

CLEARWATER ADVISORS, LLP
CASH: MERRILL LYNCH 0-3 MONTH TREASURY BILL BENCHMARK

FOR THE MONTH OF: **SEPTEMBER** **2016**

MANAGER PERFORMANCE CALCULATIONS

* Annualized returns

	Last Month	Last 3 Months	Last 1 Year	Last 3 Years*	Last 5 Years*
Clearwater - PERSI STIF	0.07%	0.16%	0.69%	0.43%	0.39%
ML 0-3 Month T-bill	0.07%	0.15%	0.50%	0.33%	0.36%

PERFORMANCE ATTRIBUTION & STRATEGY COMMENTS

Prime funds remained cautious with weighted average maturities at record lows as they continued to prepare for outflows due to money fund regulation. According to JPMorgan, government fund assets under management were up \$730B year-to-date in September with another \$250B of institutional prime money expected to convert before the October 14 deadline. Three-month LIBOR continued to increase ticking up 1.4 basis points (bps) to .85% as banks looked to fund outside of the money market space. LIBOR is expected to decrease once the money fund deadline passes. 30-day commercial paper yields increased five bps to 54 bps to attract investors in the absence of money fund investors. As expected, the Federal Reserve did not raise its target interest rate; however, the committee kept open the possibility for a hike in 2016. As of September 30, the market was placing a 59.3% probability that the Federal Reserve would hike its target rate at the December 2016 meeting. The effective Fed Funds rate hovered around 40 bps for most of September but declined to 29 bps on month-end window dressing. The yield on the 12-month T-bill ended September basically flat at .59%.

PORTFOLIO GUIDELINE COMPLIANCE

Portfolio Guideline:	Clearwater	Min	Max	Compliance
B2a. Sector Allocations:	100%			
Treasuries	15%	0%	100%	ok
Agencies	5%	0%	100%	ok
Corporates	52%	0%	100%	ok
Mortgage Backed Securities (MBSs)	0%	0%	60%	ok
Asset Backed Securities (ABSs)	0%	0%	40%	ok
Cash	12%	0%	100%	ok
Commercial Paper	16%	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	4		18	ok
B2d. Number of securities	26	10	50	ok
B3a. Allocation of corporate securities to one issuer	4%		5%	ok
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

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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Clearwater Advisors, LLCCore Fixed: Barclays Capital Aggregate Benchmark

For the month of: **September** **2016**

Manager Performance Calculations	* Annualized returns				
	Last Month	Last 3 Months	Last 1 Year	Last 3 Years*	Last 5 Years*
Clearwater Agg	0.12%	0.70%	5.71%	4.12%	3.03%
Barclays Aggregate	-0.06%	0.46%	5.19%	3.89%	2.82%

Performance Attribution & Strategy Comments

Portfolio performance exceeded the benchmark by eighteen basis points in September. Risk assets largely treaded water in a month where global central bank policy took center stage. Market expectations of continued accommodative monetary policy were reframed by a less dovish European Central Bank and possible action by the Federal Reserve. The U.S. Treasury yield curve steepened modestly, as the two-year yield declined four basis points while the thirty-year yield rose eight basis points.

The portfolio's agency mortgage-backed security and exposure to certain corporate sectors were the primary drivers of excess performance in September. Energy credits led all corporate sectors followed by metals & mining. Further, the lowest quality credits outperformed their higher-quality counterparts. U.S. TIPS also contributed to excess performance besting nominal Treasury bonds. While the portfolio's financial sector exposure detracted from performance.

Global central bank policy will be the dominant force for the balance of 2016. Easy policy overseas is countered by a potential hike domestically. Economic data and Fed speak will weigh on markets contributing to volatility. Further, the U.S. presidential election should provide an entertaining backdrop to what could be a bumpy ride into year-end. We look to take advantage of attractive relative value opportunities mindful of evolving monetary policy impacts and global dislocations.

Organizational/Personnel Changes**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: Barclays Capital Aggregate Benchmark

Portfolio Guideline Compliance September 2016

Portfolio Guideline:	Clearwater	BC Agg	Min	Max	Compliance
A1. The account shall consist of dollar denominated fixed income securities					ok
B2. Duration:	5.4	5.5	5.0	6.0	ok
B3. Sector Diversification:					
Treasuries	24%	36%	21%	51%	ok
Agencies	6%	4%	-11%	19%	ok
Supra/Sovereign	3%	4%	-6%	14%	ok
Corporates	33%	26%	6%	46%	ok
Industrial	15%	16%	1%	31%	ok
Financial	14%	8%	-7%	23%	ok
Utility	4%	2%	-8%	12%	ok
MBS	28%	28%	13%	43%	ok
ABS	1%	0%	-5%	5%	ok
(CMBS	3%	2%	-3%	7%	ok
B4. Issuer Concentration: <=5% all corporate issuers				5%	ok
B5. Number of positions	92		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)	48%		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. This measure may increase as the portfolio ages.

Account Turnover

Gained: Number of Accounts:	0	Total Mkt Value (\$m):	\$	-
Lost: Number of Accounts:	0	Total Mkt Value (\$m):		
Reason(s) for loss:	N/A			