



## Reversion to the Mean

Historically, there is a 159 basis point spread between the Fed fund rate and the 10-year Treasury note yield, and a 204 basis point spread between the funds rate and the long bond yield. So, if the Federal Reserve does, as they said last week, keep the overnight rates at essentially 0% - the yield curve could be in store to a substantial bull flattening as we embark on a classic reversion to the mean. If the yield curve does indeed revert to its historic mean the long end of the curve could rally by in excess of 100 basis points from current levels. Thus, the 10-year and 30-year interest rates reaching 2% and 2-1/2% do not seem that implausible.

### Fed Funds vs. 10 Year Treasury Note



The following table shows the current and historical spreads between the effective Fed Funds (FF) rate and representative benchmark Treasuries over the 20-year period from 1991-2010. As shown, the spread between FF and most Treasury benchmarks remains well above the historical mean. The only outlier would be the spread between Fed Funds and the 2-year Treasury which is currently 39 basis points - 8 basis points narrower than its averages. Thus, the 2-year sector of the yield curve looks relatively rich when compared to FF and longer maturities.

### Fed Funds vs. Treasury Benchmarks

Curve	Current (bps)	Avg. Spread (1991-2010) (bps)	Diff (Current- Avg) (bps)	High (bps)	Low (bps)
FF -2Yr	39	47	-8 bps	276 bps (05/94)	-186 (09/98)
FF- 5 Yr	150	110	+40	368 (04/92)	-192 (09/98)
FF -10 Yr	276	159	+117	437 (04/92)	-175 (01-01)
FF-30 Yr	378	204	+174	495 (11/92)	-143 (06/98)



Last Week, Fed Chairman Ben Bernanke, in his testimony before the Senate and House stated that the economy has an “unusually uncertain” future. The Fed remains concerned about the state of the housing sector, limited job growth and for the first time ever, suggested that deflation is a possible scenario. Clearly the Fed will not be hiking rates anytime soon. While the Fed and the majority of economists view a double dip scenario as a low probability event, the possibility does clearly exist. The last two months of economic data, from retail sales to employment to manufacturing, has been universally underwhelming. Even if we do not fall back into negative territory, most would argue that the economy is likely to grow well below trend over the foreseeable future. Meanwhile, as discussed in last week’s WRV, headline and core inflation continue to trend lower.

That said, despite the fundamental backdrop that has supported the strong bond market rally in 2010, many bond strategists and portfolio managers have remained under invested as they wait for the “inevitable” rise in rates. In fact, bond sentiment has been negative all year: most managers are short their duration bogeys, cash levels remain high and the CBOT’s Commitment of Traders Survey shows a huge short position in bonds. Thus, despite the stellar performance of the bond market, this year’s bond rally has become the “pain trade” for many institutional fixed-income portfolio managers. Apparently managers fear “small” yields and prefer to sit it out. While the absolute yield numbers are in fact low from a historical perspective, many investors may be underestimating the potential for even lower yields and the huge gains in total return terms should rates continue to decline from current levels.

So what would happen if the Fed were to keep Fed Funds rates at zero for an extended period of time, while the curve reverts to the historic mean? As shown below, the 2-year Treasury has limited upside and actually has a poor risk return trade-off. Intermediate and longer duration Treasuries would likely generate significant excess returns over cash and the 2-year Treasury.

### Total Rate of Return Analysis (12 Month Time Horizon)

Treasury Benchmark	Slope Change (bps)	Total ROR%
2-yr	+8 bps	.49%
5-yr	-40	3.47%
10-yr	-117	12.69%
30-yr	-174	38.5%

*Note: The above scenario represents a “bull flattening” of the yield curve. If the Fed were to begin to hike official rates, the yield curve could “bear flatten” resulting in potentially higher short term and long term rates across the curve. Accordingly, credit unions should run what-if scenarios under multiple interest rate and yield curve scenarios to determine the appropriate risk level for each investment portfolio and balance sheet.*

### Portfolio Strategy

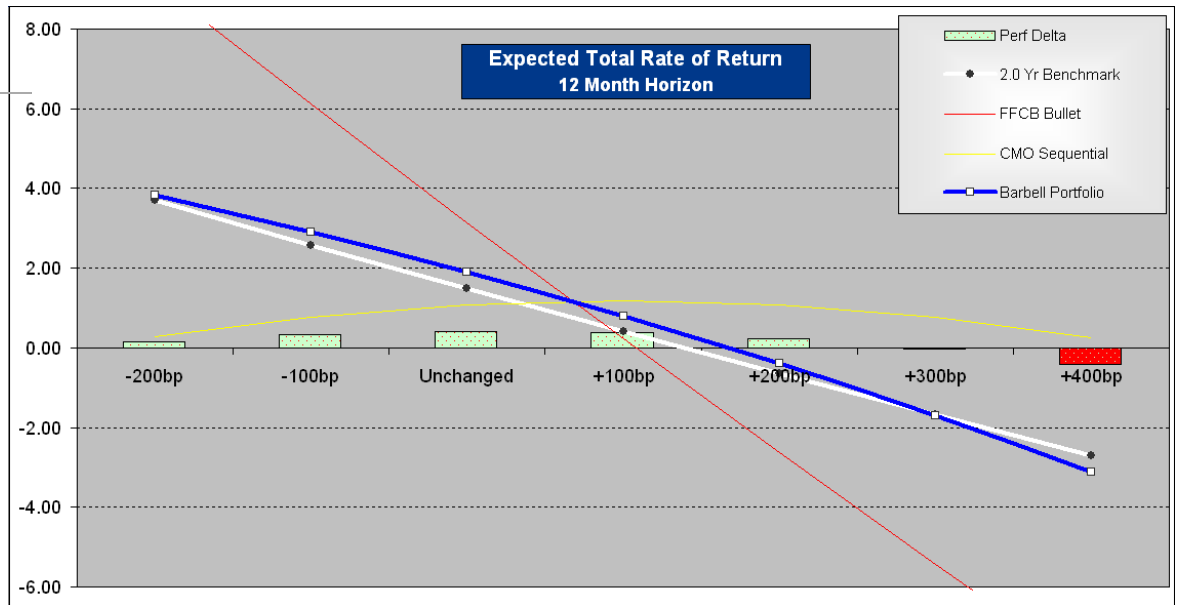
Given the steepness of the yield curve, the Fed on hold, cash earning 25 basis points or less and the fact that the 2-year sector of yield curve remains rich, we would encourage credit unions to explore various barbell strategies that may enhance yield, income and potential total returns.



The following is an example of how a barbell strategy could outperform a traditional ladder portfolio of Agency bullets under most bearish and bullish interest rate scenarios:

- The barbell strategy has a WAL of 2.07 years and consists of a 40% weighting in a 4-year FFCB bullet and a 60% weighting in a short sequential CMO with a weighted average life of 1 year. The ladder agency benchmark has a 2.24 year WAL.
- As shown below, the barbell strategy is likely to generate excess returns over the ladder benchmark within a + or - 200 basis point range.
- In an unchanged environment, the barbell is expected to outperform by 41 basis points and if rates decline by 100 and 200 basis points the barbell's performance is expected to exceed the benchmark by 33 and 14 basis points respectively.
- Moreover, should rates increase by 100 or 200 basis points the barbell is projected to outperform by 38 and 24 basis points respectively. Only if rates were to rise by 300 basis points over a 12 month time horizon would the ladder portfolio minimally outperform the barbell strategy (-1.67% vs. -1.71%). The superior performance in rising rates is attributable to the defensive monthly cash flow characteristics which serve to provide a hedge against higher rates.

### Barbell Strategy vs. Agency Ladder Benchmark (12 month Time Horizon)



Reinvestment Rate 1.65%	Expected Total Rate of Return						
	-200bp	-100bp	Unchanged	+100bp	+200bp	+300bp	+400bp
<b>Weighting</b>	6%	15%	30%	20%	17%	9%	3%
<b>2.0 Yr Benchmark</b>	3.69	2.58	1.49	0.42	-0.64	-1.67	-2.70
<b>FFCB Bullet</b>	9.16	6.12	3.15	0.23	-2.63	-5.42	-8.17
<b>CMO Sequential</b>	0.28	0.77	1.07	1.18	1.09	0.76	0.26
<b>Barbell Portfolio</b>	3.83	2.91	1.90	0.80	-0.40	-1.71	-3.11



## More Information

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