

Date	Indicator	For	Estimate	Consensus*	Previous Period
17-Apr-2017	Empire Manufacturing	Apr	17.0	15.0	16.4
17-Apr-2017	NAHB Housing Market Index	Apr	69.0	70.0	71.0
17-Apr-2017	Net Long-term TIC Flows	Feb	NA	NA	\$6.3b
18-Apr-2017	Housing Starts	Mar	1240k	1250k	1288k
18-Apr-2017	Building Permits	Mar	1235k	1250k	1216k
18-Apr-2017	Industrial Production MoM	Mar	0.4%	0.5%	0.1%
18-Apr-2017	Capacity Utilization	Mar	76.1%	76.2%	75.9%
19-Apr-2017	U.S. Federal Reserve Releases Beige Book				
20-Apr-2017	Initial Jobless Claims	15-Apr	241K	NA	234K
20-Apr-2017	Philadelphia Fed Business Outlook	Apr	29.0	25.0	32.8
20-Apr-2017	Leading Index	Mar	0.3%	0.2%	0.6%
21-Apr-2017	Markit US Manufacturing PMI	Apr P	53.5	53.8	53.3
21-Apr-2017	Markit US Services PMI	Apr P	53.2	53.6	52.8
21-Apr-2017	Markit US Composite PMI	Apr P	NA	NA	53.0
21-Apr-2017	Existing Home Sales	Mar	5.54m	5.59m	5.48m

*Consensus from Bloomberg

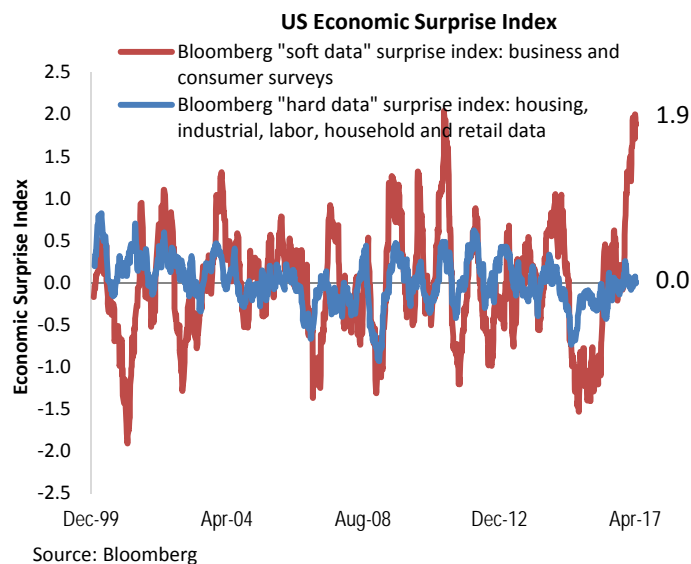
The Hard vs. Soft Data Conundrum Revisited

U.S. economic indicators have been throwing off mixed messages. Stocks have soared along with business and consumer confidence measures since the November election in anticipation of renewed fiscal stimulus and stronger economic growth. Yet harder data on industrial production, retail sales, and even last month's employment report have so far proved disappointing. We have noted this gap in past Outlook reports and counseled investors to remain cautious.

Others have argued that stronger hard data is just around the corner and it's still premature to conclude anything from the recent gap between these two surprise indexes. So in this week's Outlook report, we delve a little deeper into this conundrum and show how truly unusual the current divergence between "soft" data surprises and the "hard" data surprises really is.

In fact, if history of these two indexes is any guide, it may be too late to expect much of any bounce in the hard data indexes from the burst of confidence since November. This raises the odds, in our opinion, that confidence measures could correct lower in the months ahead rather than for the U.S. economy to see a strong acceleration in economic growth. With stocks already at high historical valuations, this could pose a problem for the markets as well.

The "Hard" vs. "Soft" Data Mystery Deepens

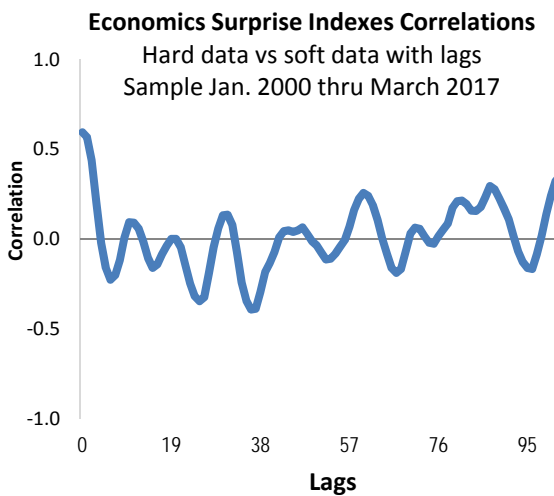


We looked at the correlation of these two indexes going all the way back to January 2000. In general, just by looking at the chart above we expected to see a pretty strong contemporaneous correlation between the soft and the hard

economic surprises. This is indeed what we found. A positive surprise in the soft economic data in any given month tended to be matched by a positive hard economic data surprise 60% of the time. If we take out the unusual post-election divergence period, that contemporaneous correlation increases to 63%.

So what of the theory that the hard data surprises are just around the corner, and that it could just take some more time for a sharp change in confidence to be reflected in the harder economic figures? To help answer that question, we also looked at the correlation between a hard economic surprise today against lagged monthly values of the soft surprise index. We found a fairly strong correlation over the prior two months of 0.57 and 0.44, respectively. This means that a soft data surprise was followed one or two months later by a hard data surprise in the same direction about half the time. But after five months had passed, the correlation actually turns negative.

How Long Will We Have to Wait for a "Hard" Surprise if It's Coming?



Source: Bloomberg

Since it has already been about five months since the divergence first surfaced between the soft and the hard economic data, you can see why one could be skeptical that a positive hard economic data surprise is just around the corner.

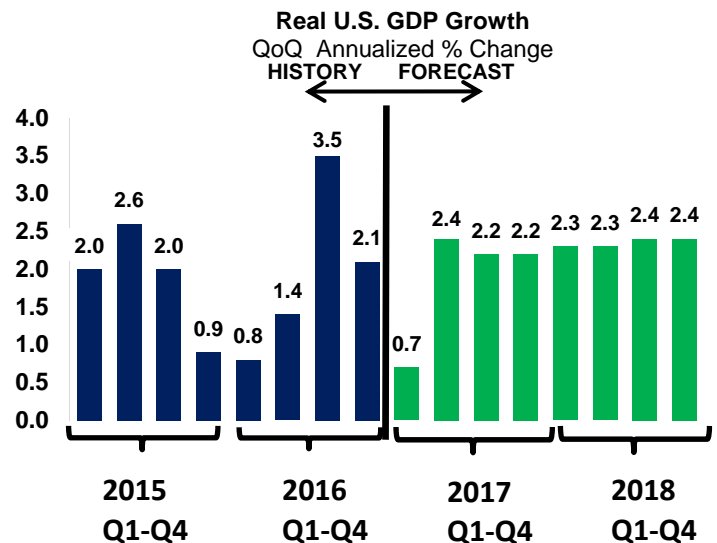
This historical study doesn't necessarily rule out the possibility that this time is different, but it should keep one open to the possibility that this time isn't going to be different.

There is also the possibility that the hard data will get revised higher and better align the soft and hard data indexes. But we

think this analysis supports our assumption of caution, raises the probability that confidence measures could correct in the months ahead, and puts a downside risk on forecasts for a strong GDP growth rebound in the second quarter. What we do know is that this divergence between soft and hard data surprises won't last forever and one of these measures will be correcting before too long.

Our GDP growth estimate for the first quarter slipped below 1.0% to 0.7% annualized this week, mainly due to a big slowdown in real consumer spending growth and inventory drag. We are forecasting a below-consensus rebound in GDP growth in the second quarter to 2.4%. This would leave an anemic first half average GDP growth rate of 1.55%. On the bright-side, that is still a bit better than last year, when GDP growth averaged just 1.1% in the first half.

Another Slow Start to the Year Forecast



Source: Bureau of Economic Analysis; Bank of the West Economics

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Major Economic Indicators

Economic Data	History				Forecast								Yr/Yr % chg or Annual Avg.			
	2016.1	2016.2	2016.3	2016.4	2017.1	2017.2	2017.3	2017.4	2018.1	2018.2	2018.3	2018.4	2015	2016	2017	2018
Real GDP*	0.8	1.4	3.5	2.1	0.7	2.4	2.2	2.2	2.3	2.3	2.4	2.4	2.6	1.6	2.0	2.3
Personal Consumption Expenditures*	1.6	4.3	3.0	3.5	0.6	2.5	2.5	2.4	2.4	2.4	2.4	2.4	3.2	2.7	2.4	2.4
Non-residential Fixed Investment*	-3.4	1.0	1.4	0.9	5.7	4.1	2.9	2.8	2.8	3.4	3.9	4.4	2.1	-0.5	3.2	3.3
Private Housing Starts (000s units)	1,151	1,159	1,145	1,248	1,260	1,250	1,255	1,261	1,263	1,265	1,275	1,285	1,108	1,176	1,257	1,272
Vehicle Sales (mill. Units, annualized)	17.3	17.1	17.5	18.0	17.2	17.4	17.4	17.4	17.3	17.3	17.2	17.2	17.4	17.5	17.3	17.3
Industrial Production*	-1.3	-0.7	0.8	0.8	1.5	1.7	2.4	2.5	2.4	2.3	2.2	2.2	0.3	-1.2	1.4	2.3
Nonfarm Payroll Employment (mil.)	143.4	144.0	144.7	145.2	145.7	146.3	146.8	147.3	147.8	148.3	148.8	149.4	141.8	144.3	146.5	148.6
Unemployment rate	4.9	4.9	4.9	4.7	4.7	4.5	4.5	4.4	4.3	4.3	4.4	4.5	5.3	4.9	4.5	4.4
Consumer Price Index* (percent)	0.1	2.3	1.8	3.0	3.1	2.0	2.3	2.3	2.3	2.2	2.2	2.2	0.1	1.3	2.6	2.3
"Core" CPI* (percent)	2.5	2.1	2.1	2.0	2.5	2.2	2.1	2.1	2.2	2.2	2.2	2.3	1.8	2.2	2.2	2.2
PPI (finished goods)* (percent)	-3.9	3.0	1.7	3.6	3.6	3.0	2.7	2.5	2.4	2.1	2.0	2.1	-3.3	-1.0	3.0	2.4
Trade Weighted Dollar (Fed BOG, major)	93.2	89.5	90.3	93.3	94.5	94.8	96.0	95.7	96.2	96.8	96.2	96.0	90.9	91.6	95.3	96.3
Crude Oil Prices -WTI (\$ per barrel)	33	45	45	49	52	49	50	50	51	51	52	53	50	43	50	52

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

Financial Data	History				Forecast								Annual Average			
	2016.1	2016.2	2016.3	2016.4	2017.1	2017.2	2017.3	2017.4	2018.1	2018.2	2018.3	2018.4	2015	2016	2017	2018
S & P 500	1,951	2,075	2,162	2,185	2,326								2,061	2,093		
Dow Jones Industrial Average	16,663	17,764	18,372	18,865	20,406								17,591	17,916		
Federal Funds Rate (effective)	0.36	0.37	0.39	0.45	0.70	0.96	1.21	1.38	1.46	1.71	1.88	2.13	0.13	0.39	1.06	1.79
Treasury-3 Month Bills (yield)	0.29	0.26	0.30	0.43	0.61	0.85	1.15	1.34	1.47	1.73	1.92	2.17	0.05	0.32	0.99	1.82
Treasury-2 Year Notes (yield)	0.84	0.77	0.73	1.01	1.24	1.28	1.51	1.70	1.94	2.21	2.35	2.61	0.69	0.84	1.43	2.28
Treasury-5 Year Notes (yield)	1.37	1.24	1.13	1.61	1.95	1.97	2.24	2.44	2.71	2.91	3.08	3.34	1.53	1.34	2.15	3.01
Treasury-10 Year Notes (yield)	1.91	1.75	1.56	2.14	2.45	2.48	2.70	2.90	3.15	3.35	3.52	3.78	2.14	1.84	2.63	3.45
Treasury-30 Year Notes (yield)	2.72	2.57	2.28	2.83	3.05	3.07	3.31	3.51	3.78	3.98	4.15	4.43	2.84	2.60	3.24	4.09
Prime Rate	3.50	3.50	3.50	3.55	3.80	4.06	4.32	4.50	4.60	4.85	5.00	5.25	3.26	3.51	4.17	4.93
Libor 3-Mo. U.S. Dollar	0.62	0.64	0.79	0.92	1.07	1.21	1.49	1.67	1.75	1.97	2.17	2.42	0.34	0.74	1.36	2.08
Mortgage-30 Year (yield)	3.74	3.59	3.45	3.84	4.17	4.22	4.43	4.63	4.85	5.05	5.34	5.60	3.85	3.66	4.36	5.21
BAA Corporate (yield)	5.30	4.66	4.26	4.64	4.66	4.67	4.94	5.19	5.55	5.78	5.94	6.20	5.00	4.71	4.87	5.87

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