

## Alternative Yield Scenarios and Returns

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**U.S. Treasury Yield Curve Scenarios and Associated Returns\***

Maturity	Yield Curve Scenarios			One-Year Total Returns		
	Current	Forward	Normalized	Current	Forward	Normalized
1 year	2.2%	2.8%	2.8%	2.2%	2.2%	2.2%
2 year	2.5%	2.8%	3.2%	2.8%	2.2%	2.2%
3 year	2.6%	2.9%	3.4%	2.9%	2.2%	1.6%
5 year	2.8%	3.0%	3.7%	3.2%	2.2%	0.3%
7 year	2.9%	3.1%	3.8%	3.3%	2.2%	-1.2%
10 year	3.0%	3.1%	4.0%	3.1%	2.2%	-4.1%

\* Both yields and returns are annualized

**If yields are the same a year from now as they are today, then at 3.3%, the 7-Year Treasury has the highest expected one-year total return.**

Why? The yield curve is positively sloped, meaning shorter term maturities have lower yields than longer term maturities. The two-year maturity you buy today is a one-year maturity a year from now, the seven-year maturity becomes a six and so on. So, as a bond matures it “rolls down” a positively sloped yield curve and is repriced to a lower yield point on the curve. If I buy the 2-Year Treasury at 2.5% and it rolls down to a 1-Year Treasury yielding 2.2%, then I get the capital gain tied to the 0.3% decline in the yield. The Current columns of the table show that a 2-Year Treasury bought today at a 2.5% yield, will return 2.8% over the next year if the yield curve remains unchanged.

**If yields follow the path of one-year forward curve, then all Treasuries have the same expected one-year total return of 2.2%.**

Think roll-forward instead of roll-down and ask the question, “Where does the yield curve need to be a year from now such that I am indifferent to buying any bond on the yield curve today?” If I buy the 1-Year Treasury at 2.2%, what does the 1-Year yield need to be a year from now for me to be indifferent about buying the two 1-Year Treasuries in sequence or just buying the 2-Year Treasury today? The answer: if 1-Year yields are 2.8% a year from now, then I make the same return whether I buy a 2-Year Treasury today, or a 1-Year Treasury today and another 1-Year Treasury a year from now. Note that the market is expecting 1-Year Treasury yields to rise much more than 10-Year Treasuries – the slope of the yield curve is expected to flatten as the Fed raises short term rates.

**If, over the next year, yields normalize around 4% nominal GDP growth (based on the Fed’s long term estimate for real GDP growth about 2% plus the Fed’s inflation target of 2%), then 7-Year and 10-Year Treasuries lose money and the highest returns are offered by the shorter-term maturities.**

The normalized yield curve in the above table is an approximation based on the historical relationship between nominal growth and yields. Don’t think of the normalized yield curve as a forecast, but as an estimate of “steady state equilibrium”. This is something the economy and markets tend toward but never sustain because there are always shocks destabilizing the system – financial crises, oil price spikes, trade policy, tax policy, technological innovation etc. – and we have yet to outlaw the economic cycle.

We are currently “late” in the economic cycle, unemployment is at record lows, inflation is on the rise, and real GDP growth remains solid. As of the end of the first quarter, nominal GDP growth was 4.8%, well above the Fed’s expected normal of 4%. While the forward curve is not signaling a move to a normalized curve, upward pressure on interest rates continues. Expect shorter term yields to continue to lead, with yields of longer maturities following until growth falters.

Email [research@wealthcarecapital.com](mailto:research@wealthcarecapital.com) with questions, comments or requests. Sources: Bloomberg, Bureau of Economic Analysis.

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