

#2017-July

Global Stocks, Bonds, and Consumers

Leading Indicators (SBCLI©)

July 2017 Tables, Charts, and Commentary

17 Trillion Dollar Economies

***SBCLI forecasts strong economies in Europe, Asia and America.
India, S. Korea, Turkey, China, and Mexico readings advance.
Europe stocks retreat after Macron euphoria, but still strong.
Brazil and Russia drop sharply with corruption scandals.***

Douglas T. Breeden*

July 13, 2017

Senior Research Consultant, Amundi Asset Management

William W. Priest Professor of Finance, Duke University, Fuqua School of Business

*I thank Song Xiao and Gloria Zeng of Duke for excellent research assistance. This research began in 2011-2013 at MIT Sloan with the academic paper entitled "Consumption As A Leading Indicator," followed by the applied paper "A Stocks, Bonds, Consumers Leading Indicator," which can be found at dougbreeden.net. My Duke article on "Consumer Signals" was published in the Journal of Asset Management, July 2016.

Summary of Breeden's Stocks, Bonds, and Consumers

Leading Indicators (SBCLI©) in July 2017

- In the last two months, India, South Korea, Turkey, China and Mexico led SBCLI advances with higher stock prices and narrower sovereign credit spreads. The SBCLIs for European countries (UK, Italy, Spain, France, and Germany) and the US continue to be quite strong, given high stock prices and generally strong consumer spending relative to stock prices. Australia, Canada, Indonesia, Mexico and Japan also have positive SBCLI readings at present.
- After a surge, Brazil has moved back into negative territory, as stocks fell sharply and credit spreads widened when corruption claims against President Temer surfaced. Russia fell as new allegations of election tampering and collusion with the Trump family arose and stocks and credit spreads deteriorated. Europe SBCLI readings fell back, as increases in term structure slopes were offset by falling stock prices, after the previous euphoric rise when Macron was elected. European economies remain strong, and SBCLI readings are still good there.
- Overall, SBCLI indicators are quite strong globally, foretelling continued strong global economic growth.
- SBCLI readings predict growth deviations from trend, with positive numbers normally indicating above-trend growth in the next 2 and 4 quarters, and negative readings indicating below trend growth or recession. For advanced economies, every 1-point move in SBCLI typically leads to growth of 0.5% above trend in real GDP, and 1.0% above trend in industrial production, and a decline of 0.3% in the unemployment rate (when not at full employment). Emerging markets sensitivities are higher at 0.75% and 1.1% for GDP and IP.

Total Stocks, Bonds Consumers Leading Indexes July, 2017

Asia, Turkey, Mexico, USA Lead SBCLI Gains. Brazil, Russia drop.

Americas		FTSE 100 (Int'l)										AustralAsia				FTSE 250 (Domestic)	
United States	Canada	Brazil	Mexico	France	Germany	Italy	Spain	United Kingdom	Russia	Turkey	Japan	Australia	South Korea	China	India	Indonesia	United Kingdom

Stocks, Bonds, Consumers Leading Index (SBCLI) Updated for Stock Price, Consumer Spending and Bond Yield Spread Moves																	Based on Last 2 Quarters Data		
Brexit voting day	6/23/2016	-0.2	0.4	-4.8	0.0	-0.2	-1.6	1.2	0.9	0.1	-2.5	2.1	-1.9	0.4	-1.5	-1.4	-1.5	-0.6	0.2
PostBrexit Low	6/27/2016	-1.4	-0.3	-5.5	-0.6	-1.9	-3.2	-0.7	-0.8	-1.3	-3.3	1.7	-2.6	-0.2	-2.1	-1.7	-2.0	-0.8	-3.1
Recent data: Pre U.S. Election	11/4/2016	-0.5	0.9	-1.8	0.1	-0.2	-1.2	0.1	0.8	1.3	-2.2	1.5	-1.3	0.3	-1.5	-0.7	-0.9	0.5	0.1
Q4 2016 Average	Avg Q4 2016	2.8	1.6	-1.7	0.6	1.0	0.1	0.7	1.6	2.9	-1.4	0.4	-0.2	0.9	-1.0	-0.5	1.4	0.7	1.5
Year End 2016: Trump elected	12/30/2016	3.4	2.3	-1.4	0.2	2.2	1.2	1.9	2.2	3.8	0.1	0.5	0.7	1.7	-0.9	-0.3	1.6	0.7	2.2
Recent Data: Macron, Moon elected	5/12/2017	2.3	2.6	1.1	0.8	3.6	2.6	3.6	3.7	3.7	0.0	4.0	0.5	2.9	1.2	-1.3	0.6	1.3	3.1
Most Recent Data: Global strength	7/7/2017	2.5	2.0	-0.6	1.2	2.8	2.3	3.2	3.2	3.7	-1.3	4.6	0.6	2.3	1.9	-0.9	1.4	1.6	3.0

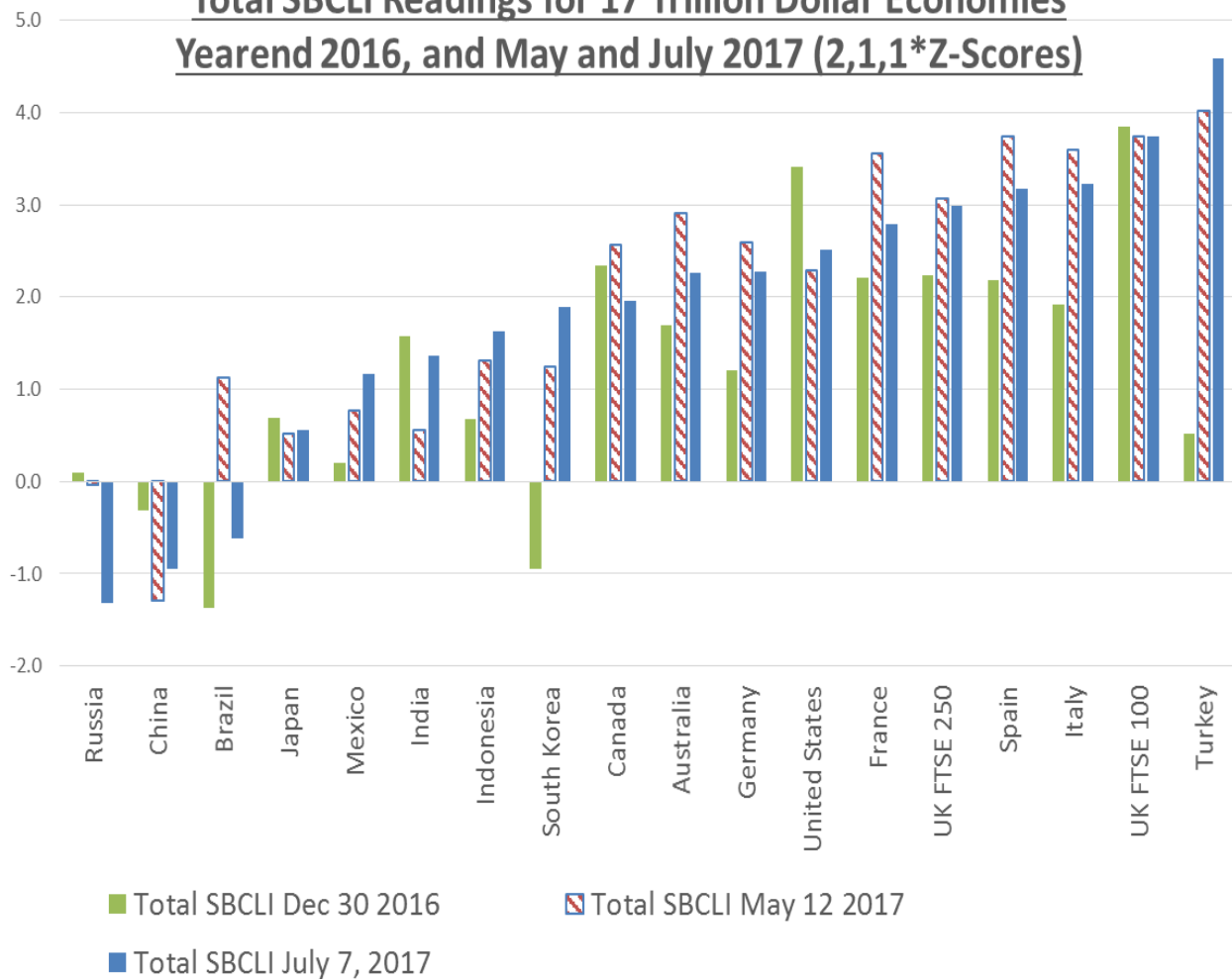
Based on Last 4 Quarters Data

Stocks, Bonds, Consumers Leading Index (SBCLI MA2, 4Q) Updated for Stock Price and Bond Yield Spread Moves																			
Brexit voting day	6/23/2016	0.2	-0.1	-4.8	0.0	-0.1	-1.6	-0.1	0.1	-0.1	-2.7	0.4	-2.6	-0.3	-1.5	-1.5	-1.1	-0.4	-0.1
PostBrexit Low	6/27/2016	-0.4	-0.4	-5.1	-0.4	-1.0	-2.4	-1.0	-0.7	-0.8	-3.1	0.1	-2.9	-0.6	-1.8	-1.7	-1.3	-0.5	-1.7
Recent data: Pre U.S. Election	11/4/2016	0.8	0.7	-2.5	0.1	0.1	-1.4	-0.6	0.3	1.0	-2.6	0.8	-2.1	0.1	-1.7	-1.4	-2.2	0.6	0.8
Q4 2016 Average	Avg Q4 2016	2.4	1.1	-2.5	0.4	0.7	-0.7	-0.3	0.7	1.8	-2.2	0.3	-1.5	0.4	-1.4	-1.3	-1.0	0.7	1.5
Year End 2016: Trump elected	12/30/2016	2.7	1.5	-2.3	0.2	1.3	-0.2	0.3	1.0	2.2	-1.4	0.3	-1.1	0.8	-1.4	-1.2	-0.9	0.7	1.9
Recent Data: Macron, Moon elected	5/12/2017	2.9	2.1	-0.1	1.0	1.4	1.2	1.9	2.4	3.2	-1.3	1.6	-0.5	1.6	0.3	-1.4	1.2	1.2	2.0
Most Recent Data: Global strength	7/7/2017	3.1	1.8	-0.9	1.2	1.1	1.0	1.7	2.1	3.2	-1.9	1.9	-0.5	1.3	0.6	-1.2	1.6	1.4	2.0

Note that every 1.0 (increase) in SBCLI is normally associated in the next 4 quarters with (1) a (positive) deviation from trend in Real GDP Growth of approximately 0.5%, (2) a (positive) deviation from trend in the growth of Industrial Production of 1.0%, and (3) a decrease in the Unemployment Rate of 0.3%.

Total SBCLI Readings Yearend 2016, May and July, 2017

Total SBCLI Readings for 17 Trillion Dollar Economies
Yearend 2016, and May and July 2017 (2,1,1*Z-Scores)



SBCLI readings are strong globally, foretelling above trend growth. SBCLIs are strongest in Turkey, UK, Italy, Spain, France, USA, and Germany.

SBCLI is solid in Australia, Canada, S. Korea, Indonesia, India, Mexico, and Japan.

China improved but is still slightly negative due to bond and consumer signals. Brazil and Russia fell negative due to corruption scandals and effects on stocks and sovereign credit spreads.

Global Stock Market Performance and SBCLI to July 2017: Strong Economic Growth in Europe, America, Asia

7/11/2017 10:20

Douglas T. Breeden, Duke University and Amundi Smith Breeden

Major Stock Price Indexes:		Americas				Europe							AustralAsia					UK FTSE250	
		United States	Canada	Brazil	Mexico	France	Germany	Italy	Spain	United Kingdom	Russia	Turkey	Japan	Australia	S.Korea	China	India	Indonesia	United Kingdom
Year End 2015	12/31/2015	2,044	13,010	43,350	42,978	4,637	10,743	21,418	9,544	6,242	757	71,727	19,034	5,296	1,961	3,539	26,118	4,593	17,122
February 2016 Low	2/11/2016	1,829	12,087	39,318	42,359	3,897	8,753	15,773	7,746	5,537	671	70,942	14,953	4,765	1,835	2,746	22,952	4,714	15,179
Brexit Voting Day Jun 23 2016	6/23/2016	2,113	14,131	51,560	46,146	4,466	10,257	17,966	8,885	6,338	941	77,990	16,238	5,281	1,987	2,892	27,002	4,874	17,334
Post-Brexit Low 6/27/2016	6/27/2016	2,001	13,690	49,246	44,282	3,985	9,269	15,104	7,646	5,982	889	75,161	15,309	5,137	1,927	2,896	26,403	4,836	14,968
Recent data: Pre U.S. Election	11/4/2016	2,085	14,509	61,598	46,695	4,377	10,259	16,319	8,792	6,693	971	74,267	16,905	5,181	1,982	3,125	27,274	5,363	17,271
Q4 2016 Average	Avg Q4 2016	2,186	14,935	60,331	46,428	4,591	10,816	17,352	8,944	6,927	1,036	76,670	17,949	5,445	2,013	3,140	27,020	5,286	17,736
Year End 2016: Trump elected	12/30/2016	2,239	15,288	60,227	45,643	4,862	11,481	19,235	9,352	7,143	1,152	78,139	19,114	5,666	2,026	3,104	26,626	5,297	18,077
Recent Data: Macron, Moon elected	5/12/2017	2,391	15,538	68,222	49,426	5,405	12,770	21,575	10,897	7,435	1,100	94,996	19,884	5,837	2,286	3,084	30,188	5,675	19,763
Most Recent Data: Global strength	7/7/2017	2,425	15,027	62,322	50,059	5,145	12,389	21,015	10,489	7,351	995	#####	19,929	5,704	2,380	3,218	31,361	5,815	19,395

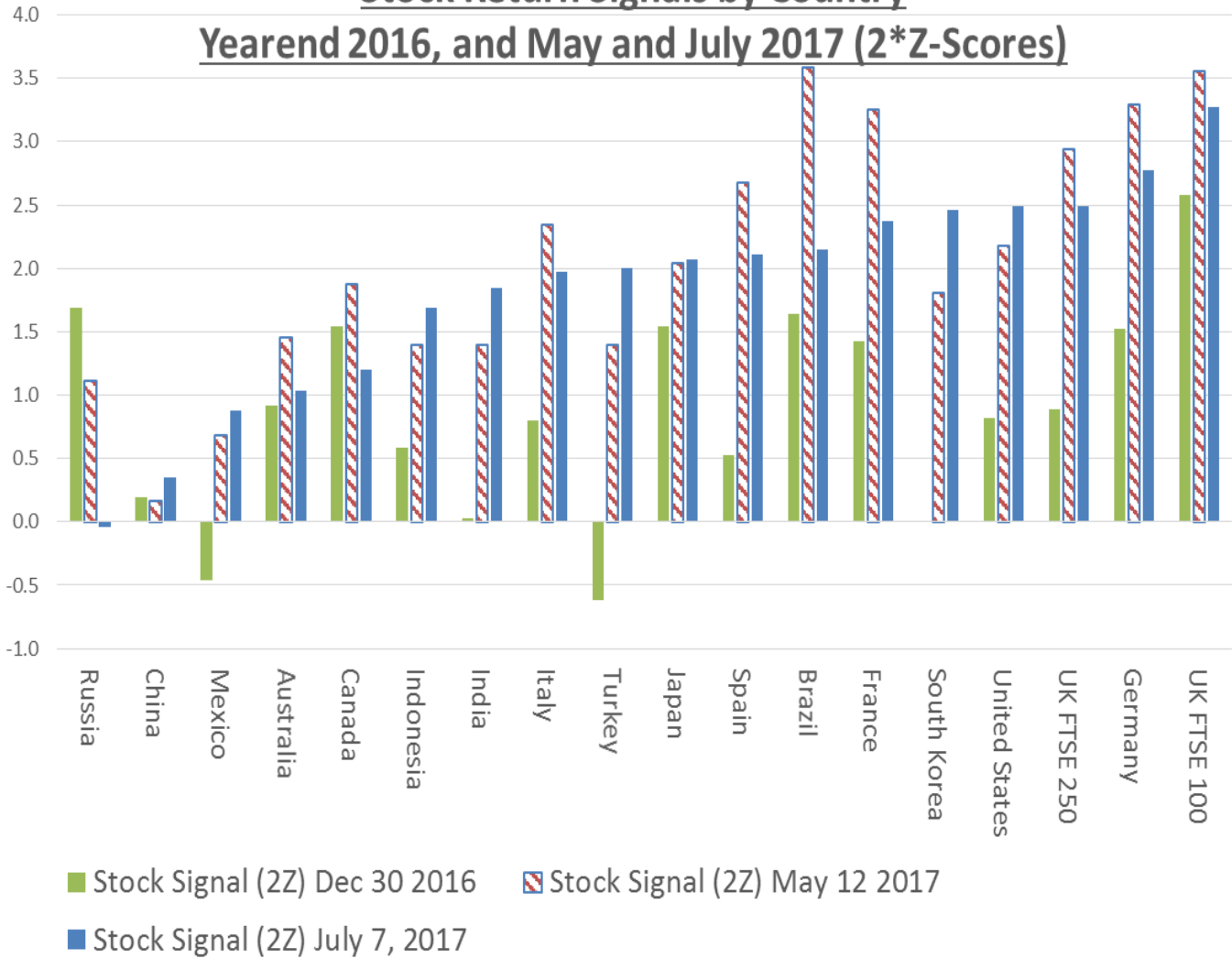
Cumulative Percentage Changes in Stock Prices from Yearend 2015, Dec 30 2015																			
Brexit voting day vs 12/31/15	6/23/2016	3.4%	8.6%	18.9%	7.4%	-3.7%	-4.5%	-16.1%	-6.9%	1.5%	24.3%	8.7%	-14.7%	-0.3%	1.3%	-18.3%	3.4%	6.1%	1.2%
PostBrexit Low	6/27/2016	-2.1%	5.2%	13.6%	3.0%	-14.1%	-13.7%	-29.5%	-19.9%	-4.2%	17.4%	4.8%	-19.6%	-3.0%	-1.8%	-18.2%	1.1%	5.3%	-12.6%
Recent data: Pre U.S. Election	11/4/2016	2.0%	11.5%	42.1%	8.6%	-5.6%	-4.5%	-23.8%	-7.9%	7.2%	28.3%	3.5%	-11.2%	-2.2%	1.1%	-11.7%	4.4%	16.8%	0.9%
Q4 2016 Average	Avg Q4 2016	7.0%	14.8%	39.2%	8.0%	-1.0%	0.7%	-19.0%	-6.3%	11.0%	36.9%	6.9%	-5.7%	2.8%	2.6%	-11.3%	3.5%	15.1%	3.6%
Year End 2016: Trump elected	12/30/2016	9.5%	17.5%	38.9%	6.2%	4.9%	6.9%	-10.2%	-2.0%	14.4%	52.2%	8.9%	0.4%	7.0%	3.3%	-12.3%	1.9%	15.3%	5.6%
Recent Data: Macron, Moon elected	5/12/2017	17.0%	19.4%	57.4%	15.0%	16.6%	18.9%	0.7%	14.2%	19.1%	45.3%	32.4%	4.5%	10.2%	16.6%	-12.9%	15.6%	23.6%	15.4%
Most Recent Data: Global strength	7/7/2017	18.7%	15.5%	43.8%	16.5%	11.0%	15.3%	-1.9%	9.9%	17.8%	31.5%	39.5%	4.7%	7.7%	21.3%	-9.1%	20.1%	26.6%	13.3%

From mid-May to mid-July 2017, Stocks gained most in Asian economies, led by South Korea, India, China and Indonesia. Turkey, USA also strong. European stocks dropped back after euphoria when Macron won in May. Brazil dropped sharply after allegations against President Temer. Russia dropped sharply on USA election meddling investigation.

7/13/2017

D.T. Breeden, Duke University

Stock Return Signals by Country Yearend 2016, and May and July 2017 (2*Z-Scores)



From May to July 2017, stocks gained the most in South Korea, Turkey, India and Indonesia. European stocks fell back as Macron euphoria subsided.

After large gains, stocks in Russia and Brazil fell sharply, given corruption scandals.

Stock signals are still quite strong in most American, European and Asian economies.

Global Bond Market Signals: Term Structure Slopes for Advanced Economies; Sovereign Credit Spreads for Emergings

7/11/2017 10:20

Douglas T. Breeden, Duke University and Amundi Smith Breeden

		Americas		Europe								AustralAsia						United Kingdom	
		United States	Canada	Brazil	Mexico	France	Germany	Italy	Spain	United Kingdom	Russia	Turkey	Japan	Australia	South Korea	China	India		Indonesia
Country Slopes and Credit Spreads		Slope	Slope	Credit	Credit	Slope	Slope	Slope	Slope	Slope	Credit	Credit	Slope	Slope	Slope	Credit	Credit	Credit	Slope
Year End 2015	1/4/2016	2.08	0.91	14.16	3.99	1.39	1.15	1.74	1.90	1.37	7.35	8.54	0.28	0.78	0.54	0.61	5.40	2.41	1.37
February 2016 Low	2/11/2016	1.38	0.59	14.67	4.44	0.98	0.68	1.77	2.04	0.83	8.64	8.85	0.15	0.19	0.31	1.21	5.96	2.92	0.83
Brexit Voting Day Jun 23 2016	6/23/2016	1.46	0.78	10.68	4.31	0.97	0.70	1.54	1.59	0.93	6.81	7.50	0.10	0.48	0.18	1.18	5.68	2.10	0.93
Post-Brexit Low 6/27/2016	6/27/2016	1.19	0.60	10.81	4.56	0.83	0.55	1.68	1.60	0.59	7.09	7.89	0.05	0.30	0.03	1.40	5.97	2.39	0.59
Recent data: Pre U.S. Election	11/4/2016	1.41	0.72	9.73	4.53	1.20	1.02	2.09	1.70	0.96	6.79	8.40	0.26	0.60	0.23	0.95	5.06	1.84	0.96
Q4 2016 Average	Q4-2016	1.72	0.97	9.53	4.68	1.35	1.06	2.12	1.74	1.11	6.38	8.28	0.35	0.53	0.23	0.77	4.43	1.80	1.11
Year End 2016: Trump elected	12/30/2016	1.95	1.27	8.93	4.97	1.59	1.19	2.31	1.87	1.42	5.92	8.64	0.46	0.60	0.23	0.59	4.07	1.88	1.42
Recent Data: Macron, Moon elected	5/12/2017	1.45	1.07	7.74	4.89	1.44	1.32	2.64	2.02	0.88	5.25	8.08	0.19	1.02	0.77	1.31	4.59	1.53	0.88
Most Recent Data: Global strength	7/7/2017	1.35	1.14	8.20	4.44	1.53	1.49	2.73	2.25	1.25	5.50	8.21	0.19	0.85	0.77	1.20	4.15	1.44	1.25
Cumulative Changes in Bond Market Yield Spreads from Yearend 2015, Dec 30 2015																			
Brexit voting day vs 12/31/15	6/23/2016	-0.62	-0.14	-3.48	0.32	-0.42	-0.45	-0.20	-0.31	-0.44	-0.54	-1.04	-0.18	-0.31	-0.36	0.57	0.28	-0.31	-0.44
PostBrexit Low	6/27/2016	-0.89	-0.32	-3.36	0.58	-0.56	-0.61	-0.05	-0.30	-0.78	-0.26	-0.65	-0.23	-0.49	-0.51	0.79	0.56	-0.02	-0.78
Recent data: Pre U.S. Election	11/4/2016	-0.67	-0.19	-4.43	0.55	-0.19	-0.14	0.36	-0.20	-0.42	-0.56	-0.14	-0.02	-0.19	-0.31	0.34	-0.34	-0.57	-0.42
Q4 2016 Average	Avg Q4 2016	-0.36	0.06	-4.63	0.69	-0.04	-0.09	0.39	-0.15	-0.26	-0.96	-0.26	0.06	-0.25	-0.31	0.16	-0.97	-0.61	-0.26
Year End 2016: Trump elected	12/30/2016	-0.13	0.36	-5.24	0.99	0.20	0.04	0.57	-0.03	0.05	-1.43	0.10	0.18	-0.19	-0.31	-0.02	-1.34	-0.54	0.05
Recent Data: Macron, Moon elected	5/12/2017	-0.63	0.16	-6.42	0.90	0.05	0.17	0.91	0.12	-0.50	-2.10	-0.46	-0.10	0.24	0.23	0.70	-0.82	-0.88	-0.50
Most Recent Data: Global strength	7/7/2017	-0.73	0.23	-5.96	0.46	0.14	0.34	1.00	0.35	-0.13	-1.84	-0.33	-0.10	0.07	0.23	0.59	-1.26	-0.97	-0.13

Term structure slopes (10 yr -3 mo yields) steepened in Europe, given increasing strength there, but flattened in the USA and Australia, a relatively weak signal.

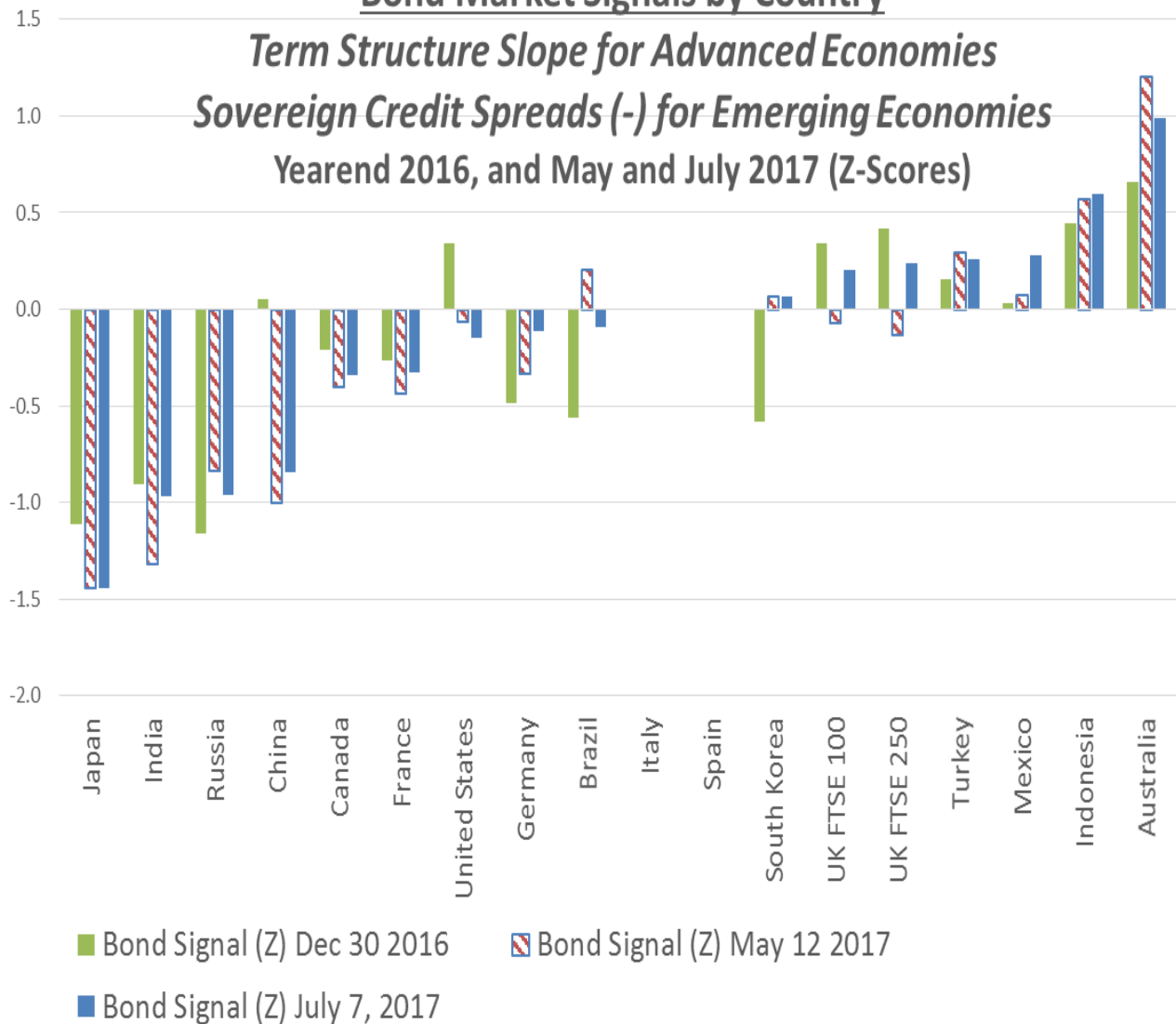
Sovereign credit spreads widened in Brazil, given the new corruption scandal (a weak signal), but narrowed sharply in Mexico, India, China and Indonesia, a positive signal. Spreads also widened in Russia, a negative, given the election manipulation inquiry.

Bond Market Signals by Country

Term Structure Slope for Advanced Economies

Sovereign Credit Spreads (-) for Emerging Economies

Yearend 2016, and May and July 2017 (Z-Scores)



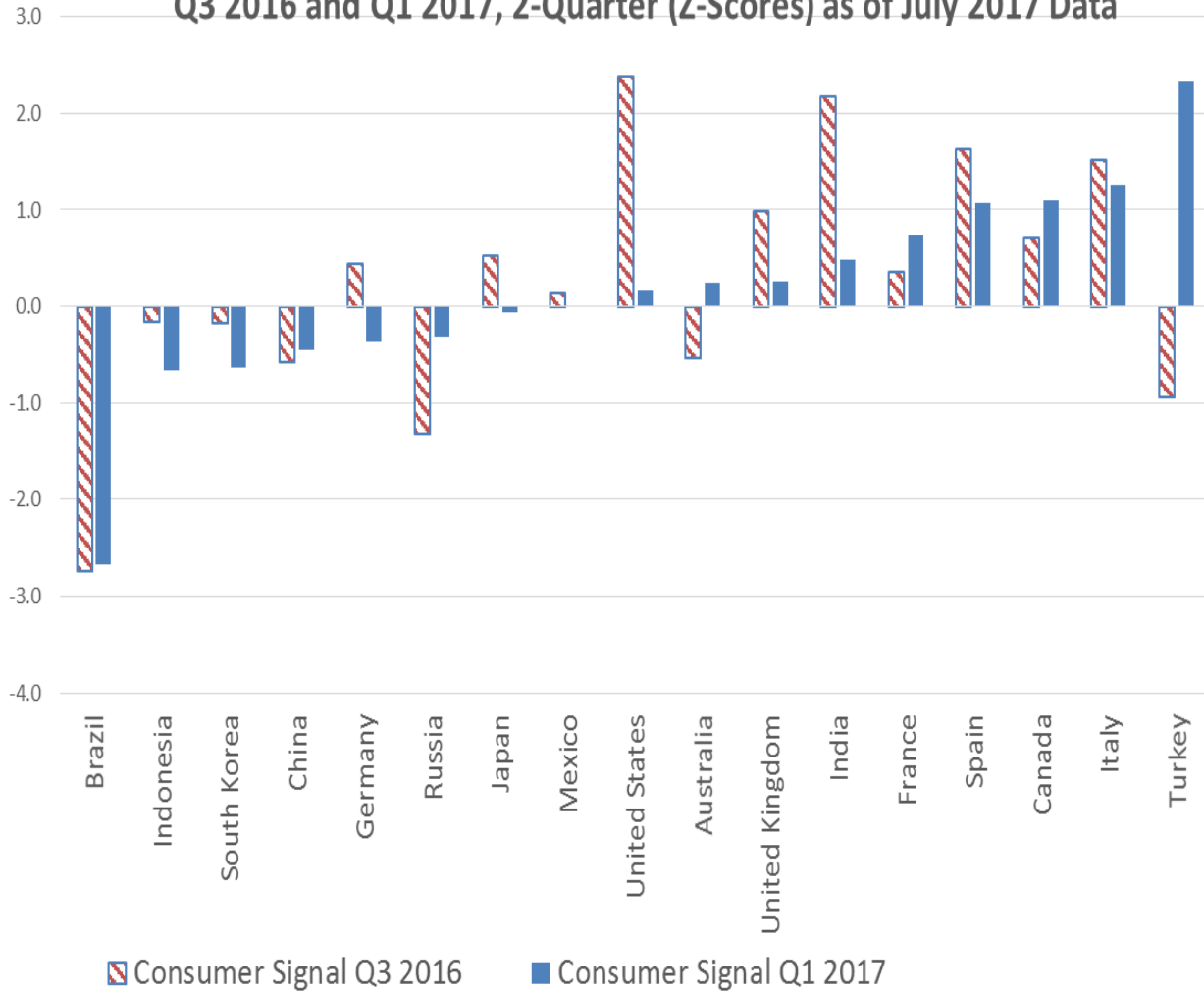
Bond market signals are strongest in Australia, Indonesia, Mexico and Turkey. For Australia, it's a relatively steep yield curve. For Indonesia, Mexico and Turkey, the strong signal is a relatively narrow sovereign credit spread. India's and China's credit spreads narrowed notably.

European bond signals improved with higher long rates and steeper yield curve slopes.

Brazil and Russia bond signals weakened.

US had a weaker bond score, as slope flattened.

Consumer Spending Signals: Deviations from Stock Wealth Q3 2016 and Q1 2017, 2-Quarter (Z-Scores) as of July 2017 Data



Consumer spending deviations from stock market wealth were weaker in 2017Q1 numbers for the USA and India, as well as in Europe. Expectations are that USA 2017 Q2 spending was better, so this may reverse.

Turkey had a significant gain, showing much improved consumer confidence.

The consumer signal continued to be extremely negative in Brazil, likely reflecting high unemployment.

Stocks, Bonds, Consumers Leading Indicators (SBCLI©)

Douglas T. Breeden, Duke University and Amundi Asset Management

(2Q Returns, Growth)

7/13/2017 11:16

Stock Market Signals

	United States	Canada	Brazil	Mexico	France	Germany	Italy	Spain	United Kingdom	Russia	Turkey	Japan	Australia	South Korea	China	India	Indonesia	United Kingdom
	Americas				Europe				FTSE 100			AustralAsia						FTSE 250
Z-Multiplier	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2
2016-Q1	-1.6	-1.7	-1.8	-0.7	-1.6	-1.5	-2.3	-2.4	-1.6	0.1	-0.8	-1.7	-1.4	-0.7	-1.0	-1.2	-0.1	
2016-Q2	-0.4	0.0	0.4	0.2	-1.4	-1.3	-2.5	-2.0	-0.6	0.3	-0.1	-2.0	-0.1	-0.4	-0.9	-0.4	0.4	-0.6
2016-Q3	1.4	1.9	2.8	0.9	0.0	0.3	-1.3	-0.5	2.1	0.5	-0.1	-0.7	1.1	0.4	0.1	0.9	1.0	2.1
2016-Q4	0.3	1.1	1.7	-0.2	0.5	0.6	-0.4	0.0	1.9	0.4	-0.8	0.8	0.2	-0.1	0.2	0.2	0.6	0.5
6/23/2016	-0.3	0.0	-0.5	-0.3	0.1	-0.2	0.0	-0.1	-0.1	-0.6	-0.6	-0.3	-0.3	-0.3	-0.1	0.2	-0.3	0.0
6/27/2016	-1.3	-0.5	-1.0	-0.9	-1.5	-1.5	-1.9	-1.8	-1.3	-1.2	-1.0	-0.9	-0.8	-0.7	-0.1	-0.1	-0.4	-2.9
11/4/2016	-0.6	0.5	2.0	-0.1	-0.2	-0.2	-1.1	-0.3	1.1	-0.3	-1.1	0.1	-0.6	-0.3	0.2	0.3	0.7	-0.1
Avg Q4 2016	0.3	1.1	1.7	-0.2	0.5	0.6	-0.4	0.0	1.9	0.4	-0.8	0.8	0.2	-0.1	0.2	0.2	0.6	0.5
12/30/2016	0.8	1.5	1.6	-0.5	1.4	1.5	0.8	0.5	2.6	1.7	-0.6	1.5	0.9	0.0	0.2	0.0	0.6	0.9
5/12/2017	2.2	1.9	3.6	0.7	3.3	3.3	2.3	2.7	3.6	1.1	1.4	2.0	1.5	1.8	0.2	1.4	1.4	2.9
7/7/2017	2.5	1.2	2.2	0.9	2.4	2.8	2.0	2.1	3.3	0.0	2.0	2.1	1.0	2.5	0.3	1.8	1.7	2.5

Bond Market Signals (Term Structure Slope or Sovereign Credit Spread for EMs)

	United States	Canada	Brazil	Mexico	France	Germany	Italy	Spain	United Kingdom	Russia	Turkey	Japan	Australia	South Korea	China	India	Indonesia	United Kingdom
Z Multiplier	1	1	1	1	1	1	0	0	1	1	1	1	1	1	2	1	1	1
Variable	Slope	Slope	Credit	Credit	Slope	Slope	Slope	Slope	Slope	Credit	Credit	Slope	Slope	Slope	Credit	Credit	Credit	Slope
2016-Q1	0.1	-0.8	-1.1	0.3	-0.6	-0.6	0.0	0.0	0.2	-2.0	-0.4	-1.3	0.0	-0.9	-0.5	-0.6	0.0	
2016-Q2	0.0	-0.7	-1.2	0.3	-0.7	-0.8	0.0	0.0	0.0	-1.8	0.0	-1.4	0.0	-0.9	-0.8	-0.9	0.2	0.0
2016-Q3	-0.2	-1.0	-1.3	0.2	-1.0	-1.0	0.0	0.0	-0.4	-1.7	0.2	-1.4	-0.2	-1.0	-1.0	-1.2	0.3	-0.4
2016-Q4	0.2	-0.5	-0.9	0.2	-0.5	-0.7	0.0	0.0	0.1	-1.4	0.2	-1.3	0.6	-0.6	-0.2	-1.2	0.5	0.1
6/23/2016	-0.1	-0.7	-1.7	0.3	-1.0	-1.1	0.0	0.0	0.0	-1.6	0.4	-1.5	0.5	-0.7	-0.8	-2.2	0.4	-0.1
6/27/2016	-0.3	-0.9	-1.8	0.2	-1.1	-1.3	0.0	0.0	-0.3	-1.7	0.3	-1.6	0.3	-0.8	-1.1	-2.4	0.3	-0.4
11/4/2016	-0.1	-0.7	-1.1	0.2	-0.7	-0.7	0.0	0.0	0.0	-1.6	0.2	-1.3	0.7	-0.6	-0.5	-1.7	0.5	-0.1
Avg Q4 2016	0.2	-0.5	-0.9	0.2	-0.5	-0.7	0.0	0.0	0.1	-1.4	0.2	-1.3	0.6	-0.6	-0.2	-1.2	0.5	0.1
12/30/2016	0.3	-0.2	-0.6	0.0	-0.3	-0.5	0.0	0.0	0.3	-1.2	0.2	-1.1	0.7	-0.6	0.1	-0.9	0.4	0.4
5/12/2017	-0.1	-0.4		0.1	-0.4	-0.3	0.0	0.0	-0.1	-0.8	0.3	-1.4	1.2	0.1	-1.0	-1.3	0.6	-0.1
7/7/2017	-0.1	-0.3	-0.1	0.3	-0.3	-0.1	0.0	0.0	0.2	-1.0	0.3	-1.4	1.0	0.1	-0.8	-1.0	0.6	0.2

Consumer Signals (Z)

	United States	Canada	Brazil	Mexico	France	Germany	Italy	Spain	United Kingdom	Russia	Turkey	Japan	Australia	South Korea	China	India	Indonesia	United Kingdom
Z Multiplier	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2016-Q1	2.0	1.9	-1.8	0.3	2.1	0.5	0.9	1.8	1.0	-0.9	-0.3	-0.3	0.4	0.1	-0.2	1.3	0.0	1.0
2016-Q2	2.5	1.3	-2.4	-0.3	2.6	0.5	1.1	1.7	1.2	-1.5	0.3	0.5	0.1	-0.4	-0.4	-2.1	0.0	1.2
2016-Q3	2.4	0.7	-2.7	0.1	0.4	0.4	1.5	1.6	1.0	-1.3	-0.9	0.5	-0.5	-0.2	-0.6	2.2	-0.2	1.0
2016-Q4	2.3	1.0	-2.4	0.6	1.0	0.2	1.1	1.7	0.9	-0.4	1.0	0.2	0.1	-0.4	-0.6	2.5	-0.3	0.9
2017-Q1	0.2	1.1	-2.7	0.0	0.7	-0.4	1.3	1.1	0.3	-0.3	2.3	-0.1	0.2	-0.6	-0.5	0.5	-0.7	0.3

Stocks, Bonds, Consumers Leading Indicators (SBCLI©)

	United States	Canada	Brazil	Mexico	France	Germany	Italy	Spain	United Kingdom	Russia	Turkey	Japan	Australia	South Korea	China	India	Indonesia	United Kingdom
	Americas				Europe				Kingdom			AustralAsia						Kingdom
2016-Q1	0.5	-0.5	-4.7	-0.1	0.0	-1.5	-1.4	-0.6	-0.4	-2.9	-1.4	-3.3	-1.0	-1.5	-1.7	-0.6	-0.1	
2016-Q2	2.0	0.6	-3.2	0.2	0.4	-1.5	-1.3	-0.2	0.6	-2.9	0.1	-2.9	-0.1	-1.8	-2.0	-3.4	0.6	0.6
2016-Q3	3.6	1.6	-1.3	1.3	-0.7	-0.3	0.2	1.1	2.7	-2.5	-0.8	-1.6	0.3	-0.7	-1.5	1.9	1.1	1.2
2016-Q4	2.8	1.6	-1.7	0.6	1.0	0.1	0.7	1.6	2.9	-1.4	0.4	-0.2	0.9	-1.0	-0.5	1.4	0.7	1.5
6/23/2016	1.9	0.3	-4.6	0.7	0.2	-1.1	1.1	1.5	0.8	-2.7	0.8	-1.6	0.3	-1.3	-1.5	0.4	-0.3	0.8
6/27/2016	0.7	-0.4	-5.3	0.0	-1.6	-2.6	-0.8	-0.2	-0.7	-3.4	0.3	-2.2	-0.4	-1.9	-1.8	0.0	-0.5	-2.4
11/4/2016	1.6	0.8	-1.5	0.7	0.1	-0.7	0.0	1.4	2.0	-2.3	0.1	-1.0	0.1	-1.3	-0.8	1.0	0.8	0.8
Avg Q4 2016	2.8	1.6	-1.7	0.6	1.0	0.1	0.7	1.6	2.9	-1.4	0.4	-0.2	0.9	-1.0	-0.5	1.4	0.7	1.5
12/30/2016	3.4	2.3	-1.4	0.2	2.2	1.2	1.9	2.2	3.8	0.1	0.5	0.7	1.7	-0.9	-0.3	1.6	0.7	2.2
5/12/2017	2.3	2.6	0.9	0.8	3.6	2.6	3.6	3.7	3.7	0.0	4.0	0.5	2.9	1.2	-1.3	0.6	1.3	3.1
7/7/2017	2.5	2.0	-0.6	1.2	2.8	2.3	3.2	3.2	3.7	-1.3	4.6	0.6	2.3	1.9	-0.9	1.4	1.6	3.0

Appendix: 10 Years of SBCLI Data Covering the Great Recession and Sovereign Debt Crisis

	Breedeen's Stocks, Bonds, Consumers Leading Indicators (SBCLI©)														(2Q Returns, Growth)			
	Douglas T. Breedeen, Duke University and Amundi Asset Management														7/13/2017 11:16			
	United States	Canada	Brazil	Mexico	France	Germany	Italy	Spain	United Kingdom	United Kingdom	Russia	Turkey	Japan	Australia	South Korea	China	India	Indonesia
	Americas				Europe				FTSE 100	FTSE 250			AustralAsia					
2006-Q4	-1.3	-1.1	1.7	2.4	-1.9	0.5	0.8	1.6	-2.1		2.6	-3.0	-0.3	-0.2	-0.8	2.4	1.5	3.6
2007-Q1	-0.9	-0.5	4.0	3.4	0.4	-0.6	1.5	2.0	-1.0		3.3	0.1	1.9	3.3	0.0	5.0	3.8	4.3
2007-Q2	-2.8	0.4	4.4	3.1	0.4	-1.7	0.6	-0.4	-0.3		2.9	0.4	1.0	2.5	0.9	5.4	2.4	3.7
2007-Q3	-2.9	0.3	3.1	1.5	-1.1	-0.5	-1.6	-1.4	-1.1		2.6	0.7	-1.5	-0.3	2.4	1.9	3.0	4.6
2007-Q4	-3.1	0.5	3.6	-0.5	-3.5	-3.3	-3.1	-0.8	-2.2		2.7	1.0	-2.6	-0.1	0.8	-0.4	4.6	5.3
2008-Q1	-4.4	0.7	3.4	-0.8	-7.0	-5.1	-4.1	-2.1	-4.6		1.2	-2.1	-2.7	-4.1	-3.2	-3.2	2.0	3.5
2008-Q2	-3.4	-1.7	2.1	0.3	-7.1	-5.4	-3.8	-4.4	-5.6		0.5	-5.5	-2.8	-7.3	-4.1	-4.4	-2.6	-0.9
2008-Q3	-3.7	-2.7	0.9	-1.2	-5.7	-4.9	-4.1	-5.7	-6.6		-0.8	-4.9	-2.9	-7.2	-4.4	-3.8	-3.3	-3.4
2008-Q4	-7.5	-7.5	-4.1	-6.4	-8.5	-7.4	-6.7	-6.7	-10.6		-5.7	-6.6	-5.6	-8.0	-9.2	-2.6	-3.2	-6.4
2009-Q1	-6.3	-6.6	-3.5	-7.7	-5.6	-4.1	-6.6	-5.0	-6.8		-7.4	-6.0	-5.6	-5.6	-4.8	-1.2	-2.1	-3.2
2009-Q2	0.3	3.4	5.7	-1.4	1.4	2.0	-1.3	-2.3	-0.3		0.2	0.9	0.8	2.0	5.0	3.1	5.9	4.2
2009-Q3	4.5	7.5	7.5	5.3	5.4	3.2	3.5	2.2	3.7		1.9	6.1	3.6	6.0	7.7	3.9	6.8	5.4
2009-Q4	4.0	5.1	3.7	5.4	5.9	3.0	3.3	3.2	6.2		1.4	4.1	1.1	4.7	3.8	1.4	0.4	1.5
2010-Q1	1.4	3.6	1.8	2.3	4.4	2.9	1.0	-0.7	3.3		2.9	2.3	0.8	2.2	1.6	0.0	1.5	-0.6
2010-Q2	1.2	2.5	0.1	0.7	0.6	1.5	-1.4	-2.7	1.4		0.8	2.6	0.9	-0.1	0.8	-0.8	3.3	0.0
2010-Q3	0.6	1.0	0.5	0.7	-0.4	0.4	-0.6	-2.5	0.6		-1.0	3.8	-0.2	-0.6	1.0	-1.3	-0.8	-0.6
2010-Q4	2.7	2.2	2.5	2.4	1.9	1.9	0.9	-1.5	0.4		0.1	3.2	-1.1	0.5	1.8	-0.1	-0.7	0.5
2011-Q1	4.3	2.1	1.5	1.9	3.7	4.0	0.9	-1.8	1.4		1.3	2.4	-1.7	1.3	1.7	1.1	3.1	0.1
2011-Q2	1.1	-0.1	0.3	0.2	-1.3	0.0	-0.2	-2.0	-0.4		0.3	1.7	-1.2	-0.4	-0.1	-0.3	-4.5	-0.1
2011-Q3	-1.4	-1.6	-1.7	1.0	-5.5	-3.2	-3.7	-3.3	-2.4		-1.1	-0.8	0.0	-3.1	-2.8	-2.7	-6.9	1.6
2011-Q4	-1.3	-1.5	-2.3	0.5	-4.1	-2.9	-6.1	-4.4	-1.5		-1.8	-2.6	-0.3	-4.0	-4.0	-4.0	0.7	-0.4
2012-Q1	1.0	0.0	1.0	1.0	-0.1	0.5	-3.8	-2.3	1.5		-0.2	-1.4	0.1	-1.1	-1.3	-3.9	-1.9	-0.7
2012-Q2	0.9	-0.7	0.6	1.3	0.6	1.0	-3.2	-3.3	0.6		-0.2	0.0	0.5	-0.7	-1.1	-3.7	-2.7	1.1
2012-Q3	-0.9	-1.2	-0.6	1.1	-0.9	-0.4	-2.4	-3.3	-0.4		-1.3	1.2	-1.1	-2.4	-2.0	-3.8	0.0	1.2
2012-Q4	0.0	0.5	0.5	1.3	1.7	1.1	0.0	-0.8	1.3		-0.4	2.5	-0.8	-1.0	-0.9	-3.8	-1.9	1.0
2013-Q1	0.7	0.6	0.2	1.8	1.5	1.2	-0.5	-0.8	1.8		0.1	3.2	3.5	1.2	-1.6	-2.8	-1.9	1.0
2013-Q2	0.3	0.5	-0.3	-0.2	1.0	0.8	-1.1	-0.8	1.5		-0.5	2.5	6.0	0.6	-2.0	-3.2	-1.1	1.3
2013-Q3	0.5	1.0	0.3	-1.1	1.0	1.4	-0.2	-0.2	1.5		-0.4	-0.2	1.8	1.2	-0.8	-2.4	0.6	-0.5
2013-Q4	1.9	1.4	0.1	-0.1	2.0	1.1	1.8	2.1	1.7		0.1	-0.8	-1.0	2.3	0.1	-1.7	-0.3	-1.5
2014-Q1	2.1	1.0	0.6	-0.4	0.5	0.9	2.4	2.2	1.3		-0.5	-2.5	0.9	1.4	-0.6	-1.7	-0.9	-0.3
2014-Q2	1.8	1.1	0.4	1.0	-0.3	0.0	1.7	1.0	1.0		-1.0	-1.0	-3.7	0.9	-1.8	-1.9	0.7	0.4
2014-Q3	2.9	1.2	0.8	2.1	1.2	-1.0	0.3	0.6	1.8		-1.2	2.0	-4.6	1.0	-1.1	-1.5	-2.4	-0.4
2014-Q4	3.0	-0.5	0.5	0.2	-0.9	-0.7	-1.1	-0.4	0.2		-1.6	0.7	0.9	-0.5	-1.4	-0.6	-1.2	-1.3
2015-Q1	2.1	-2.1	-3.2	-0.5	0.4	1.5	1.2	0.3	0.2		-4.1	0.6	1.1	-0.3	-1.8	-0.2	-1.0	-1.2
2015-Q2	1.8	-1.0	-4.4	0.7	2.3	2.2	4.1	1.8	2.0		-3.9	-0.1	0.7	1.0	-0.6	1.2	-2.4	-1.0
2015-Q3	1.5	-0.5	-4.6	0.5	0.1	-1.0	2.4	1.0	-0.1		-3.5	-1.9	-0.6	-0.7	-1.0	-0.7	-1.6	-2.0
2015-Q4	1.0	-0.9	-5.2	-0.1	-1.1	-1.8	0.5	-0.1	-0.8		-3.5	-1.3	-2.2	-1.2	-0.6	-1.6	1.4	-1.7
2016-Q1	0.5	-0.5	-4.7	-0.1	0.0	-1.5	-1.4	-0.6	-0.4		-2.9	-1.4	-3.3	-1.0	-1.5	-1.7	-0.6	-0.1
2016-Q2	2.0	0.6	-3.2	0.2	0.4	-1.5	-1.3	-0.2	0.6	1.5	-2.9	0.1	-2.9	-0.1	-1.8	-2.0	-3.4	0.6
06/23/16	-0.2	0.4	-4.8	0.0	-0.2	-1.6	1.2	0.9	0.1	0.2	-2.5	2.1	-1.9	0.4	-1.5	-1.4	-1.5	-0.6
06/27/16	-1.4	-0.3	-5.5	-0.6	-1.9	-3.2	-0.7	-0.8	-1.3	-3.1	-3.3	1.7	-2.6	-0.2	-2.1	-1.7	-2.0	-0.8
11/04/16	-0.5	0.9	-1.8	0.1	-0.2	-1.2	0.1	0.8	1.3	0.1	-2.2	1.5	-1.3	0.3	-1.5	-0.7	-0.9	0.5
Avg Q4 2016	2.8	1.6	-1.7	0.6	1.0	0.1	0.7	1.6	2.9	1.5	-1.4	0.4	-0.2	0.9	-1.0	-0.5	1.4	0.7
12/30/16	3.4	2.3	-1.4	0.2	2.2	1.2	1.9	2.2	3.8	2.2	0.1	0.5	0.7	1.7	-0.9	-0.3	1.6	0.7
05/12/17	2.3	2.6	1.1	0.8	3.6	2.6	3.6	3.7	3.7	3.1	0.0	4.0	0.5	2.9	1.2	-1.3	0.6	1.3
07/07/17	2.5	2.0	-0.6	1.2	2.8	2.3	3.2	3.2	3.7	3.0	-1.3	4.6	0.6	2.3	1.9	-0.9	1.4	1.6