U.S. Outlook

SCOTT ANDERSON, Ph.D. | Chief Economist | 415.765.8020 www.bankofthewest.com

BANK THE WEST THE INP PARIBAS GROUP

Date	Indicator	For	Estimate	Consensus*	Previous Period
19-Sep-2016	NAHB Housing Market Index	Sep	59	60	60
20-Sep-2016	Housing Starts	Aug	1198k	1192k	1211k
20-Sep-2016	Building Permits	Aug	1165k	1170k	1144k
21-Sep-2016	FOMC Rate Decision (Upper Bound)	21-Sep	0.50%	0.50%	0.50%
21-Sep-2016	FOMC Rate Decision (Lower Bound)	21-Sep	0.25%	0.25%	0.25%
22-Sep-2016	Chicago Fed Nat Activity Index	Aug	NA	NA	0.3
22-Sep-2016	Initial Jobless Claims	17-Sep	262K	NA	260K
22-Sep-2016	FHFA House Price Index MoM	Jul	0.3%	0.3%	0.2%
22-Sep-2016	Existing Home Sales	Aug	5.41m	5.45m	5.39m
22-Sep-2016	Leading Index	Aug	0.0%	0.0%	0.4%
22-Sep-2016	Kansas City Fed Manufacturing Activity	Sep	NA	NA	-4.0
23-Sep-2016	Markit US Manufacturing PMI	Sep P	51.8	52.3	52.0

*Consensus from Bloomberg

The Mystery of the Steepening Yield Curve

I guess I have been watching too many Sherlock Homes episodes on Netflix, but the sharp steepening of the U.S. Treasury yield curve since the beginning of September deserves some sleuthing. The 10-2 Year Treasury spread has increased by some 20 basis points over the last two weeks. This breaks a strong and persistent downtrend in the spread (i.e. a flattening of the yield curve) that has been underway since July of 2015.

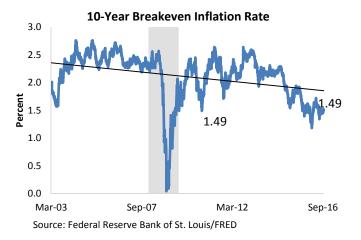
Treasury Yield Curve Steepens Sharply in September

Yield curve steepening historically has been driven primarily by signs, or expectations, of stronger growth or higher inflation. Yet we have received weaker U.S. growth signals in the economic data over the last two weeks -the drop in retail sales and industrial production for August are just the two most recent examples. On the inflation front no signs of life either. The 10-year inflation breakeven, bond investors' estimate of average annual inflation over the next 10 years, hasn't budged from historically low levels of 1.49% -- so no explanation for the change in the yield curve there.



10-Year Minus 2-Year Treasury Bond Yield Spread

Market Inflation Expectations Haven't Budged



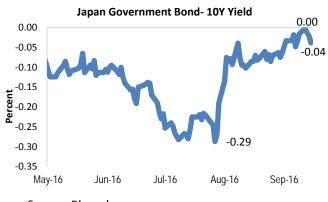
The discussions and information contained in this document are the opinions of BOTW chief economist Dr. Scott Anderson and should not be construed or used as a specific recommendation for the investment of assets, and is not intended as an offer, or a solicitation of an offer, to purchase or sell any security or financial instrument. Nor does the information constitute advice or an expression of the Bank's view as to whether a particular security or financial instrument is appropriate for you or meets your financial objectives. Economic and market observations and forecasts, such as those offered by Dr. Anderson reflect subjective judgments and assumptions, and unexpected events may occur. There can be no assurance that developments will transpire as forecasted. Nothing in this document should be interpreted to state or imply that past results are an indication of future performance.

U.S. Outlook | September 16, 2016

Perhaps heightened expectations of Federal Reserve interest rate hikes are the driver of higher long-term yields. The Federal Reserve certainly sounded hawkish at the Jackson Hole conference, and market expectation of a September rate hike from the Fed jumped to 40% for a time during the conference, only to be knocked back to earth with a weaker-than-expected August payroll report. Boston Fed President Eric S. Rosengren, a traditionally dovish Fed President, rekindled the market's rate hike fears with a September 9th speech that also made a strong case for a near-term hike, and expectations of a September rate hike temporarily jumped again from 22% to around 30% shortly following the speech.

However, subsequent speeches, particularly from Fed Governor Lael Brainard, and continued weak U.S. economic and inflation data have poured more cold water on a September rate hike. As of Thursday's close, the Fed funds futures market was placing just an 18% probability of a September rate hike from the Fed. Even a December hike is a less than 50-50 proposition today, in the market's view at 49.7%. Yet, the 10-year Treasury yield was still 15 basis points higher than a week ago at 1.69%. So, fear of an aggressive Fed, or imminent rate hike from the Fed, is not the driver of higher long-term rates. So we have a real mystery on our hands.

Sherlock Homes is fond of saying when you have eliminated the impossible, whatever remains, however improbable, must be the truth. By that standard of deduction, the jump in long-term rates and steepening of the U.S. Treasury curve must have more to do with what is going on abroad. Long-term bond yields have made similar moves around the globe, but the epicenter of the increases appears to center on a crisis of central bank confidence in Japan. Japanese long-term bonds have lead global yields higher. Japanese 10-year yields started rising at the beginning of August, increasing about 25 basis points and touching zero for the first time since March.



Source: Bloomberg

Negative interest rate policies in Japan and Europe and extensions of quantitative easing (QE) have been extremely effective in holding down global long-term bond yields. Some recent research suggests U.S. long-term treasury yields would be about 85 basis point higher today if it weren't for monetary easing in Europe and Japan. Bond investors in Japan and Europe have poured money into U.S. Treasury bonds to attain somewhat higher returns. Those foreign capital flows are likely slowing down now.

The Bank of Japan is facing a crisis of confidence. The Bank has failed to lift inflation despite unprecedented QE and negative interest rates. There are investor concerns that the Bank of Japan is reaching its limits on its ability to purchase more long-term government debt. The BOJ now holds more than 1/3 of outstanding Japanese government bonds. Bond investors suspect the Bank may embark on a somewhat different course when its leaders meet next week to decide on monetary policy. Analyst expectations are all over the place regarding next week's BOJ meeting. Some expect no change in rates; some are looking for a tapering of long-term bond purchases but another cut in short-term rates from -0.1% today.

Cutting short rates further but scaling back long-term bond purchases could help ailing bank margins and pensioners on fixed incomes, but probably would raise the cost of borrowing for businesses. Higher long-term rates could also become a problem for Japan's servicing of its massive debt should rates continue to rise. With the ECB and Bank of England also holding off on further stimulus at their recent monetary policy meetings, bond investors are wondering if central banks have run out of ideas and options.

The discussions and information contained in this document are the opinions of BOTW chief economist Dr. Scott Anderson and should not be construed or used as a specific recommendation for the investment of assets, and is not intended as an offer, or a solicitation of an offer, to purchase or sell any security or financial instrument. Nor does the information constitute advice or an expression of the Bank's view as to whether a particular security or financial instrument is appropriate for you or meets your financial objectives. Economic and market observations and forecasts, such as those offered by Dr. Anderson reflect subjective judgments and assumptions, and unexpected events may occur. There can be no assurance that developments will transpire as forecasted. Nothing in this document should be interpreted to state or imply that past results are an indication of future performance.

page 3 of 3

.

Major Economic Indicators

	History							Forecast						Yr/Yr % chg or Annual Avg.			
Economic Data	2015.1	2015.2	2015.3	2015.4	2016.1	2016.2	2016.3	2016.4	2017.1	2017.2	2017.3	2017.4	2014	2015	2016	2017	
Real GDP*	2.0	2.6	2.0	0.9	0.8	1.1	3.2	2.2	2.2	2.1	2.0	1.8	2.4	2.7	1.5	2.2	
Personal Consumption Expenditures*	2.4	2.9	2.7	2.3	1.6	4.4	3.4	2.8	2.5	2.5	2.4	2.3	2.7	3.1	2.8	2.8	
Non-residential Fixed Investment*	1.3	1.6	3.9	-3.3	-3.4	-0.9	2.6	2.0	2.7	2.8	2.9	2.8	6.2	2.4	-0.7	2.4	
Private Housing Starts (000s units)	986	1,156	1,156	1,135	1,151	1,156	1,200	1,220	1,240	1,250	1,280	1,300	1,001	1,108	1,182	1,268	
Vehicle Sales (mill. Units, annualized)	16.9	17.2	17.7	17.8	17.2	17.1	17.0	17.1	17.0	17.0	16.9	16.9	16.4	17.4	17.1	17.0	
Industrial Production*	-1.9	-2.7	1.5	-3.3	-1.7	-0.8	1.9	1.8	1.7	1.8	1.7	1.7	3.7	-0.5	-0.8	1.6	
Nonfarm Payroll Employment (mil.)	140.8	141.5	142.2	142.9	143.5	144.0	144.5	145.0	145.5	146.0	146.6	147.1	138.9	141.8	144.3	146.3	
Unemployment rate	5.6	5.4	5.2	5.0	4.9	4.9	4.8	4.7	4.6	4.6	4.6	4.5	6.2	5.3	4.8	4.6	
Consumer Price Index* (percent)	-2.9	2.4	1.4	0.8	-0.3	2.5	2.0	2.1	2.2	2.2	2.3	2.3	1.6	0.1	1.2	2.2	
"Core" CPI* (percent)	1.7	2.3	1.8	2.2	2.7	2.1	1.9	2.0	2.0	2.0	2.1	2.1	1.7	1.8	2.2	2.0	
PPI (finished goods)* (percent)	-11.0	3.4	-0.4	-4.8	-5.3	3.6	2.1	2.5	2.4	2.2	2.0	2.0	1.9	-3.3	-1.0	2.4	
Trade Weighted Dollar (Fed BOG, major)	89.3	90.1	91.7	93.1	93.3	89.6	90.2	91.7	92.0	92.5	92.0	91.6	78.4	91.1	91.2	92.0	
Crude Oil Prices -WTI (\$ per barrel)	48	58	46	42	33	45	45	47	47	47	48	49	93	49	43	48	

*Quarterly Data Percent Change At Annual Rate; Annual Data Year-on-Year % Chg, or Annual Average.

	History						Forecast						Annual Average			
Financial Data	2015.1	2015.2	2015.3	2015.4	2016.1	2016.2	2016.3	2016.4	2017.1	2017.2	2017.3	2017.4	2014	2015	2016	2017
S & P 500	2,064	2,102	2,027	2,052	1,951	2,075							1,930	2,061		
Dow Jones Industrial Average	17,808	18,004	17,077	17,475	16,663	17,764							16,770	17,591		
Federal Funds Rate (effective)	0.11	0.13	0.13	0.16	0.36	0.37	0.41	0.46	0.63	0.63	0.88	0.96	0.09	0.13	0.40	0.77
Treasury-3 Month Bills (yield)	0.02	0.02	0.04	0.13	0.29	0.26	0.30	0.35	0.53	0.53	0.80	0.88	0.03	0.05	0.30	0.69
Treasury-2 Year Notes (yield)	0.60	0.61	0.69	0.84	0.84	0.77	0.71	0.80	1.04	1.06	1.31	1.41	0.46	0.69	0.78	1.21
Treasury-5 Year Notes (yield)	1.46	1.53	1.56	1.58	1.37	1.24	1.11	1.20	1.49	1.57	1.77	1.87	1.64	1.53	1.23	1.68
Treasury-10 Year Notes (yield)	1.97	2.16	2.22	2.19	1.91	1.75	1.54	1.75	2.02	2.17	2.32	2.47	2.54	2.14	1.74	2.25
Treasury-30 Year Notes (yield)	2.55	2.88	2.96	2.96	2.72	2.57	2.24	2.50	2.77	2.92	3.12	3.32	3.34	2.84	2.51	3.03
Prime Rate	3.25	3.25	3.25	3.29	3.50	3.50	3.50	3.58	3.75	3.75	4.00	4.08	3.25	3.26	3.52	3.90
Libor 3-Mo. U.S. Dollar	0.30	0.30	0.33	0.43	0.67	0.65	0.77	0.85	0.94	0.95	1.17	1.25	0.25	0.34	0.74	1.08
Mortgage-30 Year (yield)	3.72	3.82	3.95	3.90	3.74	3.59	3.45	3.59	3.86	4.01	4.16	4.31	4.17	3.85	3.59	4.09
BAA Corporate (yield)	4.50	4.83	5.24	5.42	5.30	4.66	4.22	4.50	4.80	4.96	5.17	5.45	4.85	5.00	4.67	5.10

Source: Bank of the West Economics, Bloomberg, Federal Reserve