap <b>13.22</b>	S&P 500 <b>1.38</b>	Mid-Cap <b>13.80</b>	Growth <b>30.21</b>	Value <b>-8.27</b>	Mid-Cap <b>30.54</b>	S&P 500 <b>18.40</b>	Value <b>25.16</b>	Mid-Cap <b>-17.32</b>	S&P 500 <b>9.17</b>
	Value <b>32.53</b>	Growth <b>13.05</b>	International -0.81	S&P 500 <b>11.96</b>	International <b>25.03</b>	Mid-Cap <b>-9.06</b>	Global <b>26.60</b>	Emerging Markets <b>18.31</b>	Mid-Cap <b>22.58</b>	S&P 500 -18.11	Global <b>8.85</b>
	S&P 500 <b>32.39</b>	Small-Cap <b>4.89</b>	Global <b>-2.36</b>	Emerging Markets <b>11.19</b>	Global <b>23.97</b>	Global <b>-9.42</b>	Value <b>26.54</b>	Mid-Cap <b>17.10</b>	Global <b>18.54</b>	Global <b>-18.36</b>	International Small-Cap <b>6.84</b>
	International Small-Cap <b>25.55</b>	Global <b>4.16</b>	Mid-Cap <b>-2.44</b>	Global <b>7.86</b>	S&P 500 <b>21.83</b>	Small-Cap <b>-11.01</b>	Small-Cap 25.52	Global <b>16.25</b>	Small-Cap 14.82	Emerging Markets <b>-20.09</b>	Mid-Cap <b>3.51</b>
	Global <b>22.80</b>	Emerging Markets <b>-2.19</b>	Value <b>-3.83</b>	Growth <b>7.08</b>	Mid-Cap <b>18.52</b>	International - <b>13.79</b>	International Small-Cap <b>25.41</b>	International Small-Cap <b>12.78</b>	International 11.26	Small-Cap <b>-20.44</b>	Emerging Markets <b>2.78</b>
	International 22.78	International -4.90	Small-Cap -4.41	International Small-Cap <b>4.32</b>	Small-Cap 14.65	Emerging Markets <b>-14.58</b>	International 22.01	International <b>7.82</b>	International Small-Cap <b>11.14</b>	International Small-Cap <b>-20.59</b>	Value 2.53
Lower	Emerging Markets <b>-2.60</b>	International Small-Cap <b>-5.34</b>	Emerging Markets <b>-14.92</b>	International <b>1.00</b>	Value <b>13.66</b>	International Small-Cap <b>-18.07</b>	Emerging Markets <b>18.42</b>	Value <b>2.80</b>	Emerging Markets <b>-2.54</b>	Growth <b>-29.14</b>	Small-Cap <b>0.89</b>

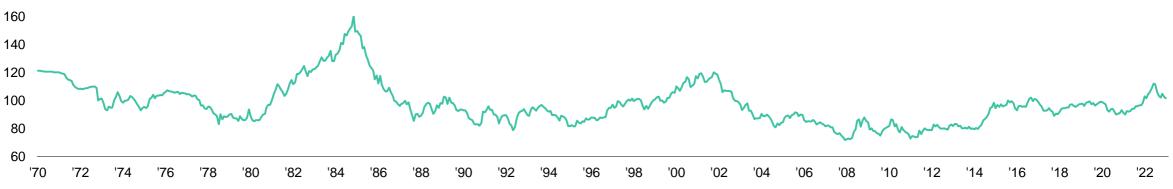
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### **Developed Market Currency Performance and Yields**

				Spot Ret		Local Interest Rates (%)					
Currency	1-Mo.	YTD	1Y	3Y	5Y	1-Mo.	YTD	1Y	3Y	5Y	1Y
U.S. Dollar (USD)	-	-	-	-	-	-1.59	-3.33	-4.44	-0.26	1.82	4.76
Euro (EUR) *	1.62	3.44	4.65	0.26	-1.79	-	-	-	-	-	3.07
British Pound (GBP)	1.65	4.49	0.11	-0.12	-1.81	0.04	1.01	-4.34	-0.38	-0.03	4.30
Japanese Yen (JPY)	-2.26	-3.10	-4.85	-7.74	-4.28	-3.81	-6.32	-9.08	-7.98	-2.54	-0.12
Australian Dollar (AUD)	-1.33	-2.55	-7.01	0.31	-2.62	-2.90	-5.79	-11.14	0.05	-0.85	3.36
Canadian Dollar (CAD)	-0.22	-0.10	-5.77	0.80	-1.12	-1.80	-3.43	-9.96	0.53	0.68	4.44
New Zealand Dollar (NZD)	-1.28	-2.34	-4.84	0.04	-2.60	-2.85	-5.59	-9.07	-0.23	-0.83	4.86
Norwegian Krone (NOK)	-2.04	-7.86	-12.86	-1.49	-5.61	-3.60	-10.93	-16.73	-1.75	-3.89	3.53
Swedish Krona (SEK)	1.09	1.58	-4.52	-1.62	-3.14	-0.51	-1.80	-8.76	-1.88	-1.38	3.22
Danish Krone (DKK)	1.56	3.21	4.44	0.29	-1.80	-0.06	-0.23	-0.20	0.03	-0.01	2.68
Swiss Franc (CHF)	2.64	3.95	9.06	2.74	2.15	1.01	0.49	4.21	2.47	4.01	0.77

### U.S. Dollar Index



Past performance is no guarantee of future results.

It is not possible to invest directly in an index. \*German Rate. Source: Factset, Bloomberg as of 4/30/23. Dollar is represented by the US Trade Weighted Dollar Index (DXY). Data provided is for informational use only. See end of report for important additional information.

### **Emerging Market Currency Performance and Yields**

	Spot Returns vs. USD (%) Spot Returns vs. EUR (%)							Local Interest Rates (%)			
Currency	1-Mo.	YTD	1Y	3Y	5Y	1-Mo.	YTD	1Y	3Y	5Y	1Y
Asia, excluding Japan											
Chinese Renminbi (CNY)	-0.81	0.34	-4.92	0.59	-1.74	-2.39	-3.00	-9.15	0.33	0.04	2.18
Malaysian Ringgit (MYR)	-1.08	-1.24	-2.40	-1.21	-2.53	-2.65	-4.53	-6.74	-1.47	-0.76	2.74
Indian Rupee (INR)	0.42	1.09	-6.59	-2.82	-4.00	-1.17	-2.27	-10.74	-3.08	-2.25	7.12
Indonesian Rupiah (IDR)	2.21	6.12	-1.18	0.46	-1.05	0.59	2.59	-5.57	0.20	0.75	6.00
Philippine Peso (PHP)	-1.84	0.62	-5.74	-3.09	-1.35	-3.40	-2.73	-9.93	-3.34	0.45	6.16
Singapore Dollar (SGD)	-0.34	0.53	3.50	1.80	-0.15	-1.93	-2.82	-1.09	1.54	1.67	3.62
South Korean Won (KRW)	-2.73	-5.52	-6.16	-3.08	-4.41	-4.28	-8.67	-10.33	-3.34	-2.67	1.25
Taiwanese Dollar (TWD)	-0.96	-0.02	-4.12	-1.10	-0.76	-2.53	-3.35	-8.38	-1.36	1.04	1.00
Thai Baht (THB)	0.14	1.43	0.30	-1.78	-1.56	-1.45	-1.95	-4.16	-2.04	0.23	0.82
Latin America											
Brazilian Real (BRL)	1.35	5.53	-1.01	2.66	-6.96	-0.26	2.02	-5.41	2.39	-5.27	12.98
Chilean Peso (CLP)	-1.45	6.20	6.34	1.38	-5.28	-3.01	2.66	1.61	1.12	-3.55	7.71
Colombian Peso (COP)	-0.03	4.03	-14.65	-5.61	-9.63	-1.62	0.57	-18.44	-5.86	-7.99	10.30
Mexican Peso (MXN)	0.09	8.03	13.14	9.69	0.81	-1.50	4.43	8.11	9.40	2.65	11.73
Peruvian New Sol (PEN)	1.42	2.84	3.55	-3.08	-2.63	-0.19	-0.59	-1.05	-3.34	-0.85	6.35

Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Factset, Bloomberg as of 4/30/23. Data provided is for informational use only. See end of report for important additional information.

### **Emerging Market Currency Performance and Yields**

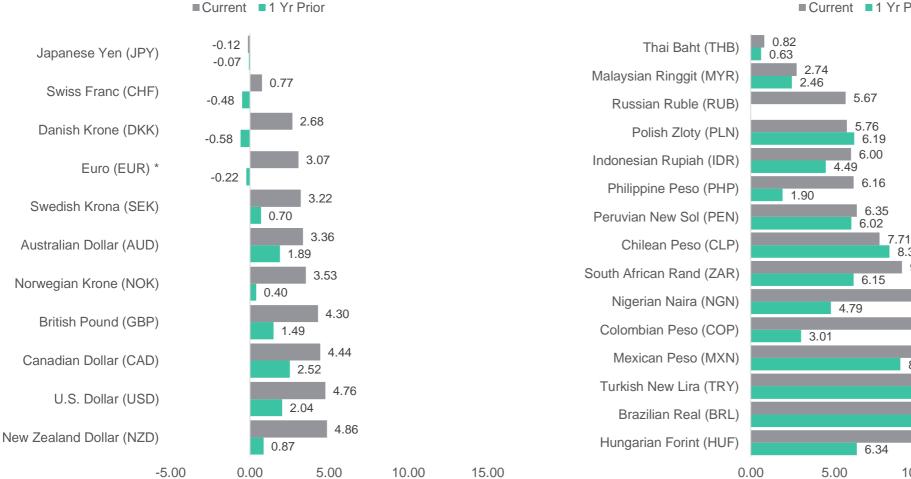
		Spot Returns vs. USD (%)					Spot Re		Local Interest Rates (%)		
Currency	1-Mo.	YTD	1Y	3Y	5Y	1-Mo.	YTD	1Y	3Y	5Y	1Y
Europe											
Czech Koruna (CZK)	1.60	6.41	9.66	5.08	-0.12	-0.01	2.87	4.79	4.80	1.70	3.11
Hungarian Forint (HUF)	3.58	11.02	6.08	-1.72	-5.15	1.94	7.32	1.37	-1.98	-3.42	14.55
Polish Zloty (PLN)	3.82	5.71	6.94	-0.07	-3.33	2.17	2.19	2.19	-0.33	-1.57	5.76
Romanian Leu (RON)	1.98	3.82	5.03	-0.43	-2.88	0.36	0.37	0.37	-0.69	-1.11	6.59
Russian Ruble (RUB)	-3.12	-8.98	-11.69	-2.67	-4.72	-4.66	-12.01	-15.61	-2.93	-2.99	5.67
Turkish New Lira (TRY)	-1.30	-3.75	-23.61	-28.90	-26.88	-2.87	-6.95	-27.01	-29.09	-25.55	12.33
Middle East and Africa											
Ghanaian Cedi (GHS)	-2.12	-13.56	-36.23	-21.08	-17.54	-3.67	-16.44	-39.06	-21.29	-16.03	17.90
Israeli Shekel (ILS)	-0.98	-2.97	-8.11	-1.54	-0.21	-2.56	-6.20	-12.19	-1.80	1.60	4.56
Kenyan Shilling (KES)	-2.57	-9.26	-14.85	-7.61	-5.92	-4.12	-12.29	-18.64	-7.85	-4.20	11.12
Moroccan Dirham (MAD)	1.77	4.08	-0.61	-0.64	-1.57	0.15	0.61	-5.03	-0.90	0.22	3.53
Nigerian Naira (NGN)	-0.16	-0.16	-10.08	-5.94	-4.87	-1.75	-3.49	-14.07	-6.19	-3.14	10.17
South African Rand (ZAR)	-2.96	-6.94	-13.50	0.15	-7.35	-4.50	-10.04	-17.34	-0.12	-5.66	9.04
Ugandan Shilling (UGX)	1.07	-0.40	-4.82	0.61	-0.12	-0.54	-3.72	-9.05	0.34	1.70	12.50
Zambian Kwacha (ZMK)	19.41	1.93	-3.96	1.63	-11.00	17.51	-1.47	-8.23	1.37	-9.38	15.75

#### Past performance is no guarantee of future results.

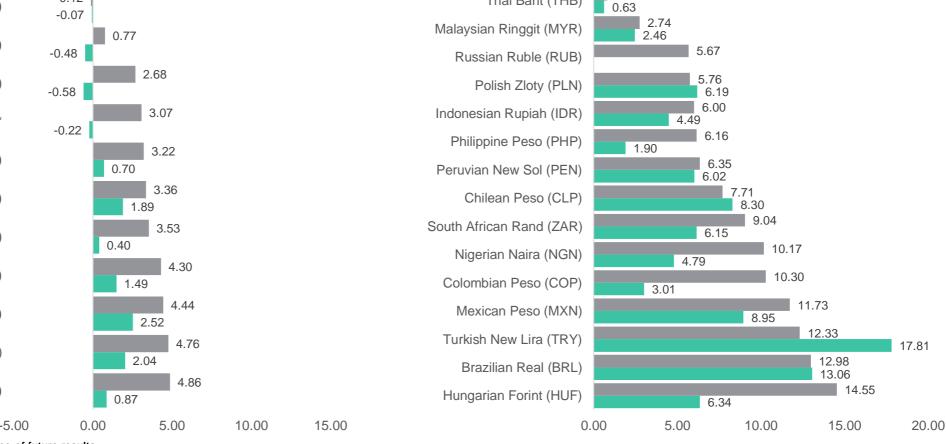
It is not possible to invest directly in an index. Source: Factset, Bloomberg as of 4/30/23. Data provided is for informational use only. See end of report for important additional information.

## Local Sovereign Currency Yields

### **Developed Market Local Interest Rates % (1 Year)**



#### **Emerging Market Local Interest Rates % (1 Year)**



■ Current ■ 1 Yr Prior

Past performance is no guarantee of future results.

It is not possible to invest directly in an index. \*German Rate. Source: Bloomberg as 4/30/23. Data provided is for informational use only. See end of report for important additional information.

### Commodities Return Analysis (%)

Index	1-Mo.	3-Мо.	YTD	1Y	3Y	5Y
Bloomberg Commodity Index	-0.75	-5.61	-6.07	-16.60	21.14	4.67
Bloomberg Sub Agriculture	-1.65	-3.83	-1.63	-10.32	25.41	7.78
Coffee	10.56	4.52	14.01	-9.32	18.24	2.85
Corn	-7.34	-9.00	-8.47	-18.64	28.56	7.02
Cotton	-2.08	-5.76	-2.15	-31.88	20.26	3.11
Soybean	-3.50	-4.38	-3.11	-1.60	26.70	7.88
Soybean Oil	-6.78	-16.52	-18.46	-30.61	35.07	14.39
Sugar	22.11	34.72	46.87	57.85	41.47	16.69
Wheat	-6.52	-8.79	-8.75	-19.26	21.22	5.65
Bloomberg Sub Energy	-0.49	-10.41	-19.08	-34.35	26.72	-2.59
Brent Crude	1.14	-3.53	-4.08	-9.26	58.03	9.20
Heating Oil	-6.93	-19.25	-19.80	-14.08	55.28	8.53
Natural Gas	-2.26	-26.19	-51.53	-71.35	-19.28	-21.85
Unleaded Gas	-2.98	-4.73	-0.93	-1.45	66.91	10.92
WTI Crude Oil	2.19	-1.64	-3.18	-15.87	55.89	-2.25

Index	1-Mo.	3-Mo.	YTD	1Y	3Y	5Y
Bloomberg Sub Industrial Metals	-3.43	-12.55	-5.45	-19.74	18.82	4.42
Aluminum	-2.38	-11.38	-1.41	-22.99	14.42	-0.73
Copper	-4.66	-7.23	3.30	-9.37	18.84	5.02
Nickel	1.87	-19.82	-18.96	-23.10	26.15	12.45
Zinc	-9.01	-20.75	-9.15	-30.46	13.22	0.24
Bloomberg Sub Precious Metals	1.70	3.52	8.09	5.10	6.81	7.51
Gold	1.04	3.03	9.23	3.91	4.21	7.46
Platinum	9.09	7.51	1.78	18.99	10.27	3.67
Silver	3.94	5.22	4.75	9.11	17.56	7.59
Bloomberg Sub Livestock	1.73	0.17	-2.63	6.09	8.47	-2.30
Lean Hogs	0.47	-8.94	-19.25	-14.37	8.16	-7.90
Live Cattle	2.46	6.08	7.55	18.56	8.51	0.64

#### Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Morningstar as of 4/30/23. Data provided is for informational use only. See end of report for important additional information. Commodity represented by Bloomberg Commodity Index. Agriculture represented by Bloomberg Agriculture Subindex. Energy represented by Bloomberg Energy Subindex. Grains represented by Bloomberg Grains Subindex. Industrial Metals represented by Bloomberg Industrial Metals Subindex. Livestock represented by Bloomberg Livestock Subindex. Precious Metals represented by Bloomberg Precious Metals Subindex.

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#### ALTERNATIVES

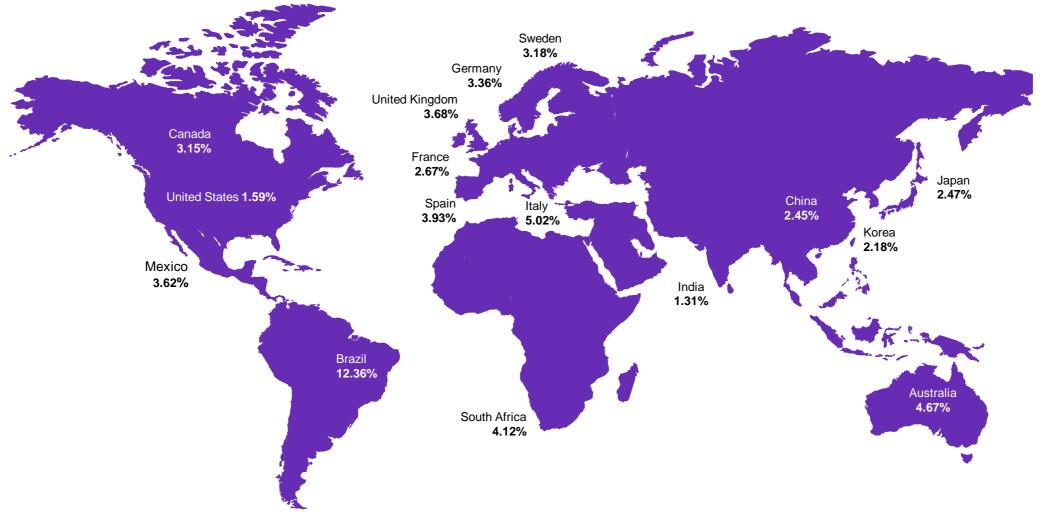
## Asset Class Return Analysis (%)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD 3/23
Higher ↑	MLP 27.58	Managed Futures 18.37	Multi-Strategy <b>3.84</b>	MLP 18.31	Long/Short Equity 13.41	Fixed Income Arbitrage 1.10	Long/Short Equity 12.17	Convertible Arbitrage <b>10.25</b>	MLP <b>40.17</b>	MLP 30.92	MLP <b>4.09</b>
	Long/Short Equity 17.74	Multi-Strategy 6.09	Long/Short Equity 3.55	Commodity 11.77	Currency 11.54	Global Macro -0.11	Global Macro 10.38	Long/Short Equity <b>7.86</b>	Commodity 27.11	Managed Futures 19.12	Long/Short Equity 4.03
	Event Driven 15.47	Long/Short Equity 5.55	Equity Market Neutral <b>1.69</b>	Convertible Arbitrage <b>6.60</b>	Equity Market Neutral <b>8.45</b>	Multi-Strategy -1.05	Managed Futures 9.01	Event Driven 6.95	Event Driven <b>12.92</b>	Commodity 16.09	Currency 3.13
	Multi-Strategy 11.23	MLP <b>4.80</b>	Convertible Arbitrage <b>0.81</b>	Multi-Strategy <b>4.41</b>	Multi-Strategy <b>6.83</b>	Convertible Arbitrage -2.26	Event Driven <b>8.22</b>	Global Macro 6.53	Global Macro <b>9.60</b>	Global Macro 15.89	Fixed Income Arbitrage 1.74
	Equity Market Neutral <b>9.27</b>	Fixed Income Arbitrage <b>4.37</b>	Fixed Income Arbitrage <b>0.59</b>	Fixed Income Arbitrage <b>4.29</b>	Fixed Income Arbitrage <b>6.52</b>	Currency -3.33	Convertible Arbitrage <b>8.15</b>	Multi-Strategy <b>5.60</b>	Long/Short Equity 8.35	Equity Market Neutral <b>1.71</b>	Equity Market Neutral 1.37
	Convertible Arbitrage <b>6.03</b>	Global Macro 3.11	Global Macro 0.18	Global Macro 3.58	Event Driven 6.30	Event Driven - <b>3.95</b>	Commodity 7.69	Fixed Income Arbitrage 3.64	Managed Futures 8.19	Multi-Strategy 1.27	Event Driven 1.31
	Global Macro 4.32	Event Driven <b>1.57</b>	Managed Futures -0.93	Currency <b>3.54</b>	Convertible Arbitrage <b>5.01</b>	Long/Short Equity -4.62	Multi-Strategy <b>7.25</b>	Managed Futures 1.86	Multi-Strategy 6.97	Fixed Income Arbitrage <b>-0.97</b>	Multi-Strategy 1.18
	Fixed Income Arbitrage <b>3.80</b>	Equity Market Neutral <b>-1.19</b>	Event Driven -6.29	Event Driven <b>2.68</b>	Managed Futures 3.29	Equity Market Neutral <b>-5.00</b>	MLP 6.56	Currency 1.73	Convertible Arbitrage <b>6.33</b>	Convertible Arbitrage -3.32	Convertible Arbitrage <b>0.40</b>
	Currency -2.04	Convertible Arbitrage <b>-1.68</b>	Currency -7.61	Long/Short Equity -3.43	Global Macro 2.14	Managed Futures -6.67	Fixed Income Arbitrage <b>6.10</b>	Equity Market Neutral <b>1.69</b>	Equity Market Neutral <b>6.16</b>	Long/Short Equity -5.77	Commodity -5.36
	Managed Futures -2.56	Currency -7.03	Commodity -24.66	Equity Market Neutral <b>-4.58</b>	Commodity 1.70	Commodity -11.25	Currency <b>5.20</b>	Commodity -3.12	Fixed Income Arbitrage <b>5.22</b>	Event Driven <b>-6.80</b>	Managed Futures -6.91
↓ Lower	Commodity -9.52	Commodity -17.01	MLP -32.59	Managed Futures -6.84	MLP -6.52	MLP -12.42	Equity Market Neutral <b>1.58</b>	MLP -28.69	Currency -3.09	Currency -7.14	Global Macro -7.34

Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Morningstar as of 3/31/2023. \*Data is on a 1-month lag. Data provided is for informational use only. Alternative investments often are speculative and include a high degree of risk. See end of report for important additional information. Global Macro represented by Credit Suisse Global Macro Index. MLP represented by Alerian MLP Index. Event Driven represented by Credit Suisse Event Driven Index. Multi-Strategy represented by Credit Suisse Multi-Strategy Index. Long/Short Equity represented by Credit Suisse Long/Short Equity Index. Convertible Arbitrage represented by Credit Suisse Convertible Arbitrage Index. Currency represented by J.P. Morgan EMLI+ Index. Equity Market Neutral represented by Credit Suisse Equity Market Neutral Index. Fixed Income Arbitrage represented by Credit Suisse Fixed Income Arbitrage Index. Managed Futures represented by Credit Suisse Managed Futures Index. Commodity represented by Bloomberg Commodity Index

#### **ASSET ALLOCATION IDEAS**

## Equity Yields Around the Globe

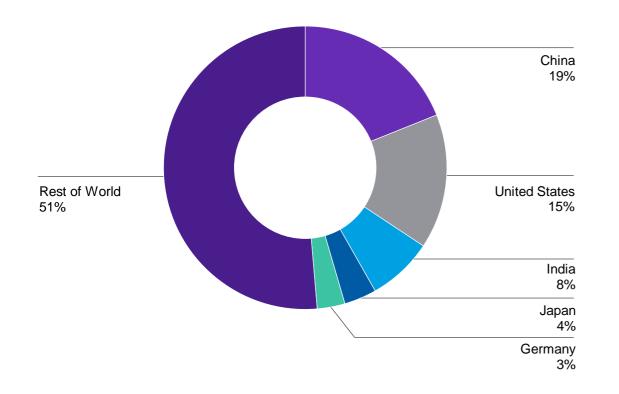


Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Factset as of 4/30/23. Returns are those of the respective MSCI indices. Data provided is for informational use only. See end of report for important additional information.

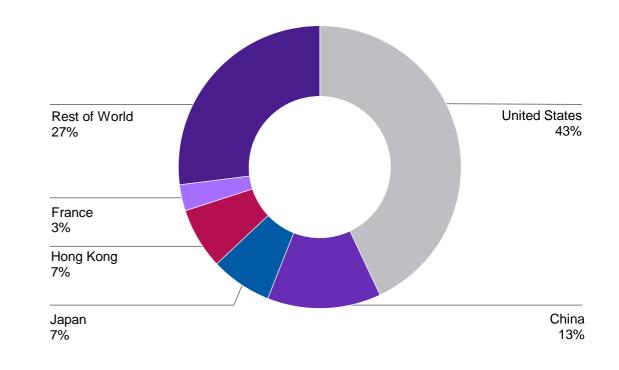
### ASSET ALLOCATION IDEAS

## U.S. Dominates Global Equity Allocations

### **GDP % of World Total**



#### Market Capitalization % of World Total

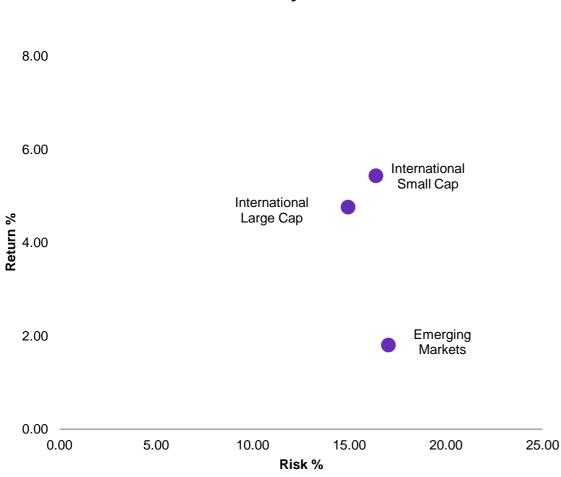


Source: World Economic Outlook Database, April 2023; World Bank. Data provided is for informational use only. See end of report for important additional information. Gross domestic product based on purchasing-power-parity (PPP) share of world total (percent). Purchasing-power-parity adjusts GDPs for differences in prices, so aggregate country values are more comparable.

Annualized Risk/Return over 10 years

#### **ASSET ALLOCATION IDEAS**

## International Small Cap Stocks May Offer Attractive Diversification Benefits



	Annualized Returns (%)	Cumulative Returns (%)	Standard Deviation (%)	Sharpe Ratio
International Small Cap	5.43	69.63	16.38	0.35
International Large Cap	4.76	59.18	14.93	0.32
Emerging Markets	1.80	19.58	17.02	0.13

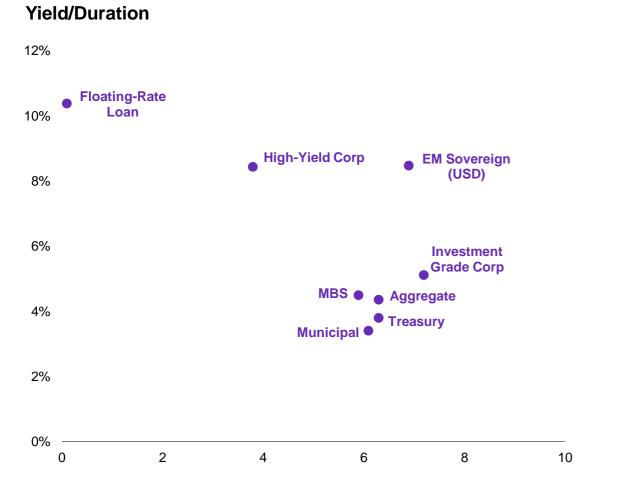
#### Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Morningstar as of 4/30/2023. Data provided is for informational use only. See end of report for important additional information. International Small-Cap represented by the MSCI World Ex USA Small Cap (Net) Index. International Large-Cap represented by the MSCI EAFE (Net) Index. Emerging Markets represented by the MSCI Emerging Markets (Net) Index. Risk is measured by standard deviation which measures the historic volatility of the index. Sharpe Ratio uses standard deviation and excess return to determine reward per unit of risk.

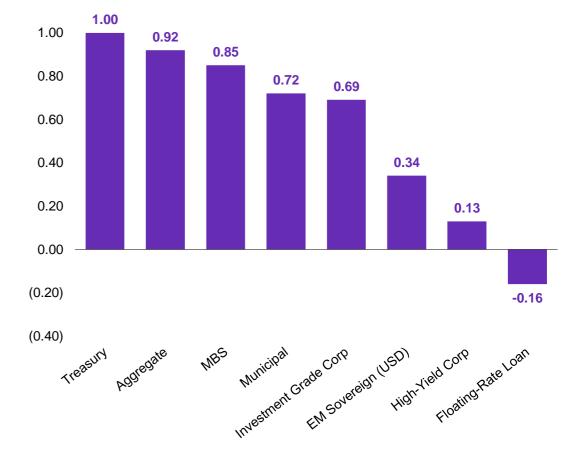
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#### **ASSET ALLOCATION IDEAS**

## Loans and High-yield: Swapping Rate Risk for Credit Exposure



#### **10-Year Correlation with U.S. Treasuries**



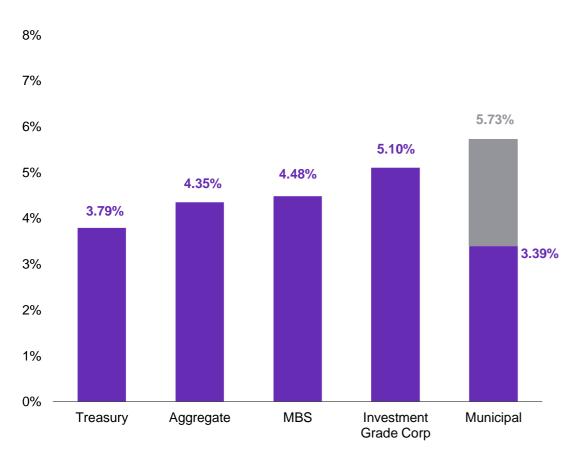
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It is not possible to invest directly in an index. Source: Factset, Morningstar as of 4/30/2023. Data provided is for informational use only. See end of report for important additional information. Aggregate represented by Bloomberg U.S. Aggregate Index. EM Sovereign (USD) represented by J.P. Morgan EM Bond Index (EMBI) Global Diversified Index. Floating-Rate Loan represented by Morningstar LSTA U.S. Leveraged Loan Index. High Yield Corp. represented by ICE BofA US High Yield Index. Investment Grade Corp. represented by Bloomberg U.S. Corp. Investment Grade Index. MBS represented by Bloomberg U.S. Mortgage Backed Securities Index. Municipal represented by Bloomberg Municipal Bond Index. Treasury represented by Bloomberg U.S. Treasury Index.

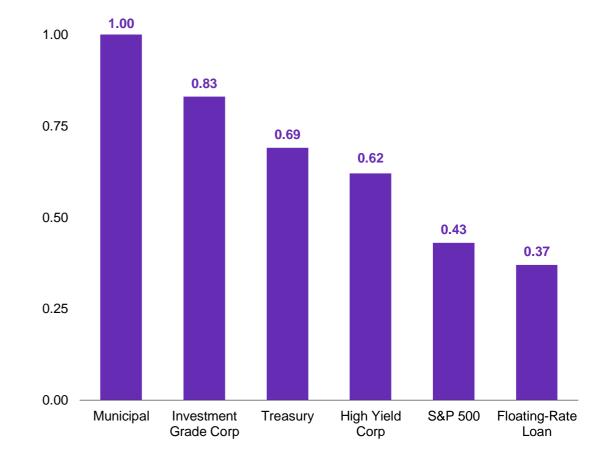
### ASSET ALLOCATION IDEAS

## Municipal Bonds Tax-equivalent Yield and 5-year Correlation

**Tax-Equivalent Yield** 



5-Year Correlation with Municipals



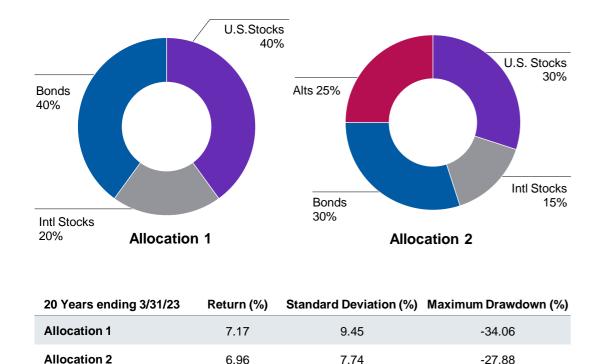
#### Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Factset, Morningstar as of 4/30/2023. Taxable equivalent yield assumes a maximum federal income tax rate of 37% and a 3.8% healthcare tax. Data provided is for informational use only. See end of report for important additional information. Treasury represented by Bloomberg U.S. Treasury Index. Agency represented by Bloomberg U.S. Aggregate represented by Bloomberg U.S. Aggregate Index. Investment Grade Corp. represented by Bloomberg U.S. Corp. Investment Grade Index. MBS represented by Bloomberg U.S. Mortgage Backed Securities Index. Municipal represented by Bloomberg Municipal Bond Index. Floating-Rate Loan represented by Morningstar LSTA U.S. Leveraged Loan Index. High Yield Corp. represented by ICE BofA US High Yield Index.

### ASSET ALLOCATION IDEAS

## Meaningful Allocation to Alts Has Competitive Performance and Reduced Risk

**Asset Allocation** 



#### 1.00 0.75 0.61 0.50 0.32 0.25 0.06 0.00 Global Macro Multi-Strategy Managed Futures 20-Year Correlation with Bonds 1.00 0.75 0.50 0.25 0.05 0.04 0.04

Multi-Strategy

#### 20-Year Correlation with U.S. Stocks

#### Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Zephyr as of 3/31/23. \*Data is on a one month lag. Data provided is for informational use only. Alternative investments often are speculative and include a high degree of risk. See end of report for important additional information. U.S Stocks represented by S&P 500 Index. International Stocks represented by MSCI EAFE Index. Bonds represented by Bloomberg US Aggregate Bond Index. Alternatives represented by 10% Credit Suisse Global Macro Index, 10% Credit Suisse Multi-Strategy Index, 5% Credit Suisse Managed Futures Index. Index returns do not reflect the effect of any applicable sales charges, commissions, expenses, taxes or leverage, as applicable. It is not possible to invest directly in an index. Historical performance of the index illustrates market trends and does not represent the past or future performance of any fund or strategy. The data and information noted above is based on hypothetical assumptions and the experience of Eaton Vance. It is for informational and illustrative purposes only. This material does not represent the results that any particular investor and should not be viewed as a current or past recommendation or a solicitation of an offer to buy or sell any securities or to adopt any investment strategy. The hypothetical models presented do not represent the results that any particular investor actually attained. Actual performance. Allocation 1 is represented by 40% of the S&P 500®, 40% of the Bloomberg U.S. Aggregate Index, 10% Credit Suisse Multi-Strategy Index, 5% Credit Suisse Managed Futures Index. 10% Credit Suisse Multi-Strategy Index, 5% Credit Suisse Managed Futures Index. Here end and information at the set of any applicable as a current or past recommendation or a solicitation of an offer to buy or sell any securities or to adopt any investment strategy. The hypothetical models presented do not represent the results that any particular investor actually attained. Actual performance. Allocation 1 is represented by 40%

0.00

Global Macro

Managed Futures

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### ASSET ALLOCATION IDEAS

### Major Asset Class Return Analysis (%)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD 4/23
Higher	Small-Cap	S&P 500	Municipal	Small-Cap	Emerging Markets	Municipal	S&P 500	Small-Cap	S&P 500	Commodities	International
	<b>38.82</b>	<b>13.69</b>	<b>3.30</b>	<b>21.31</b>	37.28	<b>1.28</b>	<b>31.49</b>	<b>19.96</b>	<b>28.71</b>	16.09	11.53
	S&P 500 <b>32.39</b>	Municipal <b>9.05</b>	S&P 500 <b>1.38</b>	High Yield <b>17.49</b>	International <b>25.03</b>	Bank Loan <b>0.44</b>	Small-Cap <b>25.52</b>	S&P 500 <b>18.40</b>	Commodities 27.11	Bank Loan <b>-0.60</b>	S&P 500 <b>9.17</b>
	International <b>22.78</b>	US Agg <b>5.97</b>	US Agg <b>0.55</b>	S&P 500 <b>11.96</b>	S&P 500 <b>21.83</b>	US Agg <b>0.01</b>	International 22.01	Emerging Markets 18.31	Small-Cap <b>14.82</b>	Municipal <b>-8.53</b>	Asset Allocation <b>5.41</b>
	Asset Allocation 13.83	Small-Cap <b>4.89</b>	Bank Loan <b>-0.69</b>	Commodities 11.77	Small-Cap <b>14.65</b>	High Yield - <b>2.26</b>	Asset Allocation 18.70	Asset Allocation 11.95	Asset Allocation 11.43	High Yield -11.22	High Yield <b>4.72</b>
	High Yield	Asset Allocation	International	Emerging Markets	Asset Allocation	S&P 500	Emerging Markets	International	International	US Agg	Bank Loan
	<b>7.42</b>	<b>4.28</b>	-0.81	11.19	14.02	- <b>4.38</b>	18.42	<b>7.82</b>	11.26	<b>-13.01</b>	<b>4.31</b>
	Bank Loan	High Yield	Asset Allocation	Bank Loan	High Yield	Asset Allocation	High Yield	US Agg	High Yield	Asset Allocation	US Agg
	<b>5.29</b>	<b>2.50</b>	-2.03	<b>10.16</b>	<b>7.48</b>	-5.40	<b>14.41</b>	<b>7.51</b>	<b>5.36</b>	-13.04	<b>3.59</b>
	US Agg	Bank Loan	Small-Cap	Asset Allocation	Municipal	Small-Cap	US Agg	High Yield	Bank Loan	International	Emerging Markets
	<b>-2.02</b>	<b>1.60</b>	-4.41	8.61	<b>5.45</b>	<b>-11.01</b>	<b>8.72</b>	<b>6.17</b>	<b>5.20</b>	-14.45	2.78
	Municipal	Emerging Markets	High Yield	US Agg	Bank Loan	Commodities	Bank Loan	Municipal	Municipal	S&P 500	Municipal
	<b>-2.55</b>	-2.19	<b>-4.64</b>	<b>2.65</b>	<b>4.12</b>	-11.25	<b>8.64</b>	5.21	<b>1.52</b>	- <b>18.11</b>	<b>2.54</b>
	Emerging Markets	International	Emerging Markets	International	US Agg	International	Commodities	Bank Loan	US Agg	Emerging Markets	Small-Cap
	-2.60	-4.90	-14.92	<b>1.00</b>	<b>3.54</b>	-13.79	7.69	<b>3.12</b>	-1.54	-20.09	<b>0.89</b>
↓	Commodities	Commodities	Commodities	Municipal	Commodities	Emerging Markets	Municipal	Commodities	Emerging Markets	Small-Cap	Commodities
Lower	-9.52	-17.01	-24.66	<b>0.25</b>	1.70	-14.57	7.54	-3.12	-2.54	<b>-20.44</b>	-6.07

**Past performance is no guarantee of future results**. It is not possible to invest directly in an index. Source: Morningstar as of 4/30/23. Data provided is for informational use only. Investing involves risks including the possible loss of principal. Investors should carefully review the risks of each asset class prior to investing. See end of report for important additional information. S&P 500 represented by the S&P 500 Index. International represented by MSCI EAFE Index. Emerging Markets represented by MSCI Emerging Markets Index. Small-Cap represented by Russell 2000 Index. US Aggregate represented by the Bloomberg Capital US Aggregate Bond Index. Municipal represented by Bloomberg Municipal Bond Index. High Yield represented by ICE BofA US High Yield Index. Bank Loan represented by Morningstar LSTA U.S. Leveraged Loan Index. Commodity represented by Bloomberg Capital US Aggregate Bond Index. The Asset Allocation portfolio assumes the following weights: 25% in the S&P 500 Index, 15% in the MSCI EAFE Index, 5% in the Morningstar LSTA U.S. Leveraged Loan Index, 35% in the Bloomberg Capital US Aggregate Bond Index, 5% in the Bloomberg Municipal Bond Index, 5% in the Bloomberg US Corporate High Yield Index, 5% in the Morningstar LSTA U.S. Leveraged Loan Index, and 5% in the Bloomberg Commodity Index.

### ASSET ALLOCATION IDEAS

## Major Asset Classes Correlation Table

	S&P 500	International	Emerging Markets	Small Cap	U.S. Aggregate	Municipal	High Yield	Bank Loan	Commodities
S&P 500	1.00	0.86	0.68	0.86	0.30	0.29	0.79	0.61	0.42
International	0.89	1.00	0.80	0.76	0.33	0.39	0.79	0.61	0.47
Emerging Markets	0.72	0.82	1.00	0.61	0.37	0.40	0.70	0.57	0.50
Small Cap	0.89	0.84	0.72	1.00	0.16	0.20	0.76	0.65	0.42
U.S. Aggregate	0.40	0.42	0.44	0.26	1.00	0.85	0.45	0.16	-0.04
Municipal	0.43	0.51	0.50	0.36	0.86	1.00	0.51	0.29	0.05
High Yield	0.83	0.82	0.71	0.83	0.49	0.62	1.00	0.81	0.55
Bank Loan	0.64	0.64	0.61	0.71	0.17	0.37	0.83	1.00	0.50
Commodities	0.52	0.56	0.54	0.54	-0.04	0.11	0.56	0.54	1.00

5 Years ended April 30, 2023

10 Years ended April 30, 2023

#### Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Morningstar as of 4/30/23. The table above shows the return correlation between various asset classes (represented by market indices as defined in this disclosure) over the past five and ten years. Data provided is for informational use only. See end of report for important additional information. S&P 500 is represented by the S&P 500 Index. International is represented by MSCI EAFE Index. Emerging Markets is represented by the Bloomberg Barclays Capital US Aggregate Bond Index. Municipal is represented by Bloomberg Barclays Municipal Bond Index. High Yield is represented by ICE BofA US High Yield Index. Bank Loan is represented by Morningstar LSTA U.S. Leveraged Loan Index. Commodities is represented by Bloomberg Commodity Index.

#### ASSET ALLOCATION IDEAS

## Fund and ETF Flows by Category

#### Top 10 Open-End Mutual Fund Categories by Monthly Flows (\$MM)

	1 Mo.	3 Mo.	12 Mo.
Intermediate Core Bond	3,781	24,357	23,300
Intermediate Core-Plus Bond	1,903	15,383	-31,087
Global Bond-USD Hedged	1,691	5,328	-2,569
Foreign Large Blend	1,438	-64	-5,934
Multisector Bond	1,131	6,985	-23,602
Intermediate Government	1,010	5,423	-48
Diversified Emerging Mkts	857	757	-26,489
Long Government	514	1,546	6,902
Derivative Income	286	876	4,366
Global Small/Mid Stock	237	473	-1,014

#### Bottom 10 Open-End Mutual Fund Categories by Monthly Flows (\$MM)

	1 Mo.	3 Mo.	12 Mo.
Foreign Large Growth	-1,893	-6,320	-50,262
Muni National Short	-2,511	-5,410	-33,720
Large Blend	-2,766	-6,660	-9,237
Corporate Bond	-3,355	-2,093	-7,242
Moderate Allocation	-3,821	-8,584	-39,177
Large Value	-4,414	-6,769	-44,497
Short-Term Bond	-4,415	-7,851	-67,507
Bank Loan	-4,886	-9,015	-34,227
Ultrashort Bond	-6,797	-12,063	-66,501
Large Growth	-7,278	-19,335	-87,611

#### Top 10 Exchange-Traded Fund Categories by Monthly Flows (\$MM)

	1 Mo.	3 Mo.	12 Mo.
Long Government	9,103	15,446	44,349
Ultrashort Bond	8,932	15,934	61,220
Intermediate Government	6,695	7,186	30,754
Large Growth	4,868	0	24,758
Corporate Bond	4,409	5,012	10,703
Large Blend	3,782	-1,226	63,244
Intermediate Core Bond	2,774	9,276	28,042
Short Government	2,595	7,340	21,323
Derivative Income	2,176	7,772	23,746
Foreign Large Blend	1,759	7,104	36,882

#### Bottom 10 Exchange-Traded Fund Categories by Monthly Flows (\$MM)

	1 Mo.	3 Mo.	12 Mo.
Financial	-973	693	-15,197
Bank Loan	-1,002	-1,291	-6,866
Miscellaneous Region	-1,031	383	-835
Small Blend	-1,637	-455	2,540
High Yield Bond	-1,646	-8,621	-1,733
Health	-1,720	-4,207	4,200
Inflation-Protected Bond	-1,886	-5,935	-16,942
Equity Energy	-2,430	-5,145	-9,735
Short-Term Bond	-4,294	-4,453	752
Large Value	-4,522	-7,138	40,519

Source: Morningstar as of 3/31/2023. Flow data is on a one month lag. Data provided is for informational use only. See end of report for important additional information.

## **Glossary of Terms**

#### **Index Definitions**

Bloomberg Global Aggregate Ex-USD Index is a broad-based measure of global Investment Grade fixed-rate debt investments, excluding USDdenominated debt

**Bloomberg High Yield Municipal Bond Index** is an unmanaged index of non-Investment Grade Municipal bonds traded in the U.S.

**Bloomberg Municipal Bond Index** is an unmanaged index of Municipal bonds traded in the U.S.

**Bloomberg Taxable Municipal Bond Index** is an unmanaged index of Taxable Municipal bonds traded in the U.S.

**Bloomberg U.S. Agency Index** measures agency securities issued by U.S government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. government

**Bloomberg U.S. Aggregate Index** is an unmanaged index of domestic investment-grade bonds, including corporate, government and mortgage-backed securities

Bloomberg U.S. Asset Backed Securities (ABS) Index measures ABS with the following collateral type: credit and charge card, auto, and utility loans

**Bloomberg U.S. CMBS Index** measures the market of conduit and fusion CMBS deals with a minimum current deal size of \$300mn

**Bloomberg U.S. Corporate Investment Grade Index** is an unmanaged index that measures the performance of investment-grade corporate securities within the Barclays U.S. Aggregate Index

Bloomberg U.S. Mortgage Backed Securities (MBS) Index measures agency mortgage-backed pass-through securities issued by GNMA, FNMA, and FHLMC

Bloomberg U.S. Treasury Index measures public debt instruments issued by the U.S. Treasury

Bloomberg Commodity Index is a broadly diversified index tracking futures contracts on physical commodities

**CBOE Volatility Index (VIX)** tracks the implied volatilities of a wide range of S&P 500 Index options

**CBOE S&P 500 BuyWrite Index** measures the performance of a hypothetical buy-write strategy on the S&P 500 Index

ICE BofA US Inflation-Linked Treasury Index tracks the performance of USD denominated inflation linked sovereign debt publicly issued by the US government

**ICE BofA Fixed Rate Preferred Securities Index** is an unmanaged index of fixed-rate, preferred securities issued in the U.S.

**ICE BofA UK Gilts Index** tracks the performance of GBP denominated sovereign debt publicly issued by the UK government in its domestic market.

**ICE BofA European Union Government Bond Index** tracks the performance of sovereign debt publicly issued by countries that are members of the European Union

ICE BofA U.S. High Yield Index is an unmanaged index of below-investment grade U.S. corporate bonds.

ICE BofA Developed Markets High Yield Ex-Subordinated Financial Index (Hedged) is an unmanaged index of global developed market below investment grade corporate bonds, USD hedged.

**FTSE 100 Index** is an unmanaged market-capitalization weighted index representing the performance of the 100 largest UK listed blue chip companies, which pass screening for size and liquidity

**FTSE All Small Index** consists of all the companies in the FTSE SmallCap and FTSE Fledgling indices

FTSE World Government Bond Index (WGBI) measures the performance of fixed-rate, local currency, investment-grade sovereign bonds.

J.P. Morgan Corporate Emerging Markets Bond Index (CEMBI) Broad Diversified is an unmanaged index of USD-denominated emerging market corporate bonds.

**J.P. Morgan Emerging Markets Bond Index (EMBI) Global Diversified** is an unmanaged index of USD-denominated bonds with maturities of more than one year issued by emerging markets governments.

J.P. Morgan Government Bond Index-Emerging Markets (GBI-EM) Global Diversified is an unmanaged index of local-currency bonds with maturities of more than one year issued by emerging market governments

Morgan Stanley Capital International (MSCI) Emerging Markets Index is an unmanaged index of emerging markets common stocks

**Morgan Stanley Capital International All Country Asia Pacific Index (MSCI AC Asia Pac)** is an unmanaged total return, capitalization-weighted index that measures the performance of stock markets in 15 Pacific region countries, including Australia, China, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, New Zealand, Pakistan, the Philippines, Singapore, Sri Lanka, Taiwan and Thailand

**Morgan Stanley Capital International (MSCI) Japan Index** is an unmanaged index designed to measure the performance of the large and mid cap segments of the Japan market

Morgan Stanley Capital International (MSCI) World Index is an unmanaged index of equity securities in the developed markets

**Morgan Stanley Capital International (MSCI) World ex USA Small Cap Index** is an unmanaged index of small-cap equity securities in the developed markets, excluding the United States.

Morgan Stanley Capital International All Country World (MSCI AC World) Index is an unmanaged free float-adjusted market-capitalization-weighted index designed to measure the equity market performance of developed and emerging markets

**Morgan Stanley Capital International Europe (MSCI Europe) Index** is an unmanaged free float-adjusted market-capitalization-weighted index designed to measure the equity market performance of the developed markets in Europe

## Glossary of Terms and About Risk

### Index Definitions (cont.)

Morgan Stanley Capital International Europe, Australasia, Far East (MSCI EAFE) Index is an unmanaged index of equities in the developed markets, excluding the U.S. and Canada

**Morningstar LSTA U.S. Leveraged Loan Index** is an unmanaged index of the institutional leveraged loan market. Prior to August 29, 2022 the index name was S&P/LSTA Leveraged Loan Index

Nikkei 225 Stock Average Index is unmanaged price-weighted index of 225 top-rated Japanese companies listed in the First Section of the Tokyo Stock Exchange

Russell 1000 Index is an unmanaged index of 1,000 U.S. large-cap stocks

Russell 1000 Growth Index is an unmanaged index of 1,000 U.S. large-cap growth stocks

Russell 1000 Value Index is an unmanaged index of 1,000 U.S. large-cap value stocks

Russell 2000 Index is an unmanaged index of 2,000 U.S. small-cap stocks

Russell 2500 Index is an unmanaged index of approximately 2,500 U.S. small- and mid-cap U.S. stocks

Russell Midcap Index is an unmanaged index of U.S. mid-cap stocks

Standard & Poor's 500 Index is an unmanaged index of large-cap stocks commonly used as a measure of U.S. stock market performance

**STOXX Europe 600 Index** is a fixed component number index designed to provide a broad yet liquid representation of large, mid and small capitalization companies in Europe

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#### Terms

**Municipal-to-Treasury Yield Ratios** are relative value indicators that measure the richness or cheapness of Municipal bond yields to comparable maturity Treasury bond yields.

**Yield to Worst** is a measure which reflects the lowest potential yield earned on a bond without the issuer defaulting. The yield to worst is calculated by making worst-case scenario assumptions by calculating the returns that would be received if provisions, including prepayment, call or sinking fund, are used by the issuer.

### About Risk

Bank Loans - There can be no assurance that the liquidation of collateral securing an investment will satisfy the issuer's obligation in the event of non-payment or that collateral can be readily liquidated. The ability to realize the benefits of any collateral may be delayed or limited. Commodities - The value of commodities investments will generally be affected by overall market movements and factors specific to a particular industry or commodity including weather, embargoes, tariffs, or health, political, international and regulatory developments. Credit - Investments in income securities may be affected by changes in the creditworthiness of the issuer and are subject to the risk of non-payment of principal and interest. The value of income securities also may decline because of real or perceived concerns about the issuer's ability to make principal and interest payments. Duration - Securities with longer durations tend to be more sensitive to interest rate changes than securities with shorter durations. Equity - Equity investment values are sensitive to stock market volatility. Foreign – Investments in foreign instruments or currencies can involve greater risk and volatility than U.S. investments because of adverse market, economic, political, regulatory, geopolitical, or other conditions. In emerging countries, these risks may be more significant, Gov't Agency - While certain U.S. Governmentsponsored agencies may be chartered or sponsored by acts of Congress, their securities are neither issued nor guaranteed by the U.S. Treasury. Income Market - An imbalance in supply and demand in the income market may result in valuation uncertainties and greater volatility, less liquidity, widening credit spreads and a lack of price transparency in the market. There generally is limited public information about Municipal issuers. Inflation-Linked - Interest payments on inflation-linked securities may vary widely and will fluctuate as principal and interest are adjusted for inflation. Investments in inflation-linked securities may lose value in the event that the actual rate of inflation is different than the rate of the inflation index. Interest Rate - As interest rates rise, the value of certain income investments is likely to decline. The London Interbank Offered Rate or LIBOR, is used throughout global banking and financial industries to determine interest rates for a variety of financial instruments (such as debt instruments and derivatives) and borrowing arrangements. The ICE Benchmark Administration Limited, the administrator of LIBOR, is expected to cease publishing certain LIBOR settings on December 31, 2021, and the remaining LIBOR settings on June 30, 2023. The transition process may involve, among other things, increased volatility or illiquidity in markets for instruments that currently rely on LIBOR, such as floating-rate debt obligations. Lower-Rated - Investments rated below Investment Grade (typically referred to as "junk") are generally subject to greater price volatility and illiquidity than higher rated investments. Maturity - Longer-term bonds typically are more sensitive to interest rate changes than shorter-term bonds. Preferred Stocks - When interest rates rise, the value of preferred stocks will generally decline. Prepayment - MBS -Mortgage-backed securities are subject to prepayment risk. Prepayment - Bank Loan - Bank Loans are subject to prepayment risk. Real Estate - Changes in real estate values or economic downturns can have a significant negative effect on issuers in the real estate industry, including REITs.

#### **Risk Considerations**

Diversification does not eliminate the risk of loss.

In general, equity securities' values also fluctuate in response to activities specific to a company. Investments in foreign markets entail special risks such as currency, political, economic, and market risks. The risks of investing in emerging market countries are greater than risks associated with investments in foreign developed countries. Fixed income securities are subject to the ability of an issuer to make timely principal and interest payments (credit risk), changes in interest rates (interest-rate risk), the creditworthiness of the issuer and general market liquidity (market risk). In a rising interest-rate environment, bond prices may fall and may result in periods of volatility and increased portfolio redemptions. In a declining interest-rate environment, the portfolio may generate less income. Longer-term securities may be more sensitive to interest rate changes. Alternative investments are speculative, involve a high degree of risk, are highly illiquid, typically have higher fees than other investments, and may engage in the use of leverage, short sales, and derivatives, which may increase the risk of investment loss. These investments are designed for investors who understand and are willing to accept these risks. Performance may be volatile, and an investor could lose all or a substantial portion of its investment.

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