
Clearwater Advisors, LLCCore Fixed: BB Aggregate Benchmark

For the month of: **August** **2021**

Manager Performance Calculations

* Annualized returns

	Last Month	Last 3 Months	Last 1 Year	Last 3 Years*	Last 5 Years*
Clearwater Agg	-0.14%	1.77%	0.64%	5.76%	3.47%
BB Aggregate	-0.19%	1.64%	-0.08%	5.43%	3.11%

Performance Attribution & Strategy Comments

The portfolio return exceeded the index by 5 bps last month. Risk asset prices continued their ascent largely shrugging off negative headlines over the month – rising coronavirus cases, slowing economic growth, the bungled Afghan withdrawal and an upcoming Fed taper. Fixed income markets drifted in the late summer doldrums with spreads little changed and slightly higher treasury yields. Intermediate yields rose some 6-8 basis points as investors started to factor in the Fed's, yet unannounced, but upcoming asset purchase taper.

The portfolio's modest underweight to duration and exposure to short-duration credit supported excess performance over the index. Credit markets delivered uneven returns led by the airline and metals & mining sectors. Further, high yield credit beat investment grade boosting its year-to-date outperformance. Agency mortgage-backed security exposure performed in line with the index.

The broad market recovery and accommodative monetary policy stance continues to support low spread levels across fixed income sectors. Front-end and intermediate treasury yields will remain near zero, tethered by 0.00-0.25% fed funds for the near-term future. Employment progress will determine a path to higher rates after the Fed has tapered. The rise in COVID cases spurred by the Delta variant and corresponding changes in pandemic policies along with expectations that the torrid pace of growth will slow into year-end casts uncertainty on the path for markets over the coming quarters.

Manager Style Summary

Clearwater manages a core Aggregate portfolio which is not expected to deviate significantly from the benchmark, although issuer concentration is expected to be much larger. They seek to add value through sector allocation and security selection rather than duration bets. Prior to January 2014, Clearwater managed a TBA mortgage portfolio. The historical returns through December 2013 reflects the performance of the TBA portfolio while performance beginning January 2014 reflects the Aggregate portfolio.

Clearwater Advisors, LLC

Core Fixed: BB Aggregate Benchmark

Portfolio Guideline Compliance

Portfolio Guideline:	Clearwater	BB Agg	Min	Max	Compliance
A1. The account shall consist of dollar denominated fixed income securities					ok
B2. Duration:	6.4	6.5	6.0	7.0	ok
B3. Sector Diversification:					
Treasuries	26%	38%	23%	53%	ok
Agencies	5%	2%	-13%	17%	ok
Supra/Sovereign	1%	3%	-7%	13%	ok
Corporates	35%	26%	6%	46%	ok
Industrial	21%	16%	1%	31%	ok
Financial	12%	8%	-7%	23%	ok
Utility	3%	2%	-8%	12%	ok
MBS	27%	28%	13%	43%	ok
ABS	1%	0%	-5%	5%	ok
CMBS	4%	2%	-3%	7%	ok
B4. Issuer Concentration: <=5% all corporate issuers				5%	ok
B5. Number of positions	124		100	200	ok
B6. Non-Investment Grade alloc	1%			10%	ok
B7. Out of index sector alloc	0%			10%	ok
B7. TIPS allocation	2%			20%	ok
E2. Annual Turnover (ex TBA rolls)	30%		80%	120%	check
The portfolio is in compliance with all other aspects of the Portfolio Guidelines				<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Manager Explanations for Deviations from Portfolio Guidelines

Annual Turnover (ex TBA rolls) Portfolio turnover has been below expectations. We don't expect it to shift materially higher in the near-term.

Total Firm Assets Under Management (\$m) as of:

Qtr 2 \$ 4,004

Organizational/Personnel Changes

N/A

Account Turnover

Gained:	Number of Accounts:	0	Total Mkt Value (\$m):	\$	-
Lost:	Number of Accounts:	0	Total Mkt Value (\$m):	\$	-

Reason(s) for loss:

Clearwater Advisors - PERSI STIF

Cash: Merrill Lynch 0-3 Month Treasury Bill Benchmark

For the month of: **August** **2021**

Manager Performance Calculations

* Annualized returns

	Last Month	Last 3 Months	Last 1 Year	Last 3 Years*	Last 5 Years*
Clearwater - PERSI STIF	0.02%	0.06%	0.27%	1.39%	1.36%
ML 0-3 Month T-bill	0.00%	0.01%	0.06%	1.16%	1.10%

Performance Attribution & Strategy Comments

August is typically a very slow month as traders and portfolio managers take vacation before school starts. Even with the Delta variant causing a renewed COVID surge, this August was no exception to the rule. Corporate issuance slowed to nearly a halt over the last few weeks and nothing really changed in the short term markets.

Fed officials continue to signal that we are moving closer to the type of economic data that would justify tapering bond purchases, but that we aren't quite there yet. In fact, many market participants had originally forecasted September as the meeting when the Fed would announce the details of tapering, but the recent Covid surge seems to be pushing back those predictions even further.

Short rates did not move much in August. The 1-month, 3-month, and 12-month t-bills ended almost exactly where they started at 0.03%, 0.04%, and 0.06% respectively. Longer rates reversed course and rose by 5 to 10 basis points likely due to increasing growth and inflation metrics.

3-Month LIBOR initially rose by 2 basis points (bps) during the month but later fell back down to end the month where it started at 12 bps. The Bloomberg All Cash Bond Index, which measures credit spreads, experienced a similar move by rising mid month and then settling to within 1 bp of where it started at 91bps.

Portfolio Guideline Compliance

Portfolio Guideline:	Clearwater	Min	Max	Compliance
B2a. Sector Allocations:	100%			
Treasuries	0%	0%	100%	ok
Agencies	0%	0%	100%	ok
Corporates	35%	0%	100%	ok
Mortgage Backed Securities (MBSs)	0%	0%	60%	ok
Asset Backed Securities (ABSs)	9%	0%	40%	ok
Cash	23%	0%	100%	ok
Commercial Paper	32%	0%	100%	ok
B2b. Quality: Securities must be rated investment grade by S&P or Moody's at time of purchase				ok
B2c. Effective Duration <=18 months	3		18	ok
B2d. Number of securities	25	10	50	ok
B3a. Allocation of corporate securities to one issuer	5%		5%	check
The portfolio is in compliance with all other aspects of the Portfolio Guidelines			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Manager Explanations for Deviations from Portfolio Guidelines

B3a. Corporate Issuer: The account experienced a larger than expected outflow near the end of the month which caused 1 position to move slightly over the 5% limit.

Manager Style Summary

The enhanced cash portfolio was created with the expectation that the portfolio will generate returns similar to, or in slight excess of, the Mellon Short-Term Investment Fund (STIF), while providing PERSI with an increased level of transparency into the cash portfolio.

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