

Indications Of Cyclical Position Around The World: False Signals Or Verifiable Indicators?

Carl Weinberg, Chief Economist

U.S. Growth Set To Remain Strong Enough To Keep Unemployment Declining, Wages & Inflation Rising, And The Fed Tightening

Jim O'Sullivan, Chief U.S. Economist



High Frequency Economics[®]

Daily Data Analysis and Assessment of the Global Economy

Indications Of Cyclical Position Around The World: False Signals Or Verifiable Indicators?

Carl Weinberg, Chief Economist



High Frequency Economics®

Daily Data Analysis and Assessment of the Global Economy

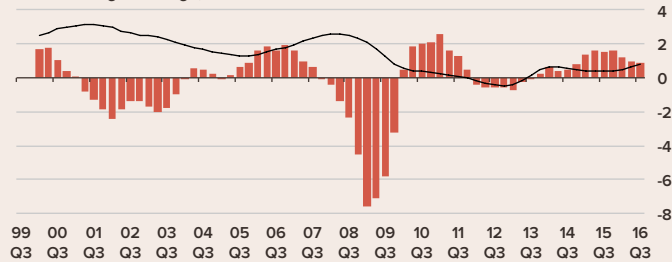
Daily Notes on the **Global Economy**

HFE Global Webinar — January 18, 2017

Carl B. Weinberg, Chief Economist

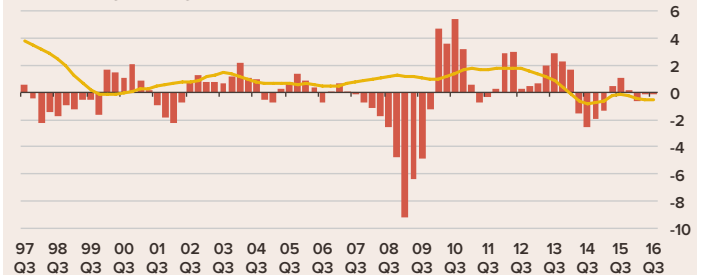
Euro Zone: GDP Cycle

Percent Change Year Ago, Deviation From Trend Rate To 2016 Q3 Line Shows Trend



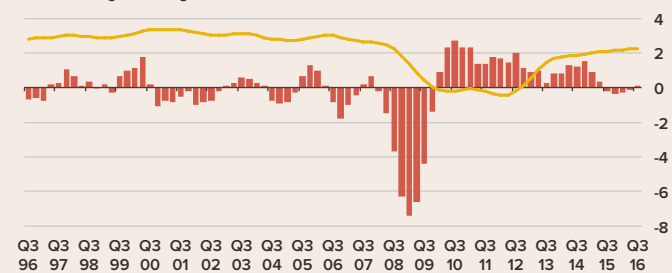
Japan: GDP Cycle

Percent Change Year Ago, Deviation From Trend Rate To 2016 Q3, Line Shows Trend



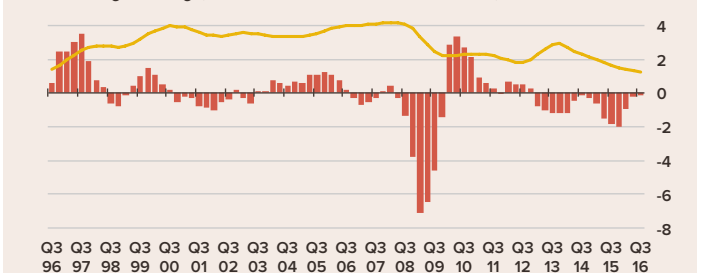
United Kingdom: GDP Cycle

Percent Change Year Ago, Deviation From Trend Rate To 2016 Q3, Line Shows Trend



Canada: GDP Cycle

Percent Change Year Ago, Deviation From Trend Rate To 2016 Q3, Line Shows Trend





High Frequency Economics®

Daily Data Analysis and Assessment of the Global Economy

Daily Notes on the **Global Economy**

HFE Global Webinar — January 18, 2017

Carl B. Weinberg, Chief Economist

QE Is Not Forever! Central banks are running out of sovereign bonds to buy. QE drives rates negative if central banks buy so much that savers cannot find paper to hedge liabilities. Buying corporates is not QE. BoJ is tapering QE now, ECB is tapering and will run out of bonds this year, the BoE is done. As central banks taper or end sovereign purchases, yields will rise, curves will steepen.

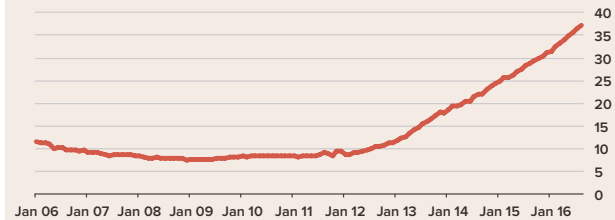
Euro Zone: ECB Holdings Of Sovereign Bonds

As A Percentage Of Central Government Debt Issuance, Quarterly Data To Sep 2016*



BoJ Holdings Of JGBs And JGTBs

As A Percent Of Central Government Debt Issuance, Monthly Data To September 2016



United Kingdom: BoE Holdings Of Gilts In The APF

As A Percentage Of Total Gilt Issuance, Monthly Data To Oct 2016



United States: Fed Holdings Of U.S. Government Debt

As A Percentage Of Federal Debt Issuance, Weekly Data To August 31, 2016





High Frequency Economics®

Daily Data Analysis and Assessment of the Global Economy

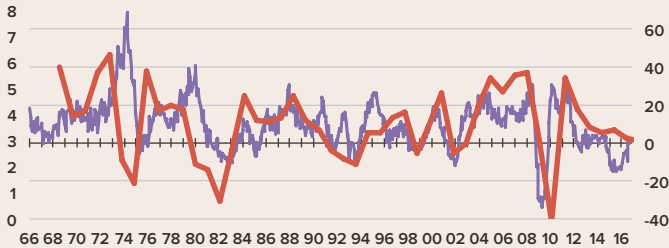
Daily Notes on the **Global Economy**

HFE Global Webinar — January 18, 2017

Carl B. Weinberg, Chief Economist

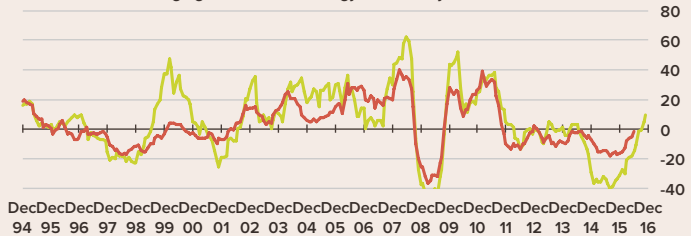
IMF Measure Of World Trade Value

Global Exports In U.S. Dollars, Percent Change Year Ago (Right Axis, To Oct 2016)
Red Line Is Year-Over-Year Growth Of World GDP (Left Axis, Yearly To 2015)



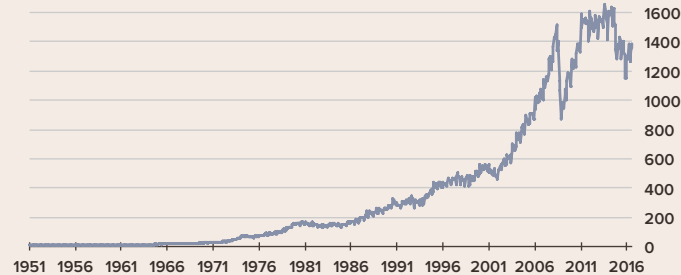
Commodity Price Indexes, Percent Change Year Ago

World Bank EM All Commodity Price Index, HFE Composite (Yellow Line)
World Bank Emerging Markets Non-Energy Commodity Price Index (Red Line)



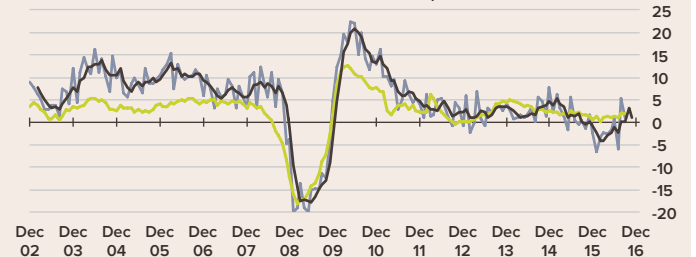
IMF Measure Of World Trade Value, Billions Of U.S. Dollars

Monthly Data Through Oct 2016



IMF Measure Of World Trade Volume, Percent Change Year Ago

Blue Line Is World Trade Volume In U.S. Dollars, Black Line Is Three-Month Moving Average
Green Line Shows HFE Index Of G-7 + China Industrial Output To October 2016





High Frequency Economics®

Daily Data Analysis and Assessment of the Global Economy

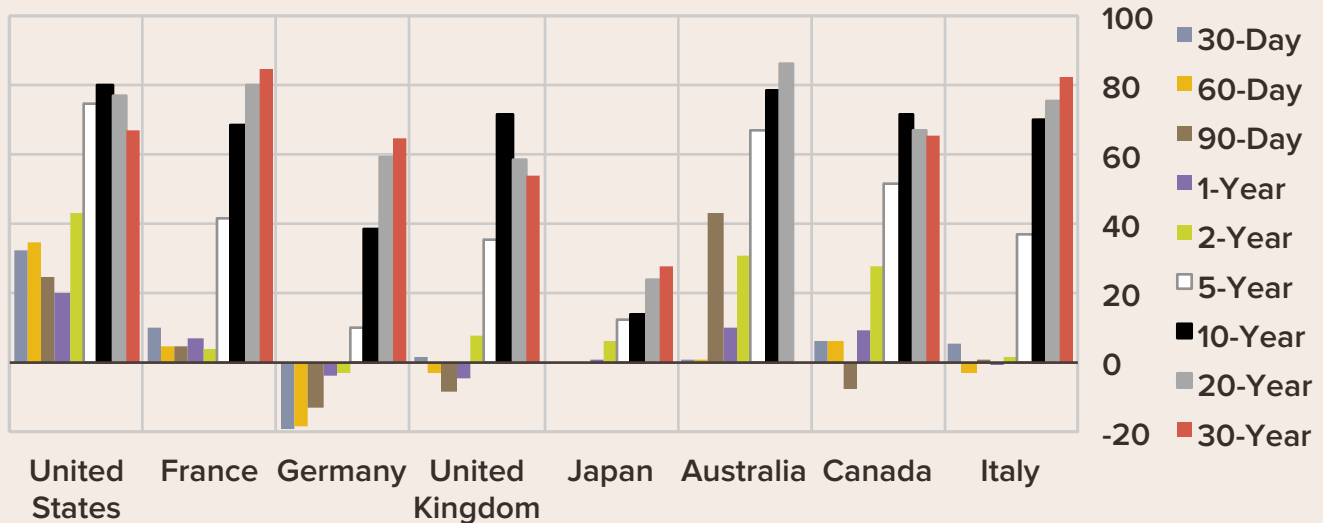
Daily Notes on the **Global Economy**

HFE Global Webinar — January 18, 2017

Carl B. Weinberg, Chief Economist

Changes In Government Bond Yield Curves, Basis Points

From September 30, 2016 To January 13, 2017





High Frequency Economics®

Daily Data Analysis and Assessment of the Global Economy

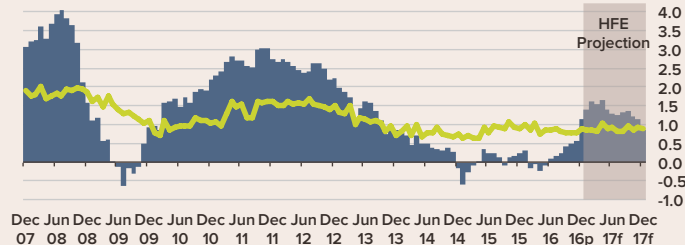
Daily Notes on the Global Economy

HFE Global Webinar — January 18, 2017

Carl B. Weinberg, Chief Economist

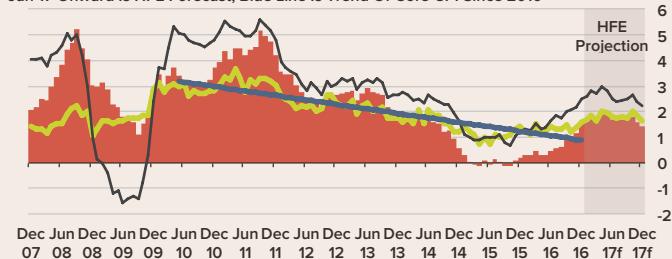
Euro Zone: CPI, Percent Change Year Ago

Blue Bars Are CPI, Green Line Is Core CPI
Data To Dec 16p, Jan 17 To Dec 17 Are HFE Forecast



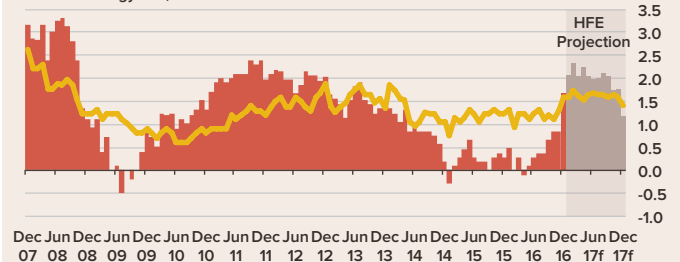
United Kingdom: CPI, Percent Change Year Ago

Green Line Shows Core CPI, Black Line Shows RPI
Jan 17 Onward Is HFE Forecast, Blue Line Is Trend Of Core CPI Since 2010



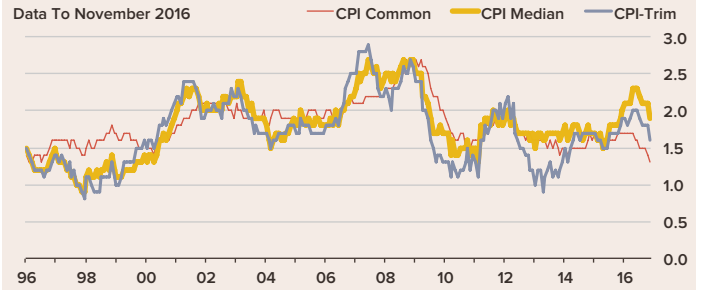
Germany: CPI, Percent Change Year Ago

Bars Show Headline CPI, Jan 17 Onward Is HFE Forecast
Line Is Ex-Energy CPI, Jan 17 Onward Is HFE Forecast



Canada: BoC Preferred CPI Metrics, Percent Change Year Ago

Data To November 2016





High Frequency Economics®

Daily Data Analysis and Assessment of the Global Economy

Daily Notes on the **Global Economy**

HFE Global Webinar — January 18, 2017

Carl B. Weinberg, Chief Economist

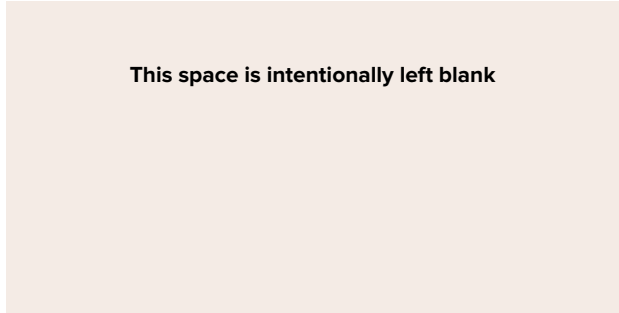
Rising Interest Rates Will Trigger Oil Stockpile Selling

OECD Oil Inventories, IEA Projections, Days Of Consumption

IEA Data To October 2016, Shaded Area Is IEA Forecast To Dec 2017



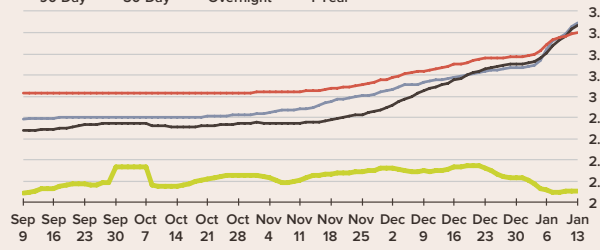
The Border Tax Plan... Details Are Missing



China Turnus Up The Heat On Yuan Bears

China: Daily SHIBOR, Percent

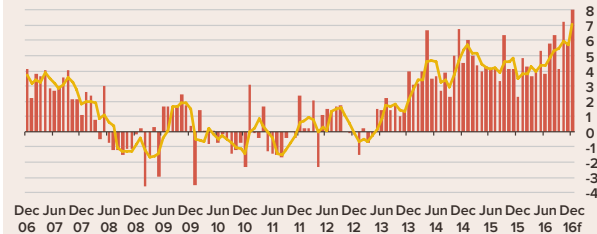
— 90-Day — 30-Day — Overnight — 1-Year



UK Recovers From Dip... Blame Immigrants & Consumers

United Kingdom: Retail Sales, Percent Change Year Ago

Line Shows Three-Month Moving Average Year-Over-Year





High Frequency Economics[®]

Daily Data Analysis and Assessment of the Global Economy

U.S. Growth Set To Remain Strong Enough To Keep Unemployment Declining, Wages & Inflation Rising, And The Fed Tightening

Jim O'Sullivan, Chief U.S. Economist



High Frequency Economics®

Daily Data Analysis and Assessment of the Global Economy

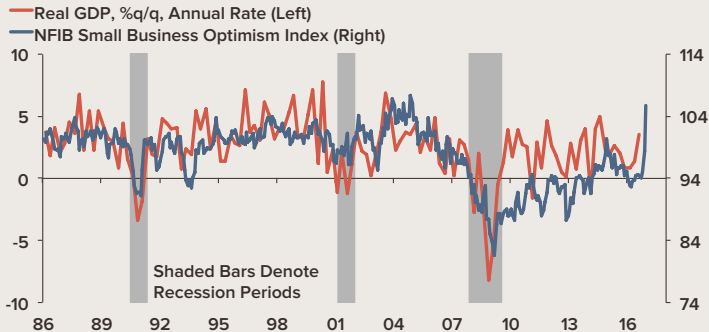
Daily Notes on the **United States**

HFE Global Webinar — January 18, 2017

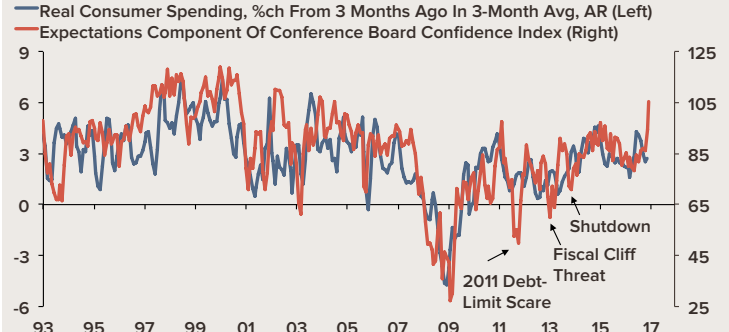
Jim O'Sullivan, Chief U.S. Economist

Metamorphosis Under Way?

1a. NFIB Index Is Now High Enough For 5%-Plus GDP Growth



1b. Confidence Data Strong Enough For 5% Real Spending Growth





High Frequency Economics®

Daily Data Analysis and Assessment of the Global Economy

Daily Notes on the **United States**

HFE Global Webinar — January 18, 2017

Jim O'Sullivan, Chief U.S. Economist

2. Latest ISM Data Look Strong Enough For 3.5-4% Real GDP Growth





High Frequency Economics®

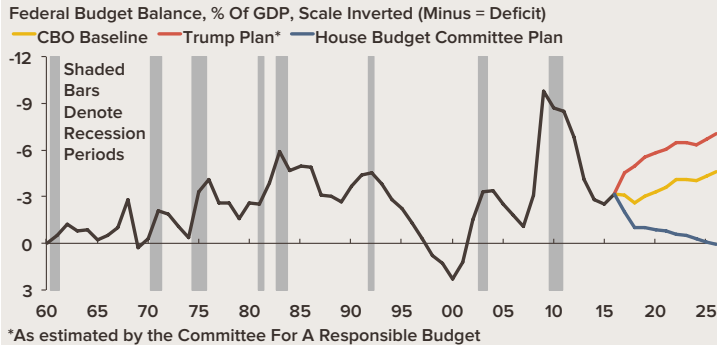
Daily Data Analysis and Assessment of the Global Economy

Daily Notes on the **United States**

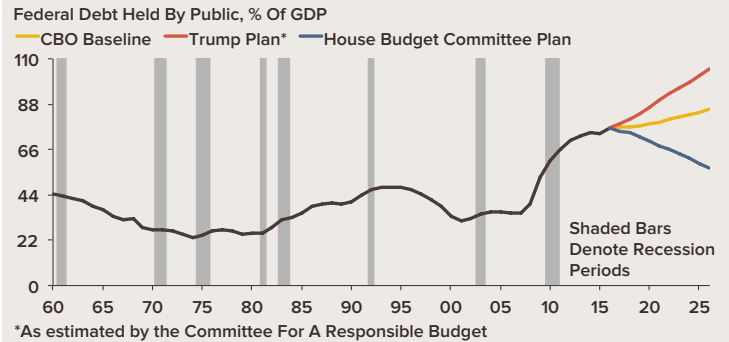
HFE Global Webinar — January 18, 2017

Jim O'Sullivan, Chief U.S. Economist

3a. Candidate Trump's Plan Implied A 2%-Of-GDP Deficit Boost



3b. ...Adding Significantly To Federal Debt-To-GDP Ratio





High Frequency Economics®

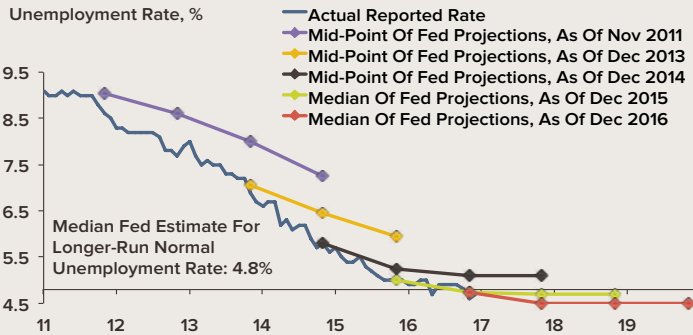
Daily Data Analysis and Assessment of the Global Economy

Daily Notes on the **United States**

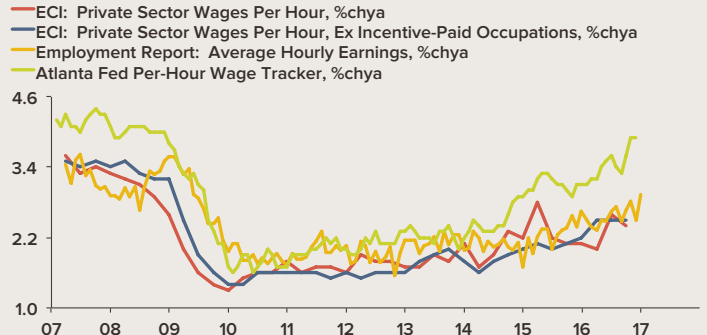
HFE Global Webinar — January 18, 2017

Jim O'Sullivan, Chief U.S. Economist

4a. Unemployment Already Below “Longer-Run Normal”



4b. Wage Gains Are Accelerating





High Frequency Economics®

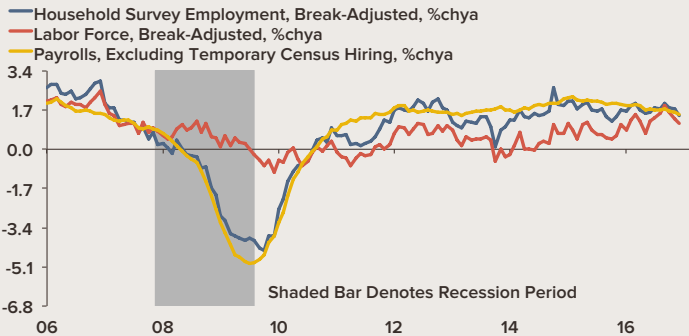
Daily Data Analysis and Assessment of the Global Economy

Daily Notes on the **United States**

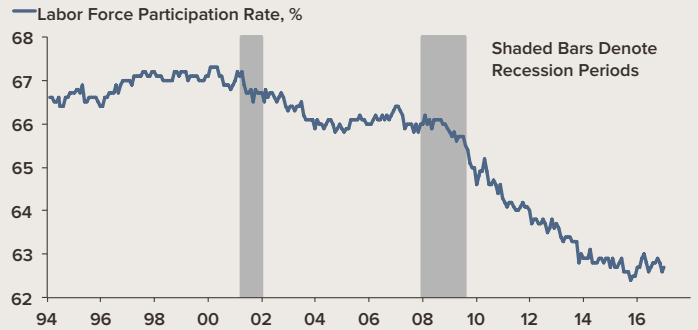
HFE Global Webinar — January 18, 2017

Jim O'Sullivan, Chief U.S. Economist

5a. Sustained Labor Force Growth Unlikely To Exceed 1%



5b. Secular Trend In Participation Rate Likely Remains Down





High Frequency Economics®

Daily Data Analysis and Assessment of the Global Economy

Daily Notes on the **United States**

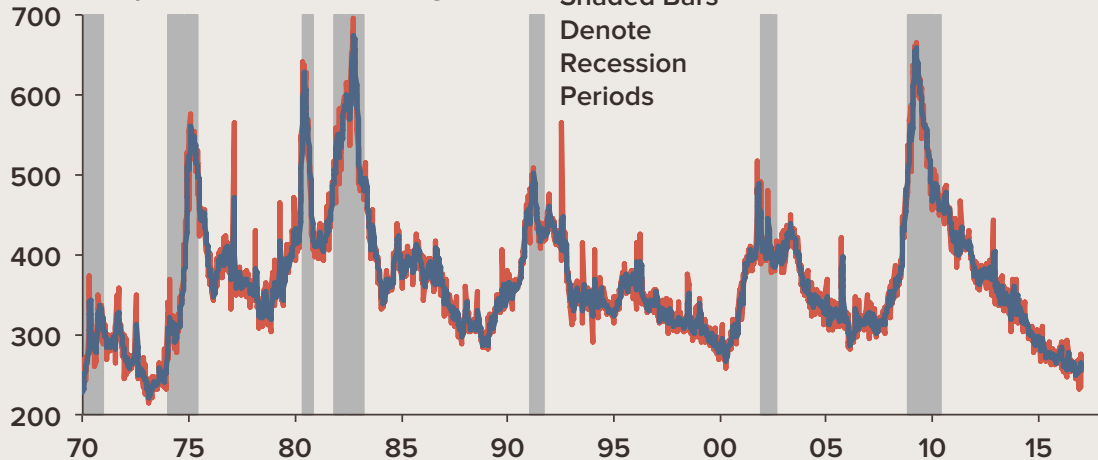
HFE Global Webinar — January 18, 2017

Jim O'Sullivan, Chief U.S. Economist

6. Jobless Claims Continue To Signal An Improving Labor Market

Initial Claims, Thousands Per Week

— Weekly — Four-Week Average





High Frequency Economics®

Daily Data Analysis and Assessment of the Global Economy

Daily Notes on the **United States**

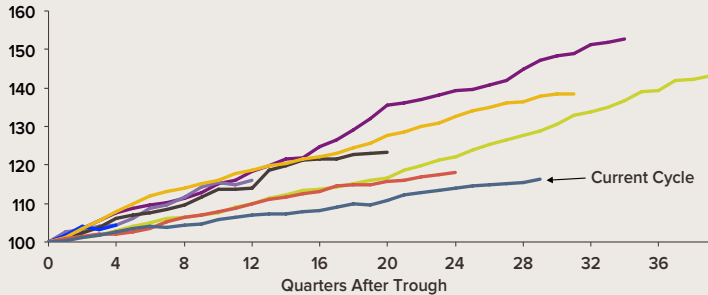
HFE Global Webinar — January 18, 2017

Jim O'Sullivan, Chief U.S. Economist

7a. GDP Growth Has Been Weak By Past Standards

Real GDP During Recoveries, Trough=100

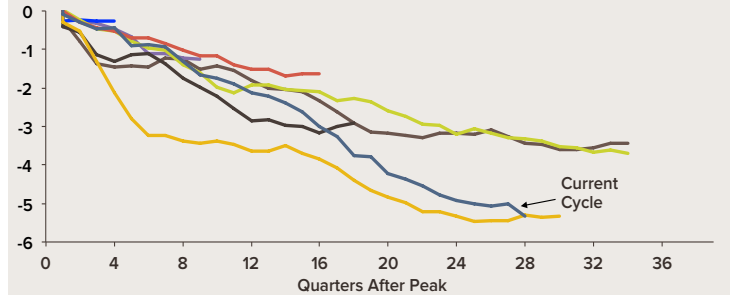
1961-69 1970-73 1975-80 1980-81 1982-90 1991-2001 2001-07 2009-
Current Cycle



7b. ...Yet Unemployment Rate Has Been Falling Rapidly

Change In Unemployment Rate From Peak During Recoveries, Percentage Points

1961-69 1970-73 1975-80 1980-81 1982-90 1991-2001 2001-07 2009-
Current Cycle





High Frequency Economics[®]

Daily Data Analysis and Assessment of the Global Economy

Daily Notes on the **United States**

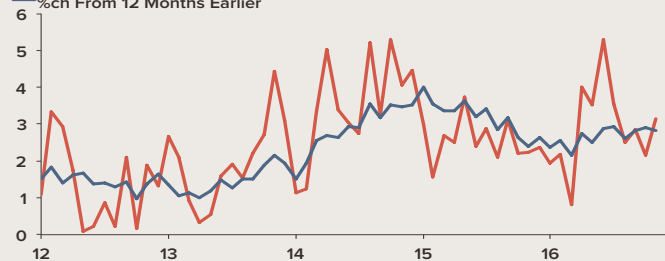
HFE Global Webinar — January 18, 2017

Jim O'Sullivan, Chief U.S. Economist

8a. Real Consumer Spending Has Been Rising Solidly

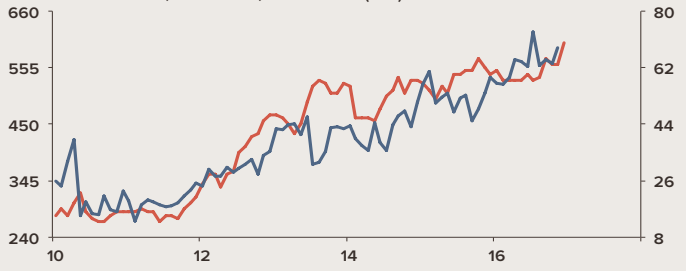
Real Consumer Spending

— %ch From 3 Months Earlier, Annual Rate
— %ch From 12 Months Earlier



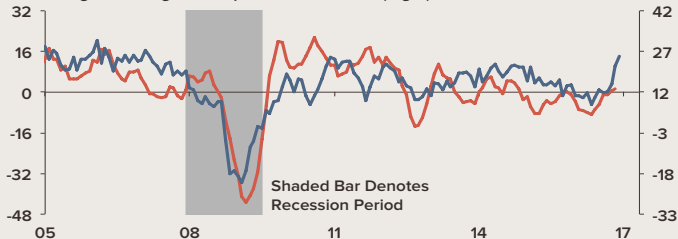
8b. Amidst Volatility, New Home Sales Have Trended Up

— Housing Market Index (Right)
— New Home Sales, Thousands, Annual Rate (Left)



8c. Capex Spending Plans Surveys Point To A Pick-Up

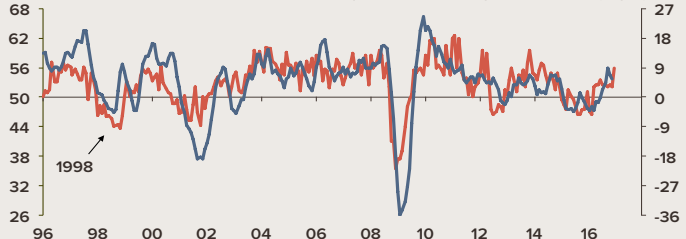
— Core Capex Orders, %ch From 6 Months Ago In 3-Month Average (Left)
— Average Of 5 Regional Capex Plans Indexes* (Right)



*New York, Philadelphia, Richmond, Dallas & KC Fed Surveys

8d. Export Orders Are Rising Again

— Manufacturing ISM Export Orders Index (Left)
— Real Good Exports, %ch From 6 Months Ago In 3-Month Avg, Annual Rate (Right)





High Frequency Economics®

Daily Data Analysis and Assessment of the Global Economy

Daily Notes on the **United States**

HFE Global Webinar — January 18, 2017

Jim O'Sullivan, Chief U.S. Economist

9a. Fed Officials' Estimates For Appropriate Fed Funds Rate

% At Year-End

	2016	2017	2018	2019	Longer Run
Median Estimate					
September 2016	0.625	1.125	1.875	2.625	2.875
December 2016	0.625	1.375	2.125	2.875	3.0

9b. Fed Officials' Economic Projections

Median, %ch Q4/Q4, Unless Noted, as of Dec 2016

	2016	2017	2018	2019	Longer Run
Real GDP	1.9	2.1	2.0	1.9	1.8
Unemploy. Rate	4.7	4.5	4.5	4.5	4.8
PCE Prices	1.5	1.9	2.0	2.0	2.0
Core PCE Prices	1.7	1.8	2.0	2.0	

*Q4 Level, %

9c. Fed Tightening Cycles

Start	End	Nominal Funds Rate Target		Change In Funds Rate (Pct Pts)		Core PCE Prices (%chya)		Real Funds Rate*		
		Start	End	First 12 Months	Full Cycle	Start	End	Start	End	
Mar 83	Aug 84	8.50	11.50		0.9	3.0	5.9	4.0	2.6	7.5
Apr 87	Feb 89	6.00	9.75		0.8**	3.8	2.8	4.7	3.2	5.1
Feb 94	Feb 95	3.00	6.00		2.5	3.0	2.2	2.3	0.8	3.7
Jun 99	May 00	4.75	6.50		1.8	1.8	1.2	1.7	3.5	4.8
Jun 04	Jun 06	1.00	5.25		2.0	4.3	1.9	2.4	-0.9	2.9
Dec 15		0.13					1.4		-1.3	

* Deflated with %chya in core PCE prices. **The 1987-89 cycle was temporarily interrupted by the 1987 stock market crash.



High Frequency Economics®

Daily Data Analysis and Assessment of the Global Economy

Daily Notes on the **United States**

HFE Global Webinar — January 18, 2017

Jim O'Sullivan, Chief U.S. Economist

10. HFE's Economic & Financial Forecasts

%ch From Previous Period, Annual Rate, Except Where Noted; Forecasts In Bold

	2016				2017				Calendar Average			Q4/Q4		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018	2016	2017	2018
Real GDP	0.8	1.4	3.5	2.3	2.3	2.3	2.7	2.7	1.6	2.5	2.4	2.0	2.5	2.2
CPI	-0.3	2.5	1.6	3.1	2.5	2.6	2.7	2.7	1.3	2.6	2.8	1.7	2.6	2.9
Core CPI	2.7	2.1	1.9	1.9	2.5	2.6	2.7	2.7	2.2	2.3	2.9	2.2	2.6	3.0
Core PCE Prices	2.1	1.8	1.7	1.4	1.9	2.0	2.1	2.1	1.7	1.8	2.3	1.7	2.0	2.5
Unemployment (% level)	4.9	4.9	4.9	4.7	4.6	4.5	4.4	4.3	4.9	4.5	4.2	4.7	4.3	4.1
Federal Budget Balance (\$B, FY)									-587	-700	-800			
% Of GDP									-3.2	-3.6	-3.9			
												End Of Year		
Fed Funds Target (% EOP)	0.38	0.38	0.38	0.63	0.88	1.13	1.13	1.38	0.41	1.03	1.88	0.63	1.38	2.38
10-Year Treasury (% EOP)	1.8	1.5	1.6	2.4	2.6	2.7	2.8	2.9	1.8	2.7	3.1	2.4	2.9	3.3
30-Year Treasury (% EOP)	2.6	2.3	2.3	3.1	3.2	3.3	3.4	3.5	2.6	3.3	3.7	3.1	3.5	3.8
S&P 500 (level, EOP)	2060	2099	2150	2239	2230	2220	2210	2200	2113	2220	2150	2239	2200	2100



High Frequency Economics®

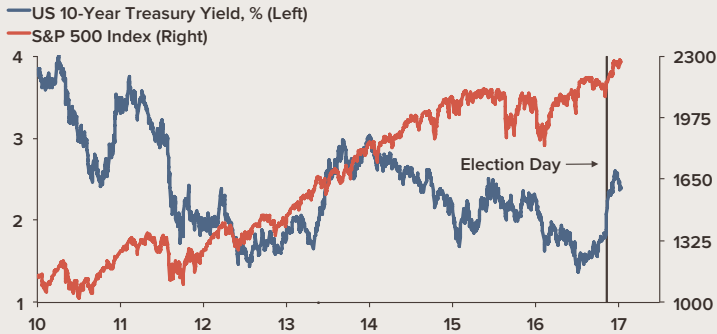
Daily Data Analysis and Assessment of the Global Economy

Daily Notes on the **United States**

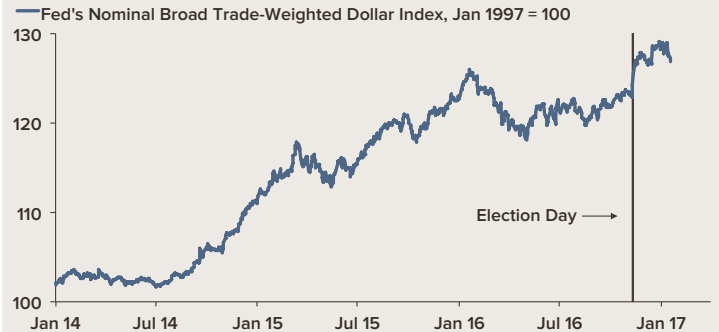
HFE Global Webinar — January 18, 2017

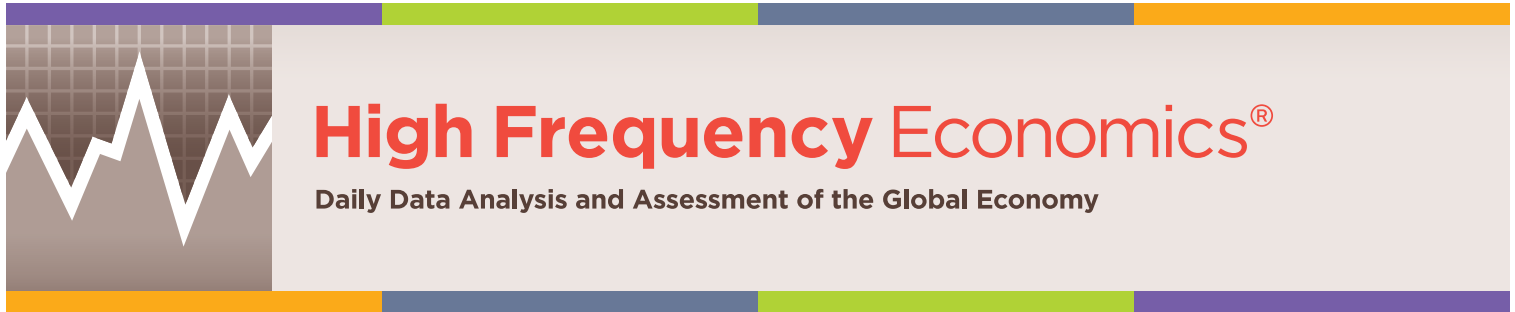
Jim O'Sullivan, Chief U.S. Economist

11a. S&P 500 Is Up Around 6% Since Election Day



11b. ...Broad Trade-Weighted Dollar Is Up A Little Over 3%





Indications Of Cyclical Position Around The World: False Signals Or Verifiable Indicators?

Carl Weinberg, Chief Economist

U.S. Growth Set To Remain Strong Enough To Keep Unemployment Declining, Wages & Inflation Rising, And The Fed Tightening

Jim O'Sullivan, Chief U.S. Economist