

# Global Fixed Income Manager Analysis

March 31, 2020

## City of Key West

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**Purpose for this Manager Evaluation Report**

This search is being conducted to potentially replace FBNRX.

**Investment Options for this Manager Evaluation Report**

<b>Firm Name</b>	<b>Strategy Name</b>	<b>Vehicle</b>	<b>Management Fee</b>	<b>Investment Minimum</b>
Loomis Sayles	Loomis Sayles Global Bond Instl (LSGBX)	MF	0.69%	\$100,000
Pacific Investment Management Company	PIMCO Global Bond Opps (Unhedged) Instl (PIGLX)	MF	0.55%	\$1,000,000
Pacific Investment Management Company	PIMCO Global Bond Opps (USD-Hedged) Instl (PGBIX)	MF	0.55%	\$1,000,000
Frankling Templeton Investments	Templeton Global Bond R6 (FBNRX)	MF	0.57%	\$1,000,000

## Definition and Characteristics

The Global Bond category consists of fixed-income securities of both developed and emerging countries. The typical benchmarks for the category are the Bloomberg Barclays Global Aggregate Index, the Citi World Government Bond Index, the J.P. Morgan Global Government Bond Index and the Bloomberg Barclays Multiverse Index.

The Bloomberg Barclays Global Aggregate Index contains more than 20,000 securities, both senior and subordinated issues, including sovereign treasuries, government-related, investment grade corporate and structured securities of more than 20 countries. These securities can be denominated in one of more than 20 eligible currencies. Approximately 40% of the index is made of the highest-rated securities. All securities within the index must be rated investment-grade or higher.

## Role within a Portfolio

The Global Bond category provides the portfolio exposure to bond markets around the world. Adding global fixed-income exposure to a portfolio offers diversification benefits compared to a strictly US-focused strategy. The Global Bond category provides diversification through exposures to currencies, interest rates, and countries with varying macroeconomic environments. Managers in the space typically invest a significant share of the total allocation to foreign bonds (usually 40% or more). The more conservative ones favor sovereign issues and high-quality instruments from developed markets while the more aggressive portfolios will own a higher percentage of lower-quality bonds, including high-yield US debt, and emerging markets securities.

## Benchmark and Peer Group

This Global Bond search report will use the following benchmark and peer group:

**Index – Bloomberg Barclays Global Aggregate Index:** The index measures the performance of fixed-rate, local currency, investment grade sovereign, government-related, corporate and structured bonds. The index currently consists of bonds from more than 20 countries, denominated in a variety of currencies, and has more than 25 years of history available. The index provides a broad benchmark for the global diversified fixed income market.

**Morningstar Category - World Bond:** World-bond portfolios invest 40% or more of their assets in foreign bonds. Some world-bond portfolios follow a conservative approach, favoring high-quality bonds from developed markets.

# Investment Option Comparison

	Loomis Sayles Global Bond Instl	PIMCO Global Bond Opps (Unhedged) Instl	PIMCO Global Bond Opps (USD-Hdg) Instl	Templeton Global Bond R6
<b>Firm Information</b>				
Year Founded	1/1/1926	1/1/1971	1/1/1971	1/1/1947
US Headquarters Location	Boston, MA	Newport Beach, CA	Newport Beach, CA	San Mateo, CA
Number of Major Global Offices	3	12	12	N/A
Year Began Managing Ext. Funds	1/1/1926	1/1/1971	1/1/1971	1/1/1947
Firm AUM (\$ M)	268,086	1,700,000	1,700,000	742,837
Ownership Type	Subsidiary	Subsidiary	Subsidiary	Publicly-traded
Largest Owner (Name)	Natixis Asset Management	Allianz	Allianz	Rupert H. Johnson Jr.
Employee Ownership (%)	0	0	0	22
Qualify as Emerging Manager?	No	No	No	No
<b>Strategy Information</b>				
Inception Date	12/31/1986	8/1/2000	8/1/2000	9/24/1986
Open/Closed	Open	Open	Open	Open
Primary Benchmark	BBgBarc Global Aggregate	BBgBarc Global Aggregate Unhedged	BBgBarc Global Aggregate Hedged	JP Morgan Global Government Bond
Secondary Benchmark	FTSE WGBI	N/A	N/A	N/A
Peer Universe	World Bond	World Bond	World Bond	World Bond
Outperformance Estimate (%)	1.5-2	1.0-1.5	1.0-1.5	N/A
Tracking Error Estimate (%)	1.0-3	1.0-3	1.0-3	N/A
Strategy AUM (\$ M)	17,900	100,211	100,211	72,553
Strategy AUM as % Firm Assets	7	8	8	10
Investment Approach - Primary	Bottom-up	Top-Down	Top-Down	Combination
Investment Approach - Secondary	Top-down	Hybrid	Hybrid	Hybrid

The source of data and figures provided is generally the respective managers. Certain data represents AndCo's view and could differ from the manager's interpretation. The most current AUM of each strategy may therefore differ from what is currently stated.

	Loomis Sayles Global Bond Instl	PIMCO Global Bond Opps (Unhedged) Instl	PIMCO Global Bond Opps (USD-Hdg) Instl	Templeton Global Bond R6
<b>Team Information</b>				
Decision Making Structure	PM-Led	Team	Team	PM-Led
Number of Decision Makers	4	4	4	2
Names of Decision Makers	4 decision makers	4 decision makers	4 decision makers	M. Hasenstab; C. Ho
Date Began Managing Strategy	2000-2011	2001-2008	2001-2008	2001, 2019
Date Began with Firm	1994-2001	2001-2006	2001-2006	1995, 2005
Number of Products Managed by Team	4	1	1	7
Number of Investment Analysts	4	133	133	14
Investment Analyst Team Structure	Combination	Sector/Industry Specialists	Sector/Industry Specialists	Country
<b>Portfolio Construction Information</b>				
Broad Style Category	Global	Global	Global	Global
Style Bias	Macro	Relative Value	Relative Value	Macro
Duration Constraint Type	Relative	Relative	Relative	N/A
Duration Constraint (%)	+/- 2 years	+/- 2 years	+/- 2 years	N/A
Country/Region Constraint Type	Relative	N/A	N/A	N/A
Typical Country/Region Constraints (%)	+/- 15%	N/A	N/A	N/A
Maximum Emerging Market Exposure (%)	25	20	20	N/A
Sector Constraint Type	Absolute	N/A	N/A	Absolute
Sector Constraints (%)	Various by sector	N/A	N/A	Max. 25% industry
Typical Sector/s Overweight	Spread Sectors	Corporate, Mortgage, EM credit	Corporate, Mortgage, EM credit	Currency, EM
Typical Sector/s Underweight	Government bonds	Developed market Treasury bonds	Developed market Treasury bonds	N/A
Typical Number of Holdings	200+	300-600	300-600	Varies; Diversified
Average Full Position Size (%)	1	1.0-2	1.0-2	4 - 8% of country/currency exposure
Maximum Position Size (%)	0.5-1	5	5	20% of country/currency exposure
Annual Typical Asset Turnover (%)	70-120	40- 60	40- 60	25 - 35
Annual Typical Name Turnover (%)	N/A	N/A	N/A	25 - 35
Max <BBB Credit (%)	20	10	10	25
Maximum Cash Allocation (%)	5	N/A	N/A	N/A
Currency Hedged?	No	No	Yes	No
Derivatives Used?	Yes	Yes	Yes	Yes

The source of data and figures provided is generally the respective managers. Certain data represents AndCo's view and could differ from the manager's interpretation. The most current AUM of each strategy may therefore differ from what is currently stated.

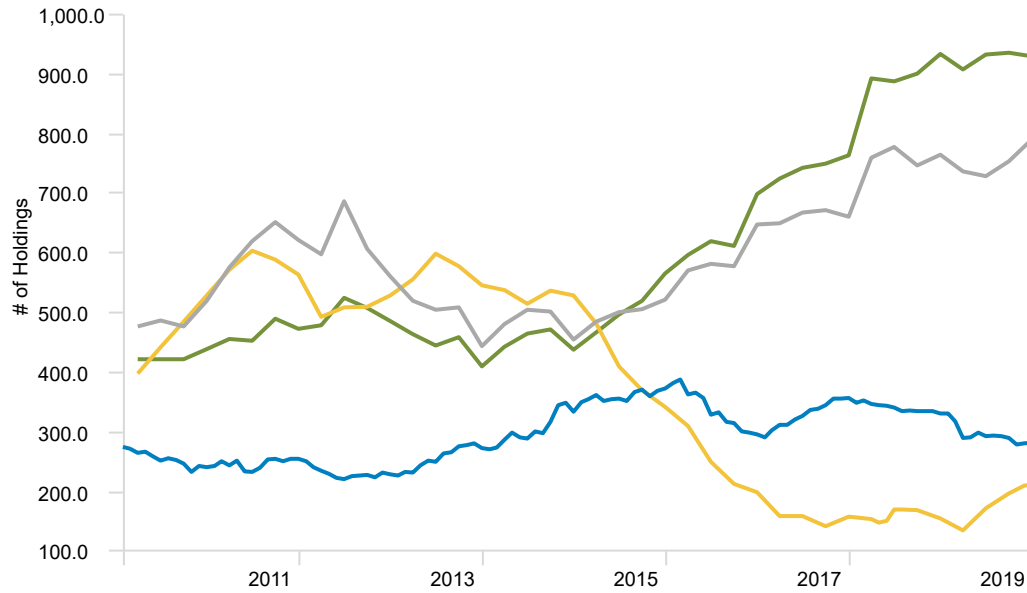
As of 12/31/2019

	Loomis Sayles Global Bond Instl	PIMCO Global Bond Opps (Unhedged) Instl	PIMCO Global Bond Opps (USD-Hdg) Instl	Templeton Global Total Return R6
<b>COMPOSITION</b>				
# of Holdings	345	791	930	202
% Asset in Top 10 Holdings	13.63	7.00	8.19	42.02
Asset Alloc Cash %	1.42	-29.26	-47.37	14.95
Asset Alloc Equity %	0.03	-0.39	0.06	0.00
Asset Alloc Bond %	96.83	110.94	121.37	86.38
Asset Alloc Other %	1.72	18.71	25.94	-1.33
<b>STATISTICS</b>				
Average Eff Duration	7.21	4.98	5.15	1.83
Average Eff Maturity	8.84	6.74	7.41	2.12
Average Coupon	3.30	3.10	3.36	6.35
Yield to Maturity	3.17	N/A	N/A	N/A
Average Credit Quality	BBB	N/A	N/A	BB
<b>SECTOR ALLOCATION</b>				
Government %	36.08	32.66	20.65	86.38
Government Related %	9.16	-20.87	3.38	0.00
Municipal Taxable %	0.00	0.26	0.17	0.00
Municipal Tax-Exempt %	0.00	0.00	0.00	0.00
Bank Loan %	0.00	0.68	0.29	0.00
Corporate Bond %	33.07	27.67	24.56	0.00
Agency Mortgage-Backed %	8.03	47.67	46.91	0.00
Non-Ag. Res. Mortgage-Backed %	1.68	8.25	4.47	0.00
Commercial Mortgage-Backed %	0.37	0.66	0.04	0.00
Asset-Backed %	7.47	10.96	14.53	0.00
Cash & Equivalents %	1.42	-31.21	-46.44	14.95

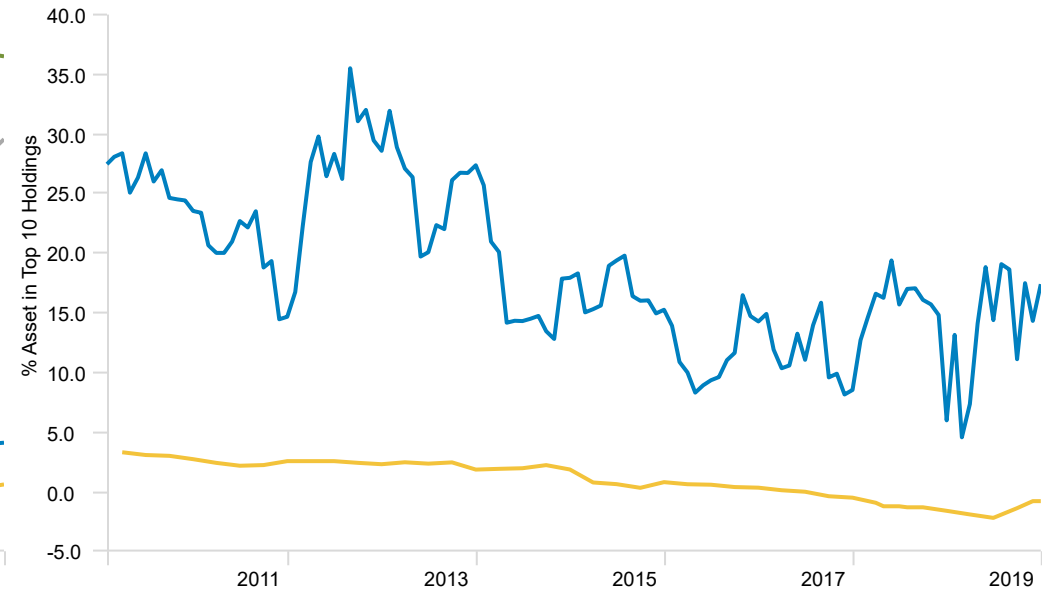
	Loomis Sayles Global Bond Instl	PIMCO Global Bond Opps (Unhedged) Instl	PIMCO Global Bond Opps (USD-Hdg) Instl	Templeton Global Total Return R6
<b>MATURITY DISTRIBUTION</b>				
Maturity 1-3 Yr %	6.01	-28.64	-33.14	30.75
Maturity 3-5 Yr %	11.29	-0.93	4.69	37.03
Maturity 5-7 Yr %	13.93	41.37	28.36	10.95
Maturity 7-10 Yr %	22.59	22.44	20.77	1.00
Maturity 10-15 Yr %	12.14	23.37	16.36	0.77
Maturity 15-20 Yr %	3.82	3.50	3.78	0.00
Maturity 20-30 Yr %	16.56	35.28	31.18	0.00
Maturity 30+ Yr %	6.76	21.77	23.89	0.00
<b>QUALITY DISTRIBUTION</b>				
Credit Qual AAA %	20.47	N/A	N/A	30.92
Credit Qual AA %	7.06	N/A	N/A	5.15
Credit Qual A %	34.43	N/A	N/A	4.40
Credit Qual BBB %	30.66	N/A	N/A	37.57
Credit Qual BB %	6.97	N/A	N/A	9.55
Credit Qual B %	0.29	N/A	N/A	4.99
Credit Qual Below B %	0.00	N/A	N/A	2.75
Credit Qual Not Rated %	0.12	N/A	N/A	4.67



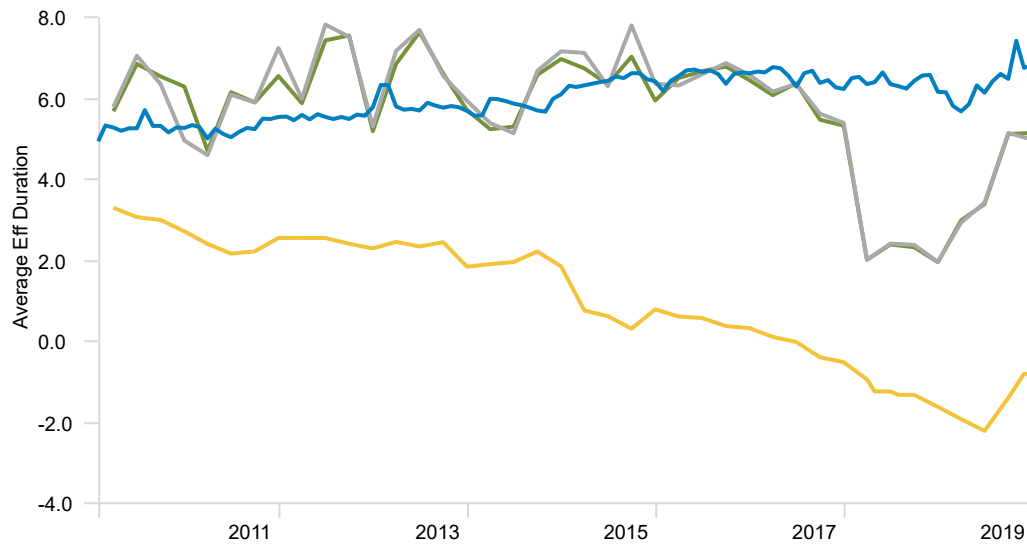
Historical Number of Holdings



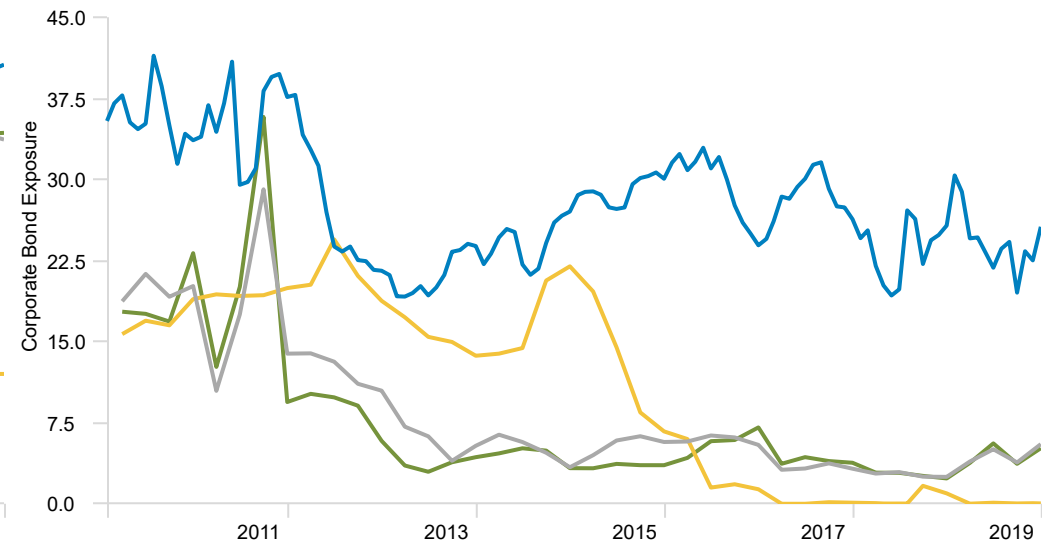
Historical Percentage of Assets in Top 10 Holdings



Historical Average Effective Duration



Historical Corporate Bond Exposure



— Loomis Sayles Global Bond Instl

— PIMCO Global Bond Opps (Unhedged) Instl

— PIMCO Global Bond Opps (USD-Hdg) Instl

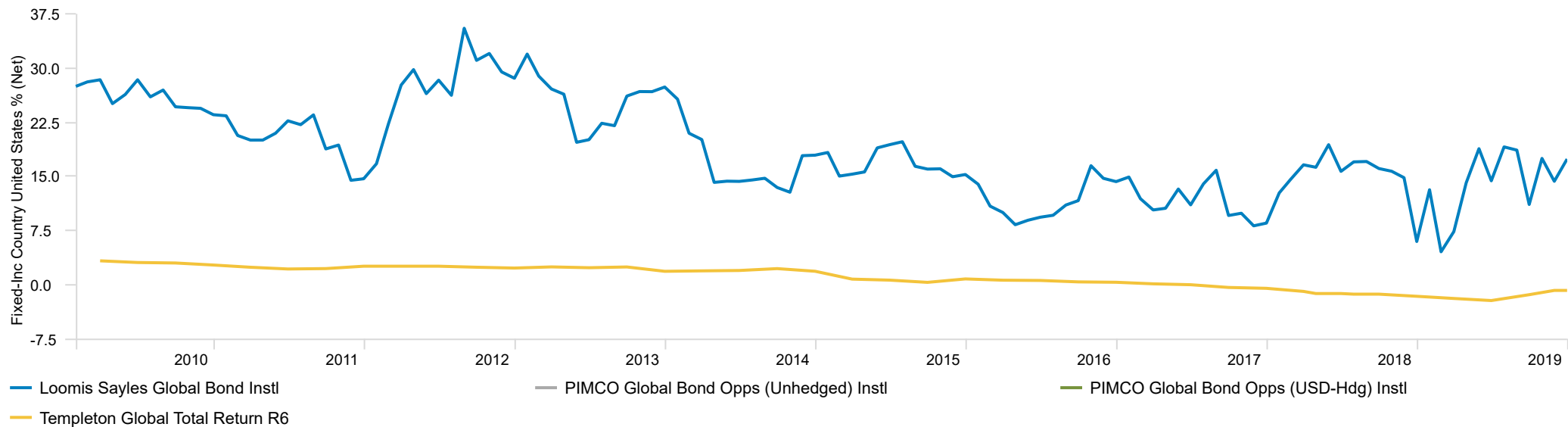
— Templeton Global Total Return R6

## Current Portfolio Region Allocation

Portfolio Date: 12/31/2019

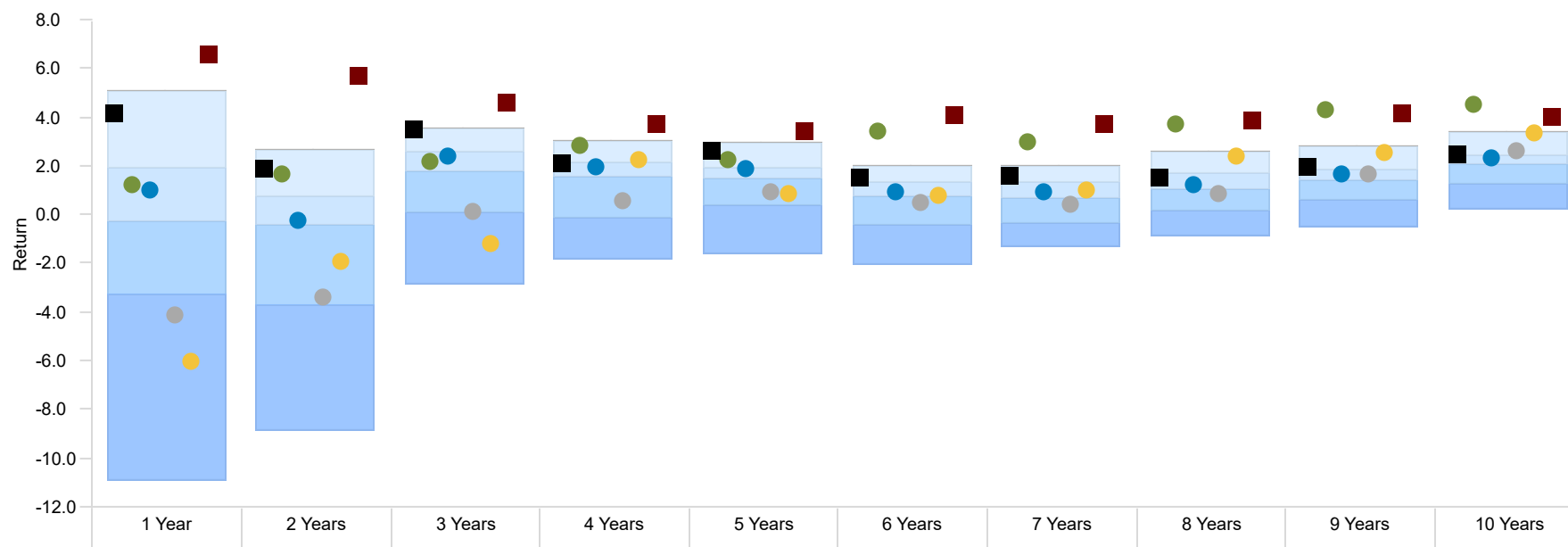
	Loomis Sayles Global Bond Instl	PIMCO Global Bond Opps (Unhedged) Instl	PIMCO Global Bond Opps (USD-Hdg) Instl	Templeton Global Total Return R6
Fixed-Inc Country United States %	39.58	46.95	48.45	23.65
North America %	42.92	50.01	51.39	23.65
Latin America %	5.24	1.46	1.85	37.41
United Kingdom %	9.00	11.43	11.26	0.00
Europe dev %	21.89	20.36	18.63	5.23
Europe emrg %	1.23	0.19	0.09	0.00
Japan %	11.21	3.26	4.12	2.12
Australasia %	1.27	6.52	6.88	0.00
Asia dev %	0.52	0.32	0.23	5.58
Asia emrg %	5.72	2.40	2.40	22.72
Africa/Middle East %	1.00	4.05	3.14	3.30
Developed %	87.47	95.79	95.59	36.58
Emerging %	12.53	4.21	4.41	63.42

## Historical US Portfolio Exposure



# Quantitative Review

Peer Group (5-95%): Open End Funds - U.S. - World Bond



● Loomis Sayles Global Bond Instl

● PIMCO Global Bond Opps (Unhedged) Instl

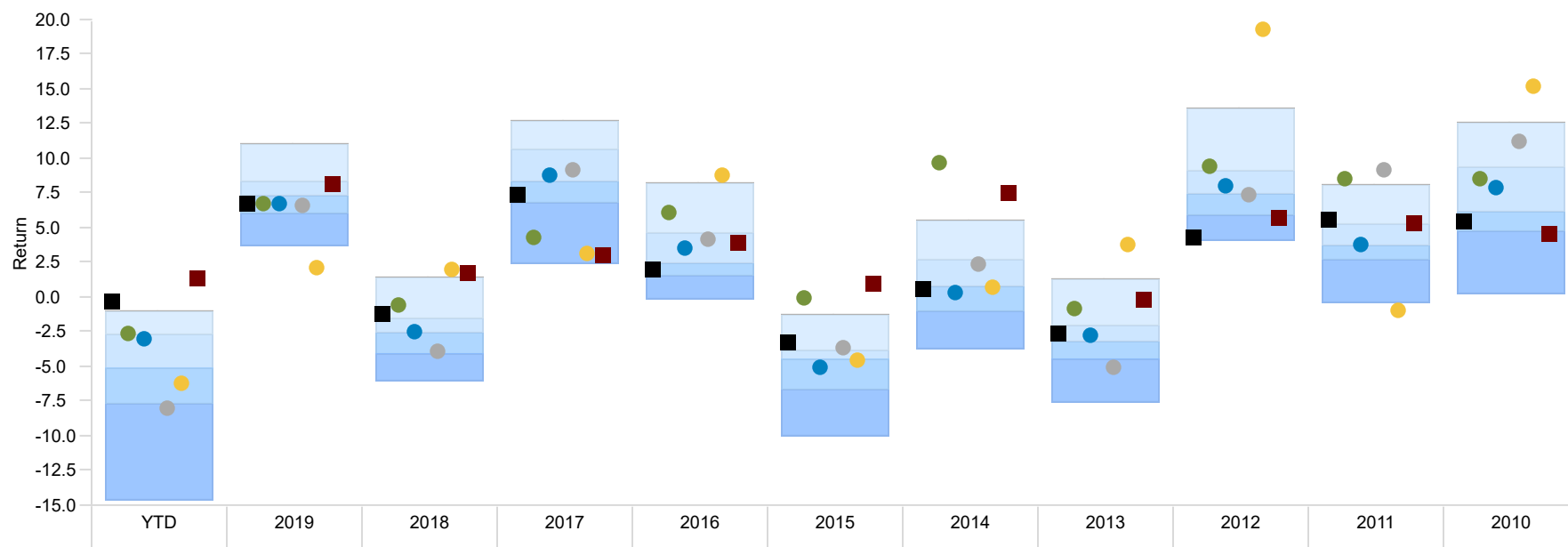
● PIMCO Global Bond Opps (USD-Hdg) Instl

● Templeton Global Total Return R6

■ BBgBarc Global Aggregate TR USD

■ BBgBarc Global Aggregate TR Hdg USD

Peer Group (5-95%): Open End Funds - U.S. - World Bond



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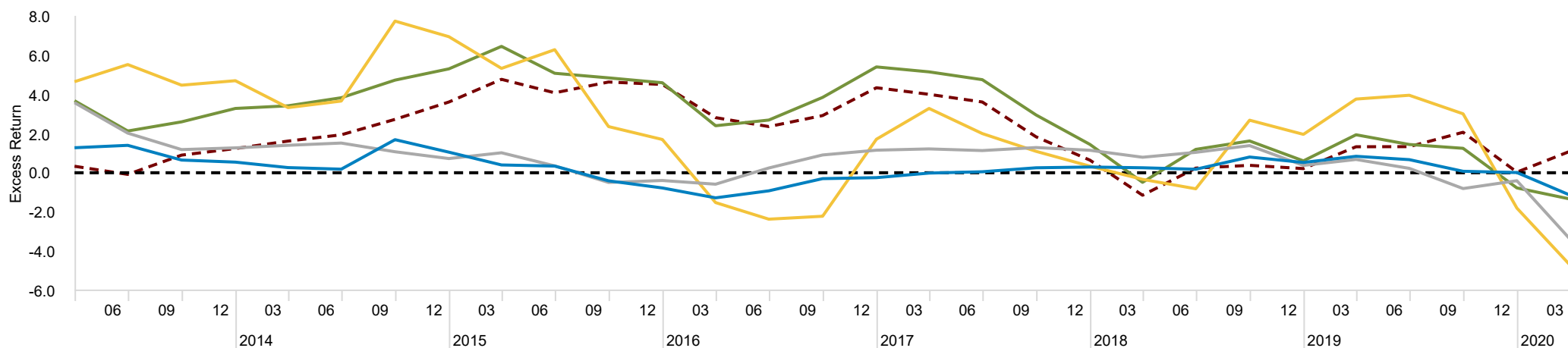
■ BBgBarc Global Aggregate TR USD

■ BBgBarc Global Aggregate TR Hdg USD

## Rolling Excess Returns

Time Period: 4/1/2010 to 3/31/2020

Rolling Window: 3 Years 3 Months shift Calculation Benchmark: BBgBarc Global Aggregate TR USD

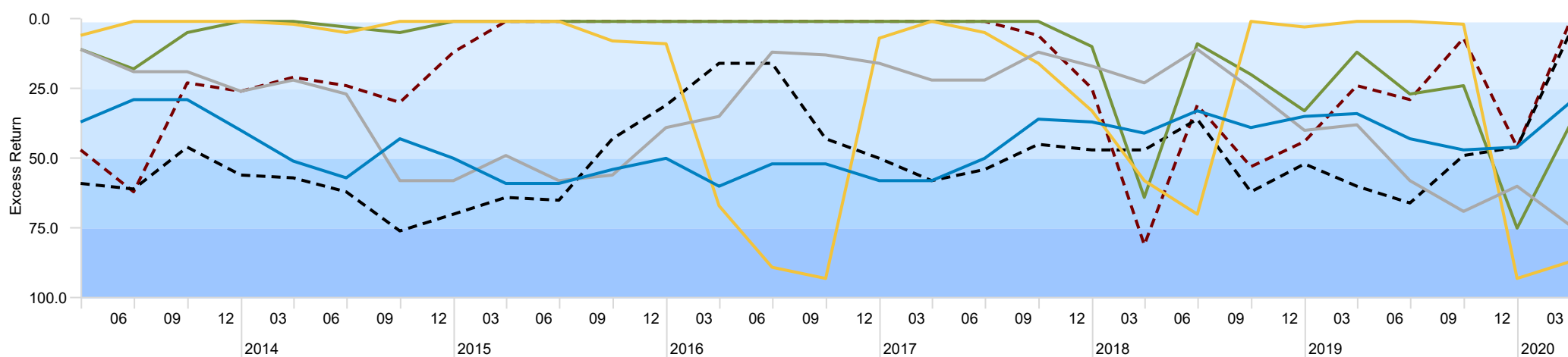


## Rolling Excess Return Rankings

Time Period: 4/1/2010 to 3/31/2020

Rolling Window: 3 Years 3 Months shift Calculation Benchmark: BBgBarc Global Aggregate TR USD

1st to 25th Percentile 26th to Median 51st to 75th Percentile 76th to 100th Percentile



Loomis Sayles Global Bond Instl  
Templeton Global Total Return R6

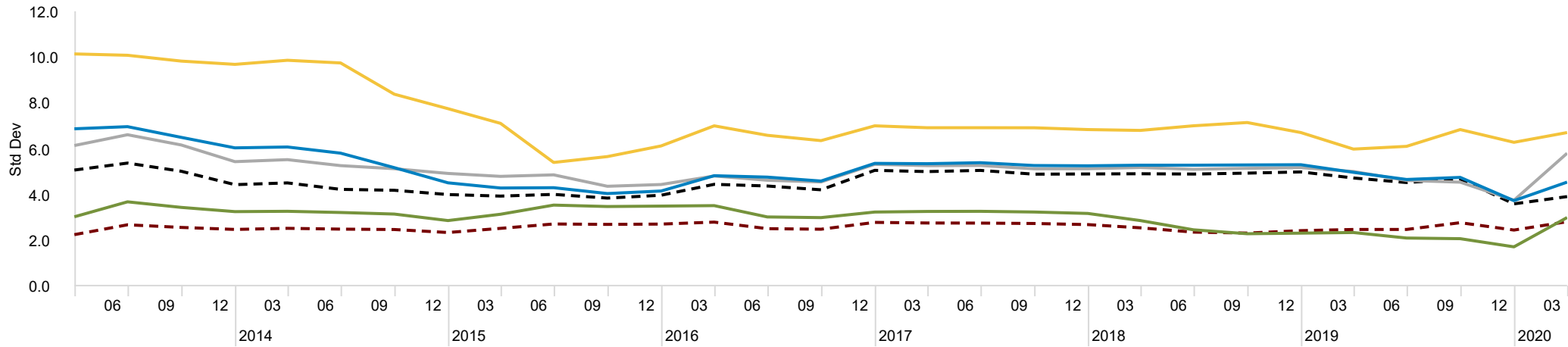
PIMCO Global Bond Opps (Unhedged) Instl  
BBgBarc Global Aggregate TR USD

PIMCO Global Bond Opps (USD-Hdg) Instl  
BBgBarc Global Aggregate TR Hdg USD

**Rolling Standard Deviation**

Time Period: 4/1/2010 to 3/31/2020

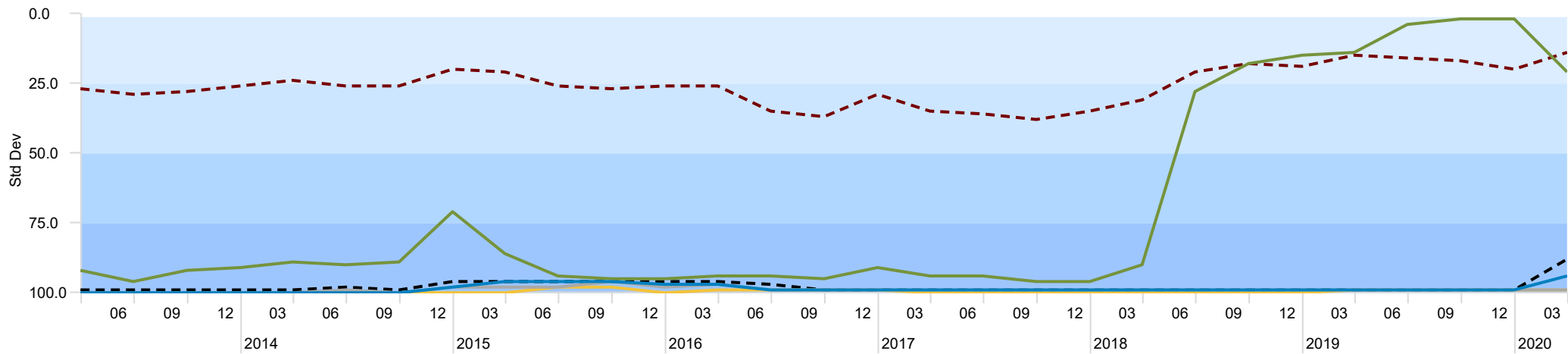
Rolling Window: 3 Years 3 Months shift Calculation Benchmark: BBgBarc Global Aggregate TR USD

**Rolling Standard Deviation Rankings**

Time Period: 4/1/2010 to 3/31/2020

Rolling Window: 3 Years 3 Months shift Calculation Benchmark: BBgBarc Global Aggregate TR USD

1st to 25th Percentile 26th to Median 51st to 75th Percentile 76th to 100th Percentile



Loomis Sayles Global Bond Instl  
 Templeton Global Total Return R6

PIMCO Global Bond Opps (Unhedged) Instl  
 BBgBarc Global Aggregate TR USD

PIMCO Global Bond Opps (USD-Hdg) Instl  
 BBgBarc Global Aggregate TR Hdg USD

**Correlation Matrix**

Time Period: 4/1/2010 to 3/31/2020

	1	2	3	4	5	6
1 Loomis Sayles Global Bond Instl	1.00					
2 PIMCO Global Bond Opps (Unhedged) Instl	0.88	1.00				
3 PIMCO Global Bond Opps (USD-Hdg) Instl	0.51	0.70	1.00			
4 Templeton Global Total Return R6	0.55	0.41	0.23	1.00		
5 BBgBarc Global Aggregate TR USD	0.93	0.88	0.52	0.31	1.00	
6 BBgBarc Global Aggregate TR Hdg USD	0.48	0.53	0.82	-0.03	0.61	1.00

**Correlation Matrix (Excess Returns vs. BBgBarc Global Aggregate TR USD)**

Time Period: 4/1/2010 to 3/31/2020

Calculation Benchmark: BBgBarc Global Aggregate TR USD

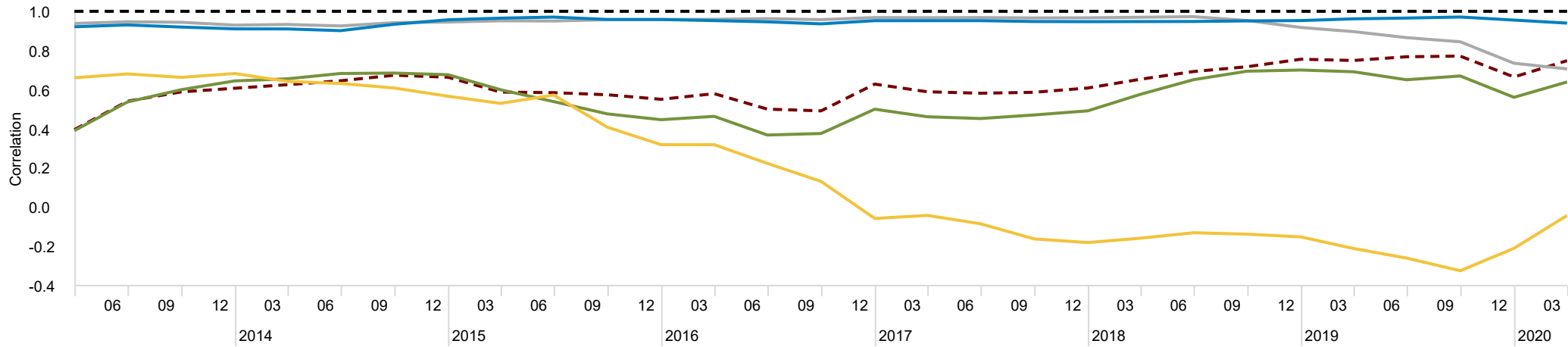
		1	2	3	4	5	6
1 Loomis Sayles Global Bond Instl	BBgBarc Global Aggregate TR USD	1.00					
2 PIMCO Global Bond Opps (Unhedged) Instl	BBgBarc Global Aggregate TR USD	0.36	1.00				
3 PIMCO Global Bond Opps (USD-Hdg) Instl	BBgBarc Global Aggregate TR USD	-0.14	0.31	1.00			
4 Templeton Global Total Return R6	BBgBarc Global Aggregate TR USD	0.62	0.24	0.26	1.00		
5 BBgBarc Global Aggregate TR USD	BBgBarc Global Aggregate TR USD					1.00	
6 BBgBarc Global Aggregate TR Hdg USD	BBgBarc Global Aggregate TR USD	-0.39	-0.10	0.89	0.07		1.00



**Rolling Correlation**

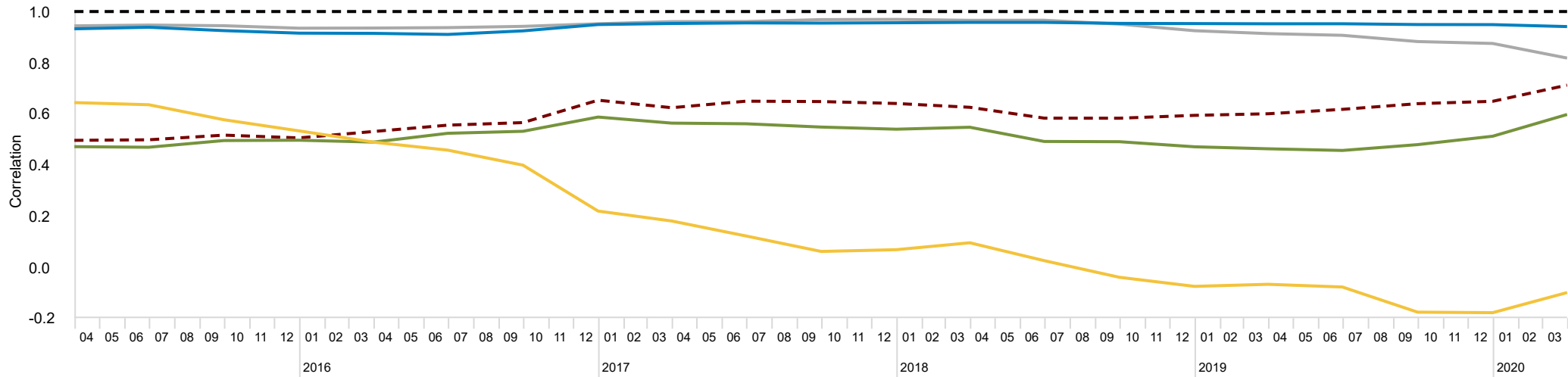
Time Period: 4/1/2010 to 3/31/2020

Rolling Window: 3 Years 3 Months shift

**Rolling Correlation**

Time Period: 4/1/2010 to 3/31/2020

Rolling Window: 5 Years 3 Months shift



— Loomis Sayles Global Bond Instl  
 — Templeton Global Total Return R6

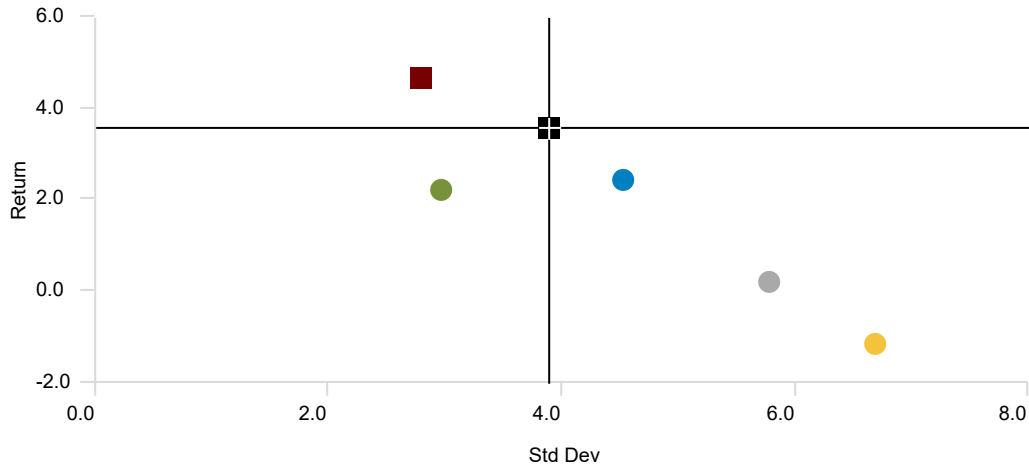
— PIMCO Global Bond Opps (Unhedged) Instl  
 - - BBgBarc Global Aggregate TR USD

— PIMCO Global Bond Opps (USD-Hdg) Instl  
 - - BBgBarc Global Aggregate TR Hdg USD

**Risk-Reward: 3-Year**

Time Period: 4/1/2017 to 3/31/2020

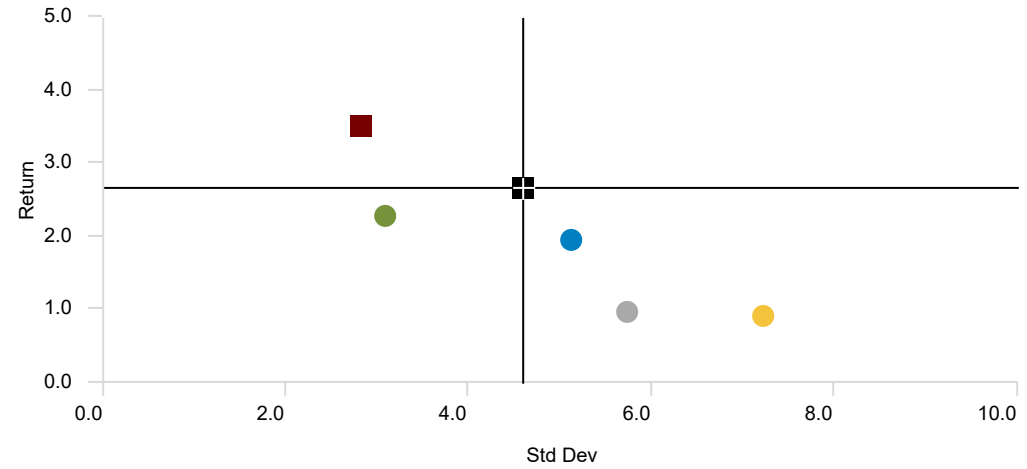
Calculation Benchmark: BBgBarc Global Aggregate TR USD



**Risk-Reward: 5-Year**

Time Period: 4/1/2015 to 3/31/2020

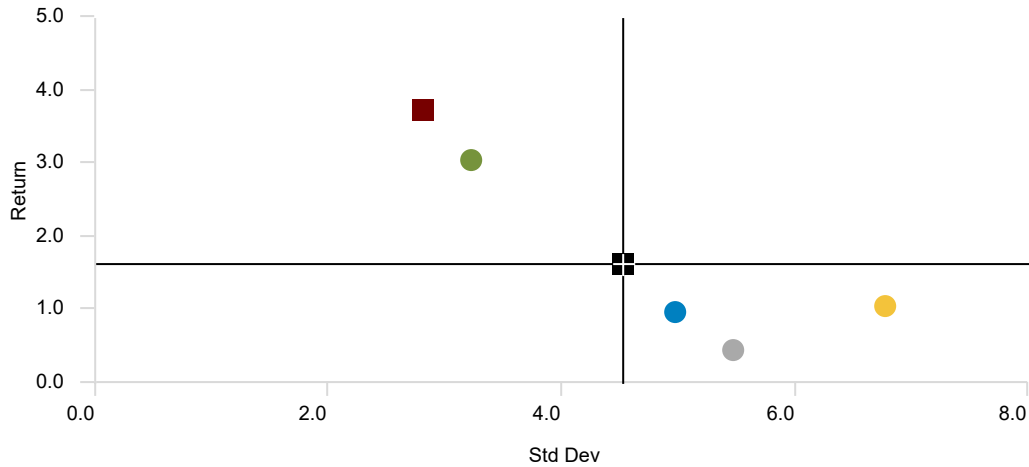
Calculation Benchmark: BBgBarc Global Aggregate TR USD



**Risk-Reward: 7-Year**

Time Period: 4/1/2013 to 3/31/2020

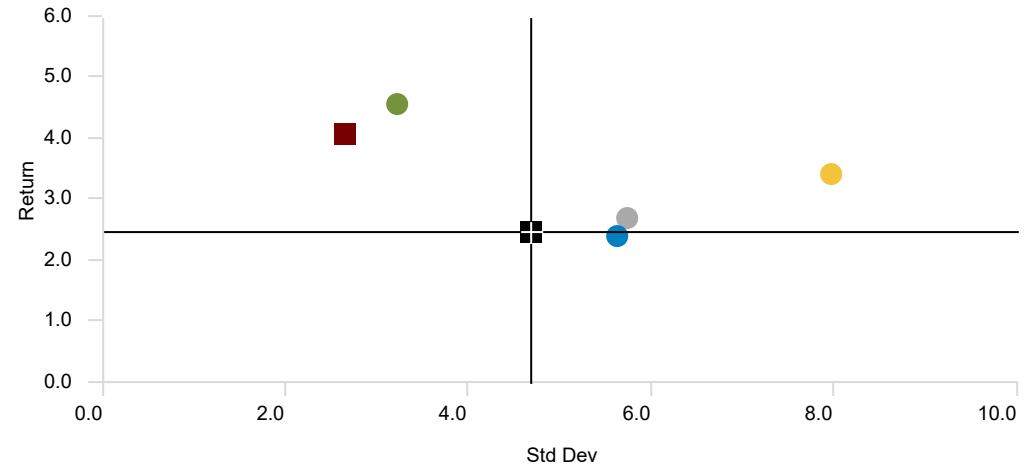
Calculation Benchmark: BBgBarc Global Aggregate TR USD



**Risk-Reward: 10-Year**

Time Period: 4/1/2010 to 3/31/2020

Calculation Benchmark: BBgBarc Global Aggregate TR USD



● Loomis Sayles Global Bond Instl

● PIMCO Global Bond Opps (Unhedged) Instl

● PIMCO Global Bond Opps (USD-Hdg) Instl

● Templeton Global Total Return R6

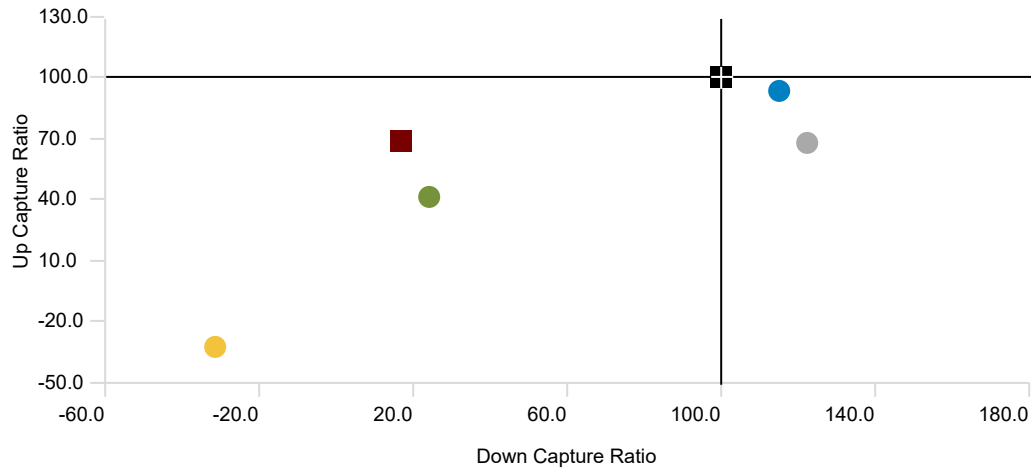
■ BBgBarc Global Aggregate TR USD

■ BBgBarc Global Aggregate TR Hdg USD

**Up and Down Market Capture: 3-Year**

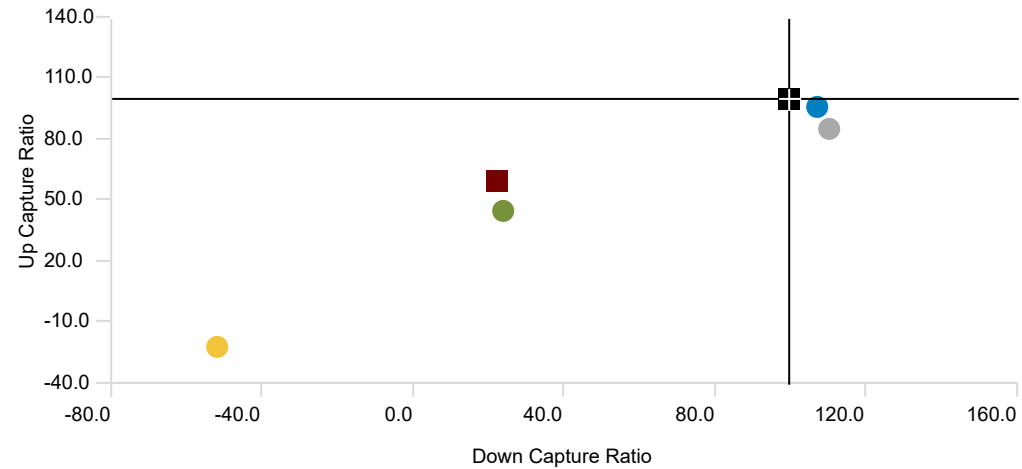
Time Period: 4/1/2017 to 3/31/2020

Calculation Benchmark: BBgBarc Global Aggregate TR USD

**Up and Down Market Capture: 5-Year**

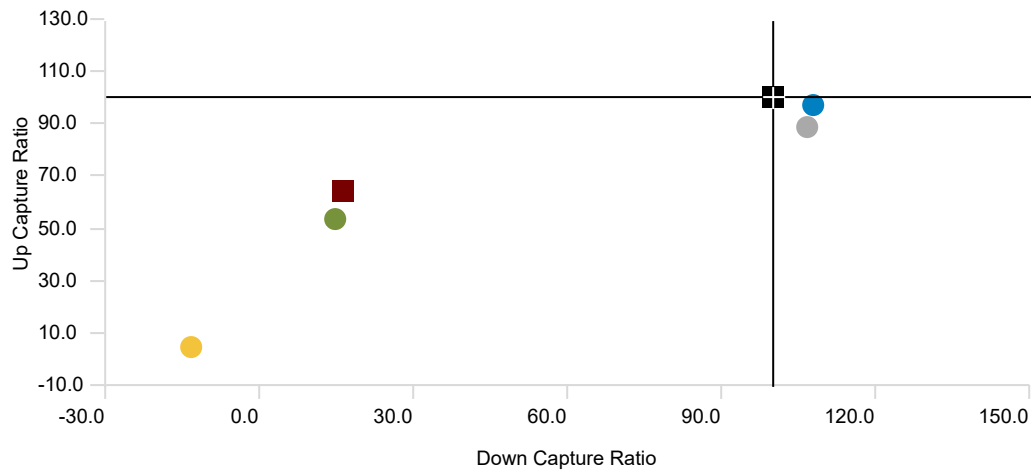
Time Period: 4/1/2015 to 3/31/2020

Calculation Benchmark: BBgBarc Global Aggregate TR USD

**Up and Down Market Capture: 7-Year**

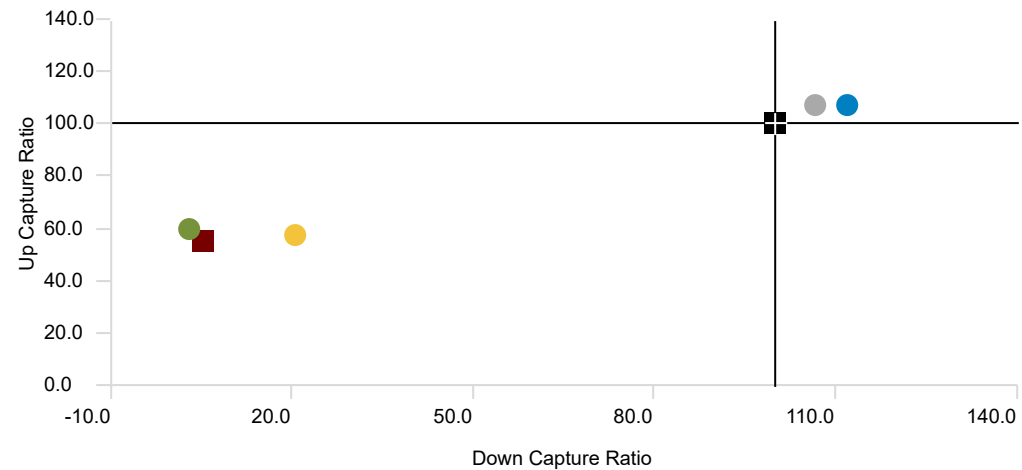
Time Period: 4/1/2013 to 3/31/2020

Calculation Benchmark: BBgBarc Global Aggregate TR USD

**Up and Down Market Capture: 10-Year**

Time Period: 4/1/2010 to 3/31/2020

Calculation Benchmark: BBgBarc Global Aggregate TR USD



● Loomis Sayles Global Bond Instl

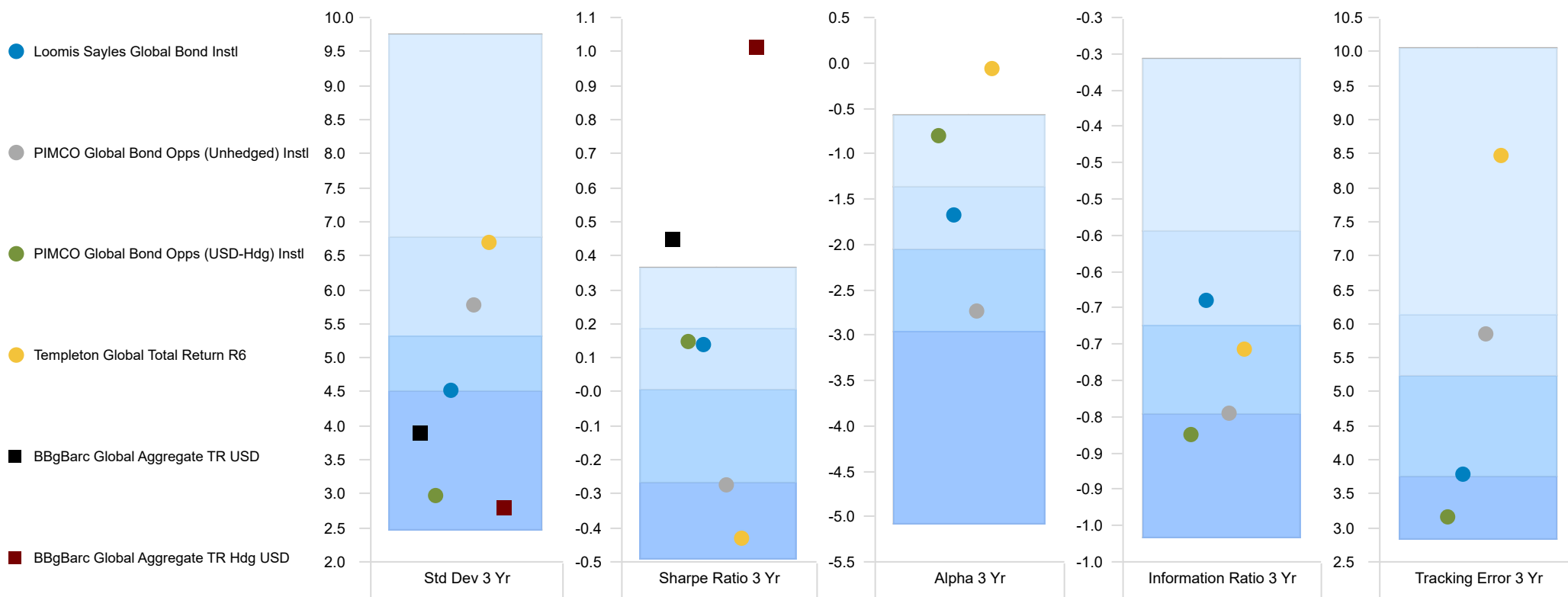
● PIMCO Global Bond Opps (Unhedged) Instl

● PIMCO Global Bond Opps (USD-Hdg) Instl

● Templeton Global Total Return R6

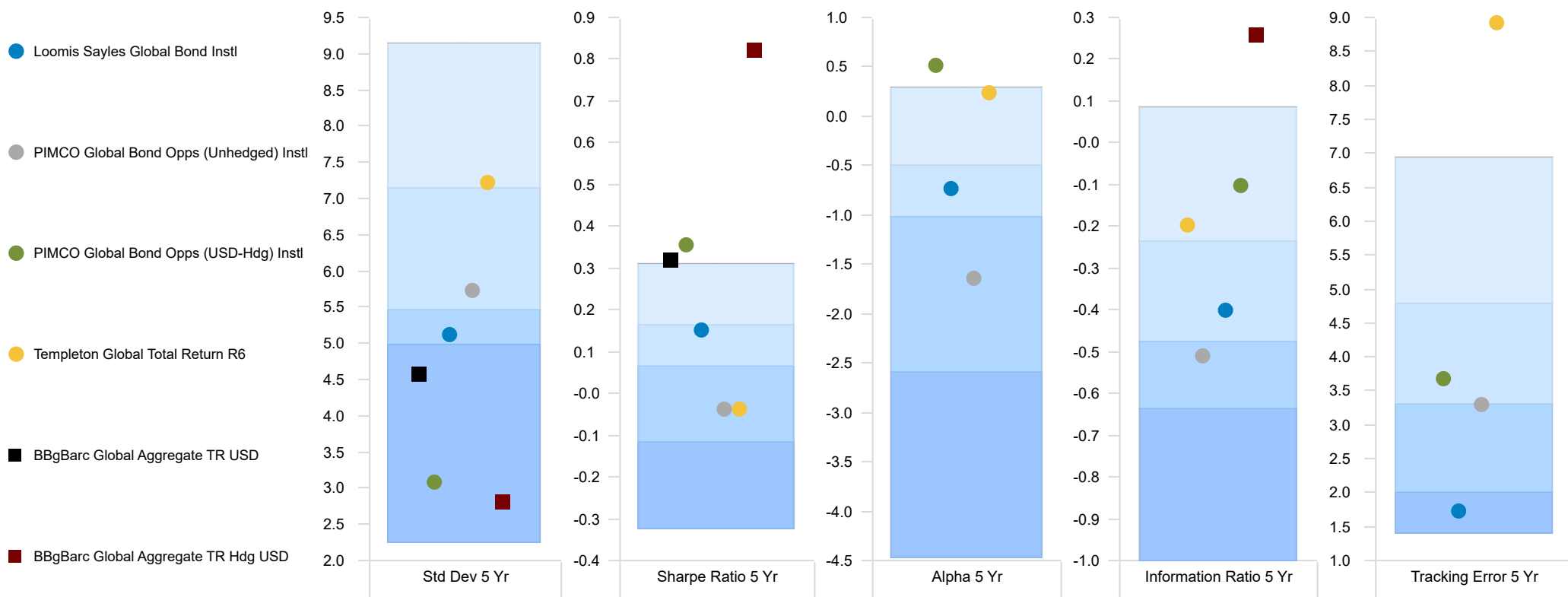
■ BBgBarc Global Aggregate TR USD

■ BBgBarc Global Aggregate TR Hdg USD



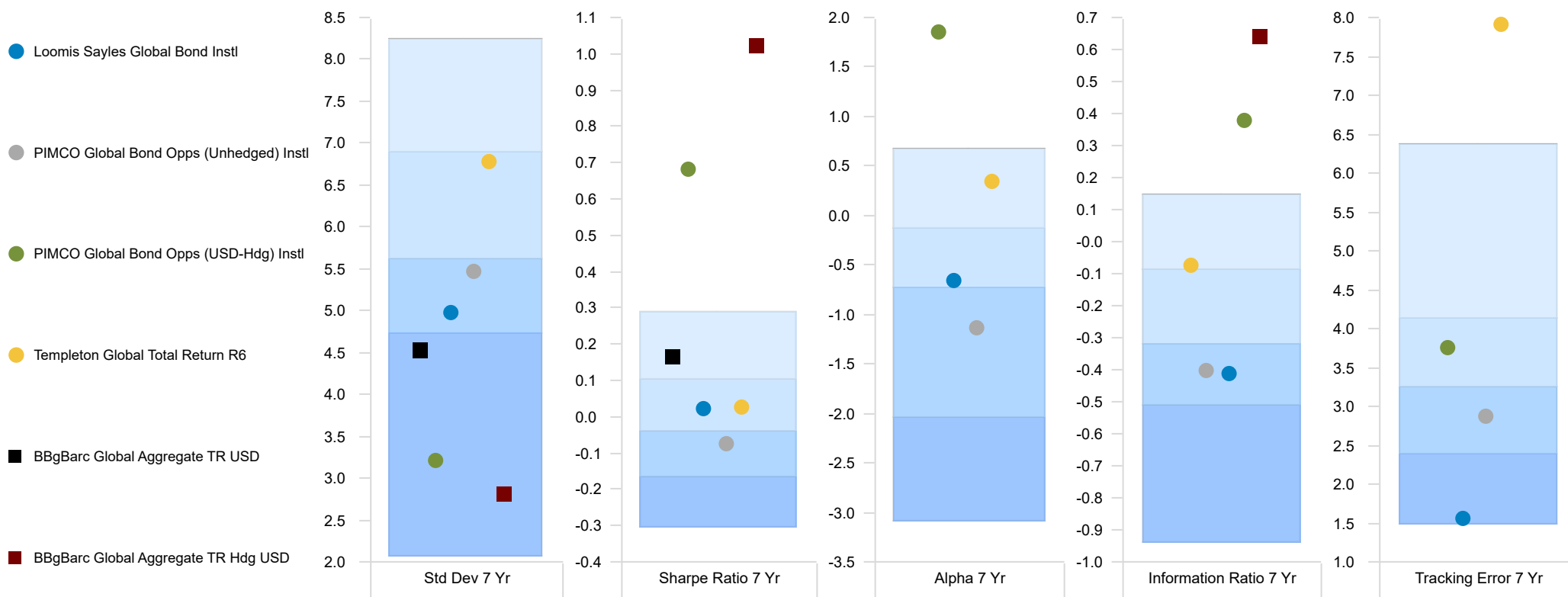
Time Period: 4/1/2017 to 3/31/2020

	Std Dev	Rank	Sharpe Ratio	Rank	Alpha	Rank	Information Ratio	Rank	Tracking Error	Rank
Loomis Sayles Global Bond Instl	4.53	67	0.14	32	-1.25	35	-0.72	63	1.58	83
PIMCO Global Bond Opps (Unhedged) Instl	5.79	44	-0.28	76	-3.33	74	-0.83	78	4.08	38
PIMCO Global Bond Opps (USD-Hdg) Instl	2.98	92	0.15	31	-0.39	12	-0.44	27	3.02	59
Templeton Global Total Return R6	6.70	26	-0.44	89	-2.56	64	-0.60	43	7.84	7
BBGBarc Global Aggregate TR USD	3.90	89	0.46	1	0.00	7			0.00	100
BBGBarc Global Aggregate TR Hdg USD	2.80	92	1.03	1	1.88	1	0.42	1	2.58	68



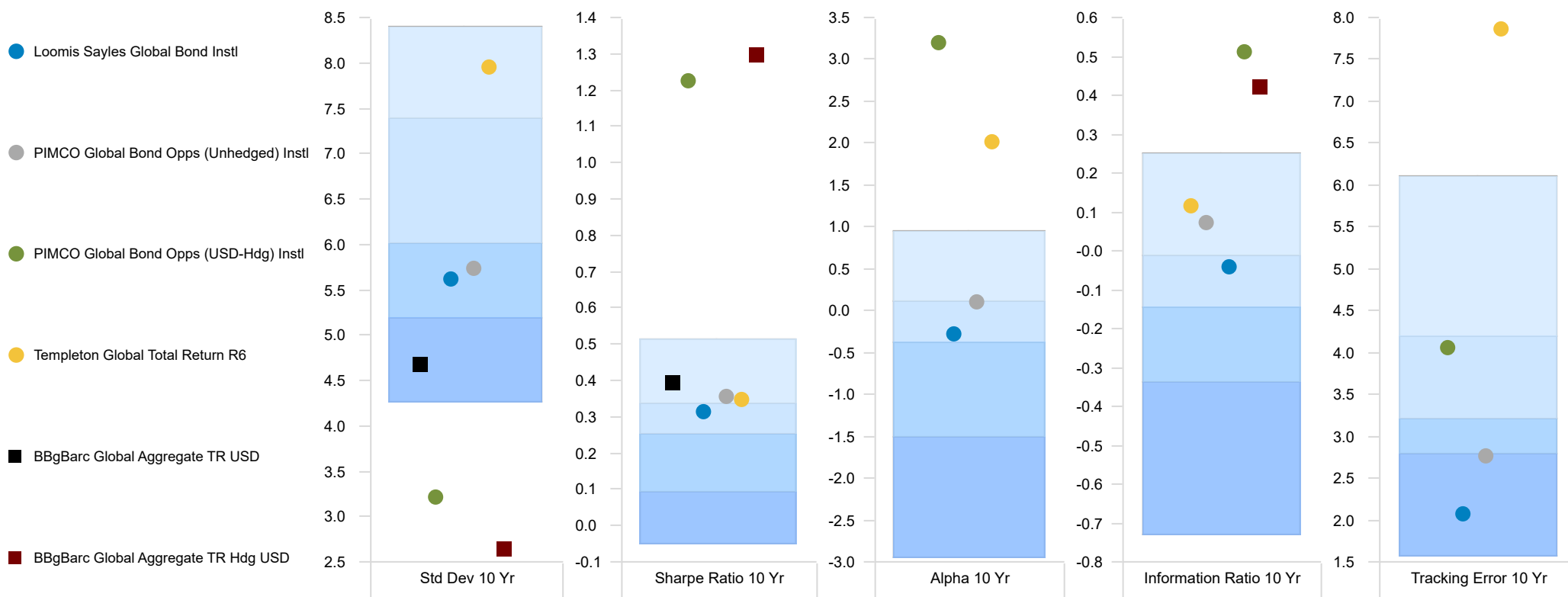
Time Period: 4/1/2015 to 3/31/2020

	Std Dev	Rank	Sharpe Ratio	Rank	Alpha	Rank	Information Ratio	Rank	Tracking Error	Rank
Loomis Sayles Global Bond Instl	5.13	61	0.15	27	-0.73	36	-0.40	42	1.74	81
PIMCO Global Bond Opps (Unhedged) Instl	5.74	46	-0.04	61	-1.63	62	-0.51	54	3.30	50
PIMCO Global Bond Opps (USD-Hdg) Instl	3.09	94	0.36	3	0.52	3	-0.10	12	3.69	42
Templeton Global Total Return R6	7.23	24	-0.04	62	0.24	8	-0.19	20	8.93	1
BBGBarc Global Aggregate TR USD	4.59	87	0.32	4	0.00	14	0.26	1	0.00	100
BBGBarc Global Aggregate TR Hdg USD	2.82	94	0.82	1	1.64	1	0.26	1	3.25	50



Time Period: 4/1/2013 to 3/31/2020

	Std Dev	Rank	Sharpe Ratio	Rank	Alpha	Rank	Information Ratio	Rank	Tracking Error	Rank
Loomis Sayles Global Bond Instl	4.98	61	0.02	40	-0.65	45	-0.41	61	1.57	86
PIMCO Global Bond Opps (Unhedged) Instl	5.48	56	-0.07	56	-1.13	56	-0.40	59	2.89	54
PIMCO Global Bond Opps (USD-Hdg) Instl	3.22	93	0.68	1	1.86	1	0.38	1	3.76	34
Templeton Global Total Return R6	6.78	27	0.03	40	0.35	13	-0.07	25	7.93	1
BBGBarc Global Aggregate TR USD	4.53	79	0.17	17	0.00	23			0.00	100
BBGBarc Global Aggregate TR Hdg USD	2.81	94	1.02	1	2.49	1	0.64	1	3.29	47

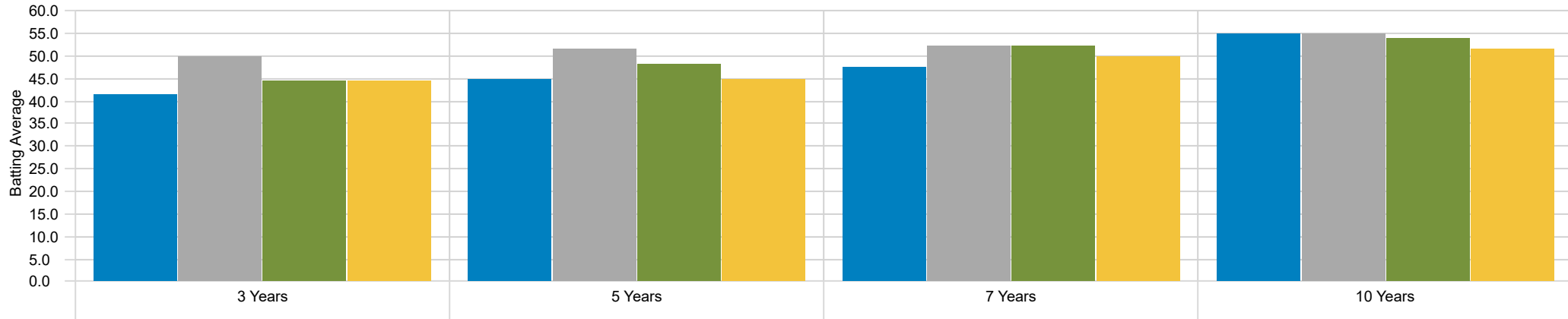


Time Period: 4/1/2010 to 3/31/2020

	Std Dev	Rank	Sharpe Ratio	Rank	Alpha	Rank	Information Ratio	Rank	Tracking Error	Rank
Loomis Sayles Global Bond Instl	5.62	57	0.32	31	-0.27	45	-0.04	31	2.08	84
PIMCO Global Bond Opps (Unhedged) Instl	5.74	55	0.36	20	0.10	27	0.08	16	2.77	78
PIMCO Global Bond Opps (USD-Hdg) Instl	3.21	99	1.23	1	3.21	1	0.51	1	4.08	26
Templeton Global Total Return R6	7.97	10	0.35	22	2.02	1	0.12	13	7.88	1
BBgBarc Global Aggregate TR USD	4.69	86	0.40	14	0.00	31	0.42	4	0.00	100
BBgBarc Global Aggregate TR Hdg USD	2.65	99	1.30	1	2.75	1	0.42	4	3.74	39

## Batting Average

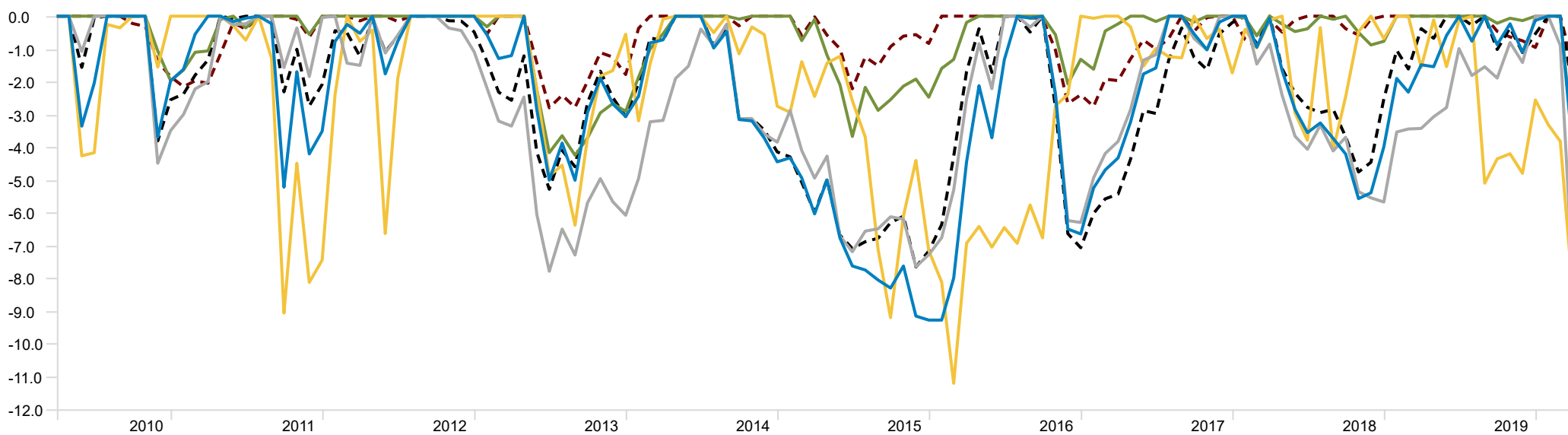
Source Data: Monthly Return Calculation Benchmark: BBgBarc Global Aggregate TR USD



## Drawdown

Time Period: 4/1/2010 to 3/31/2020

Source Data: Monthly Return



— Loomis Sayles Global Bond Instl

— PIMCO Global Bond Opps (Unhedged) Instl

— PIMCO Global Bond Opps (USD-Hdg) Instl

— Templeton Global Total Return R6

- - BBgBarc Global Aggregate TR USD

- - BBgBarc Global Aggregate TR Hdg USD



**MPT Statistics: 3-Year**

Time Period: 4/1/2017 to 3/31/2020 Calculation Benchmark: BBgBarc Global Aggregate TR USD

	Loomis Sayles Global Bond Instl	PIMCO Global Bond Opps (Unhedged) Instl	PIMCO Global Bond Opps (USD-Hdg) Instl	Templeton Global Total Return R6	BBgBarc Global Aggregate TR USD	BBgBarc Global Aggregate TR Hdg USD
Return	2.41	0.16	2.21	-1.16	3.55	4.65
Excess Return	-1.14	-3.39	-1.34	-4.71	0.00	1.10
Std Dev	4.53	5.79	2.98	6.70	3.90	2.80
Beta	1.09	1.05	0.48	-0.07	1.00	0.53
Tracking Error	1.58	4.08	3.02	7.84	0.00	2.58
Sharpe Ratio	0.14	-0.28	0.15	-0.44	0.46	1.03
Alpha	-1.25	-3.33	-0.39	-2.56	0.00	1.88
Information Ratio	-0.72	-0.83	-0.44	-0.60		0.42
Batting Average	41.67	50.00	44.44	44.44	100.00	61.11
Up Capture Ratio	93.55	68.49	41.72	-31.89	100.00	68.53
Down Capture Ratio	114.91	122.32	24.44	-31.19	100.00	16.93

**MPT Statistics: 5-Year**

Time Period: 4/1/2015 to 3/31/2020 Calculation Benchmark: BBgBarc Global Aggregate TR USD

	Loomis Sayles Global Bond Instl	PIMCO Global Bond Opps (Unhedged) Instl	PIMCO Global Bond Opps (USD-Hdg) Instl	Templeton Global Total Return R6	BBgBarc Global Aggregate TR USD	BBgBarc Global Aggregate TR Hdg USD
Return	1.94	0.96	2.27	0.90	2.64	3.49
Excess Return	-0.69	-1.68	-0.37	-1.74	0.00	0.85
Std Dev	5.13	5.74	3.09	7.23	4.59	2.82
Beta	1.05	1.02	0.40	-0.16	1.00	0.43
Tracking Error	1.74	3.30	3.69	8.93	0.00	3.25
Sharpe Ratio	0.15	-0.04	0.36	-0.04	0.32	0.82
Alpha	-0.73	-1.63	0.52	0.24	0.00	1.64
Information Ratio	-0.40	-0.51	-0.10	-0.19		0.26
Batting Average	45.00	51.67	48.33	45.00	100.00	56.67
Up Capture Ratio	95.94	85.32	45.02	-22.21	100.00	59.13
Down Capture Ratio	107.15	110.15	24.27	-51.66	100.00	22.46

**MPT Statistics: 7-Year**

Time Period: 4/1/2013 to 3/31/2020 Calculation Benchmark: BBgBarc Global Aggregate TR USD

	Loomis Sayles Global Bond Instl	PIMCO Global Bond Opps (Unhedged) Instl	PIMCO Global Bond Opps (USD-Hdg) Instl	Templeton Global Total Return R6	BBgBarc Global Aggregate TR USD	BBgBarc Global Aggregate TR Hdg USD
Return	0.96	0.45	3.04	1.03	1.61	3.72
Excess Return	-0.64	-1.16	1.44	-0.57	0.00	2.11
Std Dev	4.98	5.48	3.22	6.78	4.53	2.81
Beta	1.05	1.03	0.41	0.09	1.00	0.42
Tracking Error	1.57	2.89	3.76	7.93	0.00	3.29
Sharpe Ratio	0.02	-0.07	0.68	0.03	0.17	1.02
Alpha	-0.65	-1.13	1.86	0.35	0.00	2.49
Information Ratio	-0.41	-0.40	0.38	-0.07		0.64
Batting Average	47.62	52.38	52.38	50.00	100.00	59.52
Up Capture Ratio	97.10	88.96	53.58	4.43	100.00	64.10
Down Capture Ratio	107.75	106.65	14.84	-13.05	100.00	16.47

**MPT Statistics: 10-Year**

Time Period: 4/1/2010 to 3/31/2020 Calculation Benchmark: BBgBarc Global Aggregate TR USD

	Loomis Sayles Global Bond Instl	PIMCO Global Bond Opps (Unhedged) Instl	PIMCO Global Bond Opps (USD-Hdg) Instl	Templeton Global Total Return R6	BBgBarc Global Aggregate TR USD	BBgBarc Global Aggregate TR Hdg USD
Return	2.39	2.68	4.56	3.41	2.47	4.06
Excess Return	-0.08	0.21	2.09	0.94	0.00	1.59
Std Dev	5.62	5.74	3.21	7.97	4.69	2.65
Beta	1.12	1.08	0.36	0.54	1.00	0.34
Tracking Error	2.08	2.77	4.08	7.88	0.00	3.74
Sharpe Ratio	0.32	0.36	1.23	0.35	0.40	1.30
Alpha	-0.27	0.10	3.21	2.02	0.00	2.75
Information Ratio	-0.04	0.08	0.51	0.12		0.42
Batting Average	55.00	55.00	54.17	51.67	100.00	56.67
Up Capture Ratio	107.12	107.39	59.89	57.49	100.00	55.31
Down Capture Ratio	111.81	106.80	3.05	20.71	100.00	5.53

# Investment Option Narratives

**Firm Overview**

Loomis Sayles & Company, was founded in 1926 and is a wholly-owned subsidiary of Natixis Global Asset Management, L.P., the US-based subsidiary of Natixis which is based in Paris, France. Headquartered in Boston, Massachusetts, Loomis Sayles maintains offices in San Francisco, Detroit, London and Singapore and employs more than 675 professionals. The firm manages in excess of \$260 billion in AUM across a variety of equity, fixed income and multi-asset strategies.

**Team Overview**

The Global Bond team led by co-lead PMs Ken Buntrock and David Rolley has been working together on the strategy since 2000. PMs Lynda Schweitzer and Scott Service directly support them. Stability has been a hallmark of the team as evidenced by the fact that there has been no turnover on the strategy since 2001. The team incorporates input from a variety of internal sources including Loomis Sayles' broad macro and credit research teams when constructing portfolios. While the strategy is managed in a team-based approach, Buntrock and Rolley have final decision-making authority.

**Strategy Overview**

Loomis believes inefficiencies exist in global fixed income markets and that the use of in-depth, fundamental research can, over a full credit cycle, lead to excess returns. As a result, the Global Bond team will consistently overweight spread sectors including investment grade and high yield corporate bonds, asset-backed bonds, emerging market sovereign and corporate bonds and non-benchmark sectors such as preferred securities. The cornerstone of Loomis' investment process is the fundamental, bottom-up research conducted by their 50+ member Credit and 5+ member Sovereign Research teams. Between the two groups, research coverage extends to over 1,000 corporate issuers and 80+ countries. Analysts are assigned coverage of all names, regardless of location or credit quality, within an industry. Loomis' research culminates in an internal credit rating that is independent of the rating agencies. Loomis believes its ratings are more forward looking than the agencies' because the opinions include a trend for the company and a rating. The investment process consists of four main components: Macro, Fundamental, Portfolio Construction and Risk Management. Loomis' top-down views are developed through a collaborative process of several groups within the organization. The Macro Strategies group meets regularly with Loomis' chief economist and other investment professionals to discuss economic, geo-political, and market news. In a similar fashion, the Sovereign group meets and is charged with evaluating similar macro questions. Each group presents their thoughts on countries and currencies at a monthly Global Asset Allocation meeting where macro and market outlooks are debated. In the end, the macro process is designed to provide a framework and outlook to be used by Loomis' sector and product teams. Similar to the top-down process, the sector teams meet regularly to develop recommendations across all fixed income markets and identify horizon returns and risk assessments by integrating the firm's macro views. The team constructs the portfolio by evaluating relative sector and currency weights before selecting securities recommended by the credit research team. Portfolio risk is primarily controlled through diversification with tracking error comparisons providing a secondary control. Importantly, the team has access to various third-party systems which are used for scenario analysis as well as RiskInSite, which provides daily risk reports comparing the strategy and benchmark by multiple breakdowns. Finally, the PMs meet regularly with the CIO, CIRO, and Risk Management Committee to confirm that the strategy meets all client and firm guidelines.

**Expectations**

Loomis Sayles targets an excess return of between 1.5%-2% basis over the BBgBarc Global Agg. Bond USD Unhedged Index annually. The strategy's sources of value-add are security selection (40%), sector selection (20%), currency allocation (20%), country selection (10%), and curve and duration positioning (10%). The team overweights countries, sectors and currencies that provide the highest relative value opportunities. Typically, these opportunities lie in spread sectors or countries assigned lower credit ratings. As such, the strategy should be expected to perform well during periods of strong global economic growth. Conversely, the strategy lag during periods of decelerating growth or rising credit spreads.

**Points to Consider**

Co-lead PMs Buntrock and Rolley are nearing the age where retirement is a question. Loomis has taken great care to add additional capacity to the team with the addition of Schweitzer, and more recently, Service. The team has been together for over six years and the process is collaborative, which provides for a transfer of information and knowledge. In the event that Buntrock or Rolley were to retire, we would remain confident in the team. Loomis will use a both interest rate and foreign exchange derivatives to hedge specific exposures. In addition to their history managing the securities, the firm has access to third-party systems that provide greater transparency and independent pricing. While the use of these types of securities can increase complexity, we are confident in the firm's abilities.

**Recommendation Summary**

The Loomis Sayles Global Bond Fund offers investors a diversified, fundamentally-driven approach to the global bond space with competitive fees and low minimum investments. Similar to all Loomis Sayles strategies, the fund emphasizes Loomis Sayles' bottom-up approach to security selection which results in relative overweights to spread sectors such as investment grade and high yield bonds, securitized bonds and emerging market sovereign bonds. The primary differentiator for the fund is the long-tenured and experienced team. Co-team leaders and PMs Ken Buntrock and David Rolley have been managing the strategy since 2000. Importantly, as AUM has grown the team has added resources while planning for succession. As evidence, Lynda Schweitzer joined the team in 2001 as a portfolio specialist and trader and was promoted to PM in 2007. Additionally, Scott Service joined the firm in 1995 and has served in a variety of roles prior to being promoted to PM in 2011. The team is supported by four dedicated credit analysts and has access to the firm's deep, and well-resourced research capabilities. While at times the fund's performance can be more volatile due to the asset allocation mix, we have confidence in the team to add value over the long haul. Given these things, we recommend the fund as a standalone option for clients seeking broad exposure to the global bond space.

**Firm Overview**

Pacific Investment Management Company (PIMCO) was founded in Newport Beach, CA in 1971. PIMCO is one of the world's largest fixed income managers, with a presence in every major bond market. PIMCO started as a subsidiary of Pacific Life Insurance Company to manage separate accounts for institutional clients. Today, PIMCO has offices in Newport Beach and 16 other global locations. In 2000, PIMCO was acquired by Allianz. PIMCO operates as a separate and autonomous subsidiary of Allianz. The firm manages over \$1.8T in AUM.

**Team Overview**

Andrew Balls, CIO of Global Strategies, is the lead portfolio manager responsible for the strategy and is directly supported by Sachin Gupta, head of PIMCO's global trading desk in Newport, Lorenzo Pagani, head of European rates based in Munich, and Tomoya Masanao, head of Japanese portfolio management based in Tokyo. The lead PMs are supported by a dedicated team of 38 portfolio managers and are further supported by more than 230 investment professionals located in PIMCO's seven regional offices who assist in idea generation. Importantly, the broader Global Bond Team leverages PIMCO's sovereign and corporate credit research capabilities.

**Strategy Overview**

The strategy is designed to provide investors with broad exposure to the global markets by investing in developed market sovereign and quasi-sovereign bonds, emerging market bonds and investment grade and high yield bonds. The allocation among each market will vary based on PIMCO's assessment of global macro trends and relative value. Offered in unhedged and U.S. dollar hedged variations, the strategy allows investors the opportunity to express currency viewpoints. All told, this approach is designed to allow for increased responsiveness in asset allocation to changing economic and market conditions while remaining anchored by PIMCO's investment process and longer-term orientation. As with all PIMCO strategies, the investment process starts with an annual Secular Forum at which PIMCO investment professionals from around the world gather with industry experts for a three-day discussion about the future of the global economy and financial markets. The goal is to look beyond the current business cycle and determine how secular forces will play out over the next three-to-five years. The team implements the top down strategies developed at the Forum, and develops bottom-up strategy by maintaining contact with the PIMCO specialist teams responsible for the sectors within the opportunity set. New ideas are sourced by team members and discussed in regularly held strategy meetings. In evaluating new ideas, the team applies a number of qualitative and quantitative screens. The team also makes an assessment of the fundamental credit factors underpinning the idea, incorporating the relevant credit analysis team into the discussion. Currency hedging decisions are separate and dependent on multiple models including purchasing power parity in conjunction with the team's subjective viewpoints.

**Expectations**

PIMCO seeks to add value above that of the BBgBarc Global Agg. Bond USD Unhedged Index but with less volatility. The team accomplishes this by utilizing PIMCO's macro insights along with identifying sector and security opportunities. PIMCO expects to add 1%-1.5% of alpha while maintaining a tracking error of less than 3% over a three to five-year period. The strategy's primary sources of value-add are curve positioning (25%-35%), country allocation (20%-30%), sector allocation (15%-25%), security selection (10%-20%), and currency management (5%-15%). The strategy will typically overweight those countries, sectors and currencies that provide the highest relative value opportunities. These opportunities often lie in spread sectors or countries assigned lower credit ratings. As such, the strategy should be expected to perform well during strong global economic growth. Conversely, the strategy may lag in periods of decelerating growth or rising credit spreads.

**Points to Consider**

Unlike other smaller, less aggressive managers in the space, PIMCO makes heavy use of derivatives to replicate desired exposures. Furthermore, PIMCO has historically been less than forthcoming in the management of these opaque exposures. While PIMCO has historically demonstrated the ability and skill necessary to manage these securities, they contribute to the overall complexity of the strategy which may present challenges to investors seeking a more simplistic approach to the space. The team has seen turnover. First, lead-PM and co-CIO Mohamed El-Erian left the team in 2014. He was replaced by PM Scott Mather. However, his stay was short as he was elevated to CIO of U.S. Core Strategies during organizational changes. Balls was then elevated to lead-PM. More recently, in 2016, Manny Roman was named CEO following the announced retirement of CEO Doug Hodge. Since that time, both the senior management of the firm and team have remained stable. Importantly, AUM has grown as confidence has returned. Given PIMCO's depth and experience, we remain confident in their ability.

**Recommendation Summary**

We believe that the PIMCO Global Bond strategy offers clients a compelling choice in the global bond space. The strategy's primary differentiator is the deep and experienced investment team lead by CIO of Global strategies Andrew Balls. Similar to all PIMCO fixed income strategies, the Global Bond strategy marries PIMCO's dynamic, top-down approach with a rigorous fundamental credit research process across a broad opportunity set. The resulting portfolio seeks to harvest alpha from a diverse set of sources including country, credit and currency. The strategy is offered in both U.S. dollar hedged and unhedged versions allowing clients to express their currency viewpoints. Importantly, the strategy will liberally use derivative securities to replicate desired exposures. While the types of securities can increase the complexity of the strategy and result in reduced transparency, we are comforted by the fact that Balls and team are long-tenured and have proven adept at managing these exposures. As evidence, both the hedged and unhedged portfolios have provided consistent relative outperformance compared to their respective benchmarks. Furthermore, both versions of the strategy are offered in a wide variety of account vehicles at competitive prices. Given these things, we recommend the strategy as a standalone option for those clients seeking broad exposure to the global bond space.

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**Firm Overview**

Founded in 1947, Franklin Resources, Inc. (operating worldwide as Franklin Templeton Investments) is one of the largest publicly-traded investment management companies in the world, with offices in over 35 countries and over 9,200 staff globally. The company is listed on the NY Stock Exchange under the ticker BEN, and is a constituent of the S&P 500 Index. Directors and officers of the firm own approximately 20% of the outstanding shares. In addition, management-level employees, as well as all portfolio managers and analysts, receive deferred Franklin Resources, Inc. stock as part of their compensation.

**Team Overview**

Michael Hasenstab, PhD, is the lead portfolio manager for the Global Multisector Plus strategy. He is Executive Vice President and Chief Investment Officer of the Templeton Global Macro group and a member of the Fixed Income Policy Committee. Dr. Hasenstab specializes in global macroeconomic analysis, focusing on currency, interest rate, and sovereign credit analysis of developed and emerging market countries. He has ultimate decision-making authority for the strategy and is accountable for strategy implementation, including buy/sell decision and risk management. Calvin Ho is a co-portfolio manager for the strategy and participates in the decision-making process. He is focused on portfolio construction and implementation, analytics, and risk management. Ho also provides broad operational support including ensuring compliance with investment guidelines and local regulations, and managing portfolio flows. The Templeton Global Macro Group is actively involved in the management of Global Multisector Plus and reports to Dr. Hasenstab.

**Strategy Overview**

Global Multisector Plus, a benchmark-agnostic strategy, aims to be broadly diversified, giving the Templeton Global Macro Group the ability to exploit opportunities offering the highest expected risk-adjusted returns. The strategy draws on the firm's global resources: top-down macroeconomic views, bottom-up country and sector research, as well as quantitative analysis and rigorous risk management. The group tailors the Fixed Income Policy Committee's macroeconomic investment themes, conducting fundamental, country-by-country macroeconomic research. To identify potential alpha sources and the most attractive risk exposures relative to current valuations, the group independently evaluates five sources of potential return: interest rate, currency, sovereign credit, corporate credit and other spread sectors, and security selection. Positions are built to capitalize on short-term market inefficiencies, allowing for shifts reflecting anticipated changes in interest rates and credit spreads.

The Global Macro group meets daily to discuss ongoing market activity, as well as political and macroeconomic events. The team meets weekly with Franklin Templeton's equity teams to discuss opportunities and developments across regions, countries, sectors and asset classes. The very broad, global perspective of Franklin Templeton's research process looks beyond the predominantly developed core markets that get the most attention to the peripheral markets which can not only provide excellent sources of diversification, but also offer higher return potential.

**Expectations**

The strategy will fare best in risk on environments and when global growth is stable or improving. When emerging markets outperform developed markets, the strategy should outperform.

The strategy will likely fare worst in slow growth or recessionary environments, when commodities are out of favor (due to the strategy's reliance on emerging market debt), and when developed markets outperform emerging markets.

Hasenstab has been consistent in his view that global growth is better than most market participants appreciate. Therefore, the strategy has had a low duration profile for much of the past three years. We expect this low duration positioning to continue into the future, but we do not expect it to be consistent forever. Should Templeton's Global Macro team change its opinion on global growth, the strategy most likely will reverse its duration posture.

**Points to Consider**

The team that manages this strategy has shown a willingness to take risk. The investments have historically been of a contrarian nature, with investments in highly stressed Irish debt (2011), Ukrainian debt (2014) and more recently increasing its stake in the Mexico Peso (late 2015). Finally, the team has shown willingness to invest in less liquid areas (Uruguay & Ghana). This results in a strategy that does not resemble the Barclays Multiverse Index to which it is benchmarked. Furthermore, the strategy's five- and ten-year correlations tend to track far more closely to the MSCI EAFE equity index than they do to the benchmark, so the strategy is hard to place in an asset allocation framework, as it acts more like an equity strategy than it does fixed income.

On February 18th Franklin Templeton (FT) announced an agreement to acquire Legg Mason. The transaction will include eight of Legg Mason's nine affiliated asset managers which includes such companies as Brandywine Global and Western Asset Management Company (WAMCO). The team stated that the integration of the two parent companies is expected to take 12-18 months. Additionally, FT expects the Legg Mason affiliates wi...

**Recommendation Summary**

The depth and experience of the Global Macro team is the primary differentiator for the strategy. Michael Hasenstab, Ph.D. serves as the lead portfolio manager and is responsible for all strategy implementation decisions. He has served in a variety of capacities at Templeton since joining the firm in 1995, including analyst and, most recently, CIO. Calvin Ho, Ph.D. joined the firm in 2005 and serves as co-PM and Director of Research. The PMs are supported by a deep and experienced team of ten global macro and three quantitative analysts in addition to four dedicated traders. The strategy employs a flexible, benchmark-agnostic approach that is designed to be nimble across countries, credit, currencies, sectors and with regard to security selection. Specifically, the team seeks to identify long-term macro themes that will result in changes in local interest rates and currency strength. Importantly, the strategy will deviate significantly from the benchmark in pursuit of absolute returns. As evidence, the strategy has produced strong relative returns over most trailing periods while tracking error has averaged near the top quartile of the peer universe. As such, the strategy may not be suitable for investors seeking dedicated exposure to high-quality global government bonds which would generally provide a smoother ride with less volatility. Nonetheless, we believe this strategy presents a compelling opportunity for investors seeking a global, unconstrained approach to the space.

**Alpha** - A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta.

**Batting Average** – A measure of a manager's ability to consistently beat the market. It is calculated by dividing the number of months in which the manager beat or matched an index by the total number of months in the period.

**Best Quarter**- This is the highest quarterly (3 month) return of the investment since its inception.

**Beta** - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.

**Down Period Percent** - Number of months below 0 divided by the total number of months.

**Downmarket Capture Ratio** - The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance.

**Downside Std Dev** - This measures only deviations below a specified benchmark.

**Excess Return**- This is a measure of an investment's return in excess of a benchmark.

**Information Ratio** - This calculates the value-added contribution of the manager and is derived by dividing the excess rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.

**Longest Down-Streak Return** - Return for the longest series of negative monthly returns.

**Longest Down-Streak # of Periods** - Longest series of negative monthly returns.

**Longest Up-Streak Return** - Return for the longest series of positive monthly returns.

**Longest Up-Streak** - Longest series of positive monthly returns.

**Kurtosis** - Kurtosis indicates the peakedness of a distribution. For normal distribution, Kurtosis is 3.

**Max Drawdown** - The peak to trough decline during a specific record period of an investment or fund. It is usually quoted as the percentage between the peak to the trough.

**Max Drawdown # of Periods** - This is the number of months that encompasses the max drawdown for an investment.

**R-Squared** - The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.

**Return** - Compounded rate of return for the period.

**Sharpe Ratio** - Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.

**Skewness** - Skewness reflects the degree of asymmetry of a distribution. If the distribution has a longer left tail, the function has negative skewness. Otherwise, it has positive skewness. A normal distribution

is symmetric with skewness 0.

**Sortino Ratio** - The Sortino Ratio is similar to Sharpe Ratio except it uses downside risk (Downside Deviation) in the denominator. It was developed in early 1980's by Frank Sortino. Since upside variability is not necessarily a bad thing, Sortino ratio is sometimes more preferable than Sharpe ratio.

**Standard Deviation** - A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.

**Tracking Error** - This is a measure of the standard deviation of a portfolio's excess returns versus its designated market benchmark.

**Treynor Ratio** - Similar to Sharpe Ratio, Treynor Ratio is a measurement of efficiency utilizing the relationship between annualized risk-adjusted return and risk. Unlike Sharpe Ratio, Treynor Ratio utilizes "market" risk (beta) instead of total risk (standard deviation). Good performance efficiency is measured by a high ratio.

**Up period Percent** - Number of months above 0 divided by the total number of months.

**Upmarket Capture Ratio** - The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.

**Worst Quarter** - This is the lowest quarterly (3 month) return of the investment since its inception.



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