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US

- CPI/PPI
- Unconventional CPI
- Federal Reserve
- GDP
- Jobs
- Oil
- Favorite Things

Global


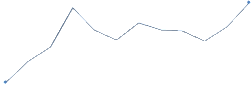

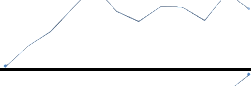



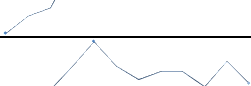

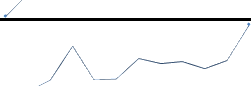

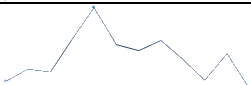

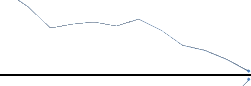



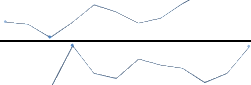

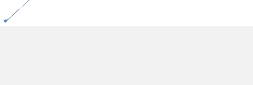


- Equity Risk Premia
- PMI
- Real Rates and Yields
- Euro Area Recovery Monitor

Data Insights

Data Insights: Consumer Price Index, Producer Price Index

Tuesday, October 18, 2016

Today's CPI data: what you need to know

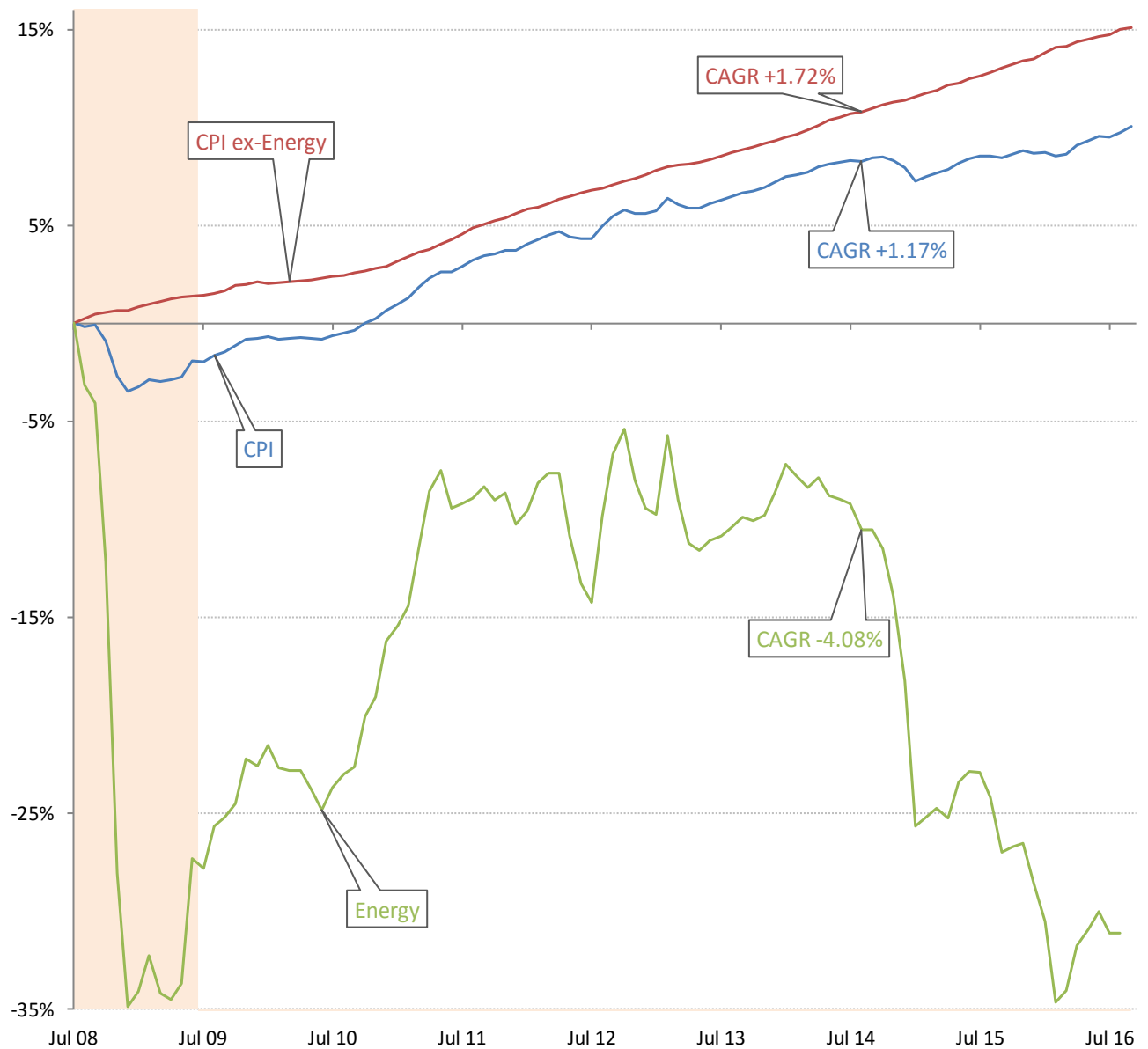
	12-mo YOY	3-mo ann	1-mo ann	12 / 3/ 1-mo	12-mo YOY history
All items	+1.46%	+1.8%	+3.6%		
Core	+2.2%	+1.9%	+1.4%		
OER	+3.4%	+3.8%	+4.3%		
All less OER	+1.2%	+1.9%	+3.6%		
Core less OER	+1.5%	+0.7%	-0.4%		
Energy	-2.9%	+5.3%	+41.5%		
All less energy	+1.8%	+1.6%	+1.2%		
Food	-0.2%	+0.1%	+0.4%		
All less food	+1.8%	+2.1%	+4.1%		
Health care	+4.9%	+7.1%	+1.8%		
All less health care	+1.2%	+1.4%	+3.7%		

Source: BLS Consumer Price Index, TrendMacro calculations

For more information contact us:

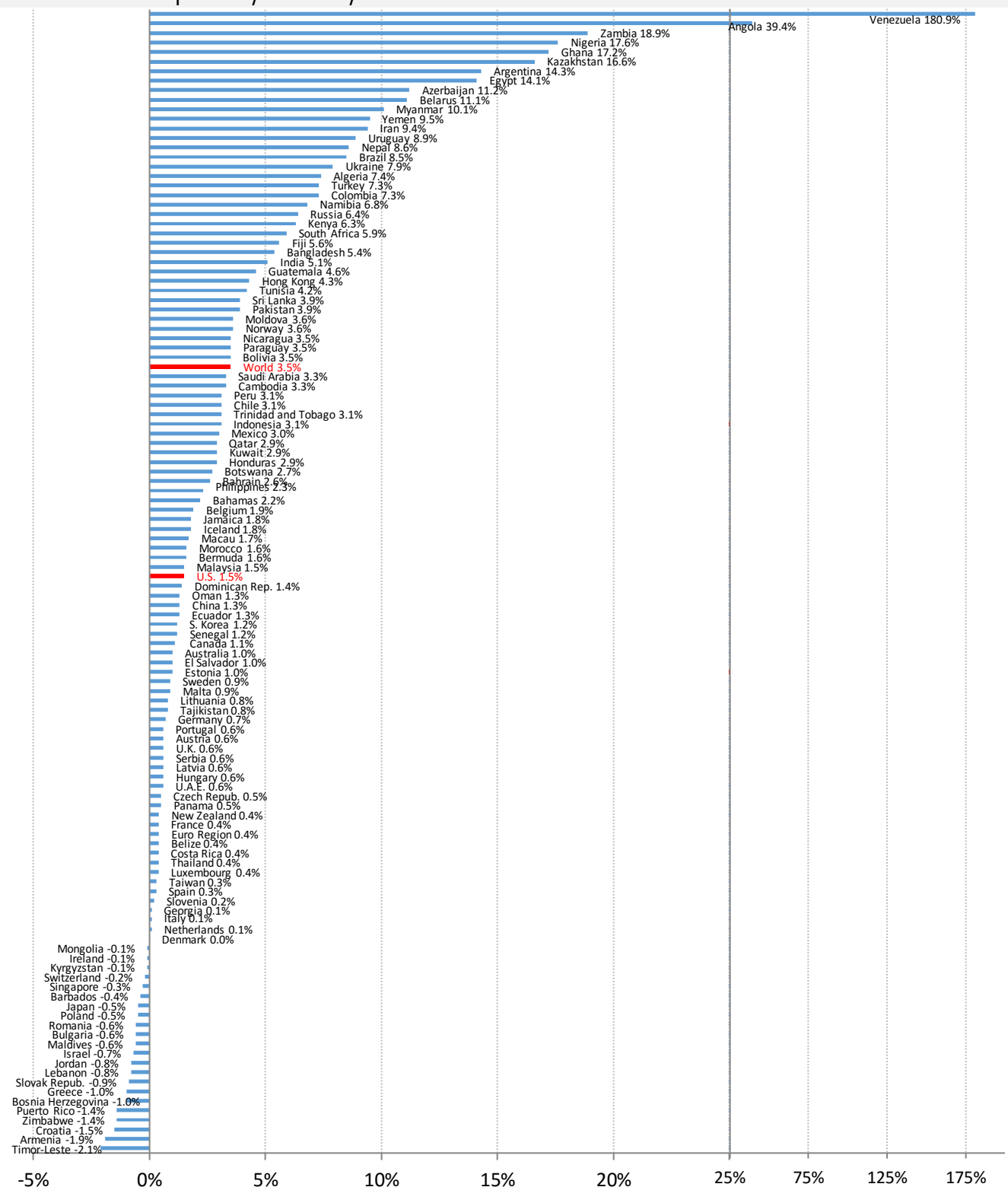
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The deflation delusion: it's all about oil, and always has been
Cumulative growth of CPI from July 2008, the all-time high oil price



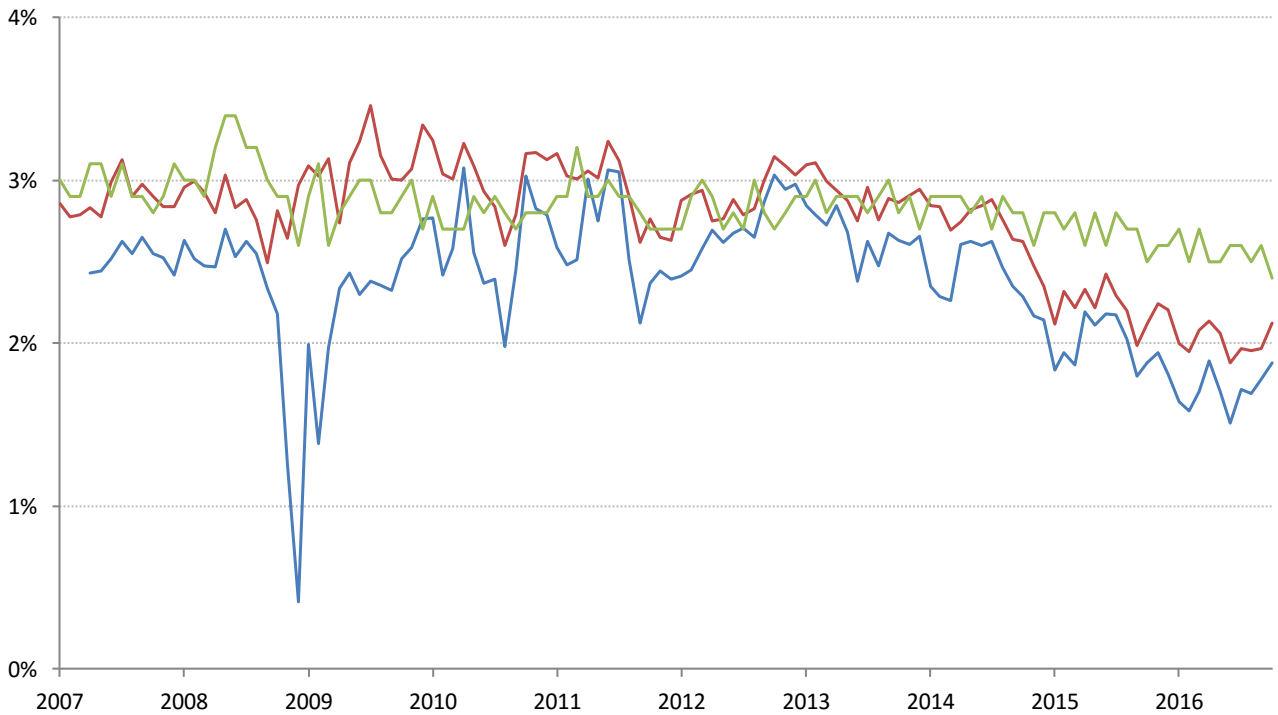
Source: Bloomberg, TrendMacro calculations

World round-up: CPI year-on-year



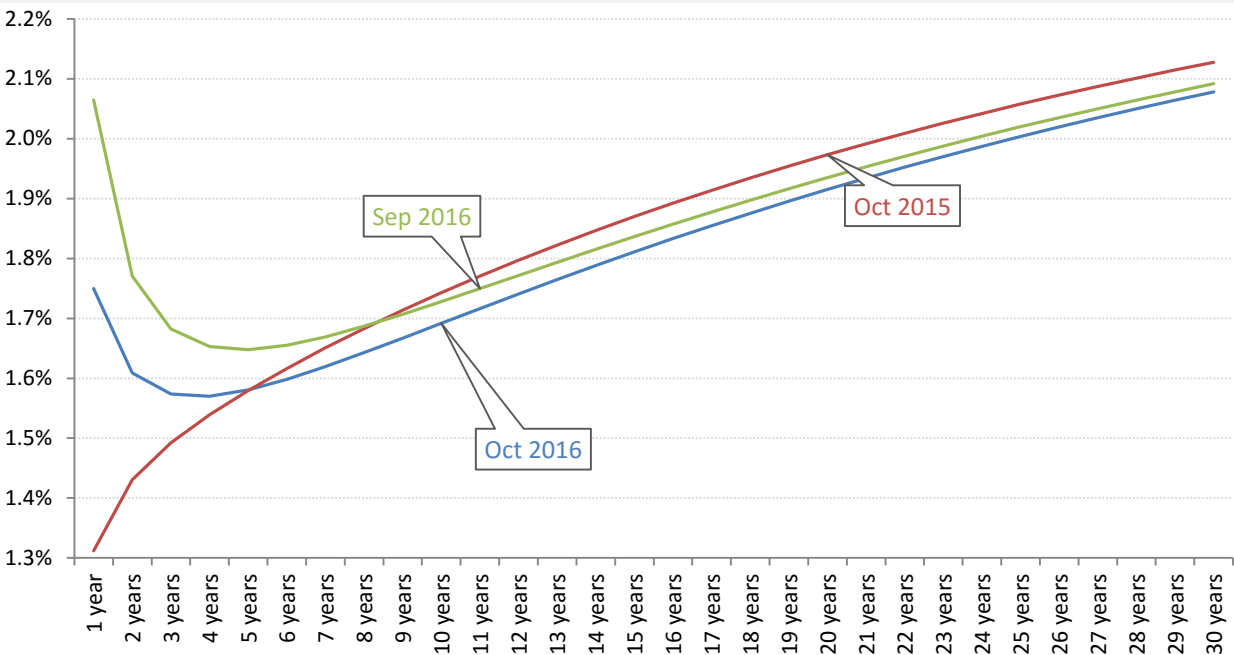
Source: Bloomberg, TrendMacro calculations

Implied 5-year inflation, 5 years forward — TIPS — Swaps — U. Michigan Survey



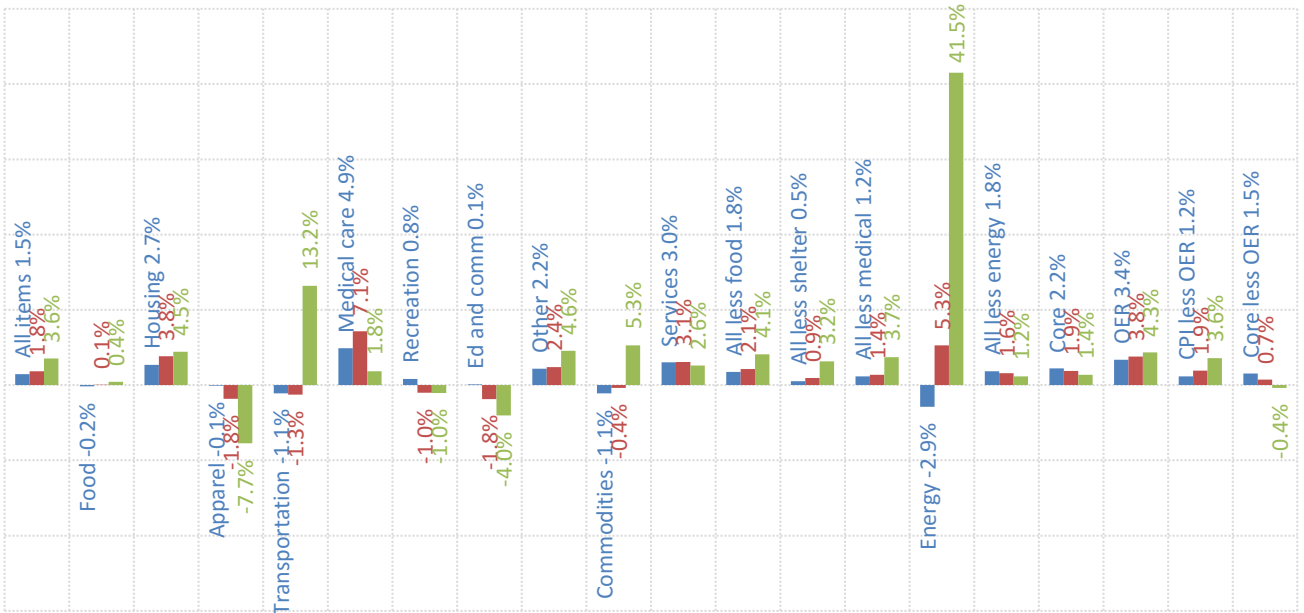
Source: Bloomberg, TrendMacro calculations

Swap-implied inflation yield curve, per annum



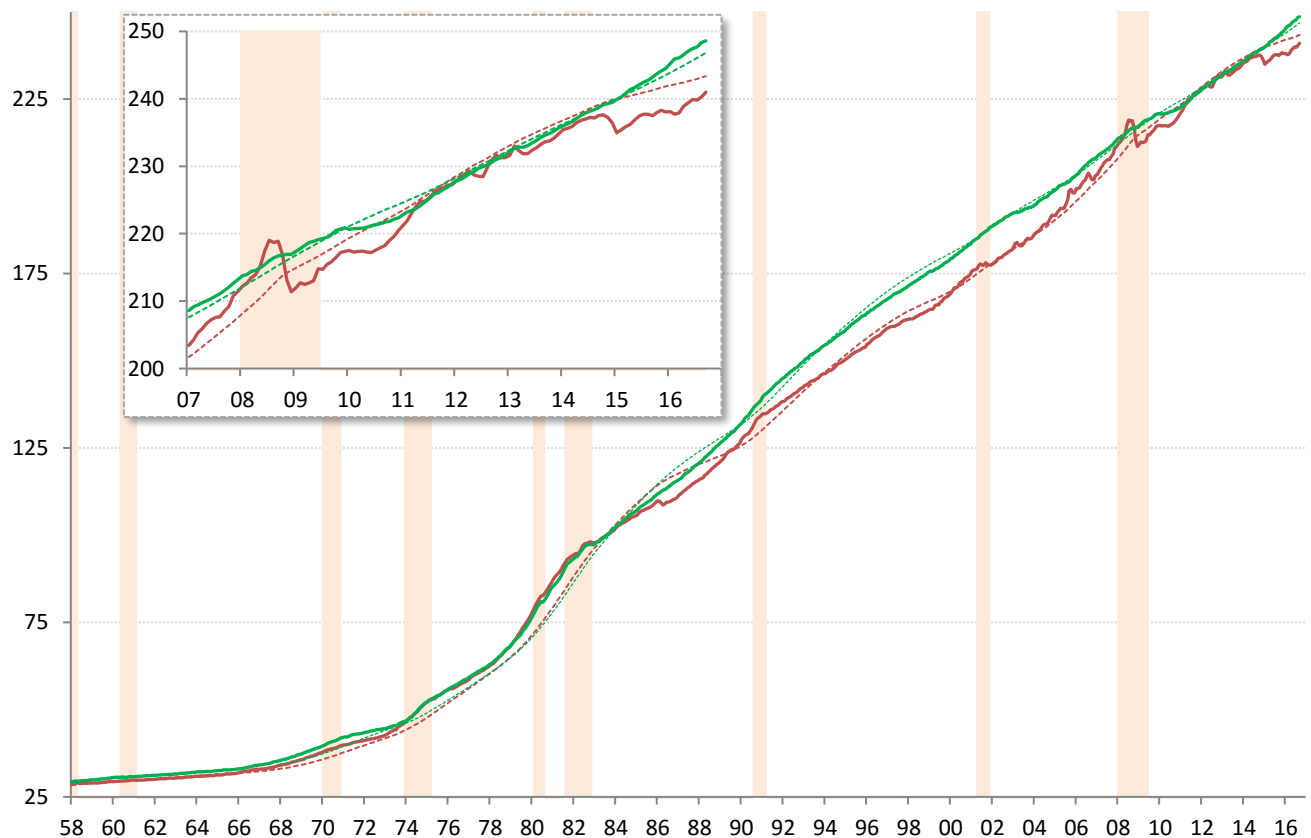
Source: Cleveland Fed, TrendMacro calculations

US CPI inflation by sector (SAAR) ■ 12-month ■ 3-month ■ 1-month



Source: BLS Consumer Price Index, TrendMacro calculations

US CPI Core — Level ... 20-year trend ■ Recession



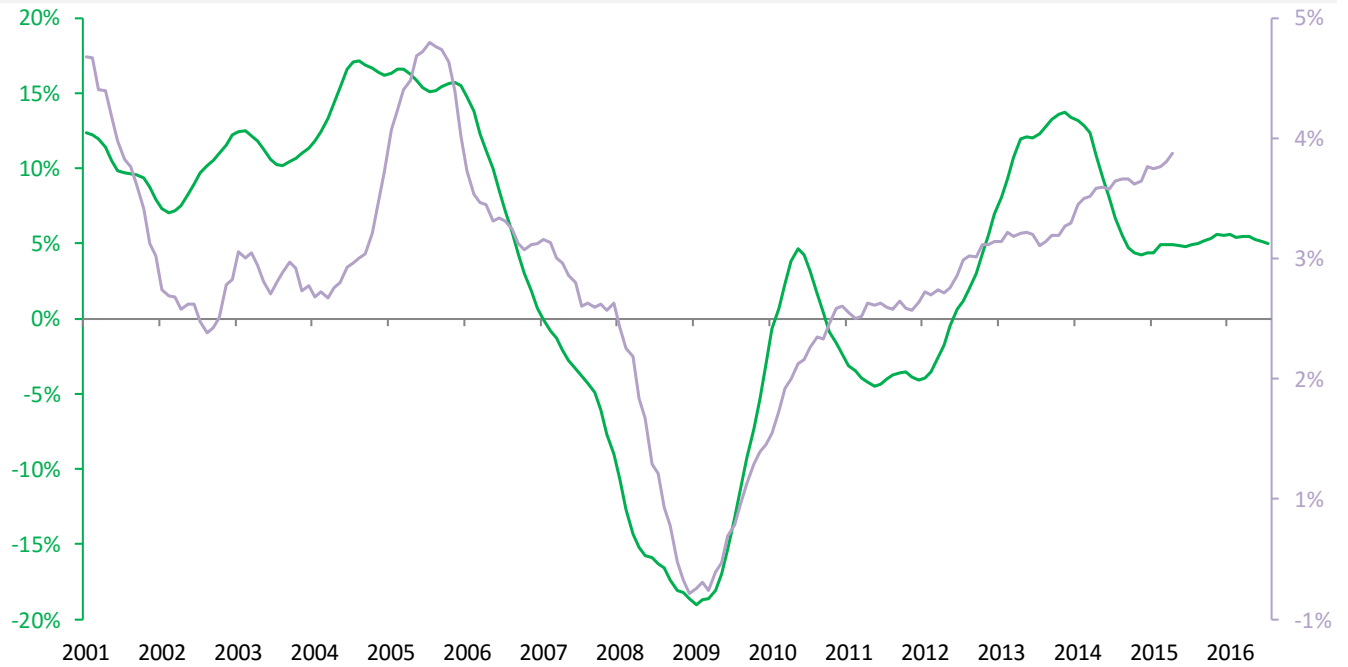
Source: BLS Consumer Price Index, TrendMacro calculations

Housing leads US CPI

Year-over-year change

— Case Shiller 20-city avg

— Owner's equivalent rent CPI component, 18-mo lag



Source: BLS, Standard & Poor's Case Shiller, TrendMacro calculations

The world is flat: the vanishing Phillips Curve

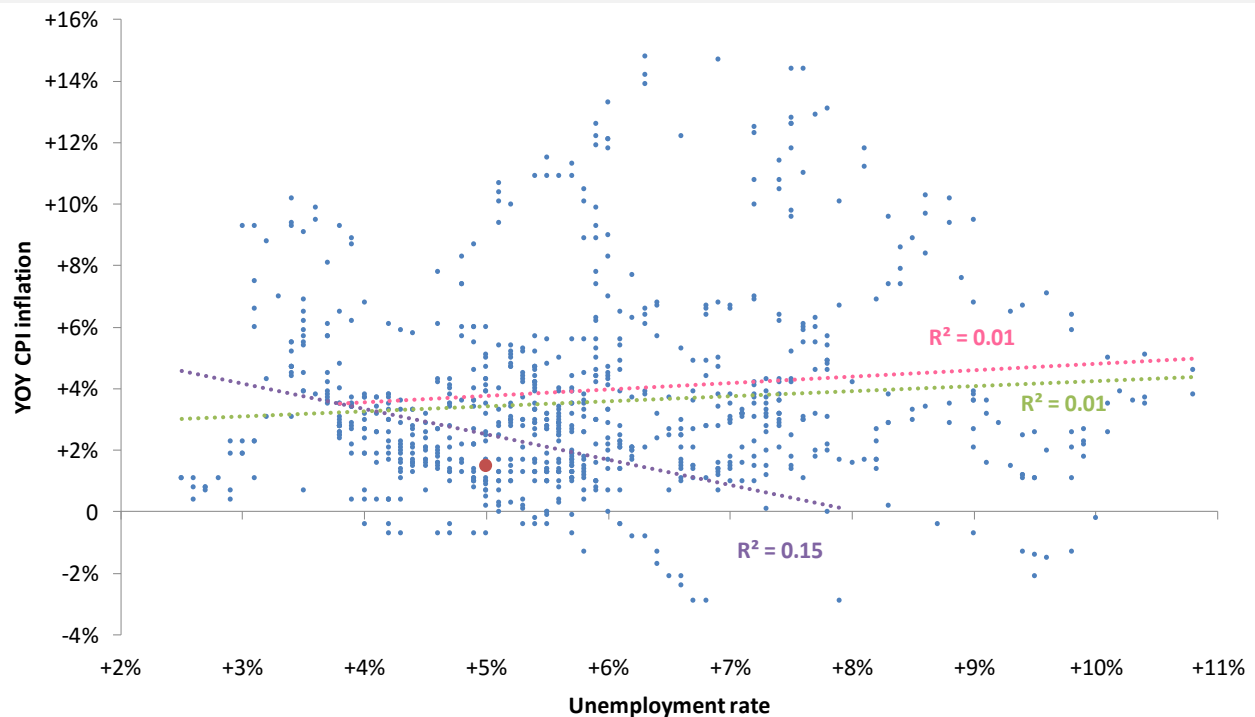
● Latest

Linear trend: ...

Pre-74

Post-74

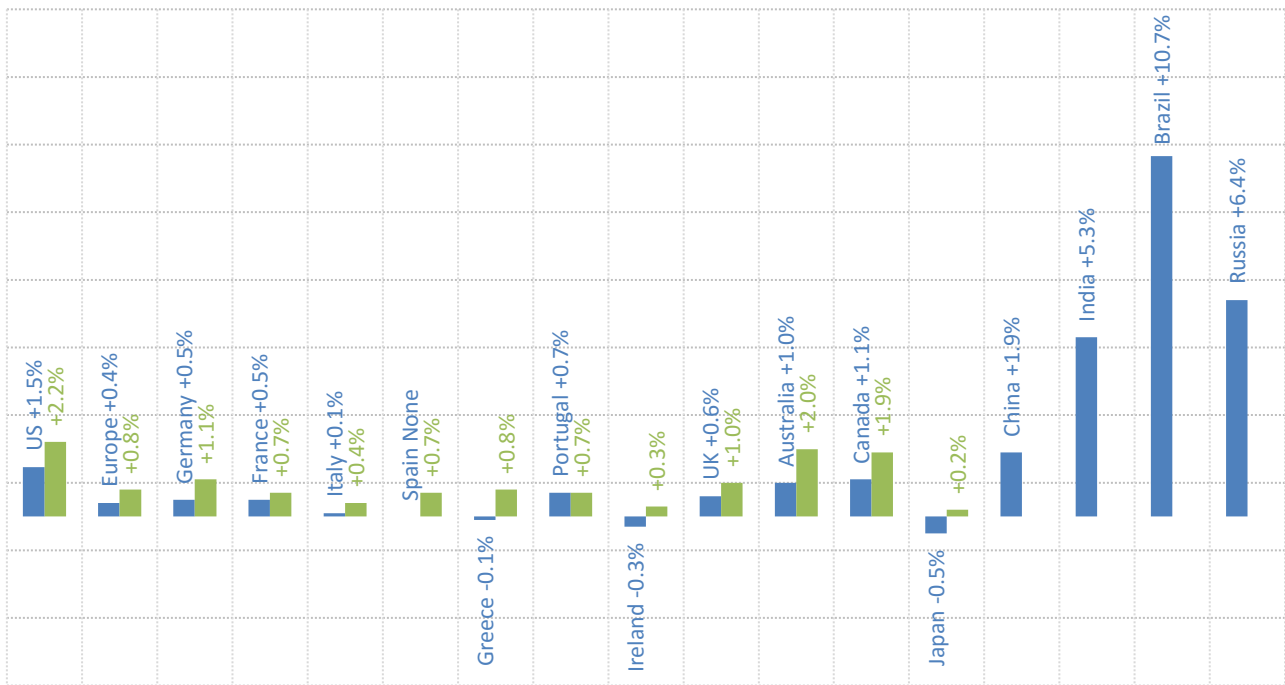
... All



Source: BLS Consumer Price Index, Current Population Survey

Major economies CPI, year on year

■ Headline ■ Ex-food and energy



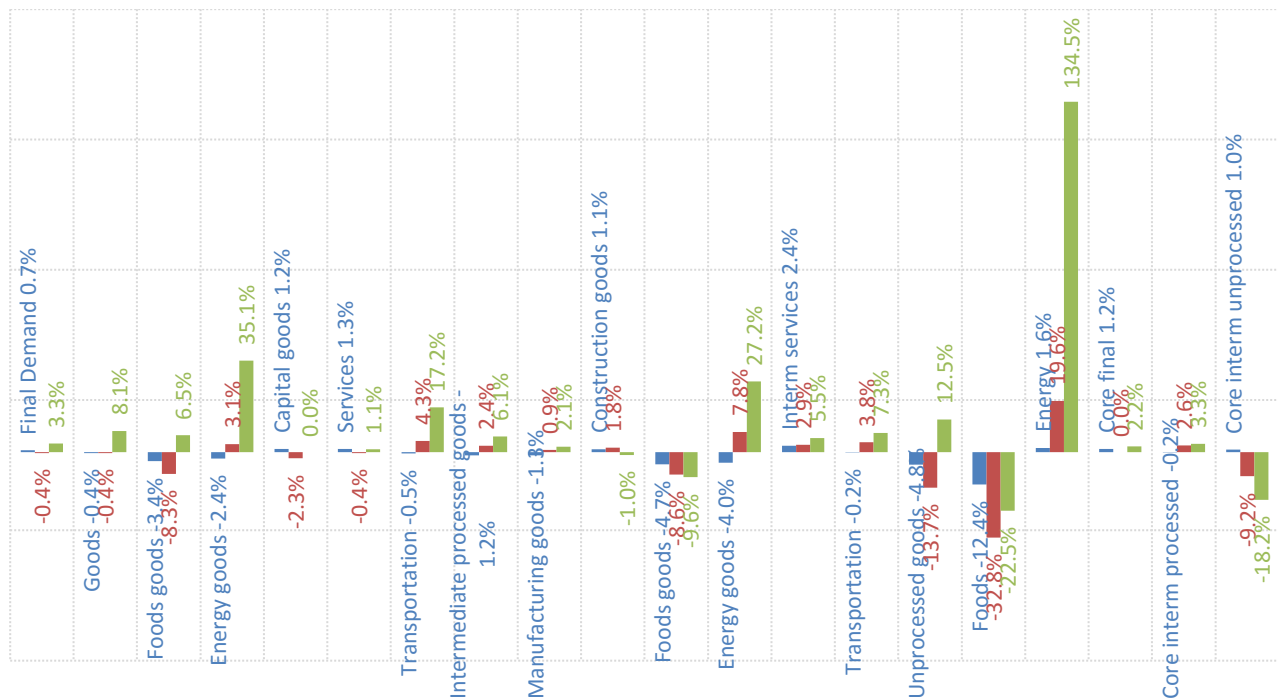
Source: Respective Statistical agencies, TrendMacro calculations

PPI data: what you need to know

	12-mo YOY	3-mo ann	1-mo ann	12 / 3 / 1-mo	13-mo YOY history
Final demand	+0.7%	-0.4%	+3.3%		
Core	+1.2%	unch	+2.2%		
Intermediate processed	-1.2%	+2.4%	+6.1%		
Core	-0.2%	+2.6%	+3.3%		
Intermediate unprocessed	-4.8%	-13.7%	+12.5%		
Core	+1.0%	-9.2%	-18.2%		

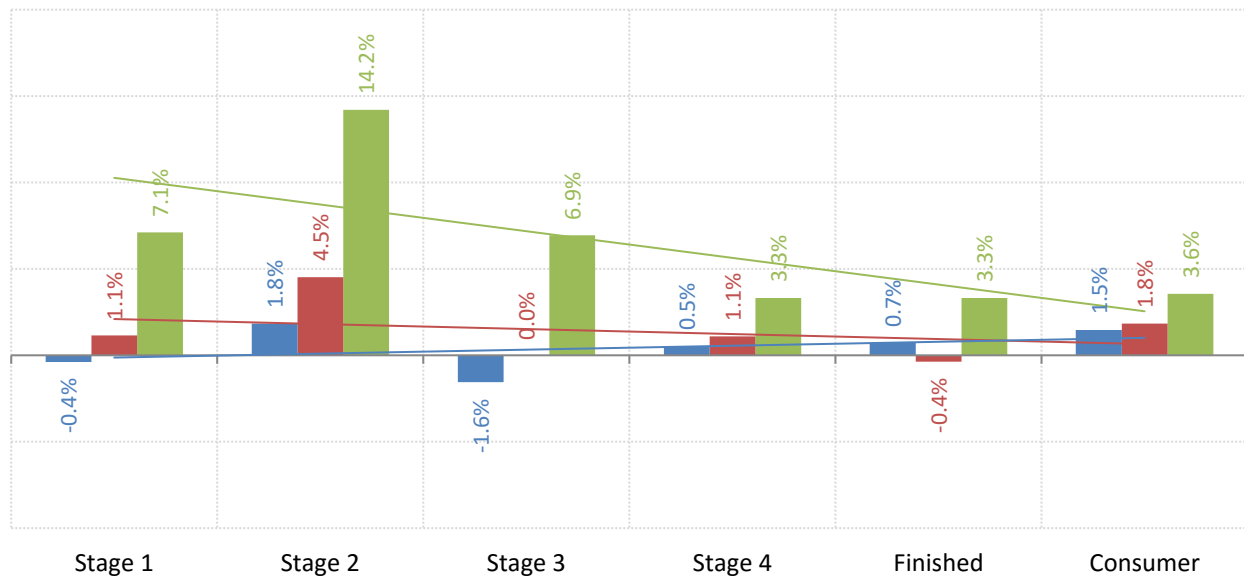
Source: BLS Producer Price Index, TrendMacro calculations

PPI inflation by sector (SAAR) ■ 12-month ■ 3-month ■ 1-month



Source: BLS Producer Price Index, TrendMacro calculations

The inflation pipeline (SAAR) ■ 12-month ■ 3-month ■ 1-month


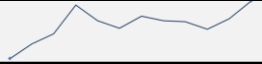



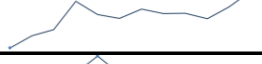











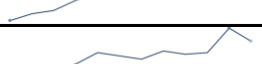




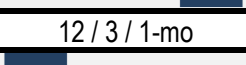







Source: BLS Producer Price Index and Consumer Price Index, TrendMacro calculations

Data Insights: Unconventional Consumer Price Indices

Tuesday, October 18, 2016

Today's unconventional CPI data: what you need to know

	12-mo YOY	3-mo ann	1-mo ann	12 / 3 / 1-mo	12-mo YOY history
<i>All items</i>	+1.5%	+1.8%	+3.6%		
<i>Core</i>	+2.2%	+1.9%	+1.4%		
<i>All items NSA</i>	+1.5%	+0.7%	+2.9%		
<i>Core NSA</i>	+2.2%	+1.5%	+2.2%		
<i>PCE deflator Aug</i>	+1.0%	+1.2%	+1.7%		
<i>Core PCE deflator Aug</i>	+1.7%	+1.5%	+2.2%		
<i>Median CPI</i>	+2.5%	+2.5%	+2.1%		
<i>Trimmed mean CPI</i>	+2.1%	+2.2%	+2.1%		
<i>Sticky CPI</i>	+2.6%	+2.6%	+2.2%		
<i>Sticky core CPI</i>	+2.6%	+2.6%	+2.1%		
<i>Flexible CPI</i>	-0.9%	+0.1%	+8.3%		
<i>Flexible core CPI</i>	-0.2%	-2.1%	-2.8%		
	YOY change	3-mo	1-mo	12 / 3 / 1-mo	12-mo YOY history
<i>ISM Manu prices paid</i>	+15	-8	Unch		
<i>ISM Services prices paid</i>	+5	-2	+2		

Source: BLS, BEA, ISM, Cleveland Fed, Atlanta Fed, PriceStats TrendMacro calculations

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Data Insights: Federal Reserve

Wednesday, November 2, 2016

Today's FOMC statement: how the language changed from prior meeting

Release Date: ~~September 21~~November 2, 2016

For release at 2:00 p.m. EDT

Information received since the Federal Open Market Committee met in ~~July~~September indicates that the labor market has continued to strengthen and growth of economic activity has picked up from the modest pace seen in the first half of this year. Although the unemployment rate is little changed in recent months, job gains have been solid, ~~on average~~. Household spending has been ~~growing~~ strongly rising moderately but business fixed investment has remained soft. Inflation has ~~continued to run~~ increased somewhat since earlier this year but is still below the Committee's 2 percent longer-run objective, partly reflecting earlier declines in energy prices and in prices of non-energy imports. Market-based measures of inflation compensation have moved up but remain low; most survey-based measures of longer-term inflation expectations are little changed, on balance, in recent months.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace and labor market conditions will strengthen somewhat further. Inflation is expected ~~to remain low in the near term, in part because of earlier declines in energy prices, but~~ to rise to 2 percent over the medium term as the transitory effects of past declines in energy and import prices dissipate and the labor market strengthens further. Near-term risks to the economic outlook appear roughly balanced. The Committee continues to closely monitor inflation indicators and global economic and financial developments.

Against this backdrop, the Committee decided to maintain the target range for the federal funds rate at 1/4 to 1/2 percent. The Committee judges that the case for an increase in the federal funds rate has ~~strengthened~~ continued to strengthen but decided, for the time being, to wait for some further evidence of continued progress toward its objectives. The stance of monetary policy remains accommodative, thereby supporting further improvement in labor market conditions and a return to 2 percent inflation.

In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. In light of the current shortfall of inflation from 2 percent, the Committee will carefully monitor actual and expected

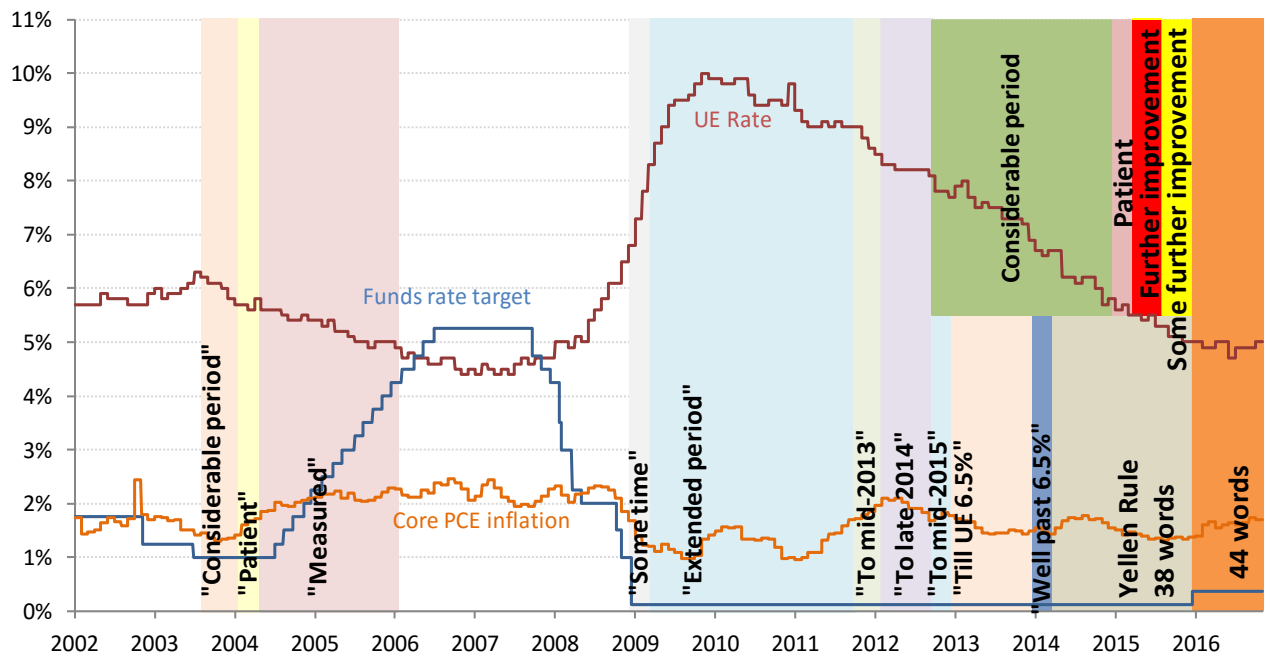
progress toward its inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant only gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.

The Committee is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction, and it anticipates doing so until normalization of the level of the federal funds rate is well under way. This policy, by keeping the Committee's holdings of longer-term securities at sizable levels, should help maintain accommodative financial conditions.

Voting for the FOMC monetary policy action were: Janet L. Yellen, Chair; William C. Dudley, Vice Chairman; Lael Brainard; James Bullard; Stanley Fischer; Jerome H. Powell; [Eric Rosengren](#); and Daniel K. Tarullo. Voting against the action were: Esther L. George, [and](#) Loretta J. Mester, ~~and Eric Rosengren~~, each of whom preferred at this meeting to raise the target range for the federal funds rate to 1/2 to 3/4 percent.

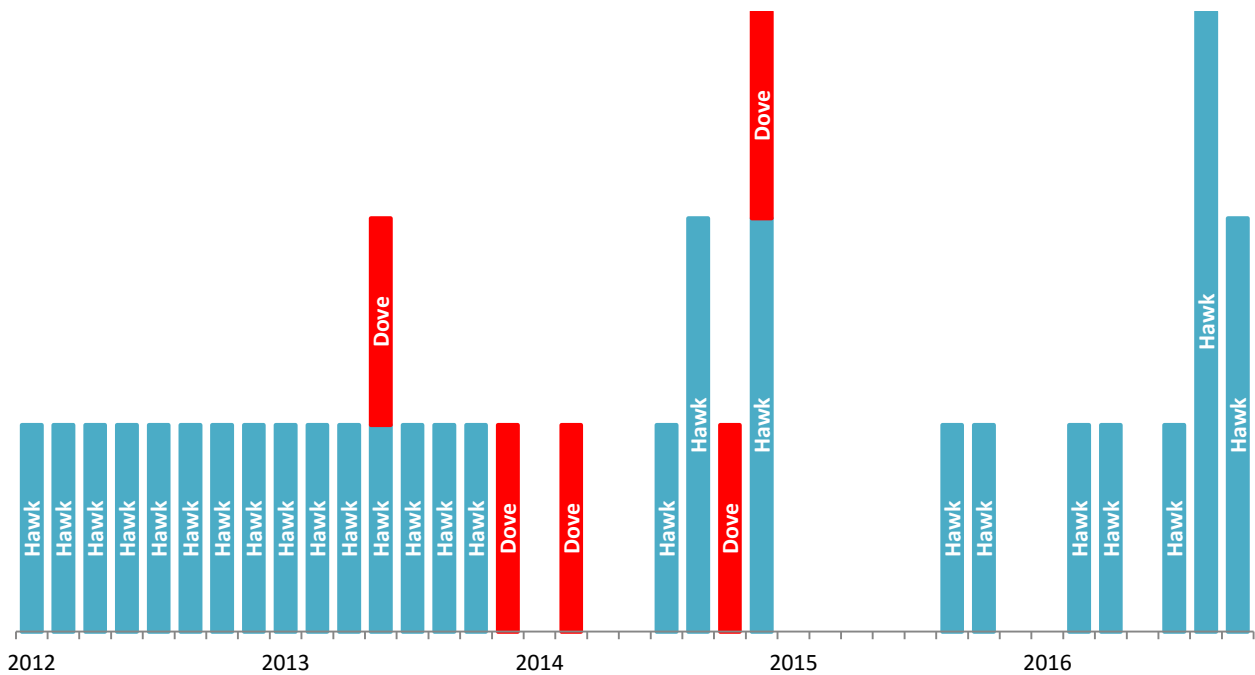
Source: FOMC, TrendMacro analysis

Fedpeak regime change: the evolution of forward guidance



Source: FOMC, Federal Reserve, BLS, BEA, TrendMacro calculations

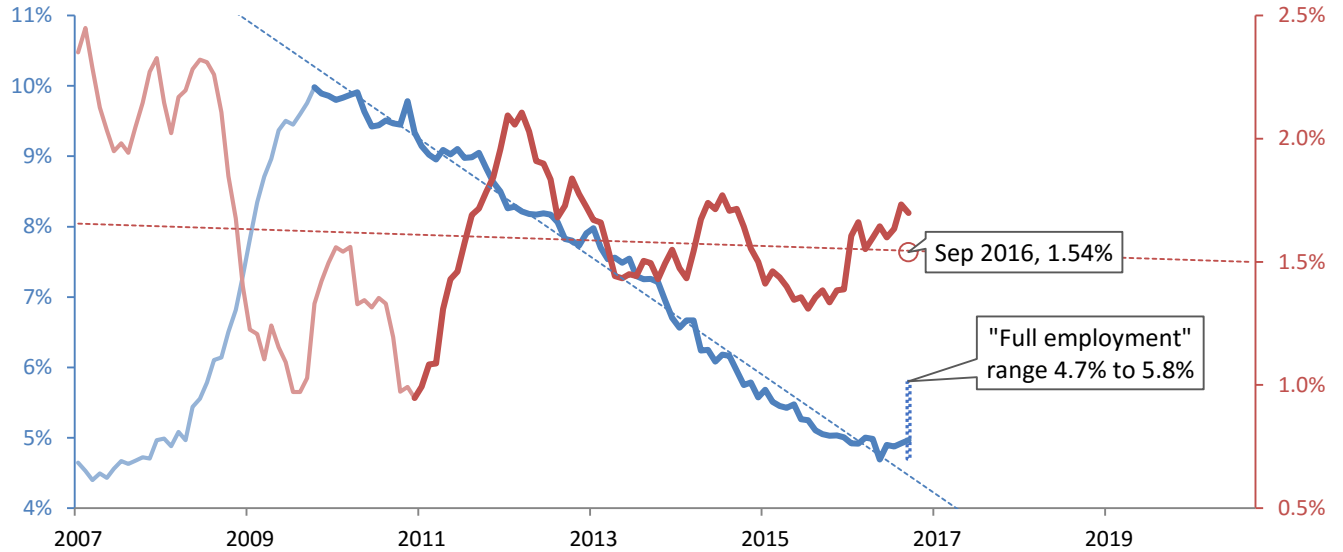
Other voices: number and direction of FOMC decision dissents



Source: FOMC, TrendMacro calculations

The dual mandate: garbage in, garbage out

— Unemployment rate ··· Trend from peak — Core PCE inflation YOY ··· Trend from trough

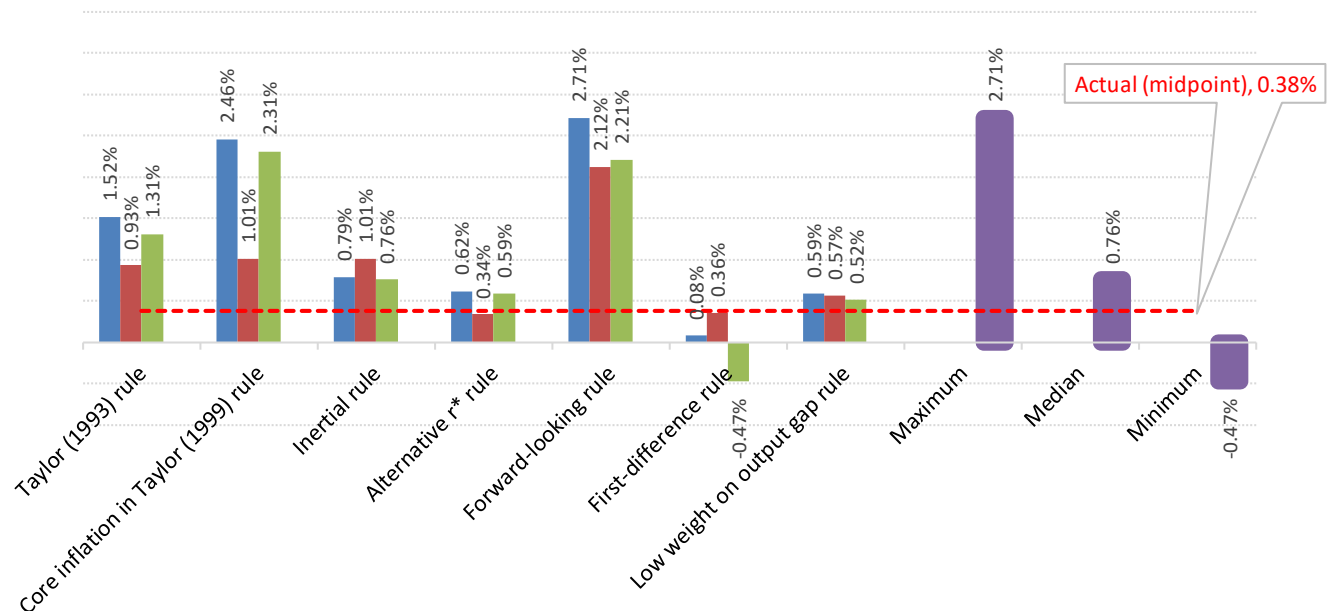


Source: BLS Current Population Survey, TrendMacro calculations

So many policy rules, so little time...

As of Q3-2016 Based on inputs from:

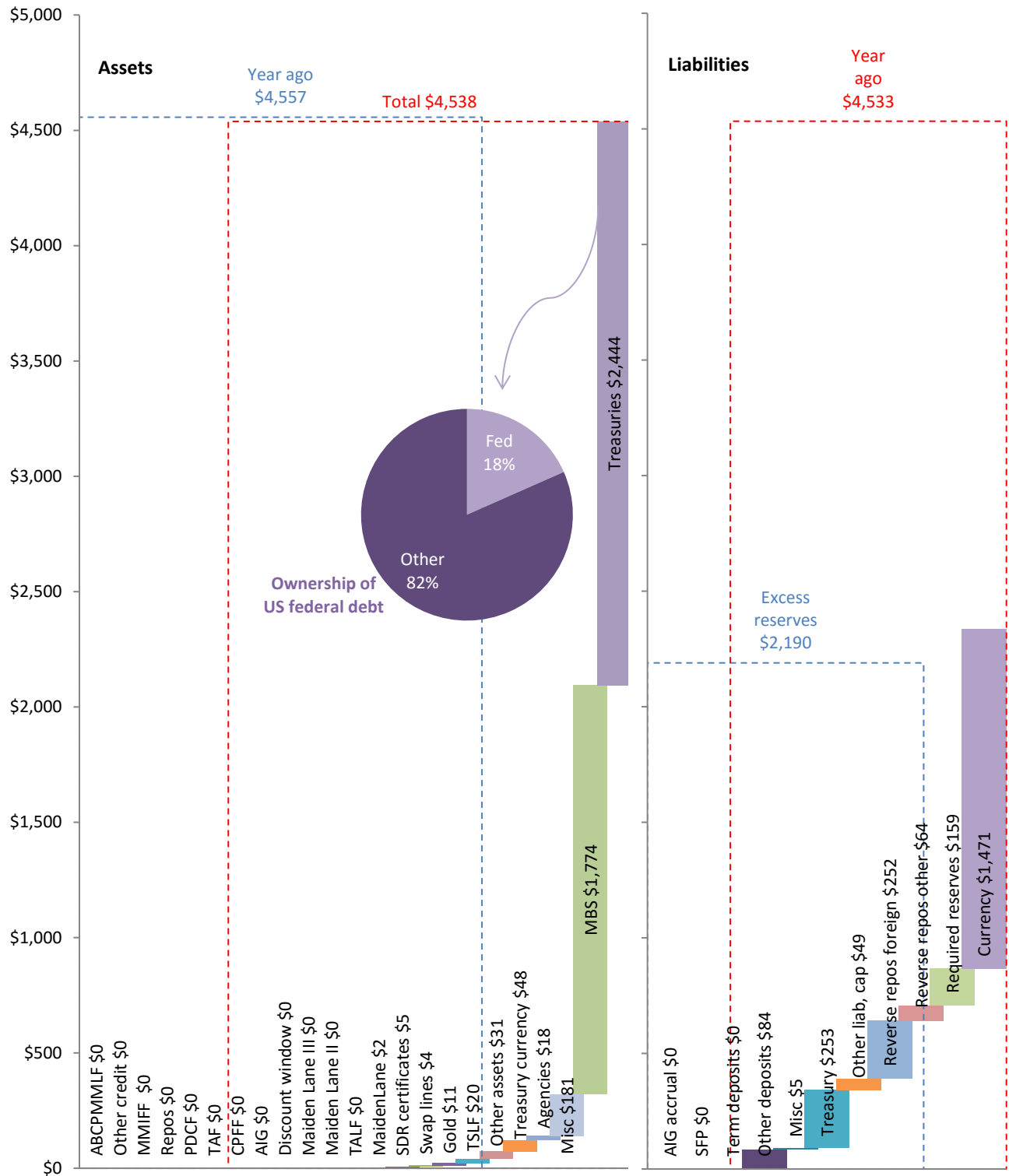
■ FOMC Summary of Economic Projections ■ Congressional Budget Office ■ Cleveland Fed



Source: Cleveland Fed, TrendMacro calculations

The Fed's assets, and how they are funded (USD billions)

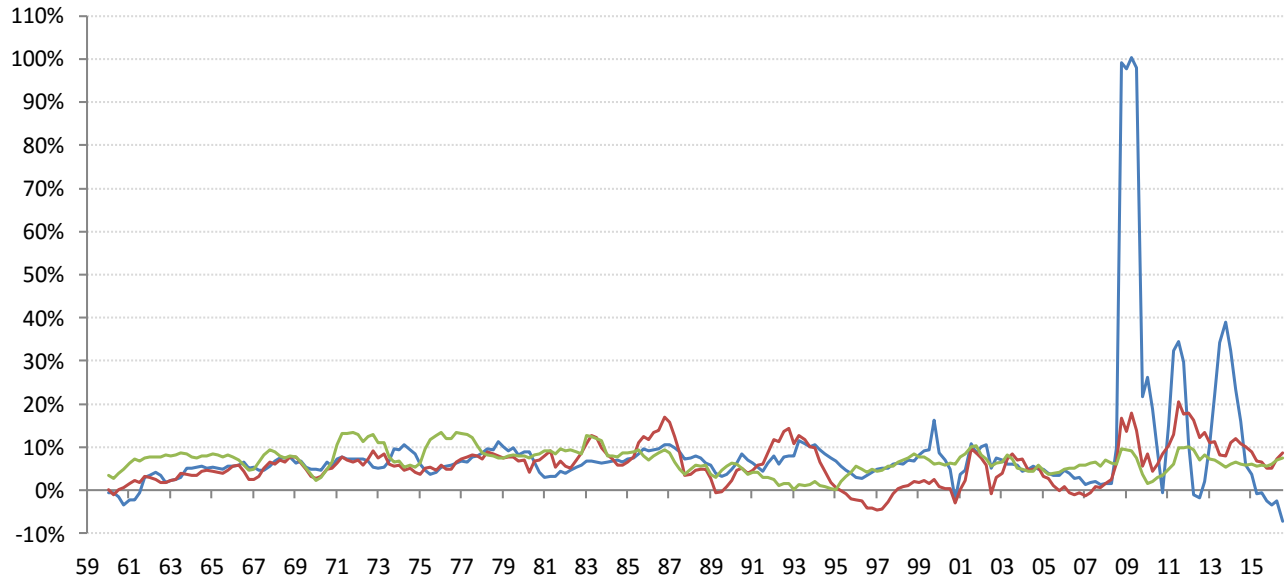
Assets do not perfectly match liabilities because we include unsettled MBS purchases and sales



Source: Federal Reserve H.4, US Treasury, TrendMacro calculations

Money supply growth, YOY quarterly

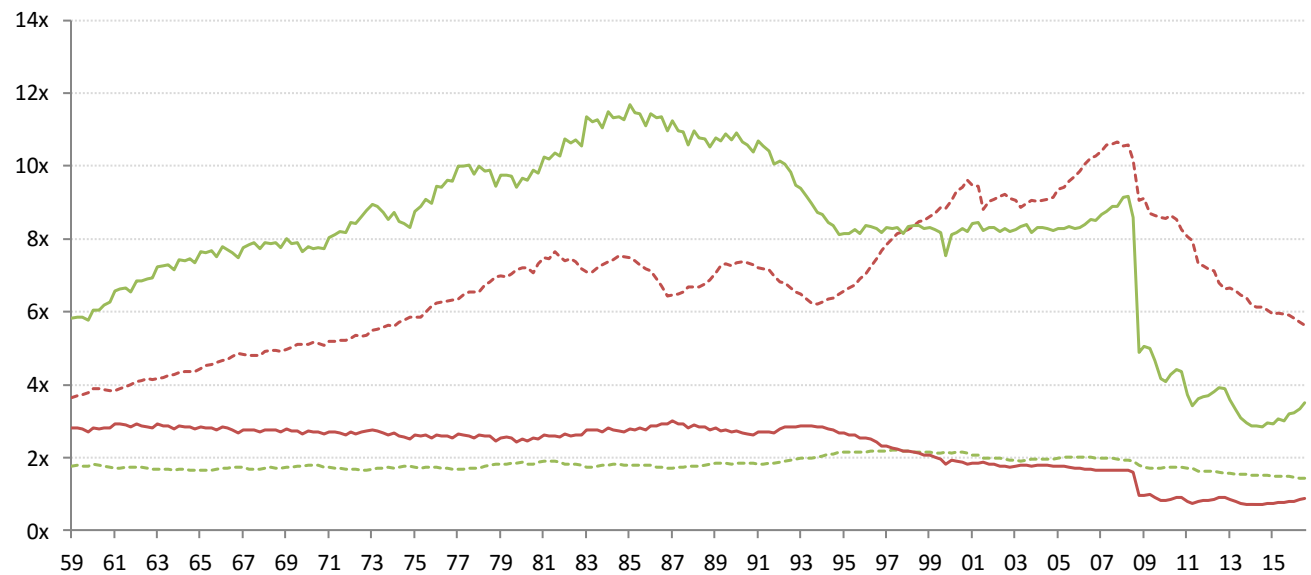
— M1 — M2 — Monetary base



Source: Federal Reserve H.6, TrendMacro calculations

Monetary velocity, quarterly

— M1 base multiplier - - - M1 output multiplier — M2 base multiplier - - - M2 output multiplier



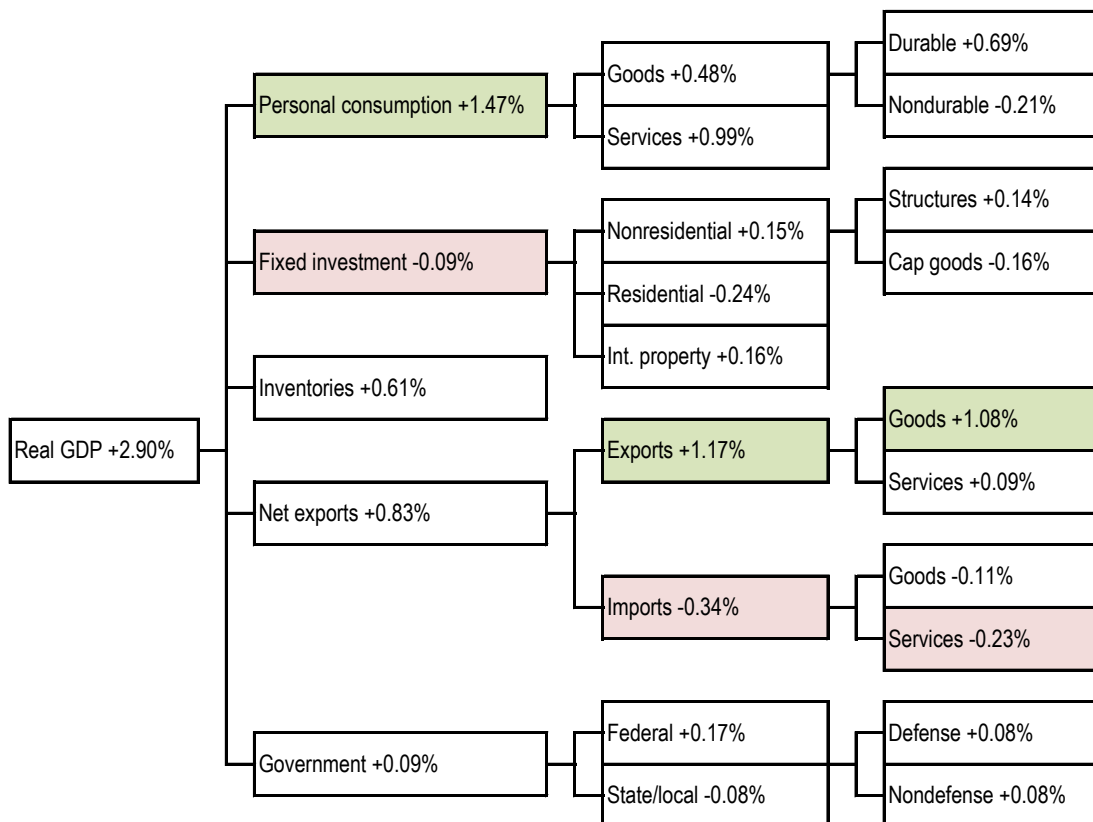
Source: BEA, Federal Reserve H.6, TrendMacro calculations

Data Insights: GDP

Friday, October 28, 2016

Today's GDP data: what you need to know -- where did the growth come from?

Contributions to real, sequential quarter change, SAAR Biggest change per detail-level: ■ positive ■ negative



Source: Bureau of Economic Analysis

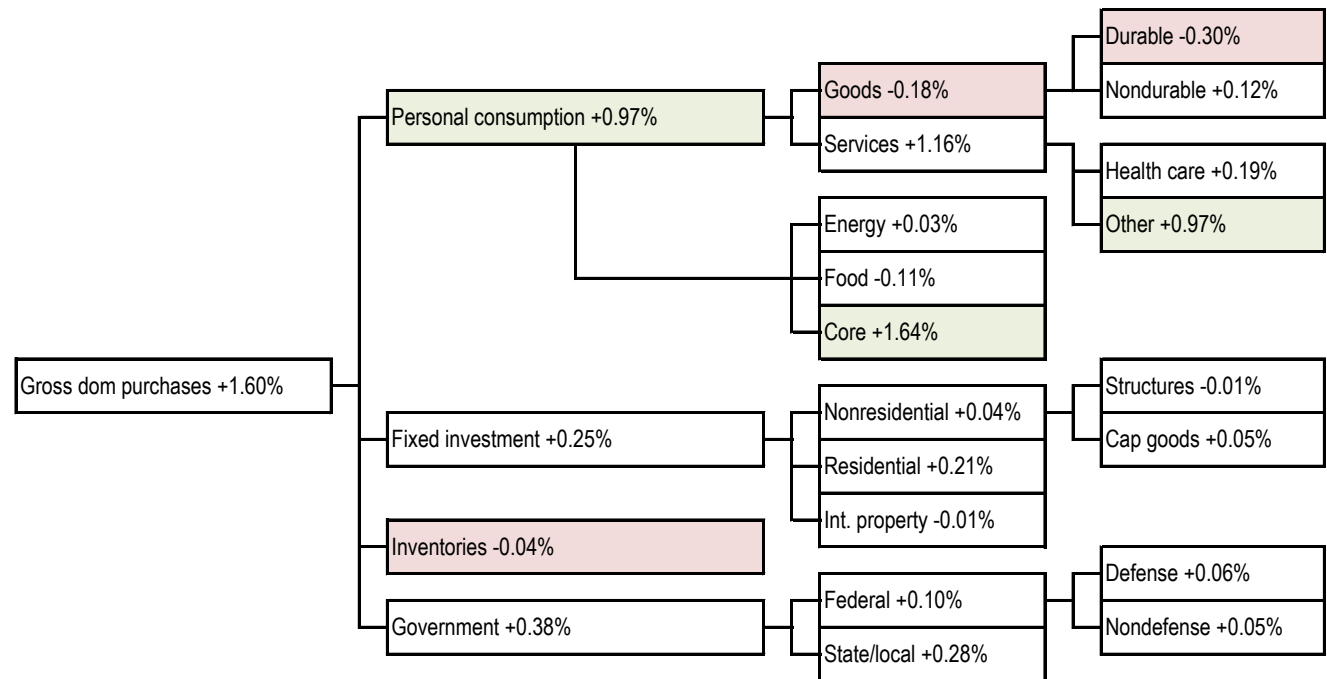
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Price index data: what you need to know -- where did the inflation come from?

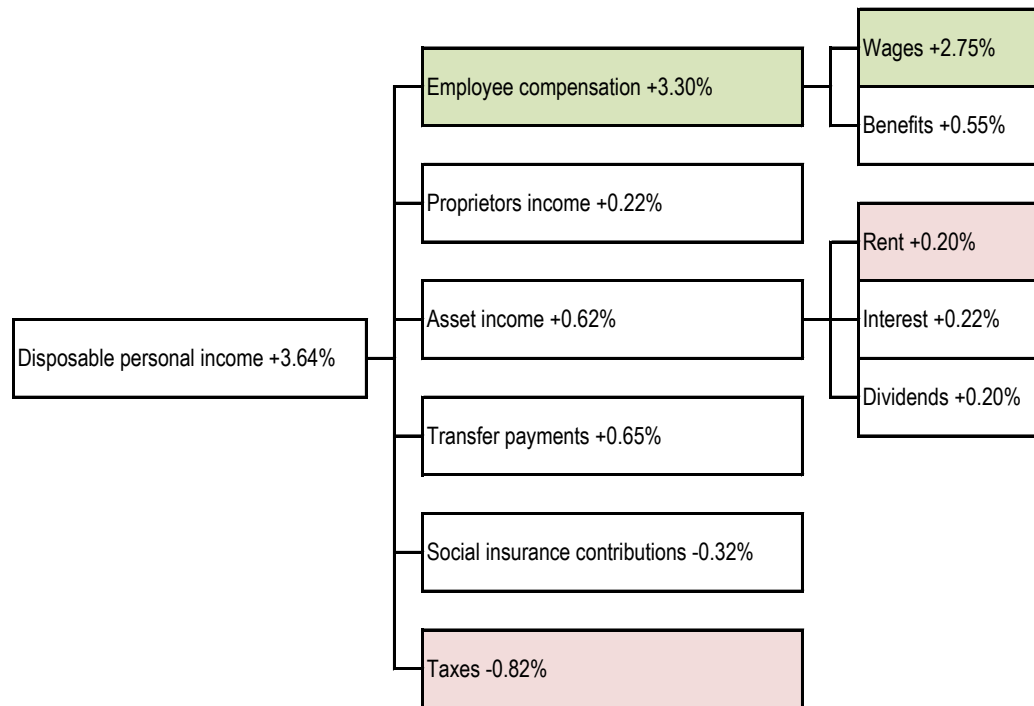
Contribution to sequential quarter change, SAAR Biggest change per detail-level: ■ positive ■ negative



Source: Bureau of Economic Analysis, TrendMacro calculations

Personal income data: what you need to know -- where did the growth come from?

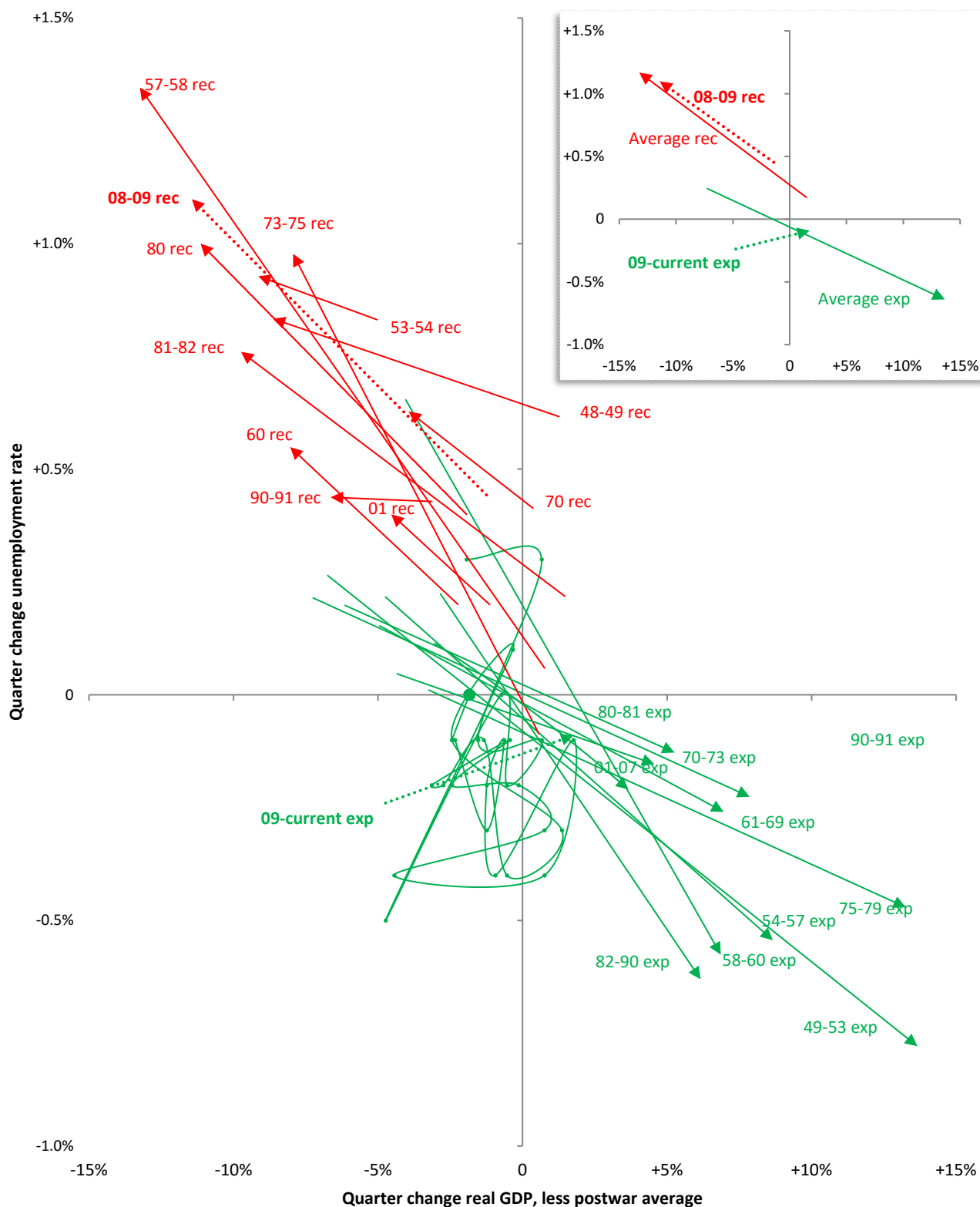
Contribution to nominal, seq quarter change, SAAR Biggest change per detail-level: ■ positive ■ negative



Source: Bureau of Economic Analysis, TrendMacro calculations

Broken Okun's Law: real growth required to change unemployment

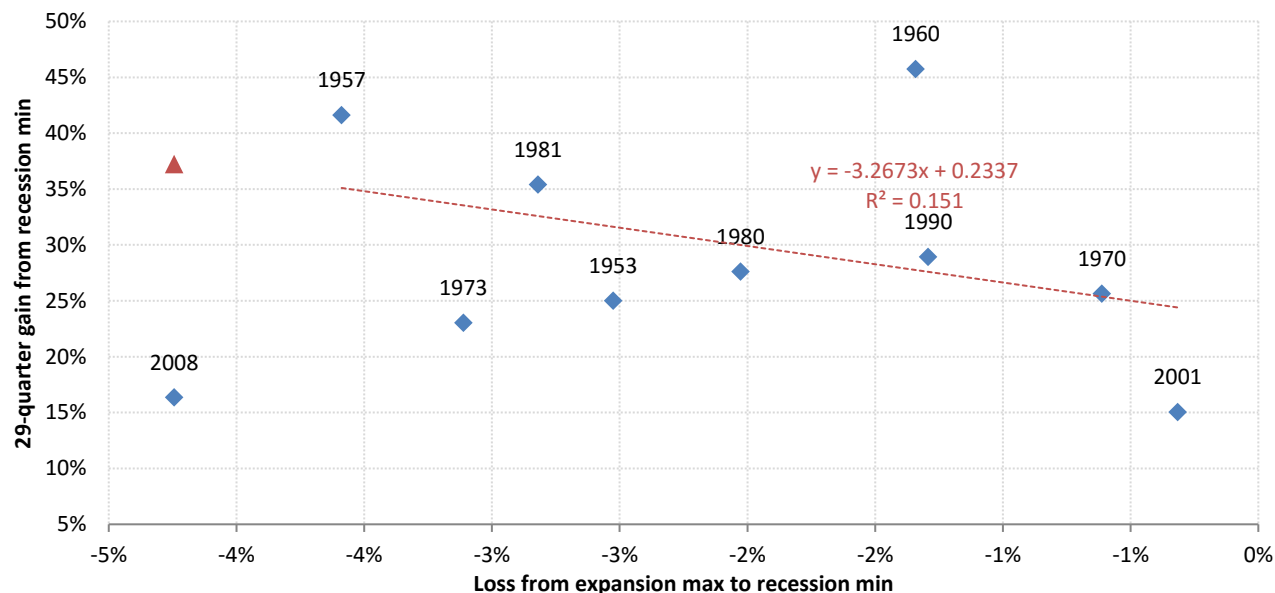
— Expansion — Recession Linear trend, plus monthly plots for 09-current expansion • Latest



Source: Bureau of Economic Analysis, BLS Current Population Survey, TrendMacro calculations

The Zarnowitz Law: severity of output loss in recession, versus vigor of recovery

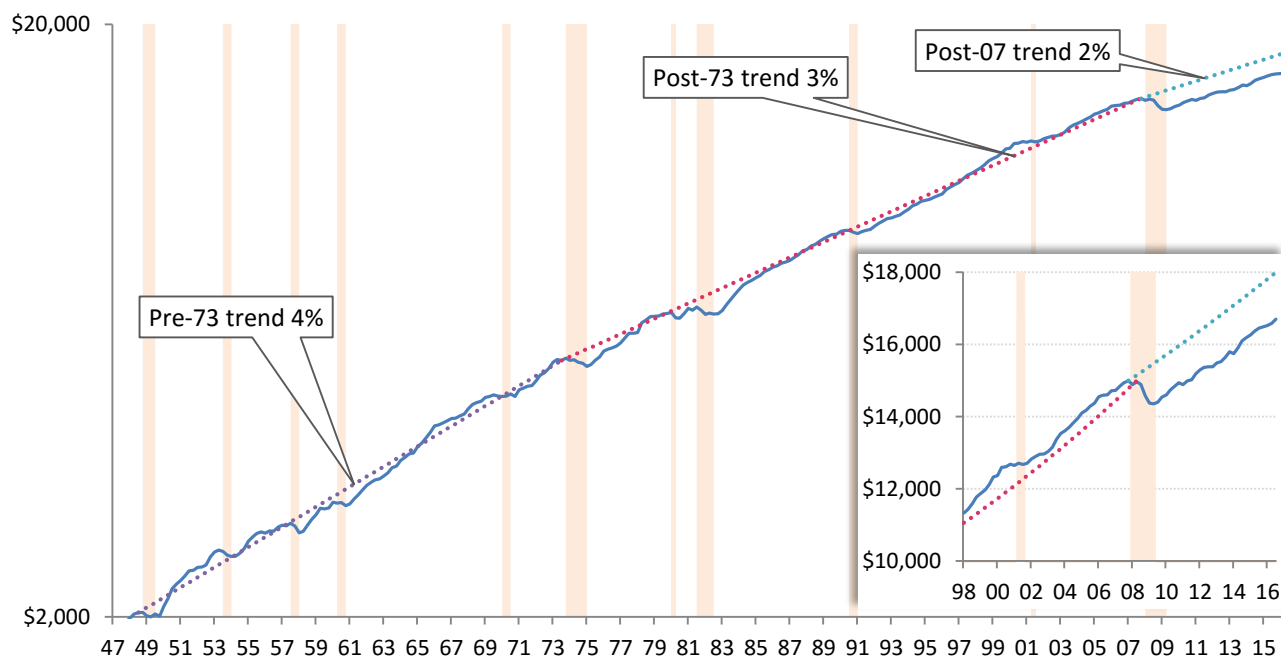
◆ Actual --- Regression for recessions 1948-2001 ▲ Theoretical for current recovery based on regression



Source: Bureau of Economic Analysis, National Bureau of Economic Research, TrendMacro calculations

The plucked string theory: GDP reverts to trend after perturbation

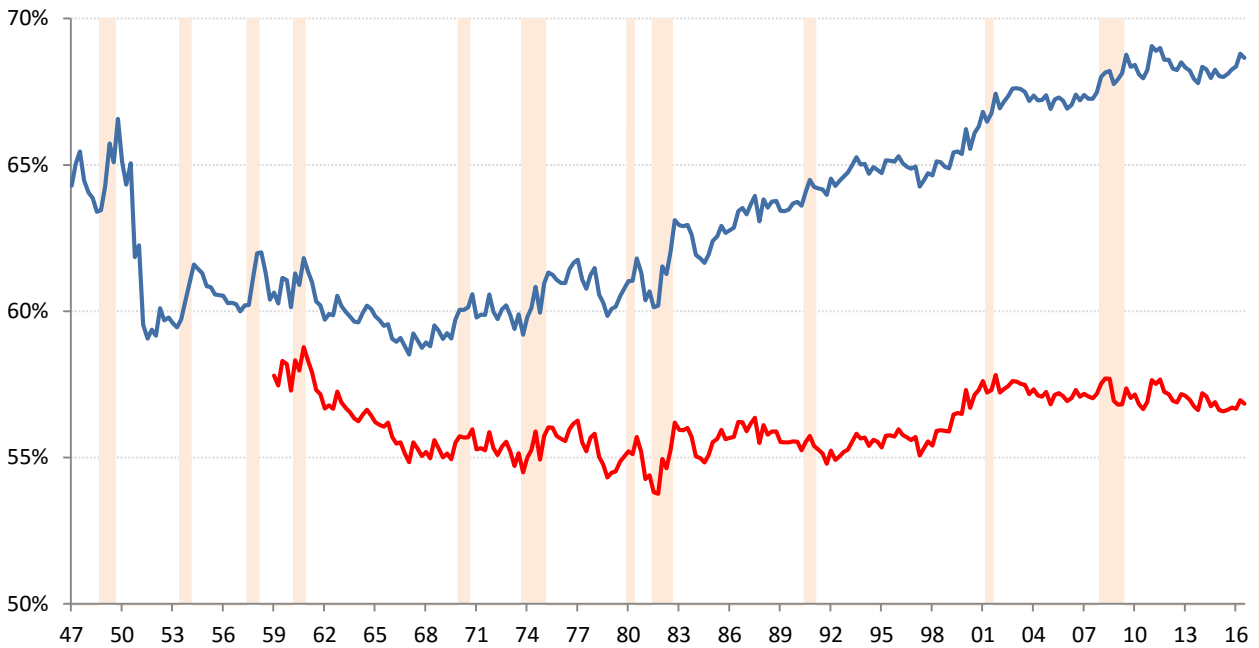
— Real GDP, USD billions, log scale --- '47-'74 3.99% --- '74-'07 trend 3.02% --- Post-'07 trend Recession



Source: Bureau of Economic Analysis, National Bureau of Economic Research, TrendMacro calculations

"New normal" watch: personal consumption share of nominal GDP

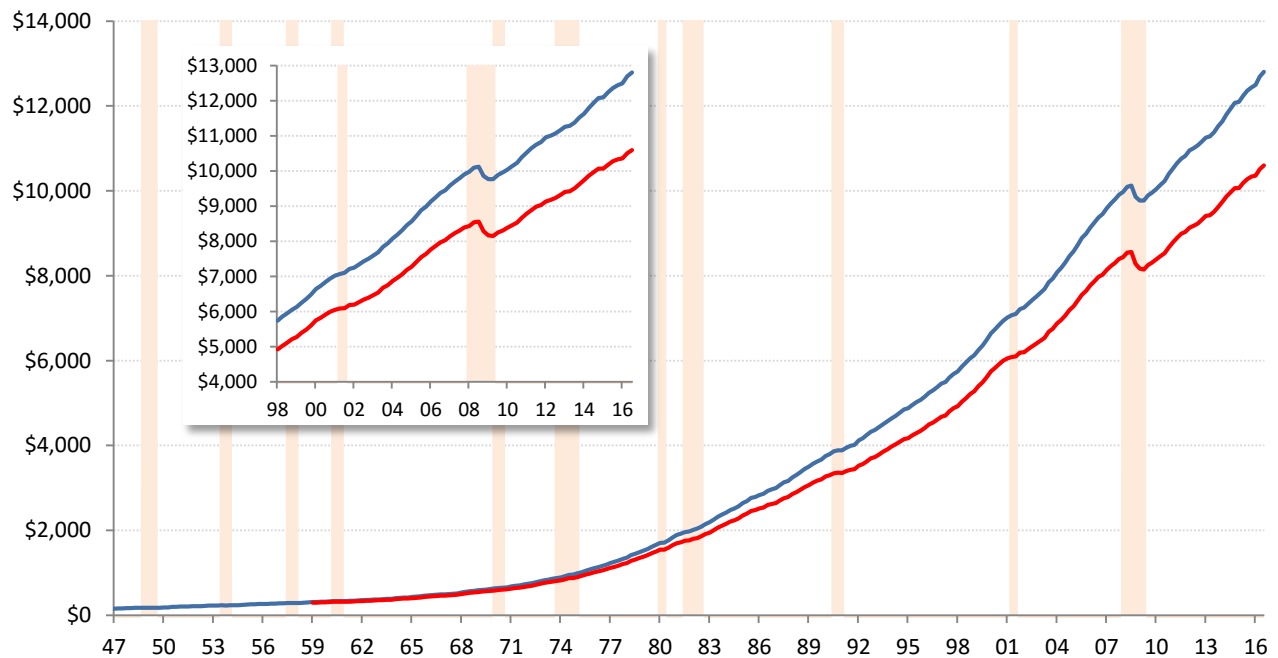
— Personal consumption expenditures — Ex-health care services — Recession



Source: Bureau of Economic Analysis, National Bureau of Economic Research, TrendMacro calculations

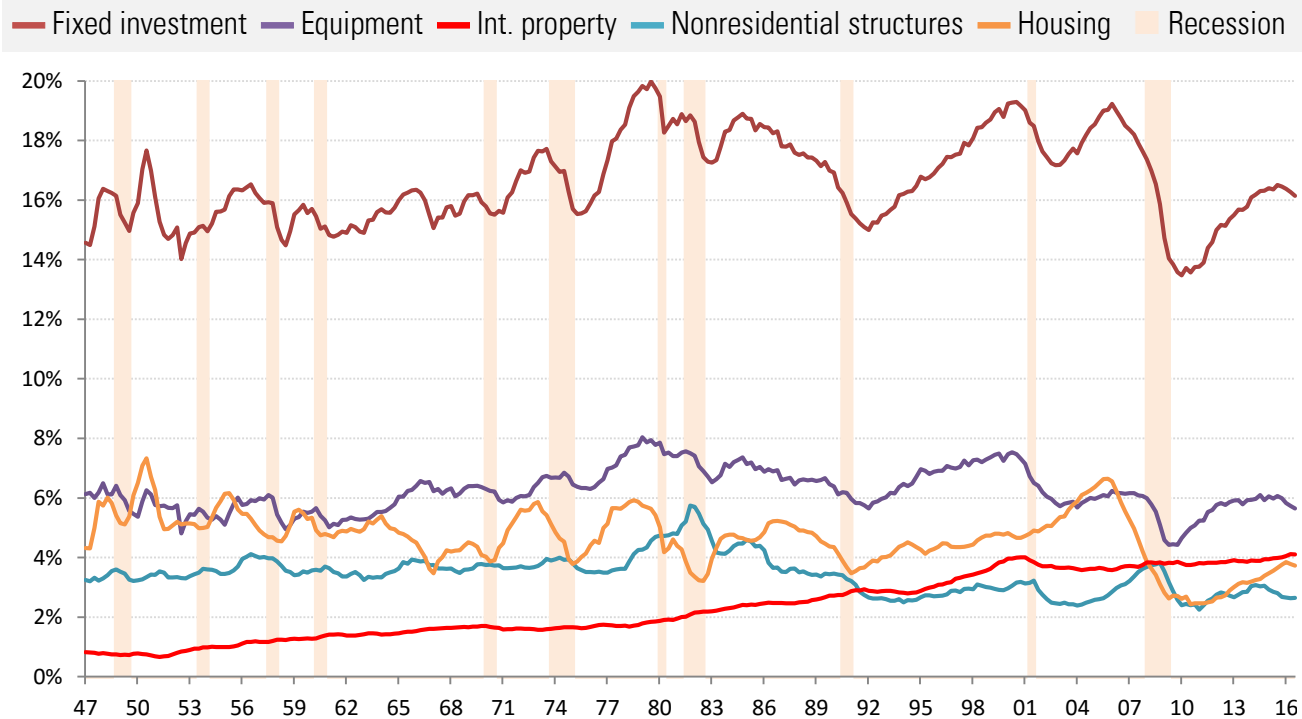
"New normal" watch: nominal personal consumption expenditures

USD billions — Personal consumption expenditures — Ex-health care services — Recession



Source: Bureau of Economic Analysis, National Bureau of Economic Research, TrendMacro calculations

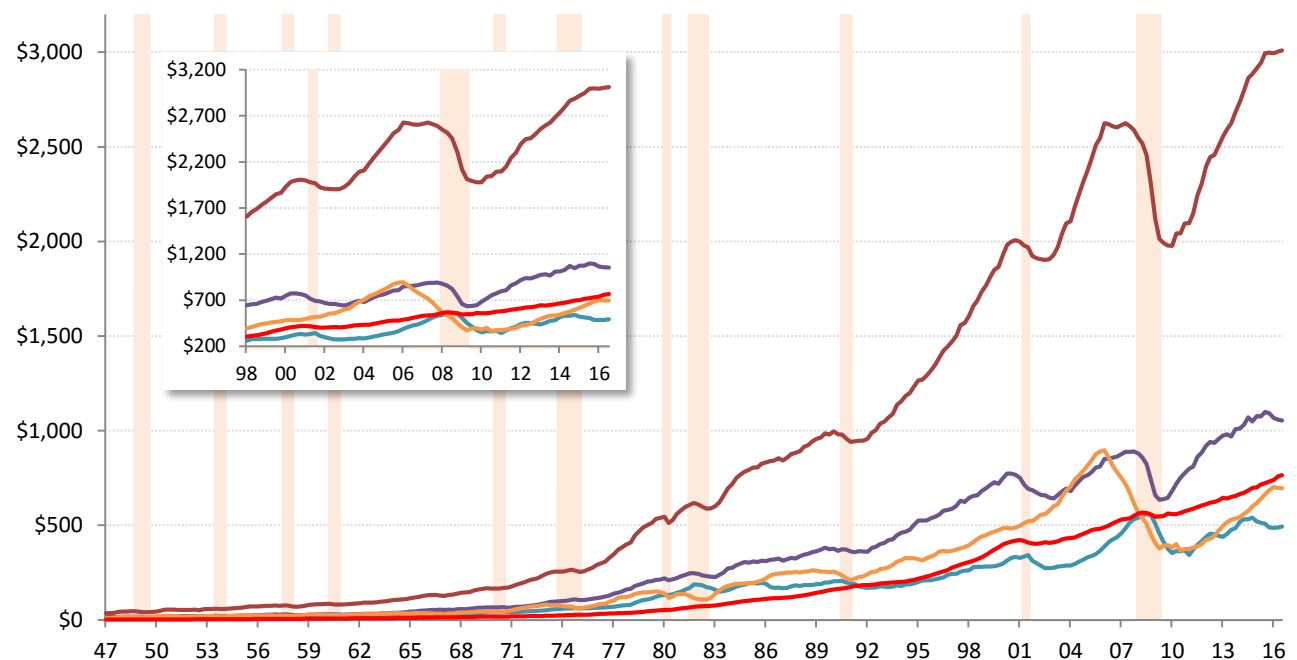
Capital on strike: fixed investment share of nominal GDP



Source: Bureau of Economic Analysis, National Bureau of Economic Research, TrendMacro calculations

Capital on strike: nominal fixed investment

USD billions Fixed investment Equipment Int. property Nonresidential structures Housing



















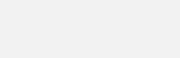


Source: Bureau of Economic Analysis, National Bureau of Economic Research, TrendMacro calculations

Data Insights: Jobs

Friday, November 4, 2016

Today's jobs data: what you need to know

Non-farm payrolls	Change Oct: +161	Revision Sep: +35	Revision Aug: +9	
Private payrolls	Change Oct: +142	Revision Sep: +21	Revision Aug: -12	
Employment	Change Oct: -43			
Unemployment	Change Oct: -152			
Long-term unemployment	Change Oct: -45			
Civilian labor force	Change Oct: -195	4.72 million below trend	77.9% of leavers unemployed	
Unemployment rate	Oct: 4.88%	Change Oct: -0.09%		
Underemployment rate	Oct: 9.5%	Change Oct: -0.2%		
Participation rate	Oct: 62.8%	Change Oct: -0.1%		
UE adjusted for participation	Oct: 9.5%	Change Oct: +0.06%		
Average weeks unemployed	Oct: 27.2	Change Oct: -0.3		
% longterm unemployed	Oct: 25.2%	Change Oct: +0.3%		
Aggregate hours worked index	Oct: 106.0	Change Oct: +0.2%	Revision Sep: unch	
Average hourly earnings	Oct: +0.4%	Change Oct: +0.1%	Revision Sep: +0.1%	
Aggregate weekly earnings	Oct: 131.3	Change Oct: +0.5%	Revision Sep: +0.1	
Monthly job-finding probability	Oct: 32.1%	Change Oct: +0.5%		
Monthly separation probability	Oct: 1.9%	Change Oct: -0.1%		
% involuntary part-time	Oct: 3.9%	Change Oct: -0.0%		
"Household" vs "Payroll" jobs	Change Oct: -244			

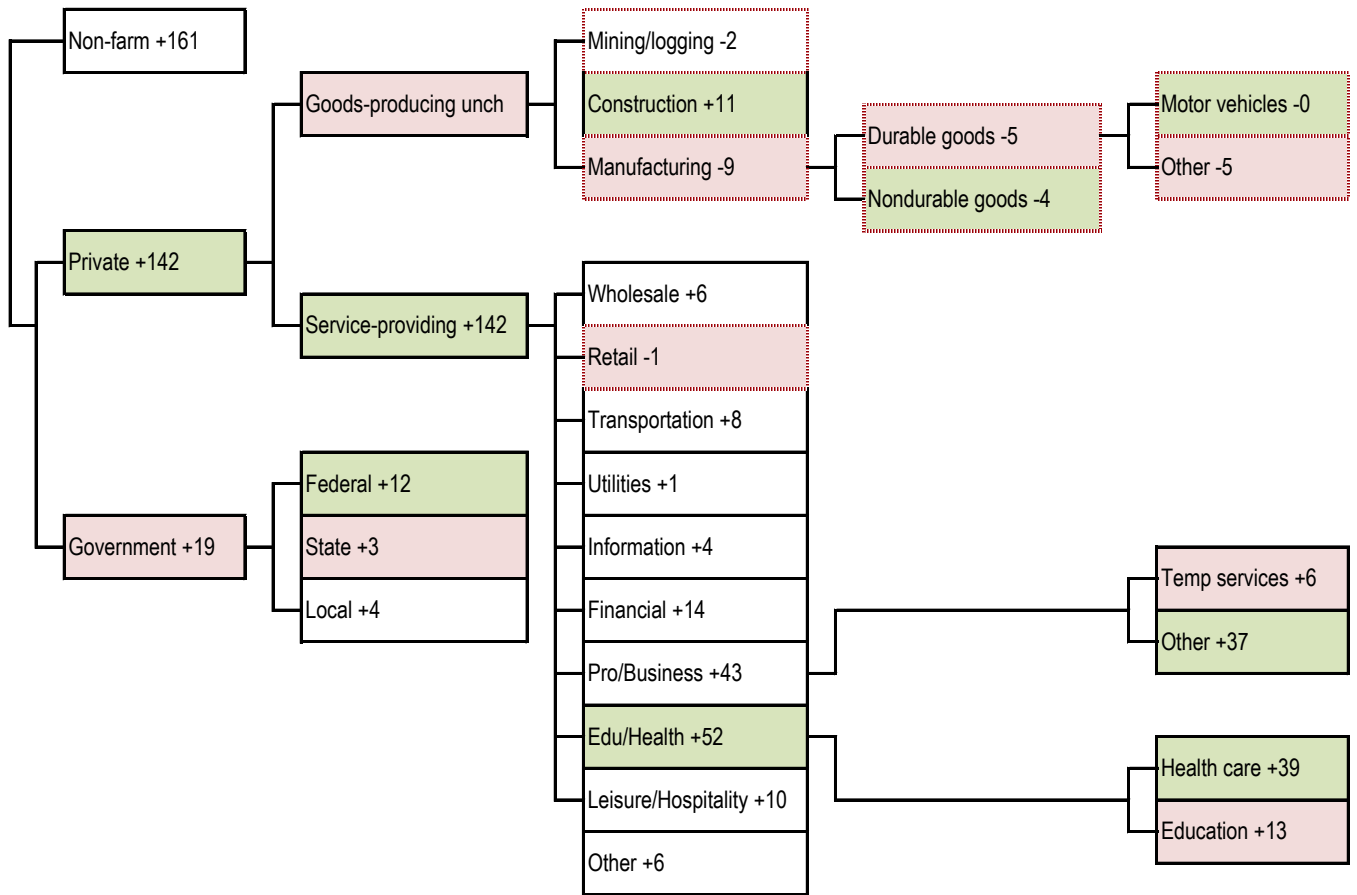
Source: Bureau of Labor Statistics, TrendMacro calculations

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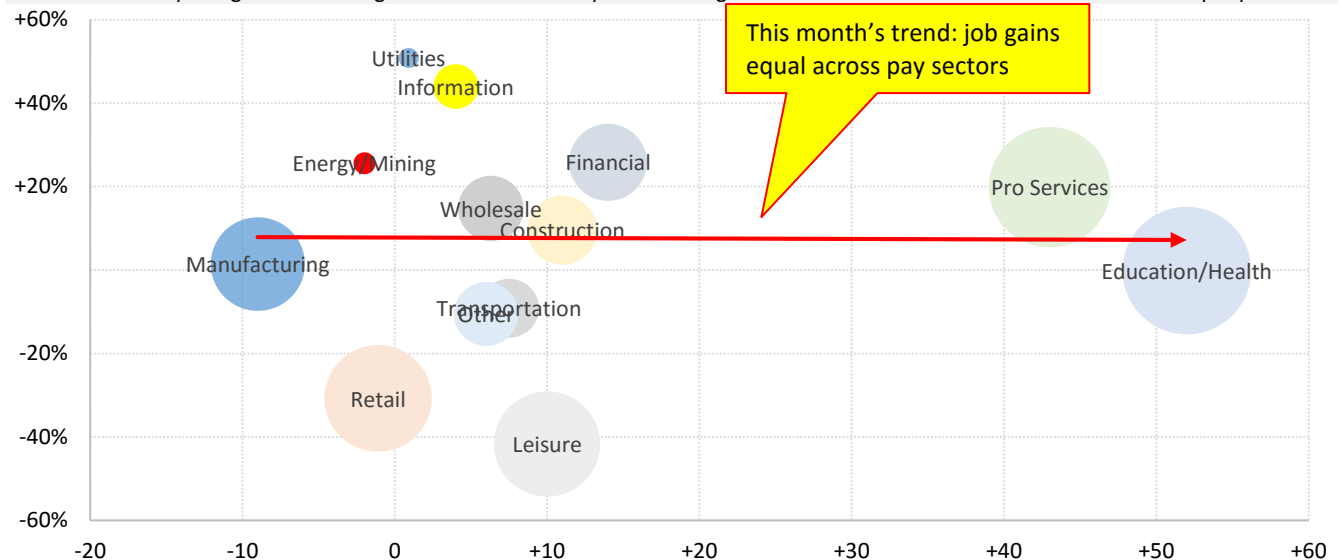
Today's payroll data: what you need to know -- where did the jobs come from?

Sequential month change, thousands SA --- Net job losses Biggest change per detail module: ■ best ■ worst



Where is the pay coming from?

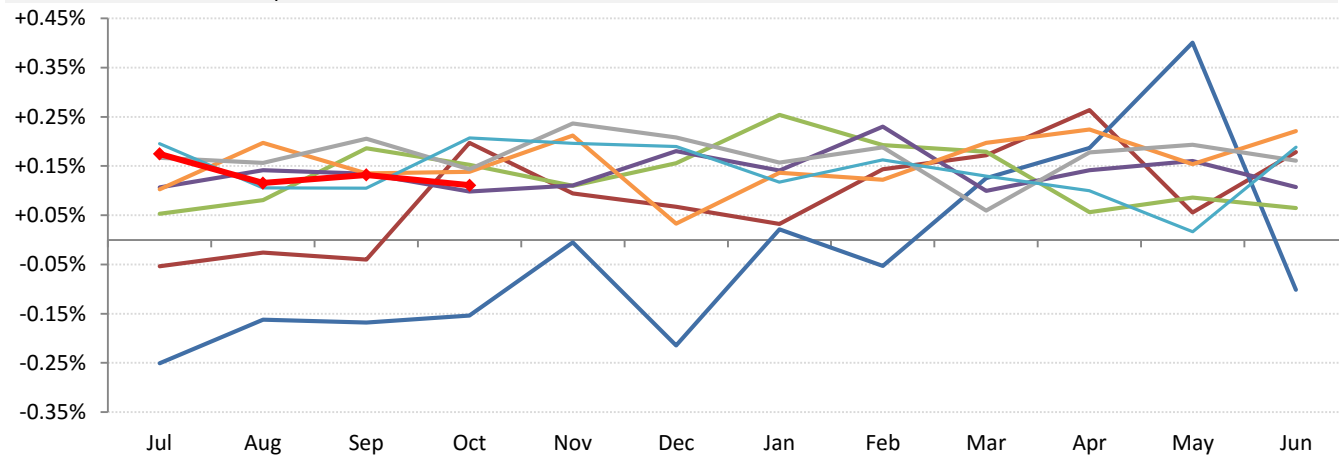
Vertical: Hourly wages vs average Horizontal: Payrolls change this month Circle size: Share of all employment



Source: BLS, TrendMacro calculations

The payroll cycle in the Not So Great Expansion following the Great Recession

Growth MOM from July — 09-10 — 10-11 — 11-12 — 12-13 — 13-14 — 14-15 — 2015-16 — 2016-17

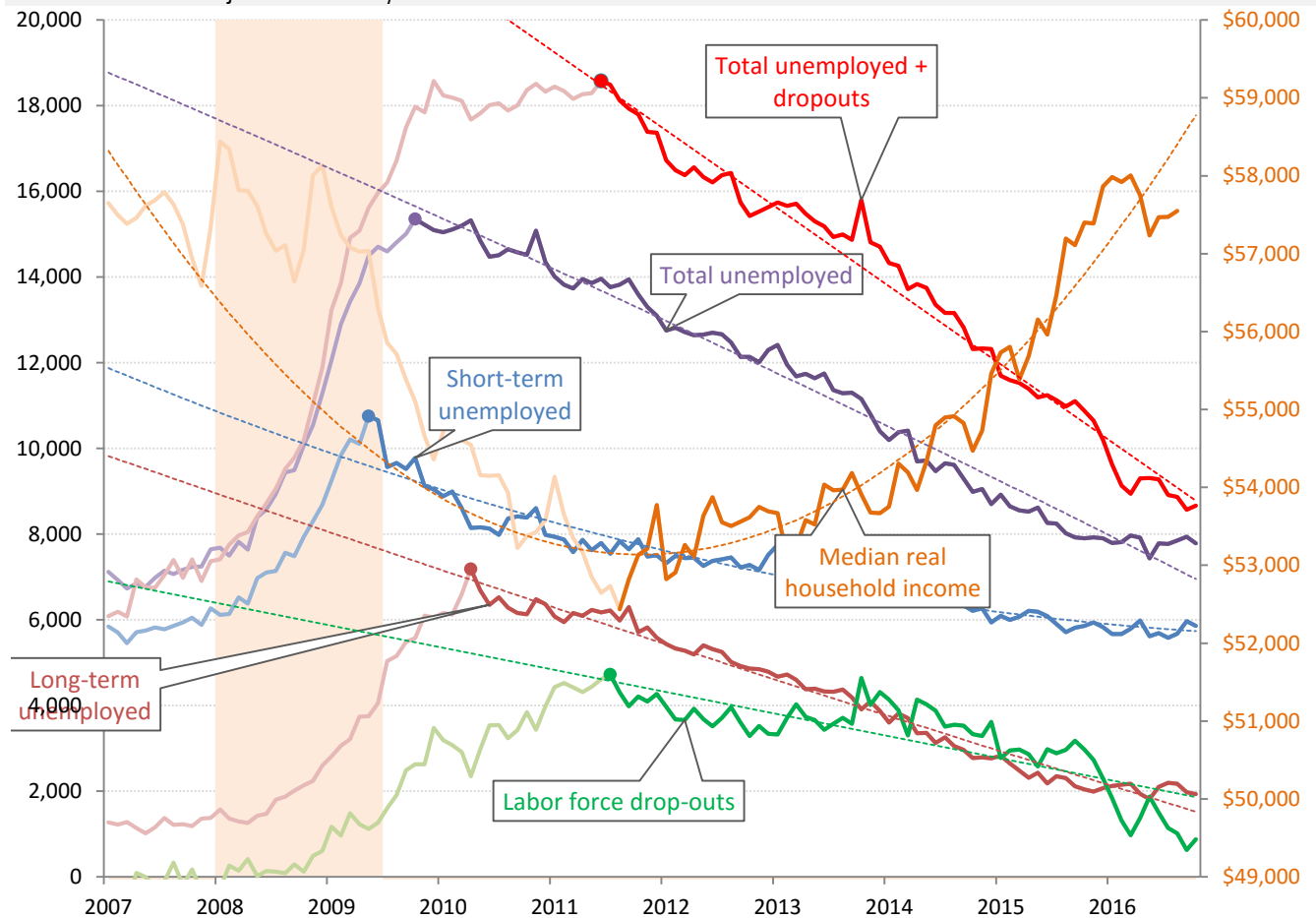


Source: BLS Current Population Survey, TrendMacro calculations

The ultimate jobless recovery is becoming jobful

Unemployment: thousands Short-term = <27 weeks Long-term = >27 weeks

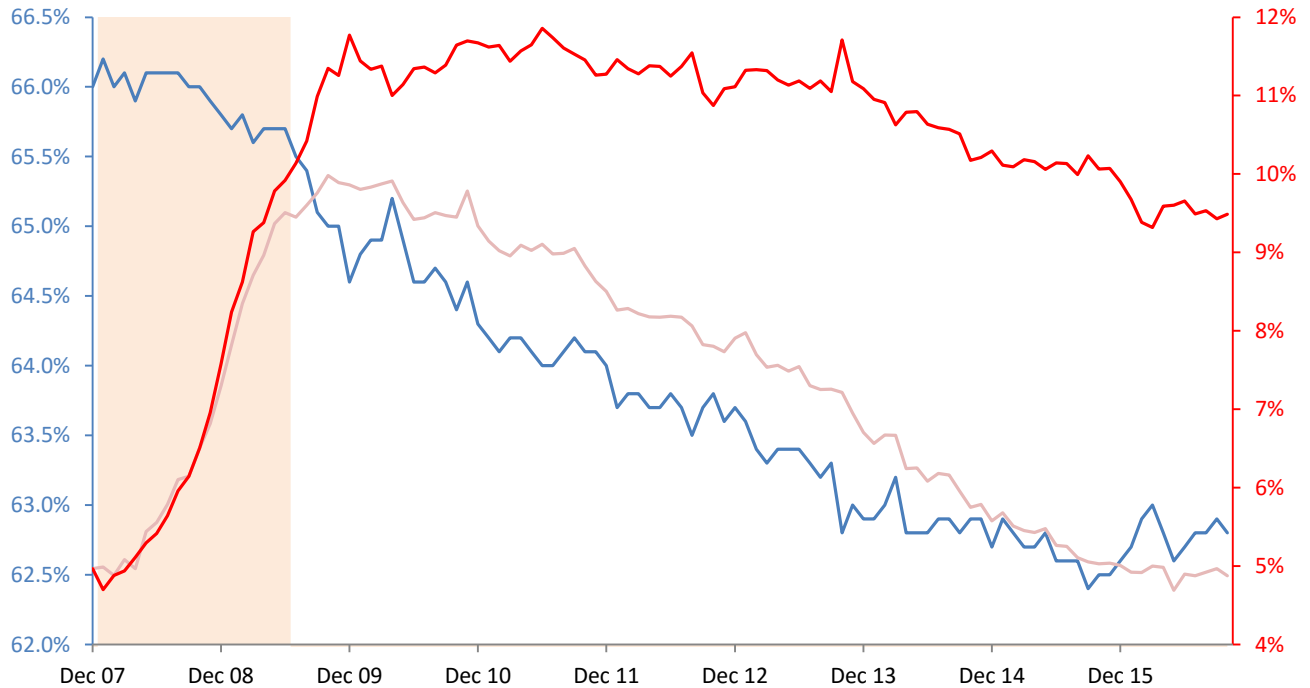
Income inflation adjusted to today's USD



Source: BLS Current Population Survey, TrendMacro calculations

Unemployment rate normalized for participation rate December 2007

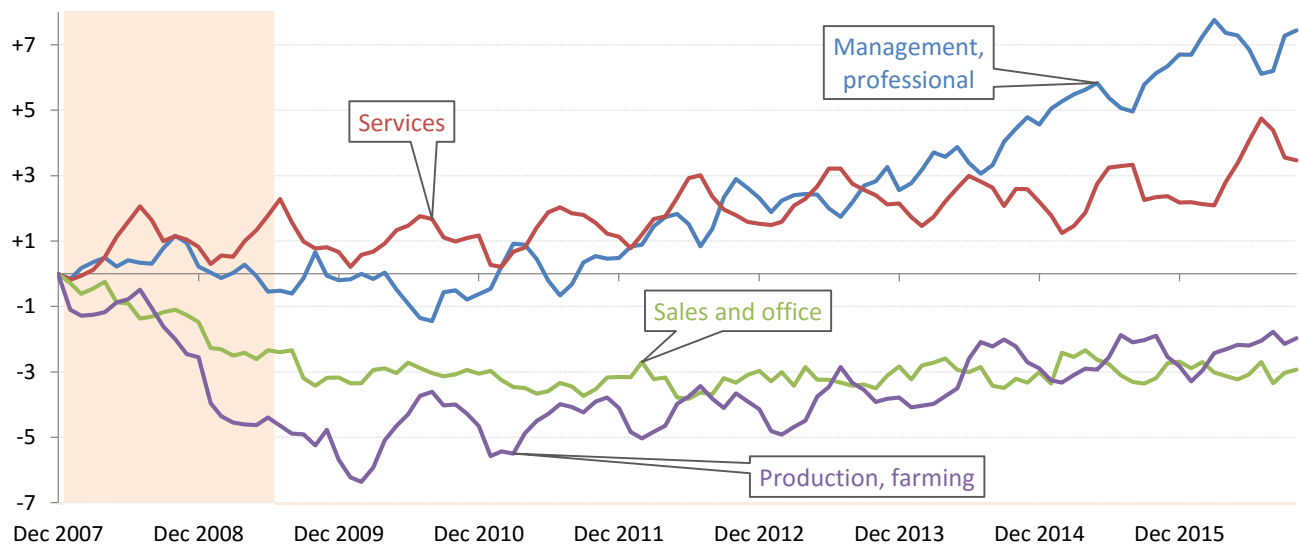
Participation rate Headline unemployment rate Recession



Source: BLS Current Population Survey, TrendMacro calculations

Winner and losers in the Not So Great Expansion following the Great Recession

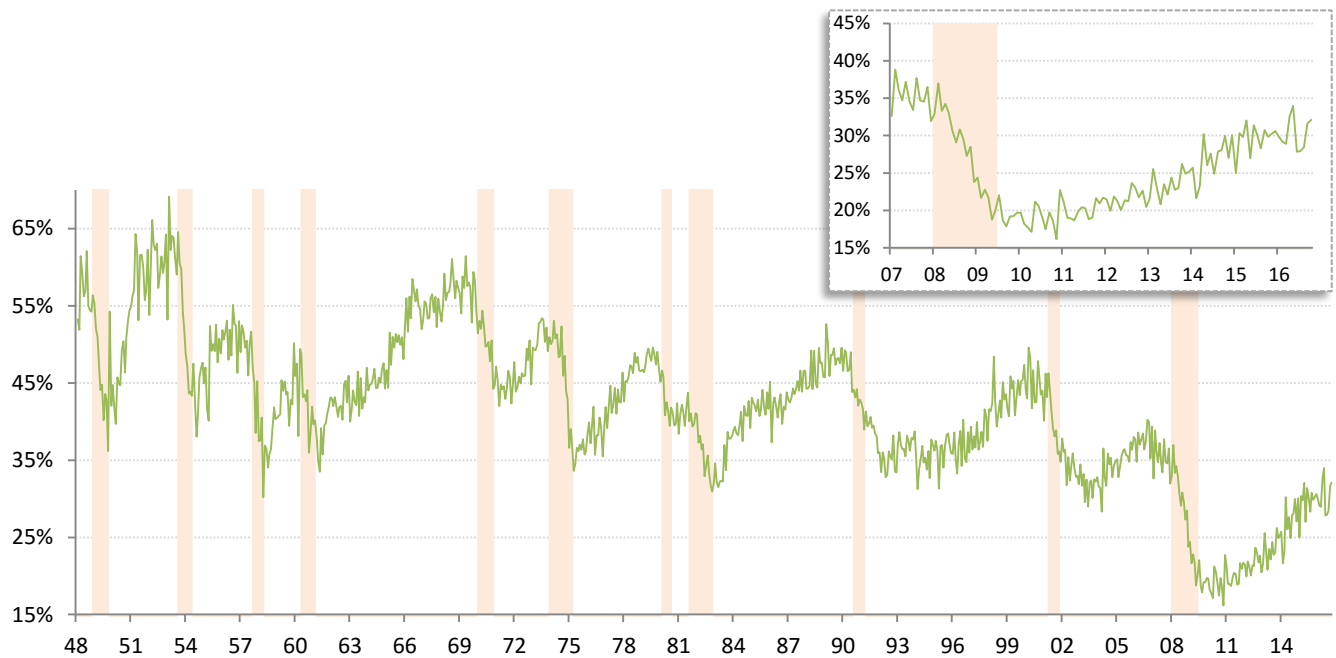
Change in total payrolls from prior business cycle peak, millions



Source: BLS, NBER, TrendMacro calculations

Monthly job-finding probability (the outflow rate from unemployment)

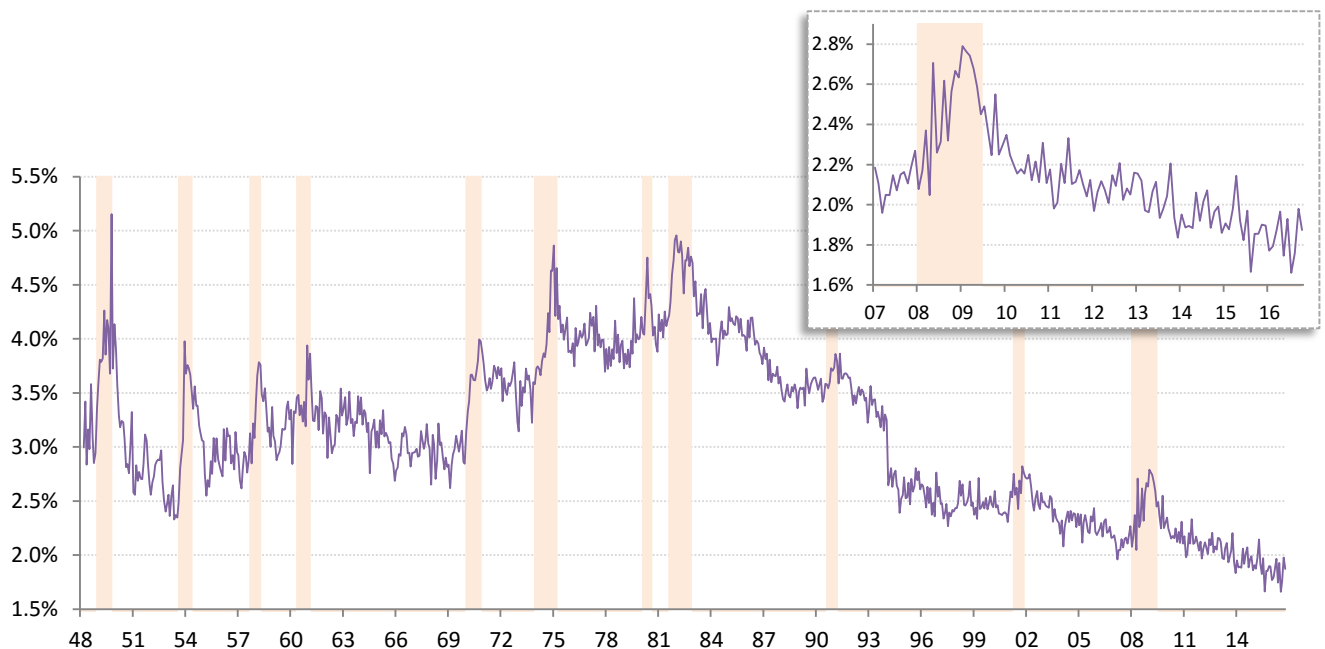
Chance of an unemployed person becoming employed in one month (per [Shimer 2005](#)) Recession



Source: BLS Current Population Survey, TrendMacro calculations

Monthly job-separation probability (the inflow rate to unemployment)

Chance of an employed person becoming unemployed in one month (per [Shimer 2005](#)) Recession

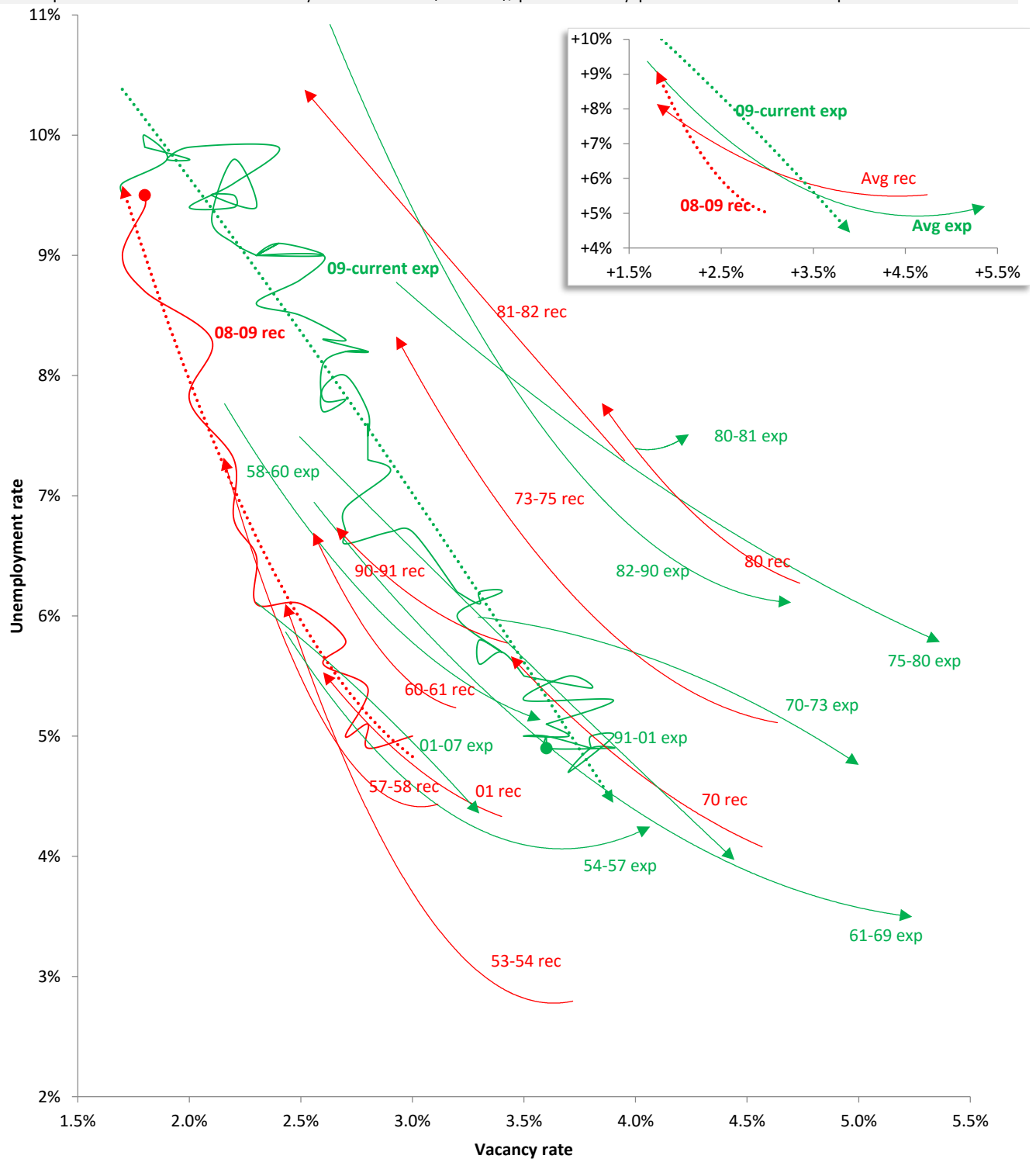


Source: BLS Current Population Survey, TrendMacro calculations

The Beveridge Curve

Cycle relationship between unemployment and job openings

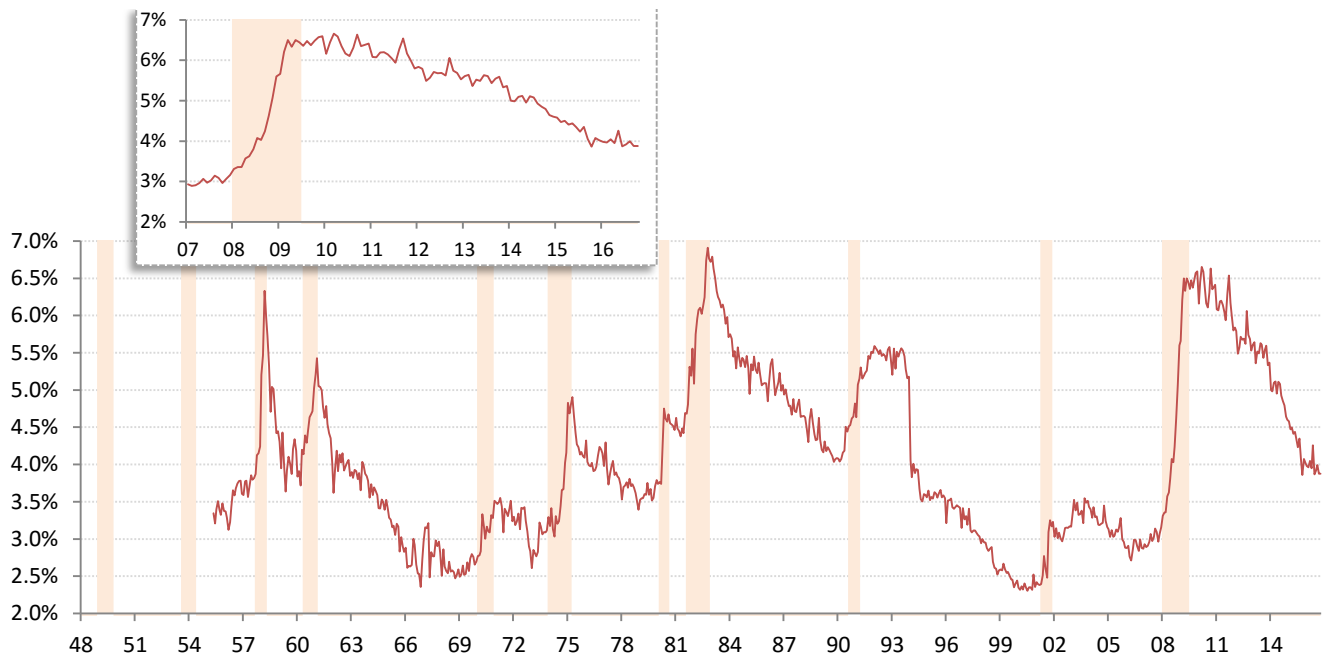
— Expansion — Recession Polynomial trend (order 2), plus monthly plots for 09-current expansion • Latest



Source: BLS Current Population Survey & JOLTS. Pre-2000:Conference Board normalized per [Valletta \(2005\)](#), TrendMacro calculations

Involuntary part-time workers as percentage of the employed labor force

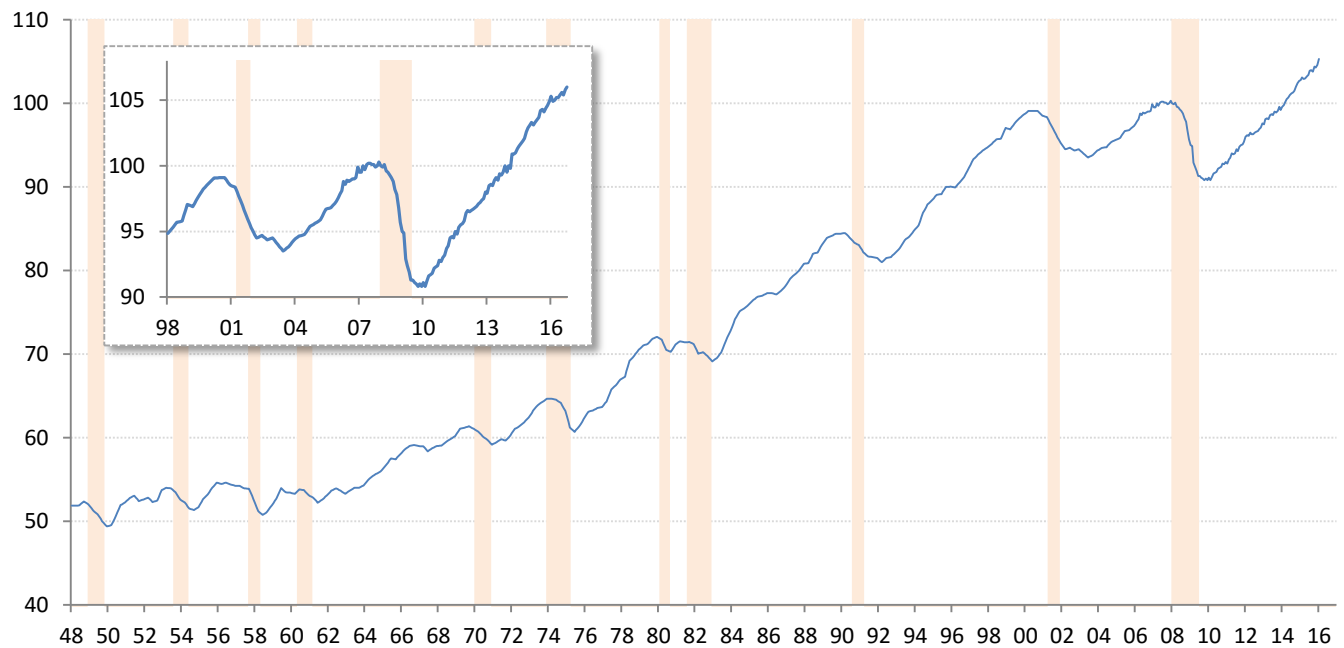
Persons available for full-time work Recession



Source: BLS Current Population Survey, TrendMacro calculations

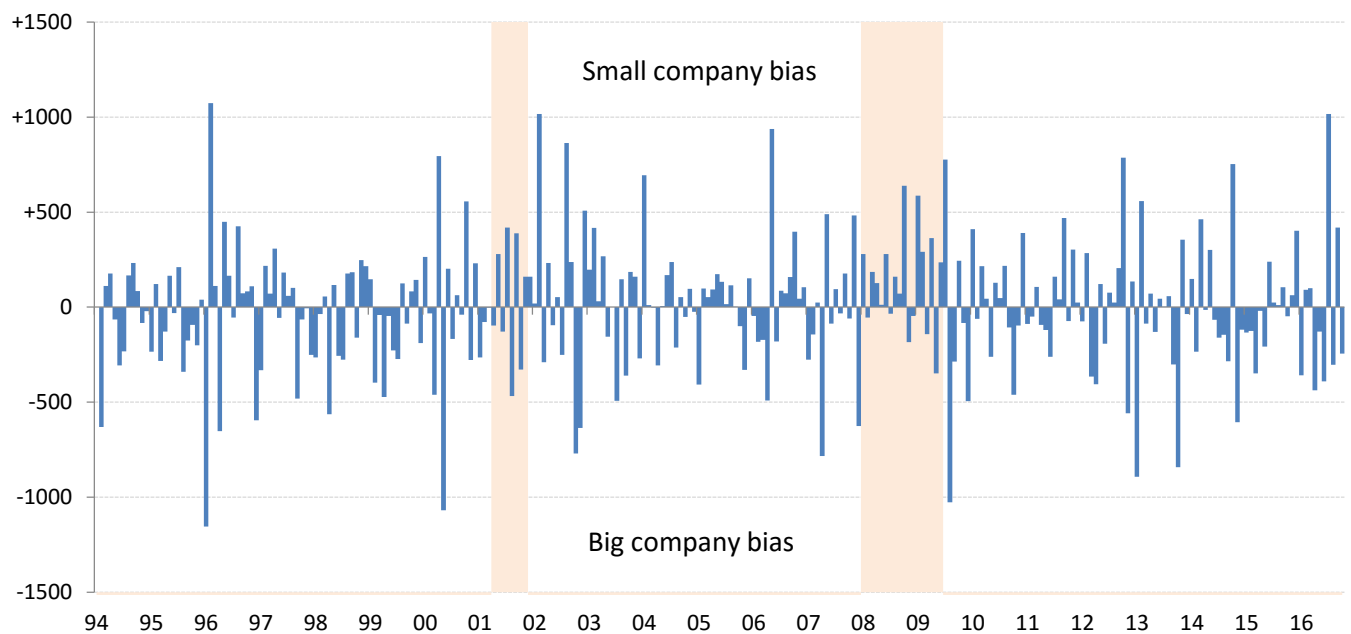
Aggregate weekly private hours-worked index

Recession



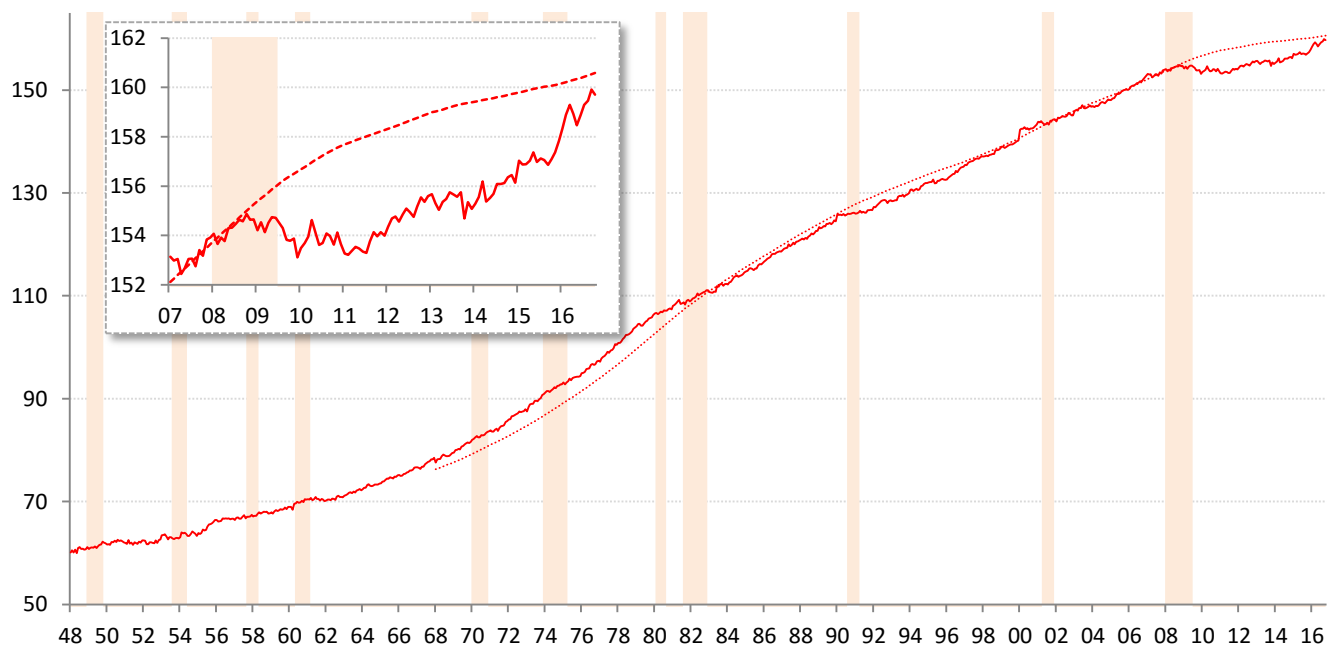
Source: BLS Productivity and Costs (quarterly) and Current Employment Stats (recent monthly), TrendMacro calcs

Difference in employment change: "household" minus "payroll" surveys ■ Recession



Source: BLS Current Population Survey and Current Employment Statistics, TrendMacro calculations

Civilian labor force versus 20-year trend, millions ■ Recession

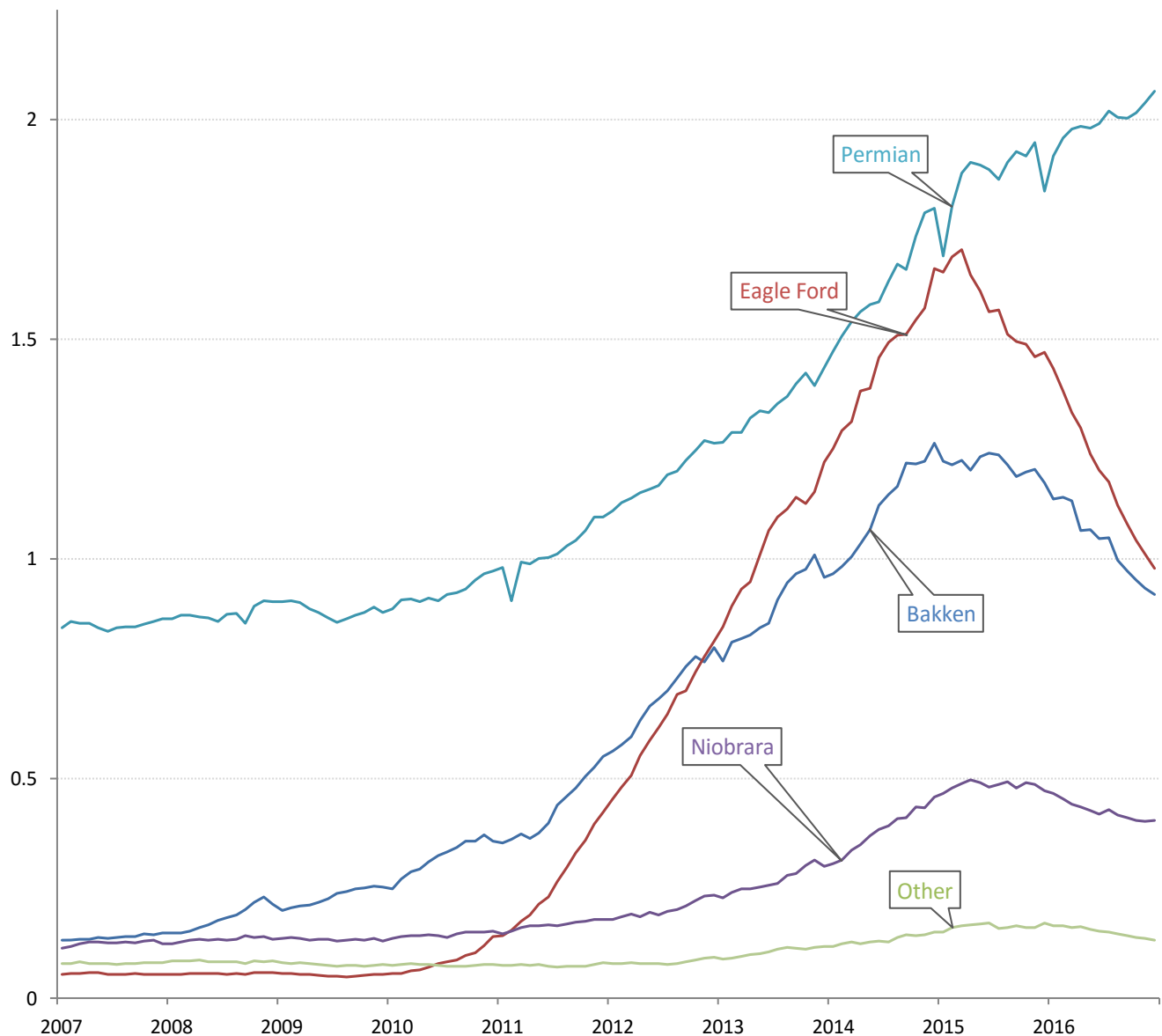


Source: BLS Current Population Survey, TrendMacro calculations

Data Insights: Oil

Tuesday, November 15, 2016

The light tight oil revolution -- and the rollover Production in major US shale plays, millions of barrels/day

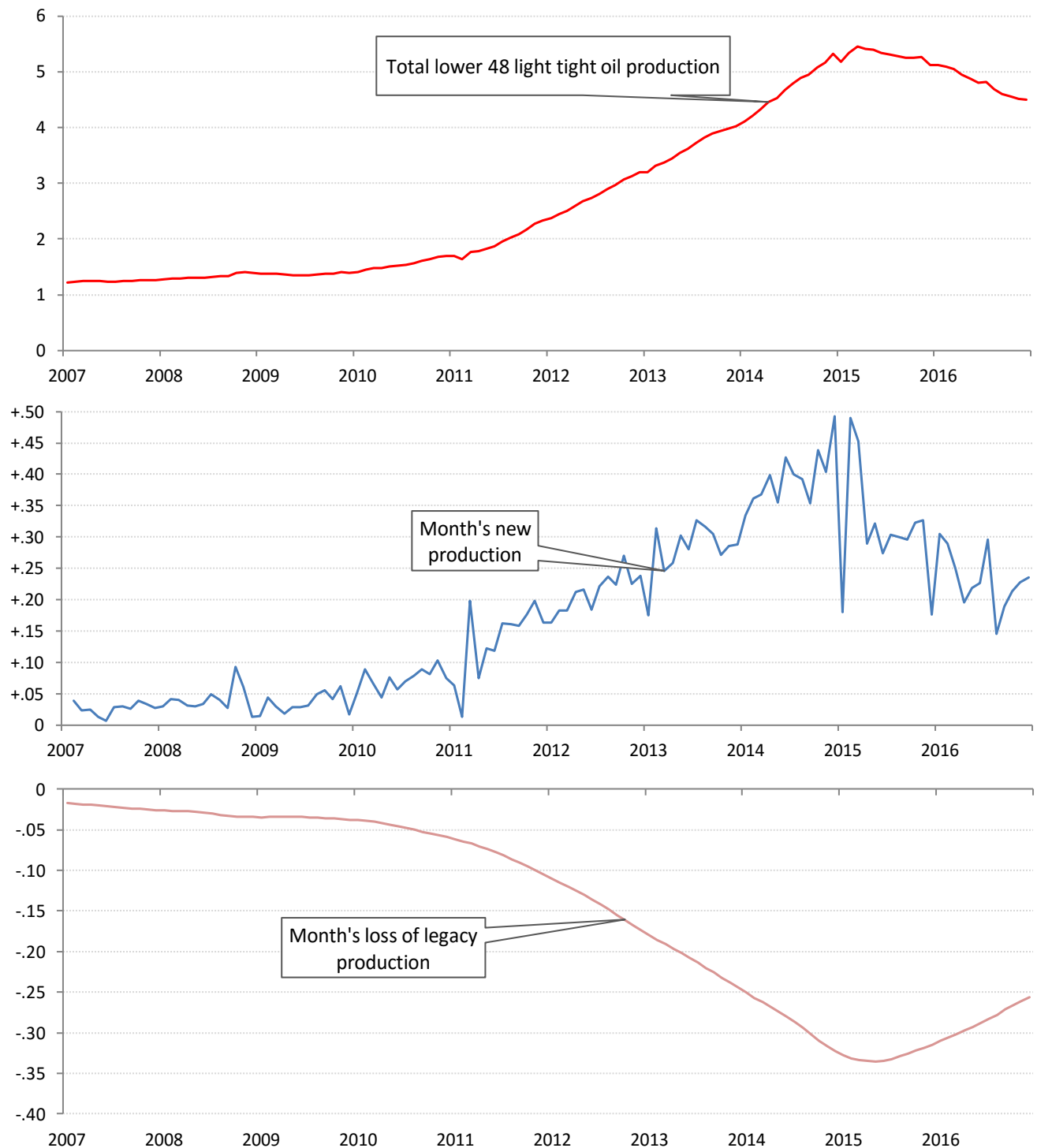


Source: DOE EIA Drilling Productivity Report, TrendMacro calculations

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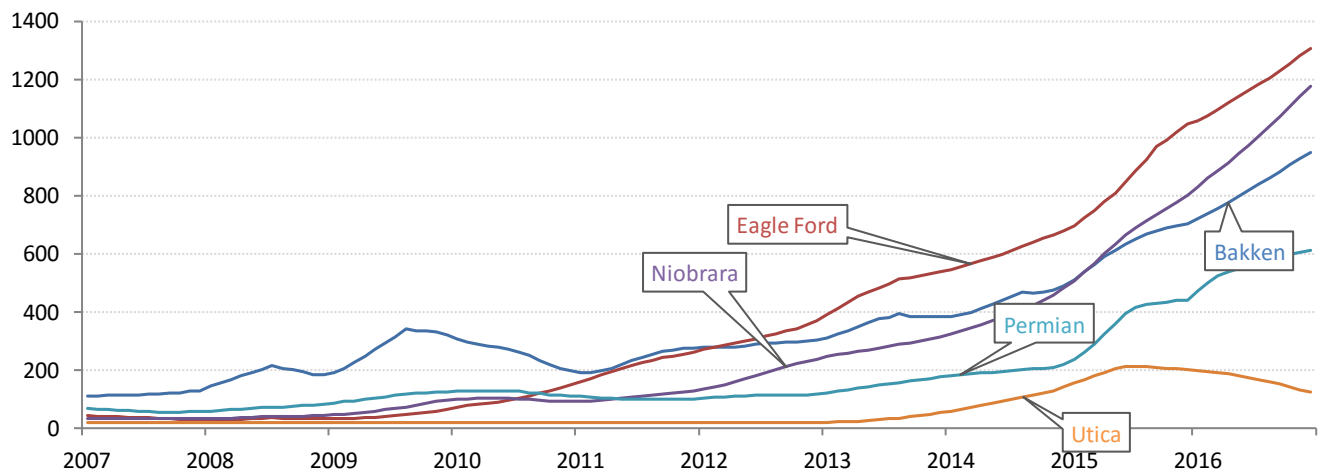
Inside the rollover: depleting legacy, diminishing new production

Aggregate production in major US shale plays, millions of barrels/day



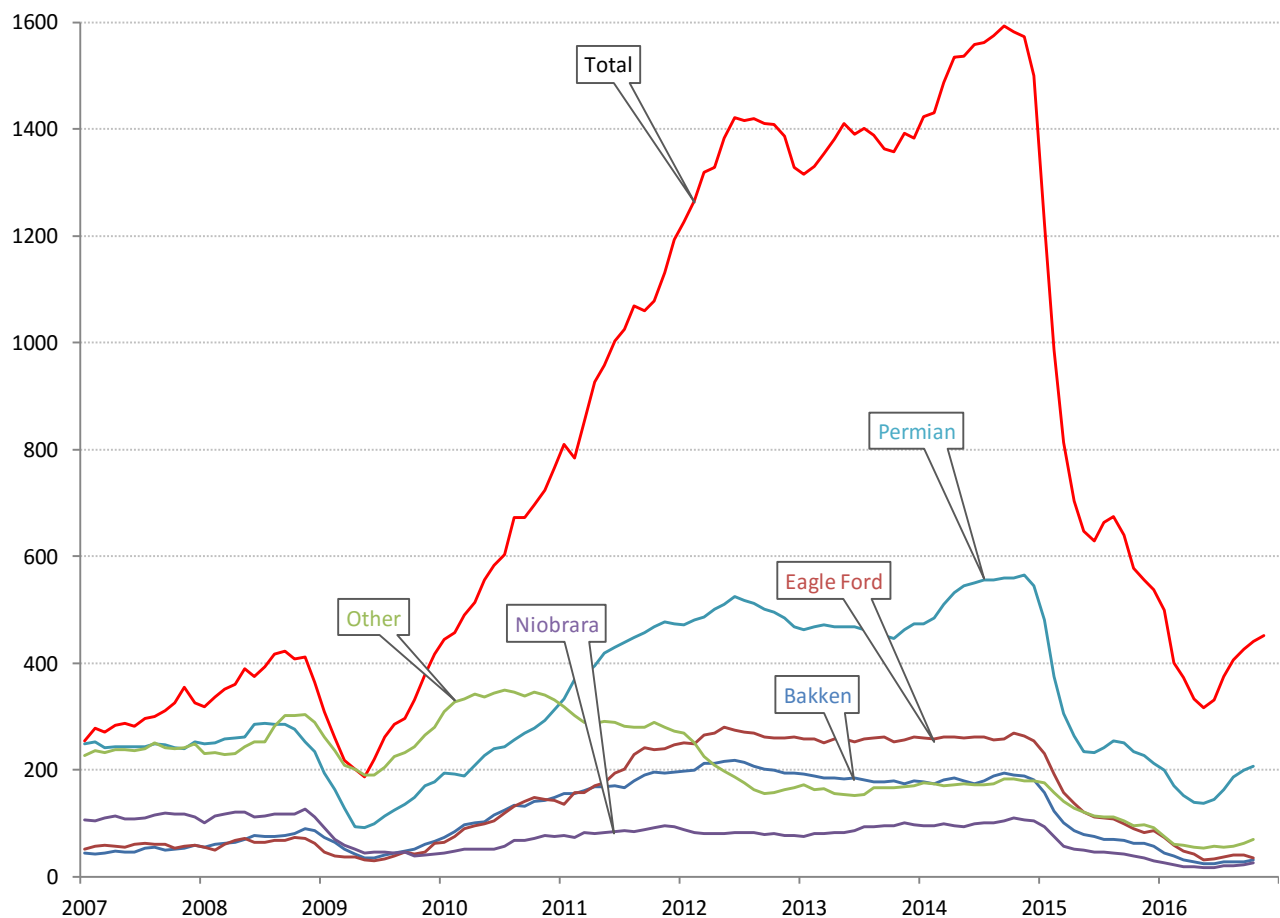
Source: DOE EIA Drilling Productivity Report, TrendMacro calculations

Doing a lot more... New-well oil production per rig, major US shale plays, barrels/day



Source: DOE EIA Drilling Productivity Report, TrendMacro calculations

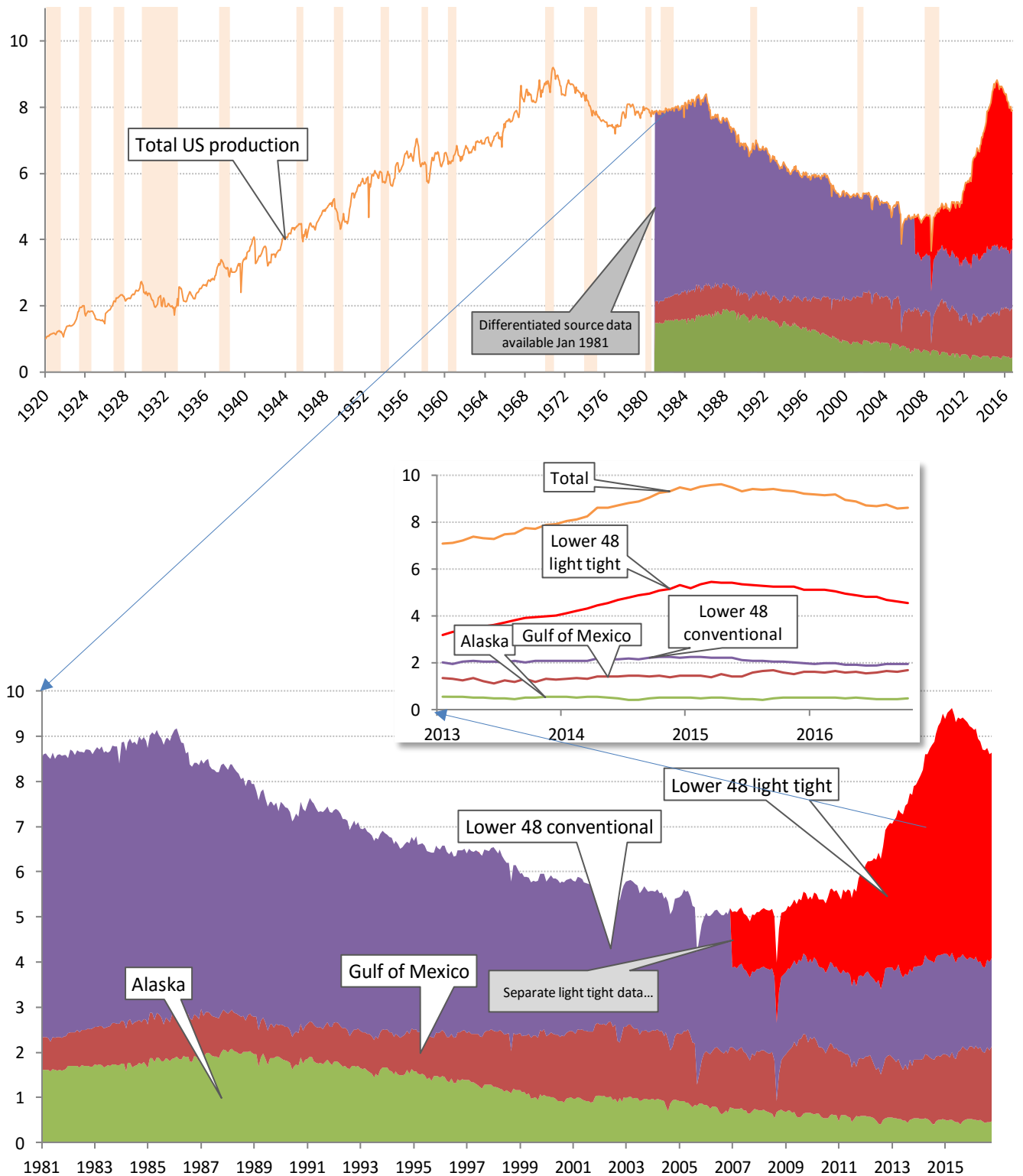
...with a lot less Rig count, total oil and major US shale plays



Source: DOE EIA Drilling Productivity Report, Baker Hughes, TrendMacro calculations

US crude oil production -- deep history, and the modern transformation of sources

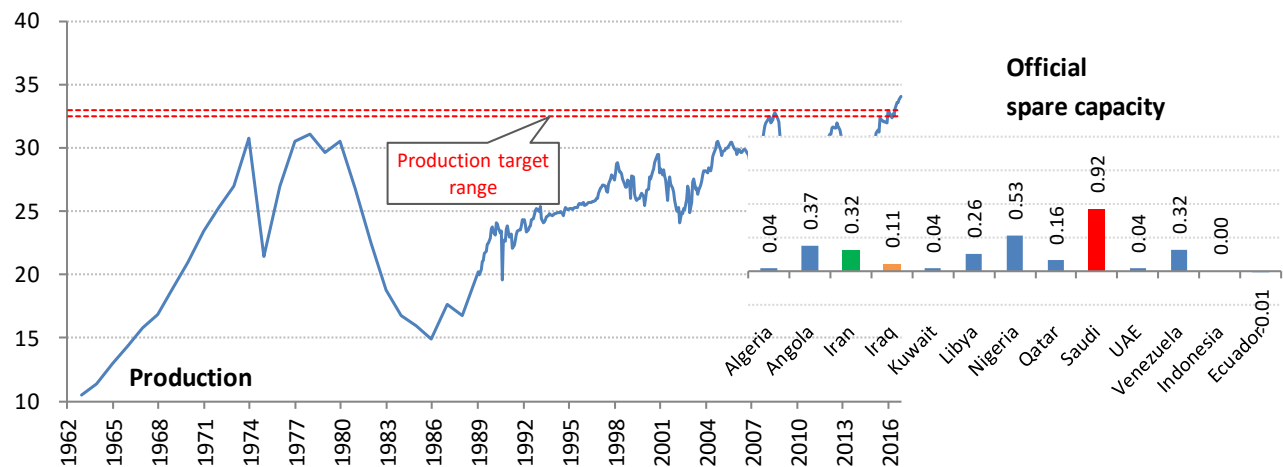
Millions of barrels/day Recession



Source: DOE EIA Short Term Energy Outlook, Drilling Productivity Report, TrendMacro calculations

OPEC: what it's producing, what's left to produce

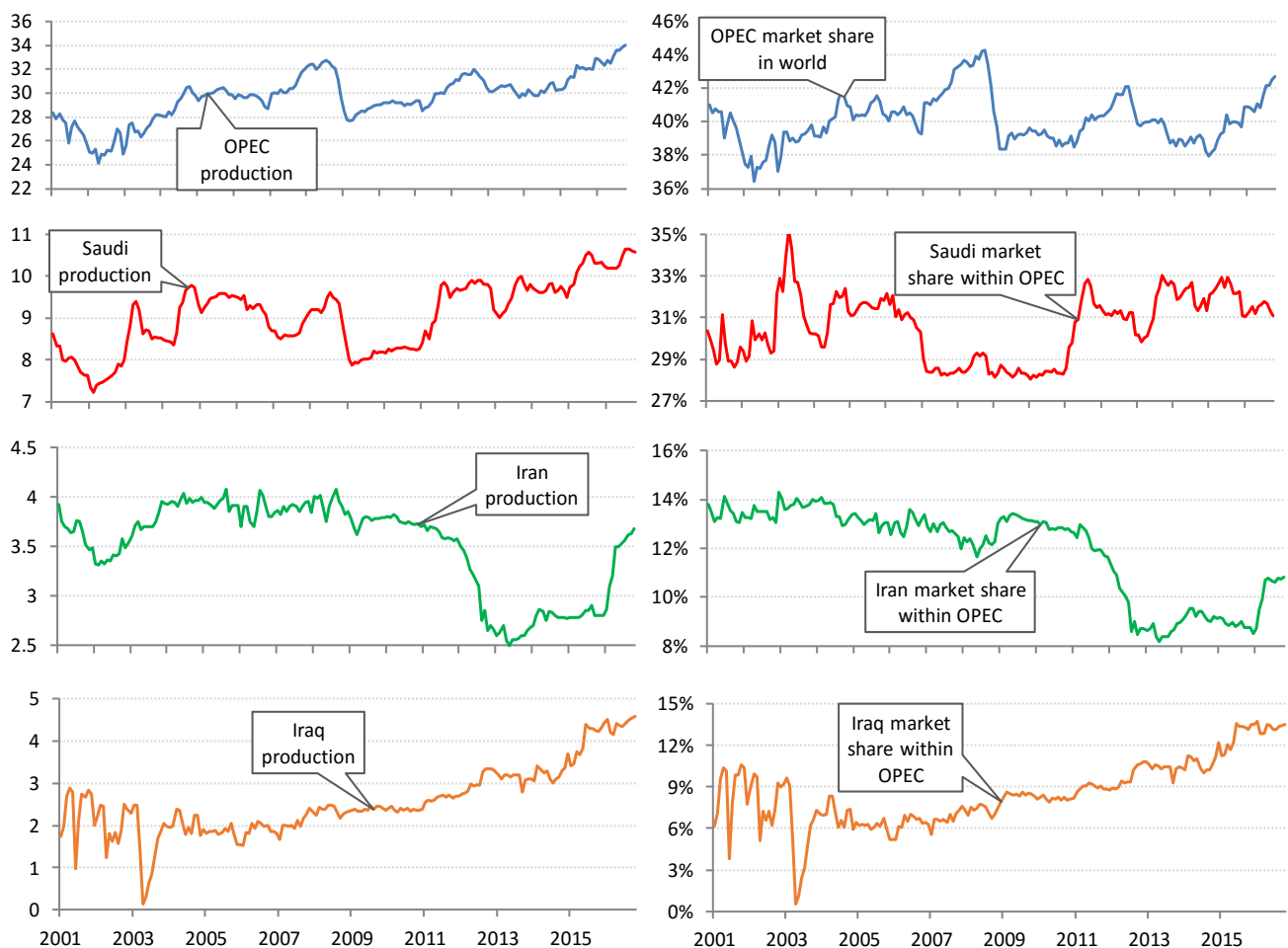
Millions of barrels/day



Source: Bloomberg News, TrendMacro calculations

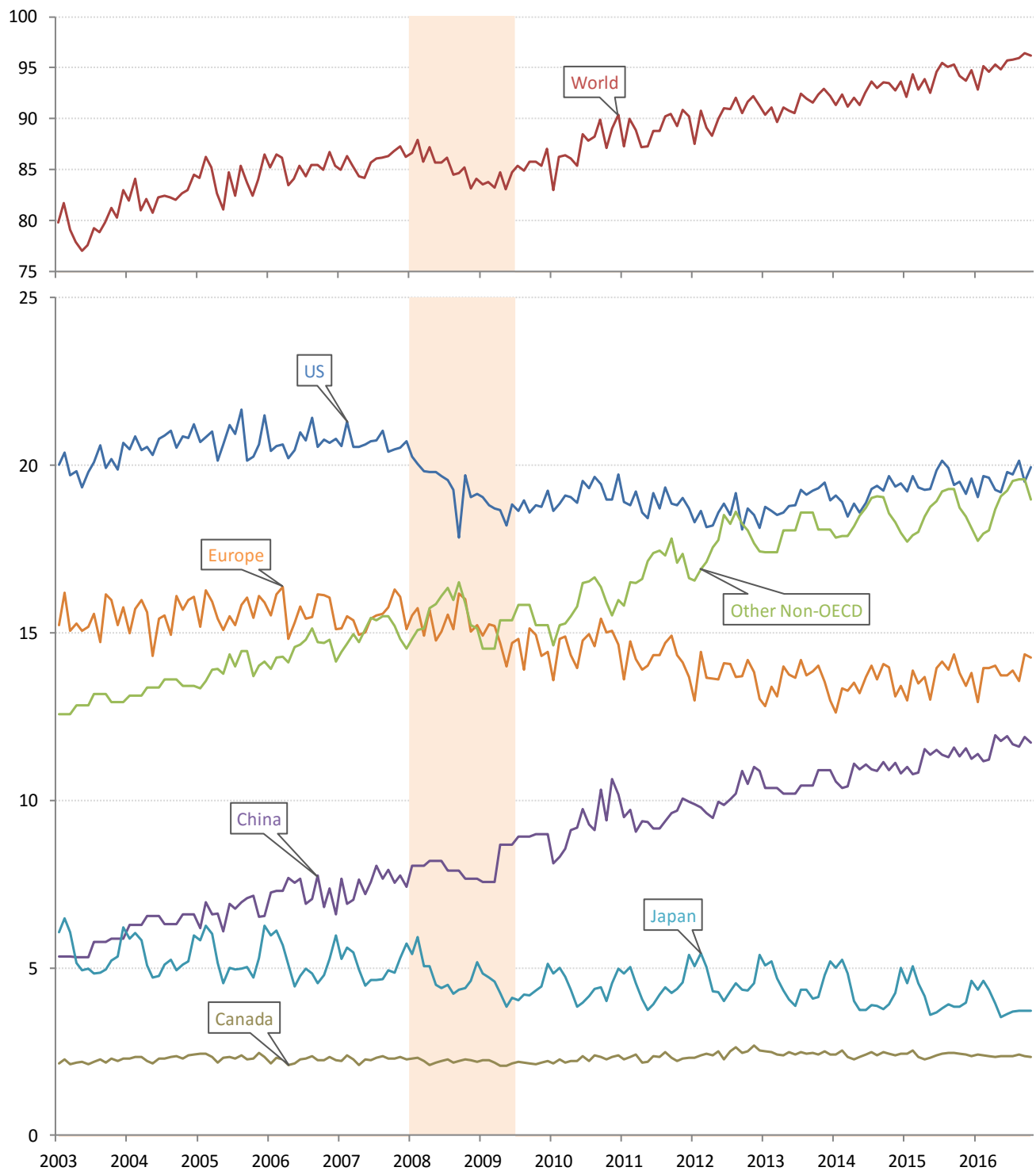
OPEC's battle for market share

Millions of barrels/day



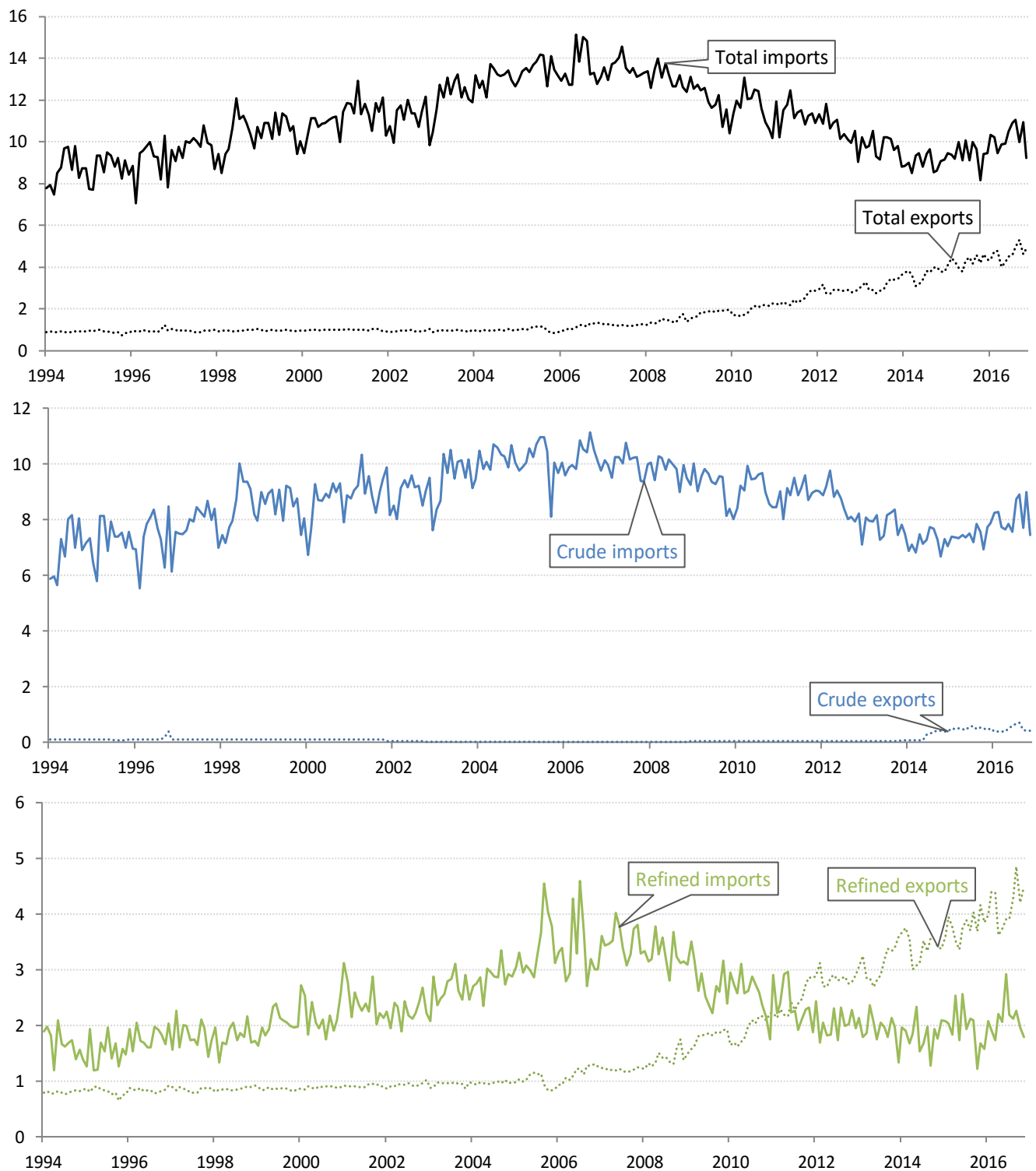
Source: Bloomberg News, TrendMacro calculations

The world of oil consumption Millions of barrels/day Recession



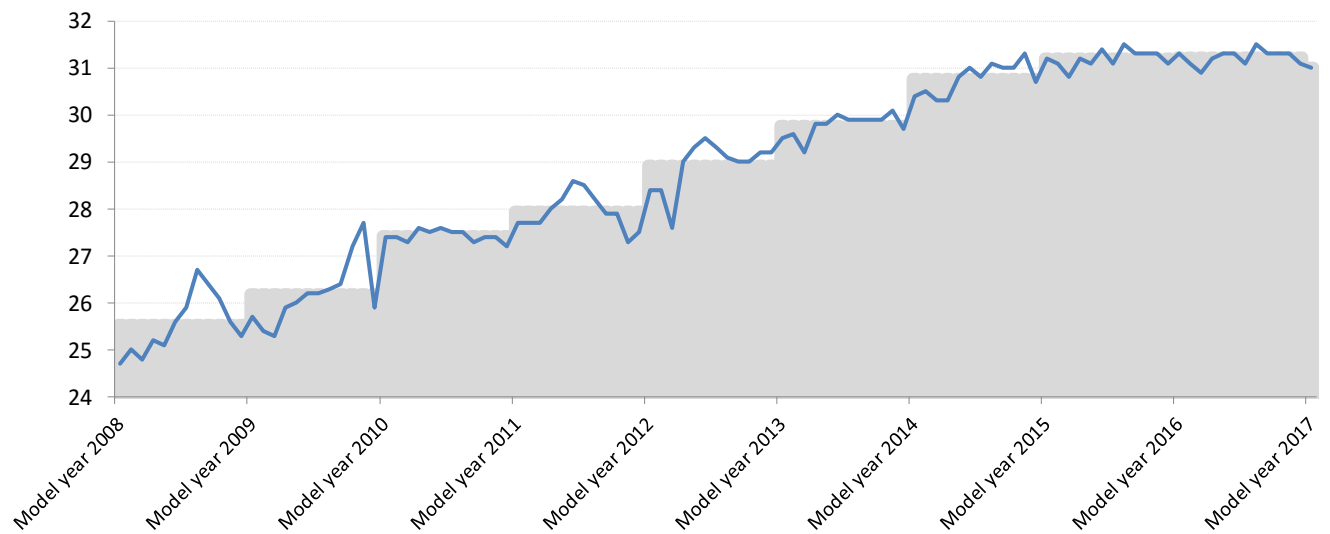
Source: DOE EIA Short Term Energy Outlook, TrendMacro calculations

US petroleum imports and exports Millions of barrels/day



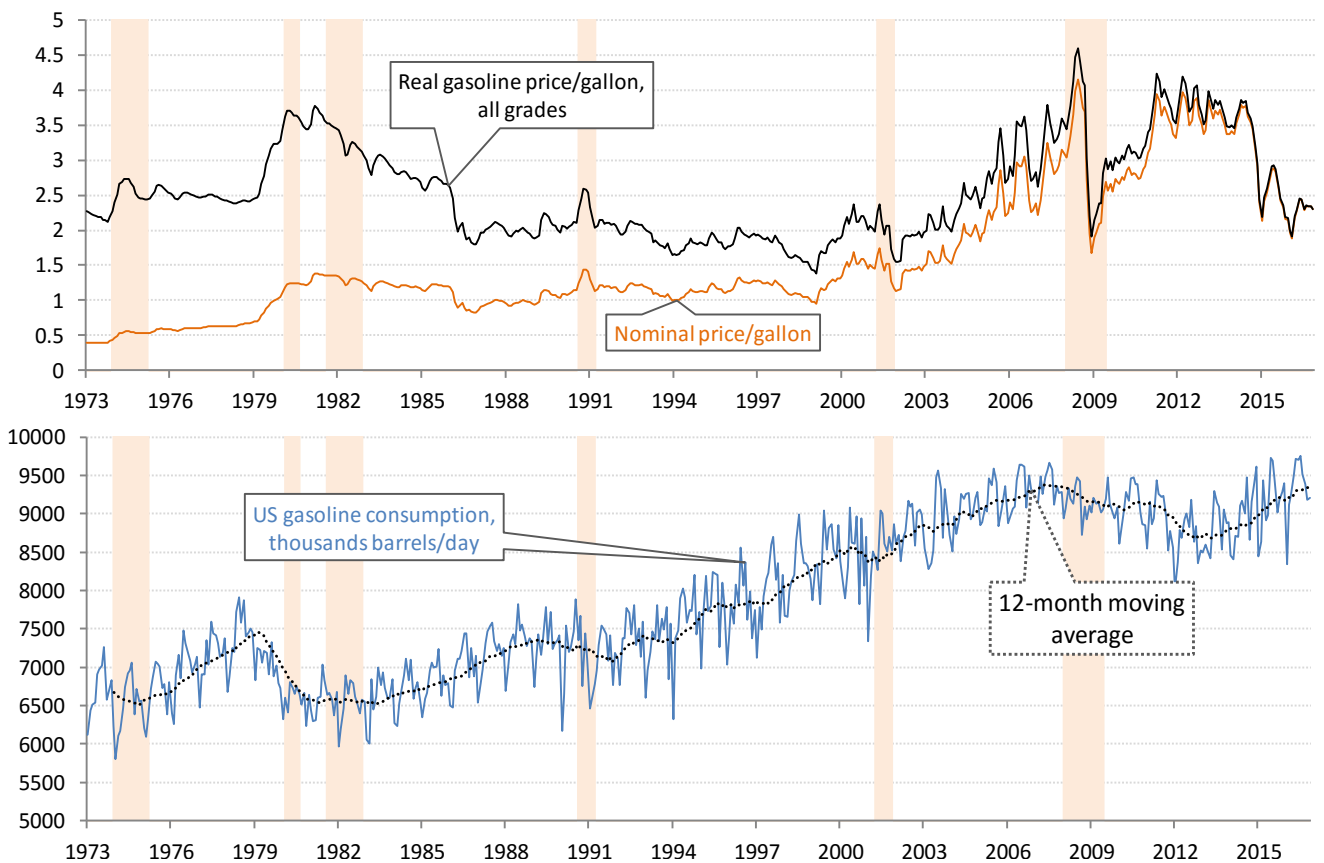
Source: DOE Weekly Petroleum Status Report, TrendMacro calculations

Guzzle that gas! New-car fleet fuel-efficiency by MPG



Source: University of Michigan, TrendMacro calculations

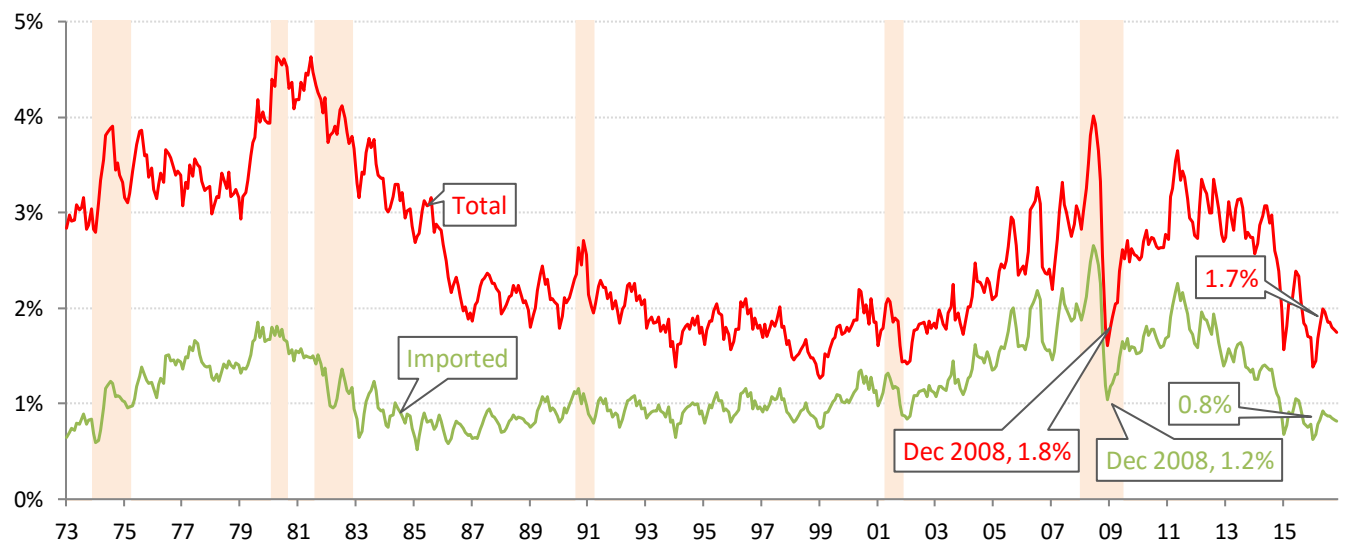
US gasoline: paying a lot, using a lot



Source: DOE EIA Weekly Petroleum Status Report, Weekly Retail Gasoline Survey, TrendMacro calculations

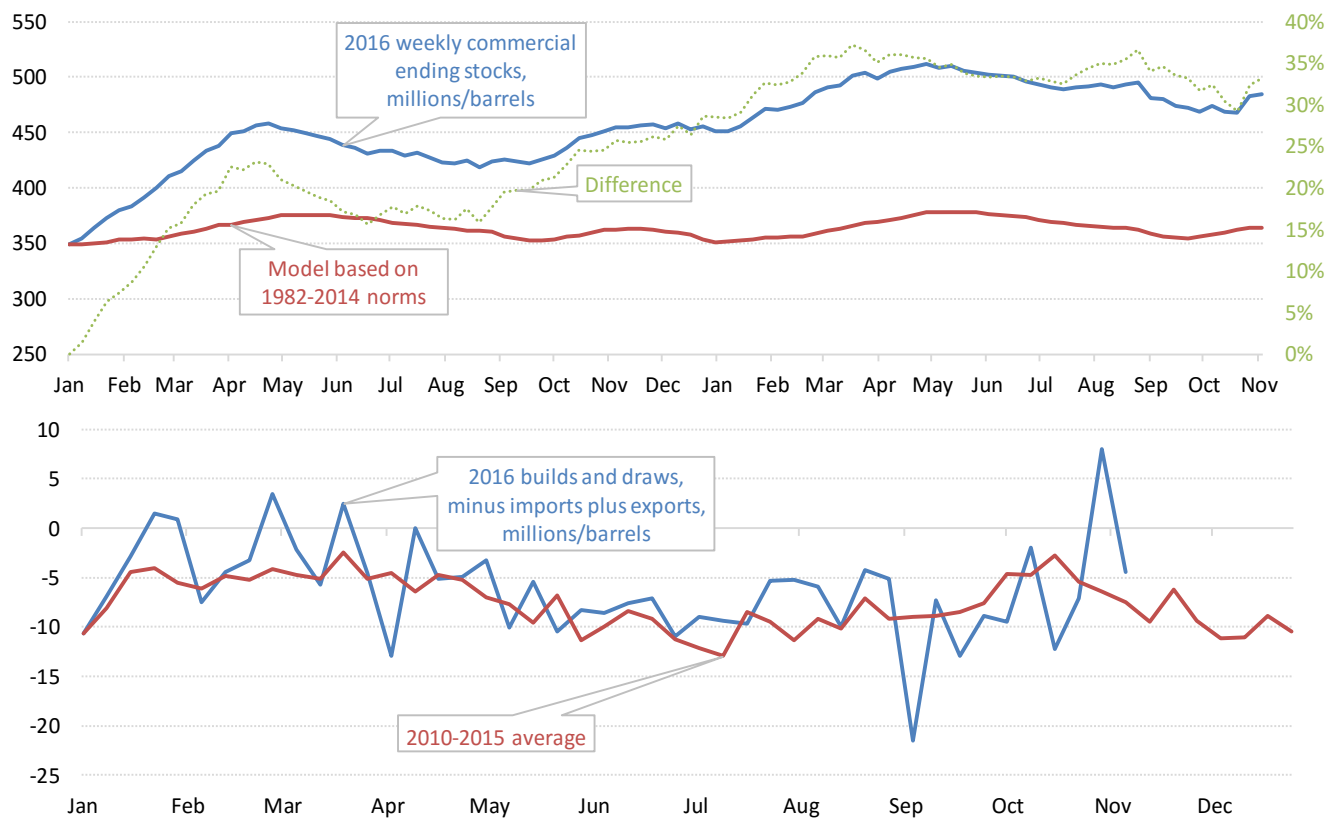
The rubber meets the road: US gasoline spending as share of GDP

Recession



Source: BEA, DOE EIA, TrendMacro calculations

The mirror of apparent demand: US storage dynamics



Source: DOE EIA Weekly Petroleum Status Report, TrendMacro calculations

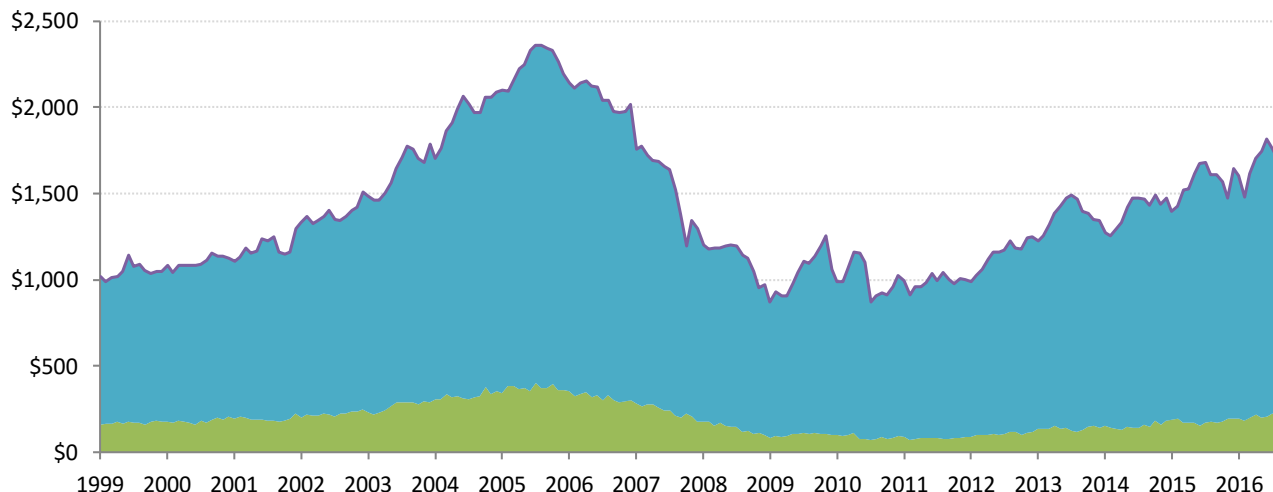
Data Insights: A Few of Our Favorite Things

Thursday, October 27, 2016

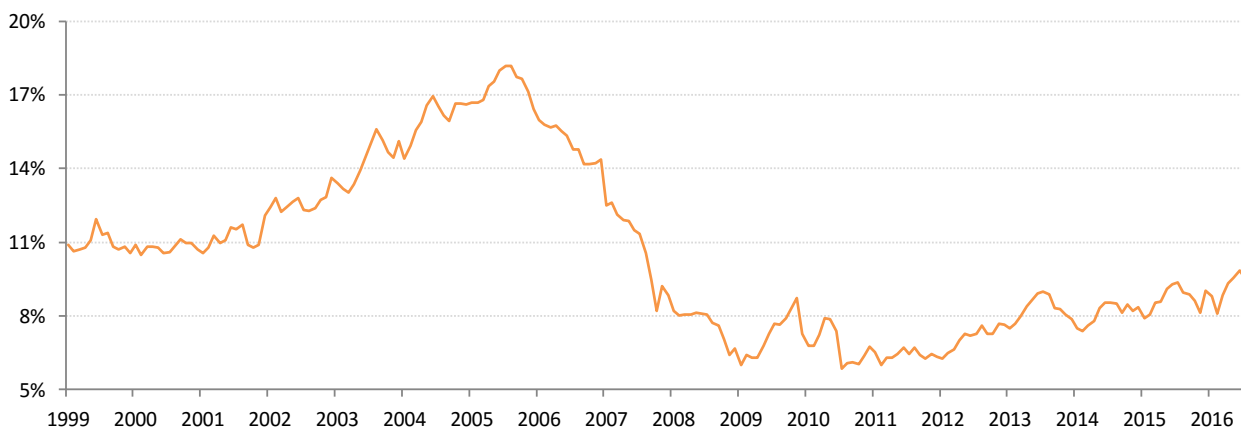
Mid-frequency growth indicators not already covered in other regular reports.

Valuing the housing recovery: TrendMacro Housing Transaction Value Aggregate

— Total — Existing homes component — New homes component USD billions, nominal, SAAR



— Total as percentage of GDP



Source: Census Bureau, National Assoc. of Realtors, Bureau of Economic Analysis, TrendMacro calculations

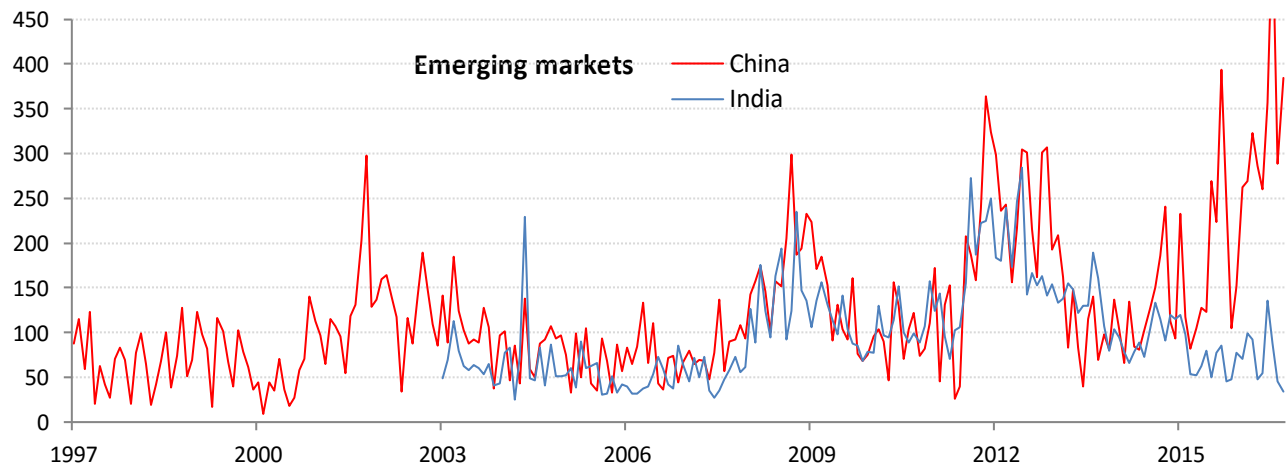
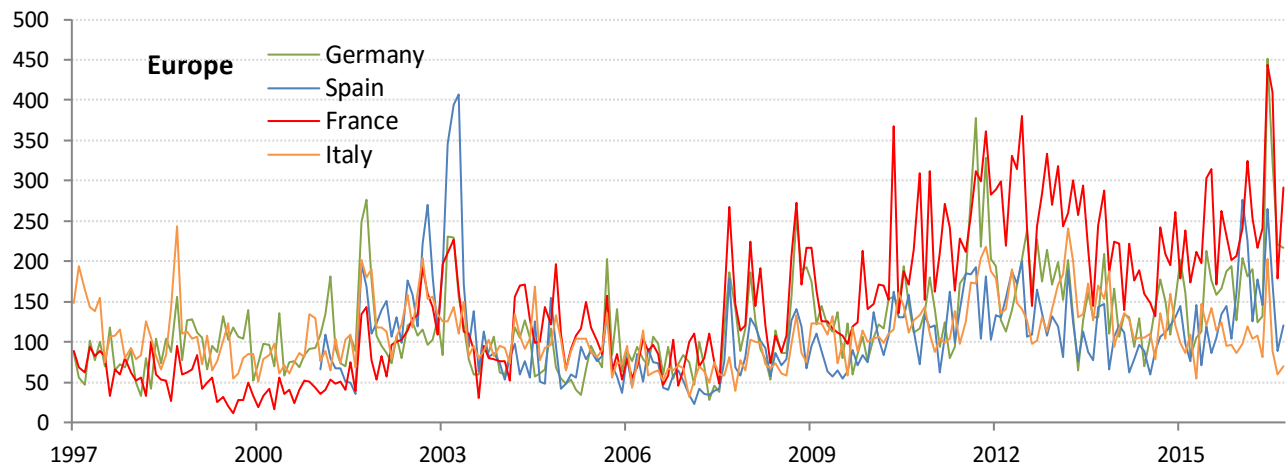
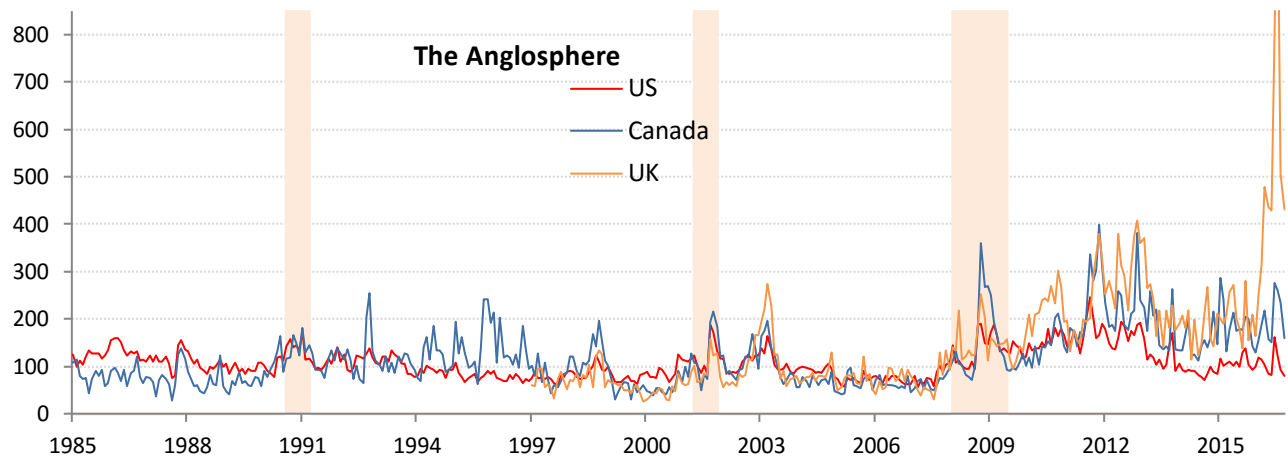
For more information contact us:

Donald Luskin: 312 273 6766 don@trendmacro.com

Thomas Demas: 704 552 3625 tdemas@trendmacro.com

The drag on animal spirits: tracking the burden of economic policy uncertainty

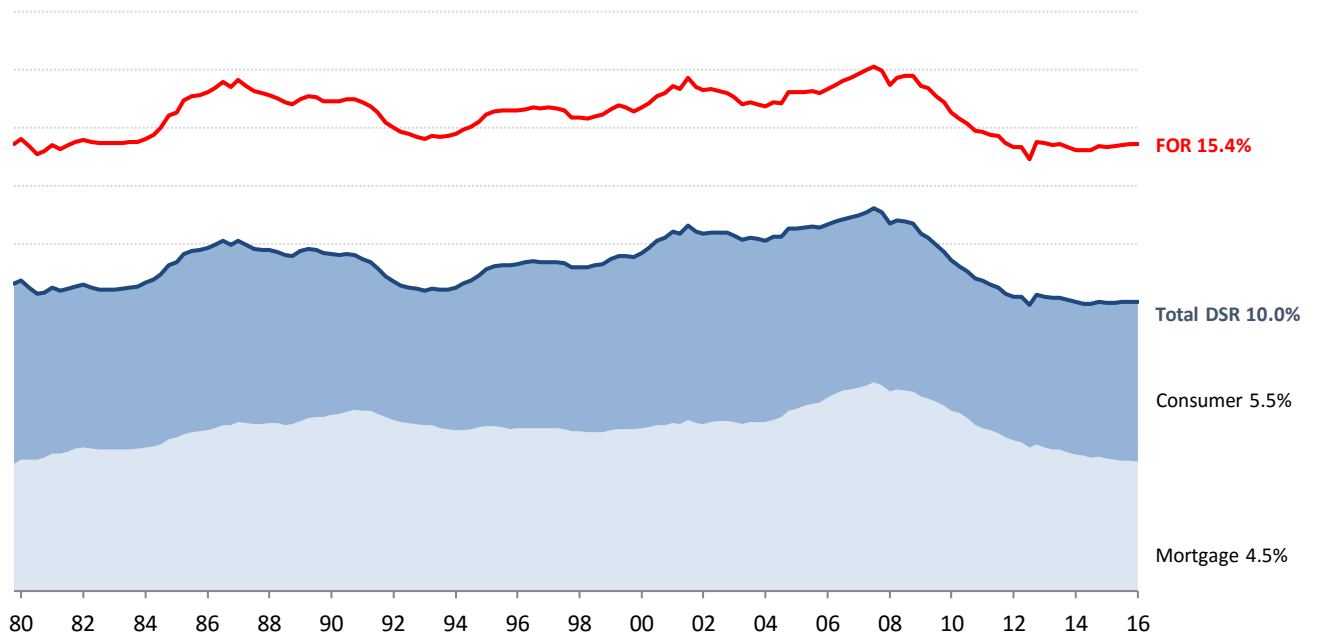
Economic Policy Uncertainty indices After [Baker, Bloom and Davis \(2015\)](#)



Source: Baker, Bloom and Davis, TrendMacro calculations

The deleveraging consumer: Financial obligation and debt service ratios

Payments of mortgage and consumer debt, automobile leases, home rental and insurance, and property taxes as percentage of after-tax income.

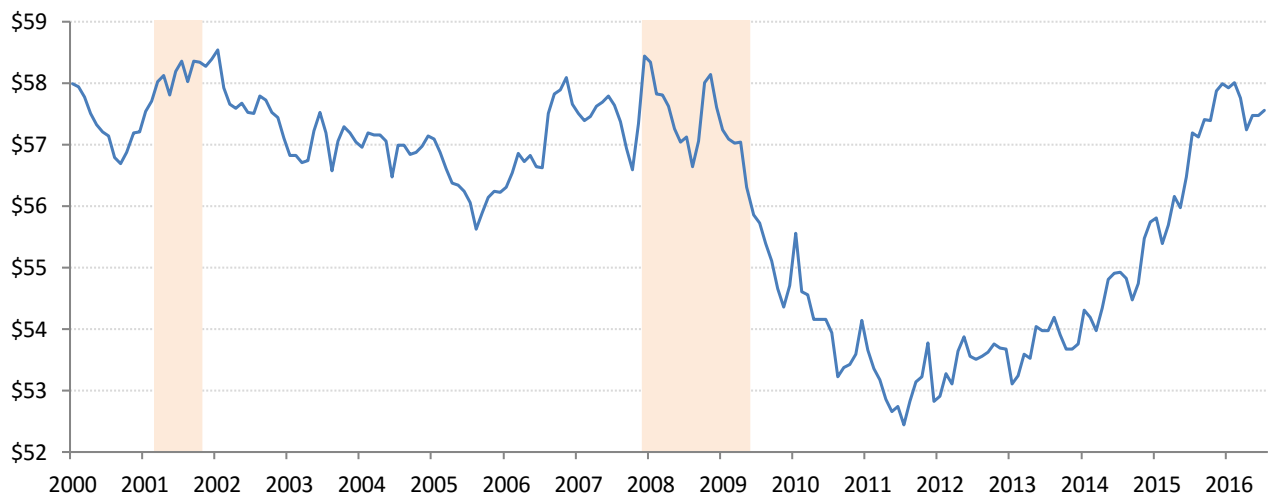


Source: Federal Reserve, TrendMacro calculations

The human face of the output gap:

Real median annual household income

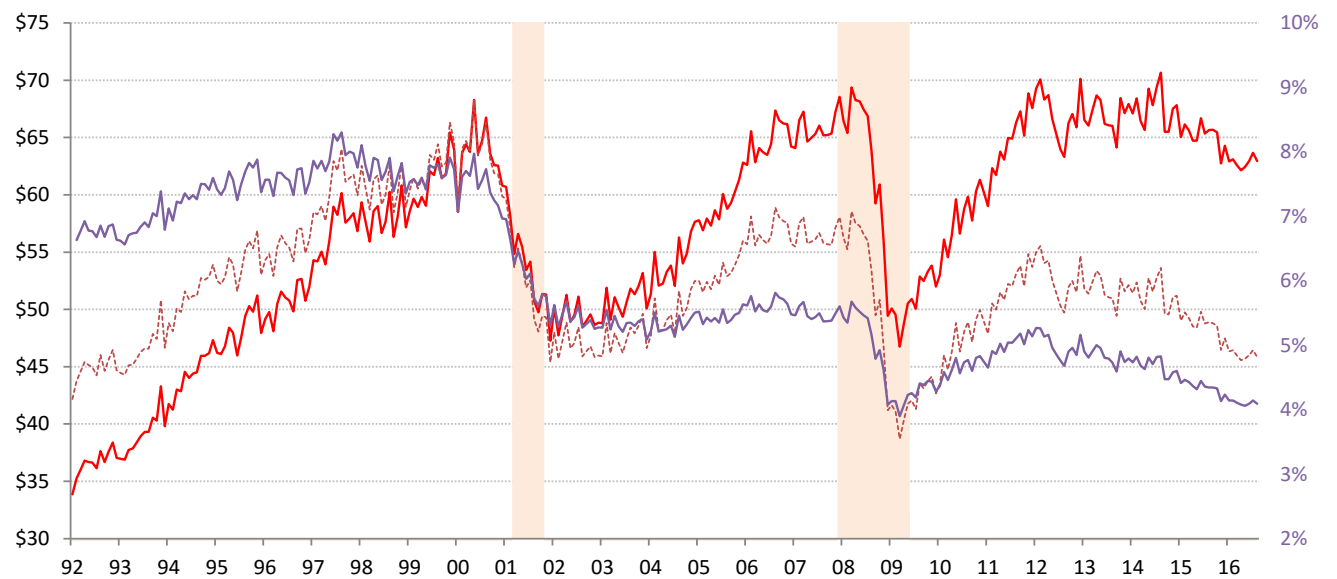
Recession



Source: Sentier Research, NBER, TrendMacro calculations

Precursor of the precursor of growth: orders for non-defense cap goods, ex-air

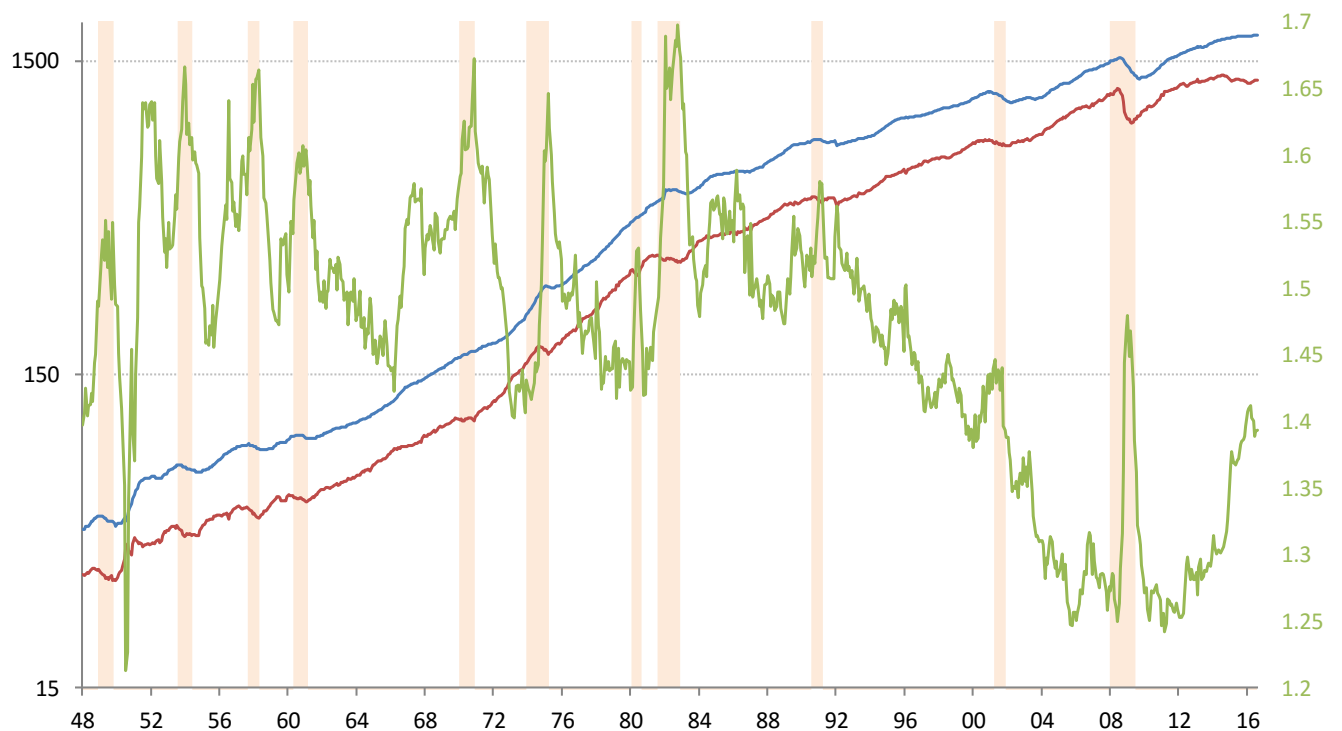
USD billions, SA — Nominal — Real — Percent GDP — Recession



Source: Census Bureau, Bureau of Labor Statistics, NBER, TrendMacro calculations

The Wal-Mart effect: US business inventories

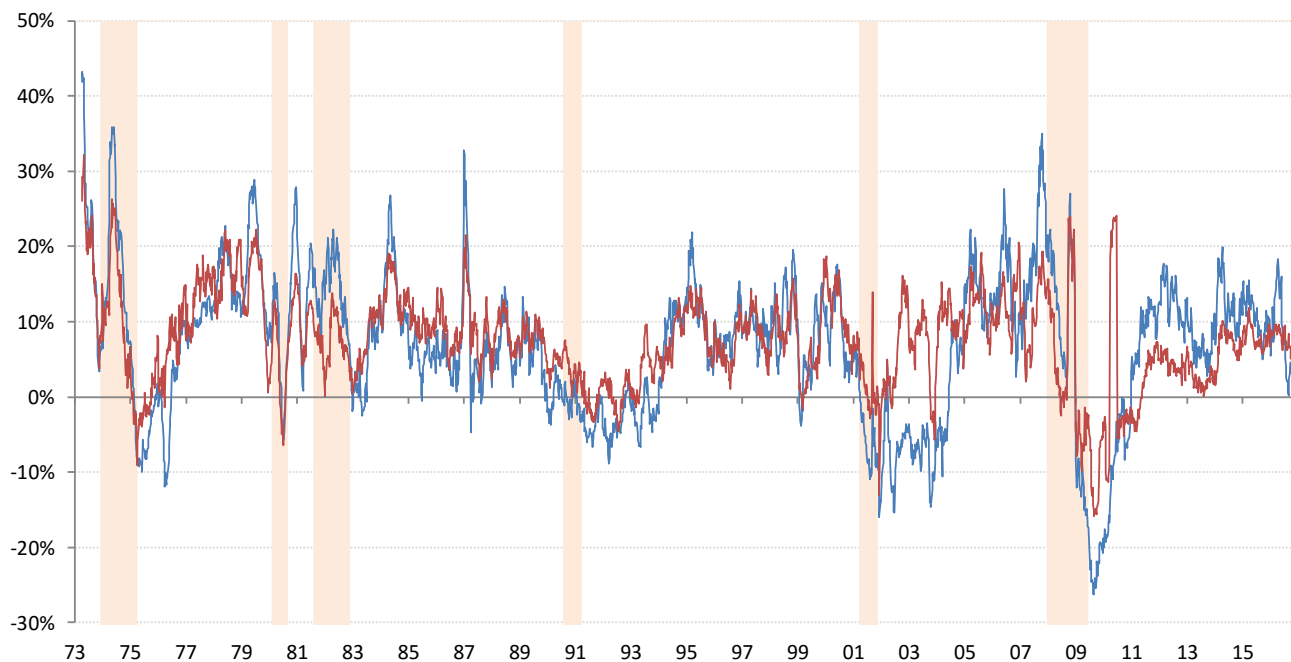
USD billions, log scale — Inventories — Sales — Ratio — Recession



Source: Census Bureau, NBER, TrendMacro calculations

Releveraging US business: lending by commercial banks

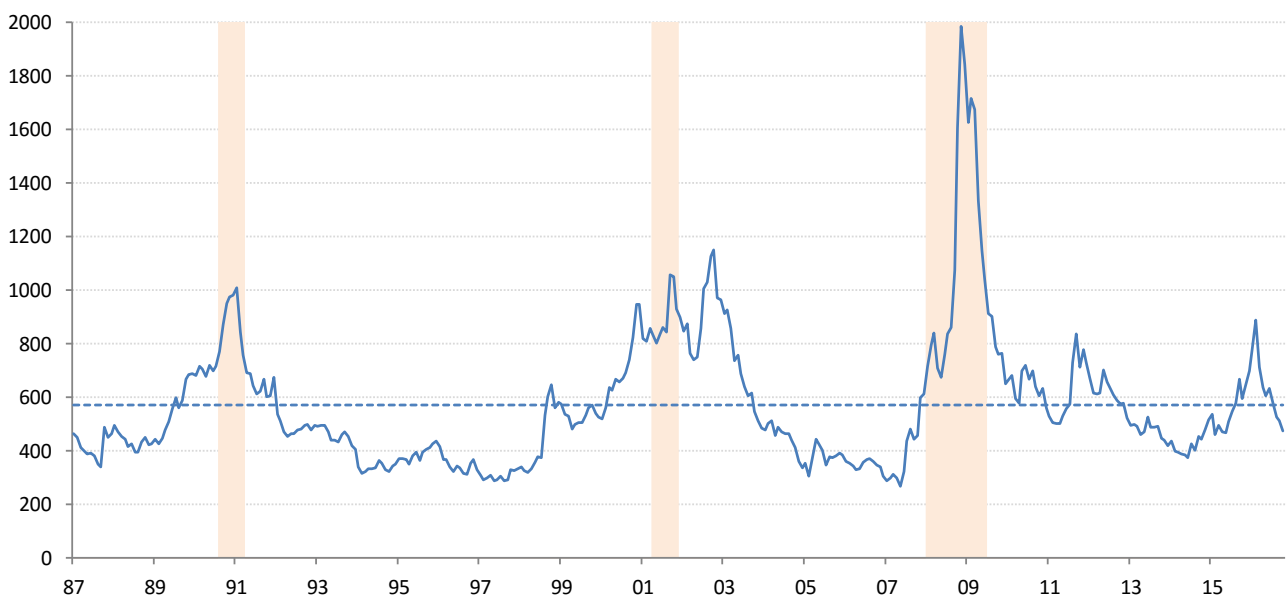
13-week annualized growth — Total credit in loans and leases — Commercial and industrial loans — Recession



Source: Federal Reserve, NBER, TrendMacro calculations

Risk-on for small growth companies: Merrill Lynch High-yield Master Index

— Spread to Treasuries, basis points — Average — Recession



Source: Merrill Lynch, NBER, TrendMacro calculations

Data Insights: Global Equity Risk Premia

Monday, November 14, 2016

Global leader-board: by equity risk premium, value, and growth ■ Best ■ Worst

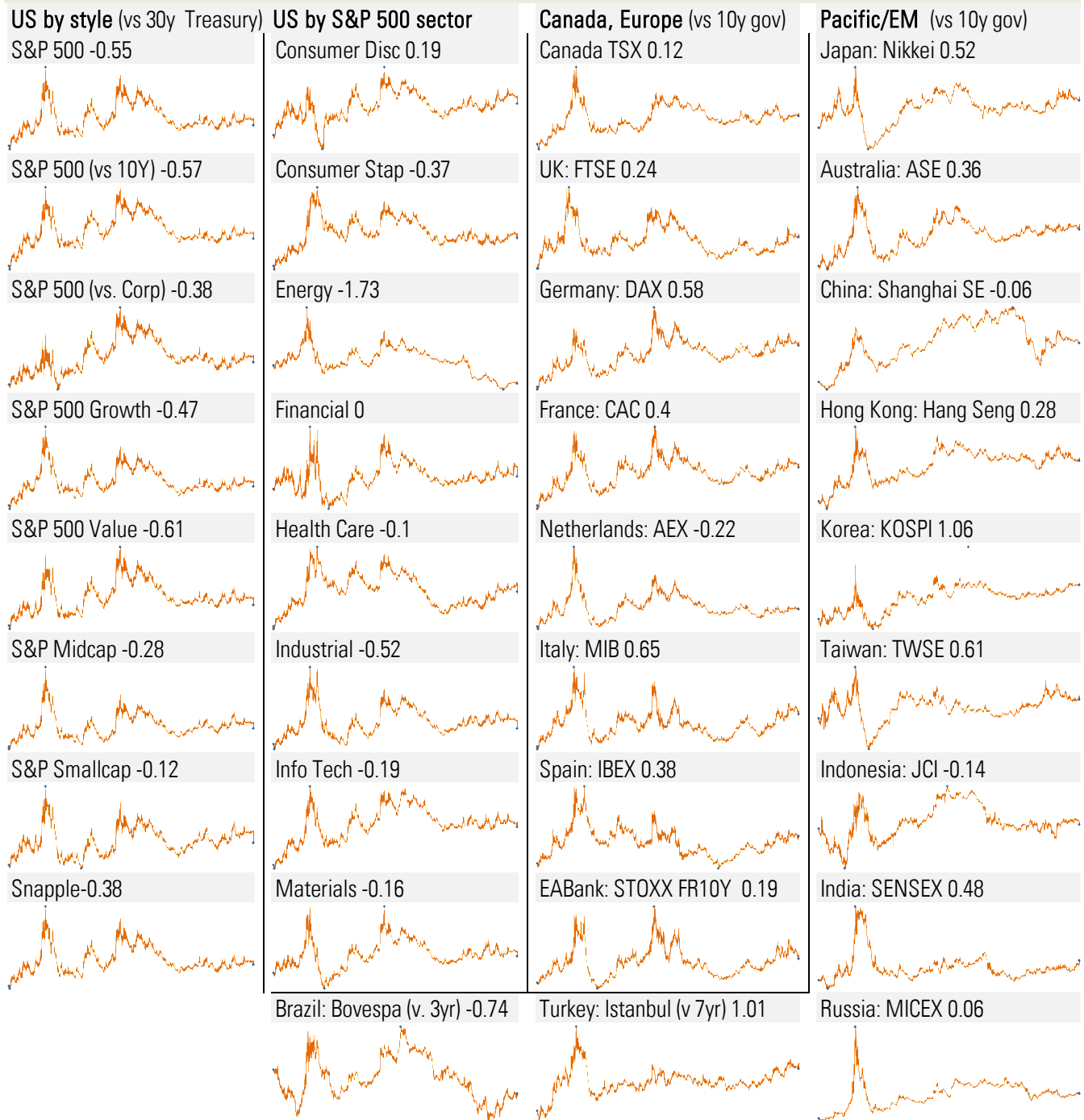
Rank	Equity risk premium By SD from crisis era mean		Forward PE ratio		Fwd earnings upgrade rate Trailing 90 days, AR		Fwd sales upgrade rate Trailing 90 days, AR	
	By country		By country		By country		By country	
1	Korea: KOSPI	+1.07	Russia: MICEX	6.3	Russia: MICEX	+41%	Netherlands: AEX	+70%
2	Turkey: Istanbul	+1.01	Turkey: Istanbul	7.7	Indonesia: JCI	+30%	India: SENSEX	+21%
3	Italy: MIB	+0.66	Korea: KOSPI	10.0	UK: FTSE	+29%	Indonesia: JCI	+18%
4	Taiwan: TWSA	+0.61	HK: Hang Seng	11.5	Italy: MIB	+27%	Canada: TSX	+14%
5	Germany: DAX	+0.58	Italy: MIB	12.1	Canada: TSX	+26%	Turkey: Istanbul	+14%
6	Japan: Nikkei	+0.52	Germany: DAX	12.5	Taiwan: TWSA	+21%	Taiwan: TWSA	+13%
7	India: SENSEX	+0.48	Brazil: Bovespa	12.8	Brazil: Bovespa	+19%	UK: FTSE	+9%
8	France: CAC	+0.40	Spain: IBEX	12.9	Netherlands: AEX	+18%	Australia: ASE	+8%
9	Spain: IBEX	+0.38	Taiwan: TWSA	13.2	Spain: IBEX	+17%	US: S&P 500	+7%
10	Australia: ASE	+0.36	China: Shanghai SE	13.5	India: SENSEX	+13%	France: CAC	+5%
11	HK: Hang Seng	+0.29	France: CAC	13.6	France: CAC	+13%	Japan: Nikkei	+0%
12	UK: FTSE	+0.24	UK: FTSE	14.4	Korea: KOSPI	+13%	HK: Hang Seng	-1%
13	Canada: TSX	+0.12	Indonesia: JCI	14.7	Australia: ASE	+13%	Korea: KOSPI	-1%
14	Russia: MICEX	+0.06	Netherlands: AEX	15.0	Turkey: Istanbul	+12%	Spain: IBEX	-3%
15	China: Shanghai SE	-0.07	India: SENSEX	15.8	HK: Hang Seng	+10%	Italy: MIB	-4%
16	Indonesia: JCI	-0.15	Australia: ASE	15.9	US: S&P 500	+8%	Brazil: Bovespa	-4%
17	Netherlands: AEX	-0.23	Canada: TSX	16.2	Germany: DAX	+8%	Russia: MICEX	-5%
18	US: S&P 500	-0.56	Japan: Nikkei	16.6	China: Shanghai SE	+3%	China: Shanghai SE	-6%
19	Brazil: Bovespa	-0.75	US: S&P 500	16.7	Japan: Nikkei	+2%	Germany: DAX	-19%
	US, by style		US, by style		US, by style		US, by style	
1	S&P Smallcap	-0.13	S&P 500 Value	15.6	S&P Smallcap	+12%	S&P Smallcap	+32%
2	S&P Midcap	-0.28	S&P 500	16.7	S&P 500 Value	+9%	S&P 500 Value	+8%
3	S&P 500 Growth	-0.48	S&P 500 Growth	18.0	S&P 500 Growth	+9%	S&P 500 Growth	+8%
4	S&P 500	-0.56	S&P Midcap	19.0	S&P 500	+8%	S&P 500	+7%
5	S&P 500 Value	-0.62	S&P Smallcap	19.6	S&P Midcap	+3%	S&P Midcap	-10%
	US, by sector		US, by sector		US, by sector		US, by sector	
1	Telecom	+1.32	Telecom	12.3	Energy	+144%	Financial	+94%
2	Consumer Disc	+0.19	Financial	13.4	Financial	+89%	Energy	+30%
3	Financial	+0.01	Health Care	14.8	Info Tech	+19%	Industrial	+20%
4	Health Care	-0.10	Utilities	16.2	Consumer Stap	+8%	Info Tech	+7%
5	Materials	-0.17	Info Tech	16.3	Materials	+6%	Consumer Stap	+5%
6	Info Tech	-0.20	Materials	16.7	Health Care	+3%	Consumer Disc	+1%
7	Utilities	-0.26	Industrial	17.5	Utilities	+0%	Health Care	-0%
8	Consumer Stap	-0.38	Consumer Disc	17.5	Telecom	-0%	Telecom	-1%
9	Industrial	-0.52	Consumer Stap	18.8	Industrial	-2%	Utilities	-1%
10	Energy	-1.74	Energy	33.6	Consumer Disc	-8%	Materials	-19%

Source: Bloomberg, TrendMacro calculations

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Equity risk premium: forward earnings yield minus bond yield, July 2007 to current

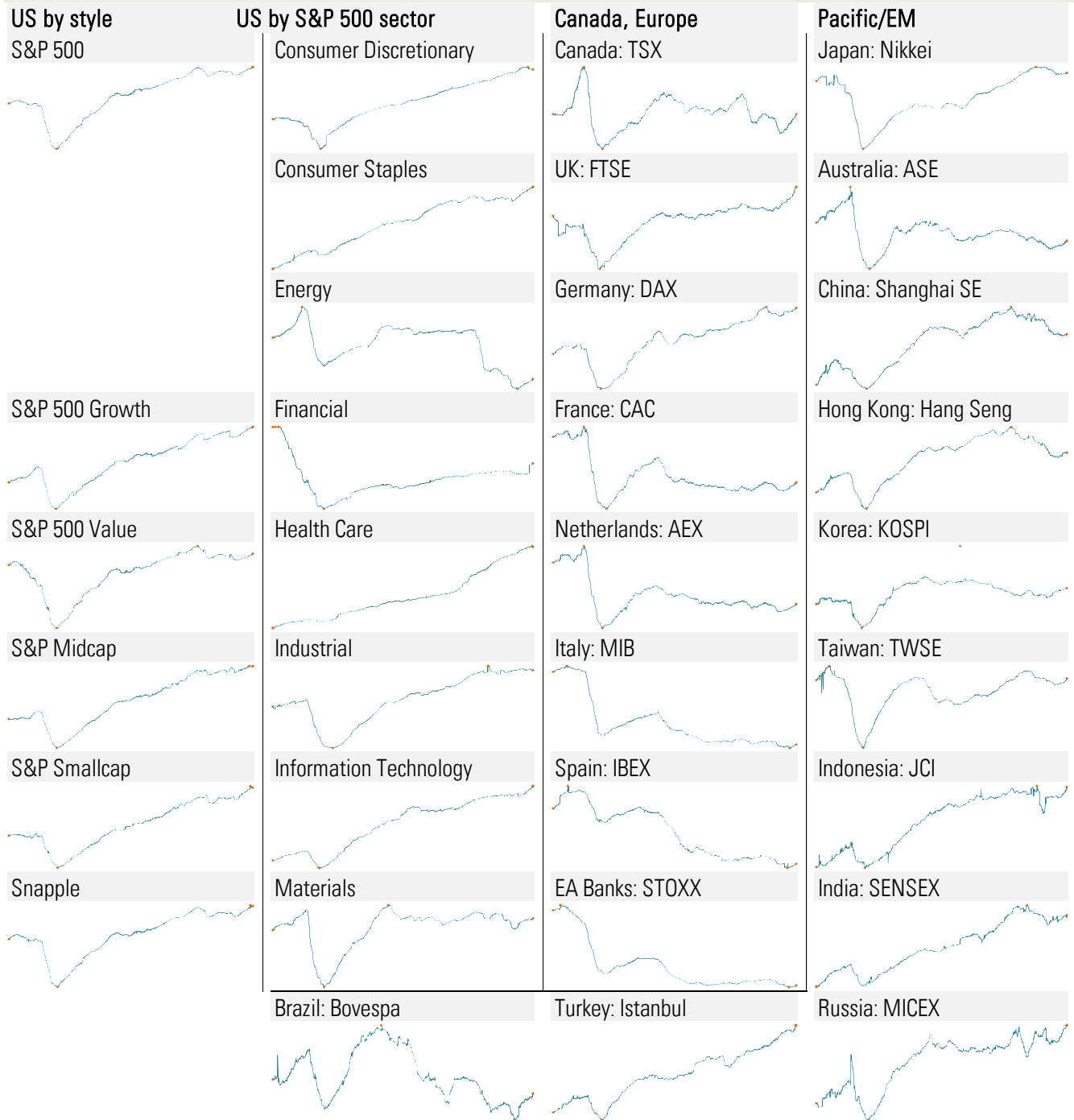
Standard deviations from crisis-era mean • First, High, Low, Last



Source: Bloomberg, TrendMacro calculations

EPS: forward consensus, bottom-up, July 2007 to current

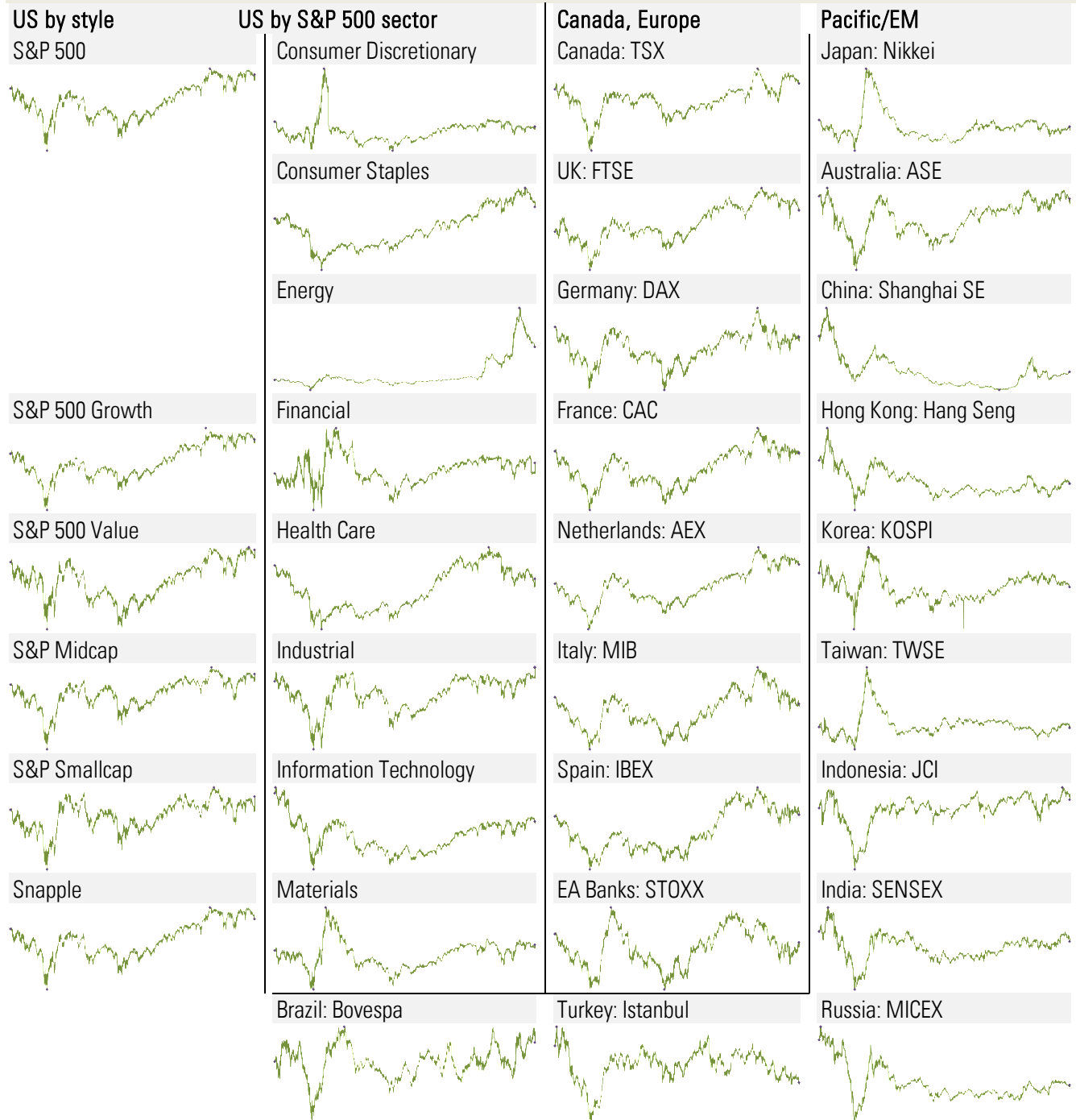
● First, High, Low, Last



Source: Bloomberg, TrendMacro calculations

P/E ratio: forward consensus, bottom-up, July 2007 to current

• First, High, Low, Last



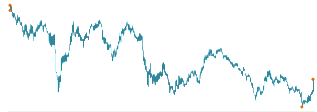
Source: Bloomberg, TrendMacro calculations

Benchmark bond yields, July 2007 to current

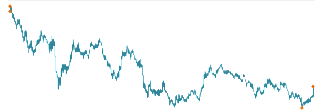
● First, High, Low, Last

US

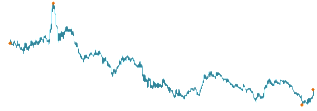
30-year Treasury



10-year Treasury

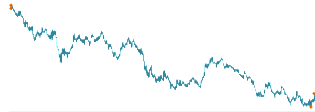


Moody's Corporate Avg

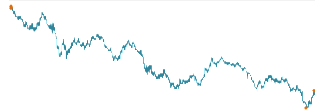


Canada, Europe

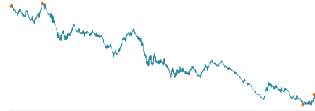
Canada 10-year govt



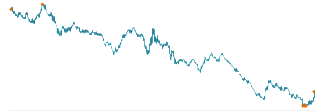
UK: 10-year govt



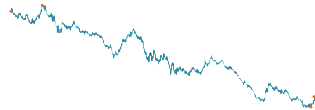
Germany: 10-year govt



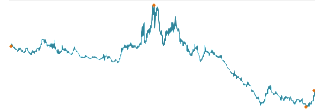
France: 10-year govt



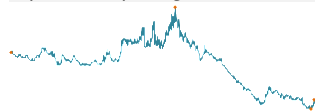
Netherlands: 10-year govt



Italy: 10-year govt

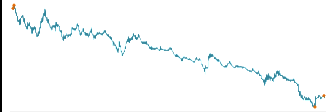


Spain: 10-year govt

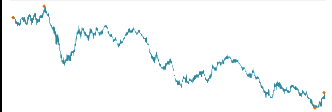


Pacific/EM

Japan: 10-year govt



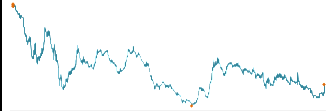
Australia: 10-year govt



China: 10-year govt



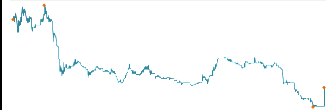
Hong Kong: 10-year govt



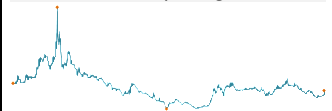
Korea: 10-year govt



Taiwan: 10-year govt



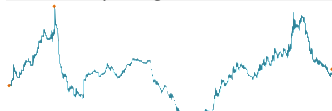
Indonesia: 10-year govt



India: 10-year govt



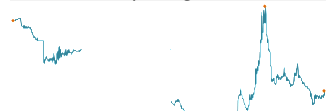
Brazil: 3-year govt



Turkey: 7-year govt



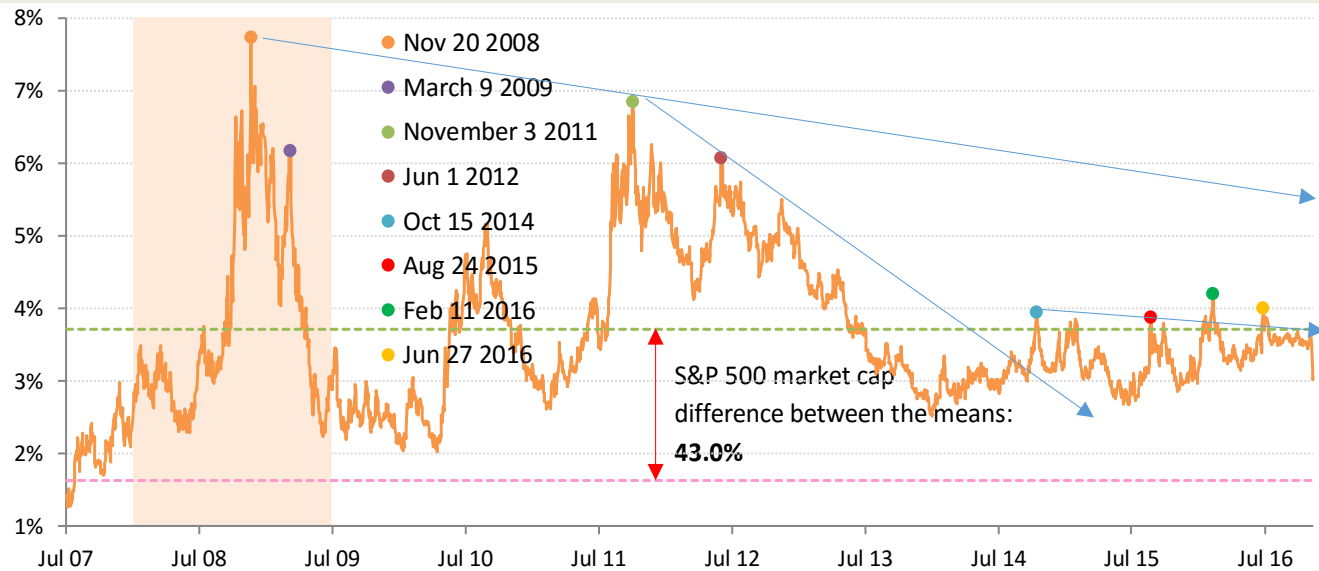
Russia: 10-year govt



Source: Bloomberg, TrendMacro calculations

Daily S&P 500 equity risk premium in the crisis era

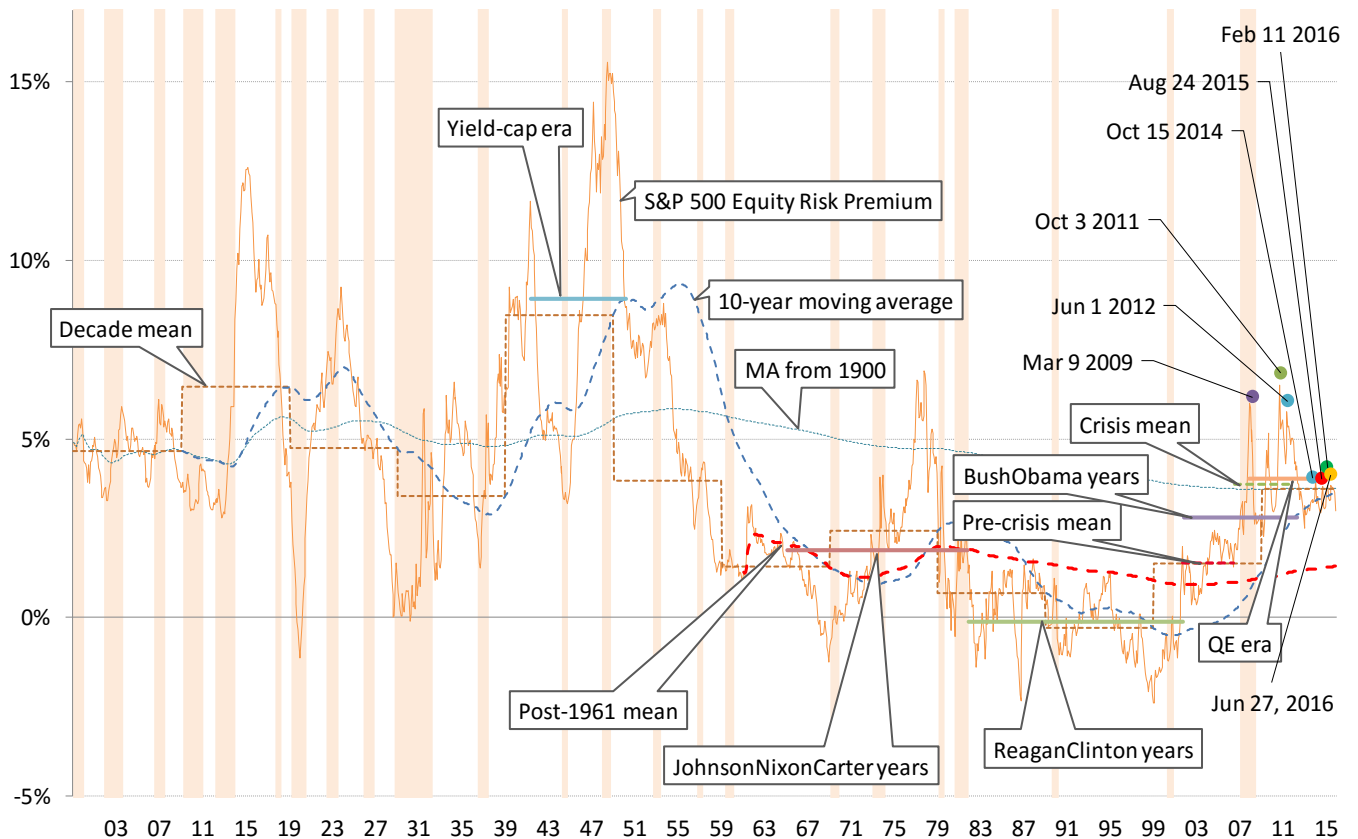
--- Crisis era mean --- Pre-crisis mean ↘ Downtrends ■ Recession



Versus 30-year Treasury

Source: Bloomberg, NBER, TrendMacro calculations

A century-plus of the monthly S&P 500 equity risk premium






Versus 30-year Treasury

Source: Various, TrendMacro calculations

Data Insights: Global PMI



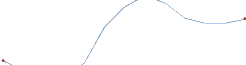



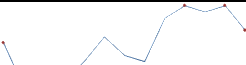

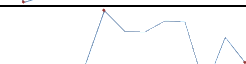
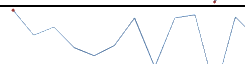
Thursday, November 3, 2016

Worldwide aggregate data: at a glance

Manu	Oct	Prev	13-month history	Serv	Oct	Prev	13-month history	Comp	Oct	Prev	13-month history
Index	52.0	51.0		Index	53.2	51.6		Index	53.3	51.7	



Source: JPMorgan, TrendMacro calculations

US data: at a glance

Manufacturing	Oct	Prev	13-month history	Services	Oct	Prev	13-month history
Index	51.9	51.5		Index	54.8	57.1	
Prices paid	54.5	53.0		Prices paid	56.6	54.0	
Employment	52.9	49.7		Employment	53.1	57.2	
Inventories	47.5	49.5		Inventories	52.0	51.5	
Orders	52.1	55.1		Orders	57.7	60.0	

Source: Institute of Supply Management, TrendMacro calculations

Japan data: at a glance



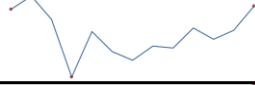
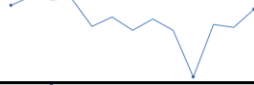
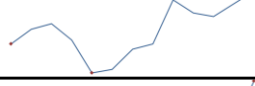
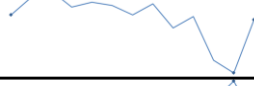
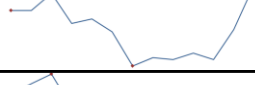
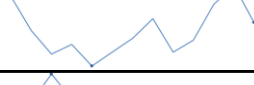
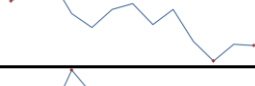

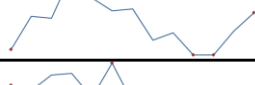
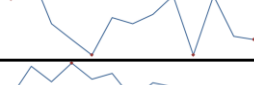


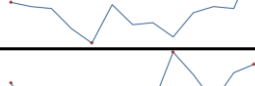



Manufacturing	Oct	Prev	13-month history	Services	Oct	Prev	13-month history
Index	51.4	50.4		Index	50.5	48.2	

Source: Markit/Nomura, TrendMacro calculations

For more information contact us:

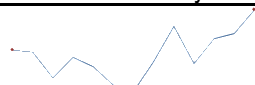
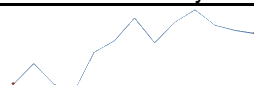


Donald Luskin: 312 273 6766 don@trendmacro.com
Thomas Demas: 704 552 3625 tdemas@trendmacro.com

Europe data: at a glance

Manufacturing	Last	Prev	13-month history	Services	Last	Prev	13-month history
Eurozone Oct	53.5	52.6		Eurozone Oct	52.8	52.2	
UK Oct	54.3	55.5		UK Oct	54.5	52.6	
Germany Oct	55.0	54.3		Germany Oct	54.2	50.9	
France Oct	51.8	49.7		France Oct	51.4	53.3	
Italy Oct	50.9	51.0		Italy Oct	51.0	50.7	
Spain Oct	53.3	52.3		Spain Oct	54.6	54.7	
Ireland Oct	52.1	51.3		Ireland Oct	54.6	56.2	
Netherlands Oct	55.7	53.4					
Austria Oct	53.9	53.5					
Greece Oct	48.6	49.2					
Czech Rep Oct	53.3	52.0					



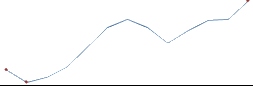
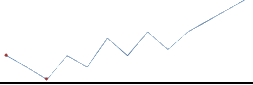
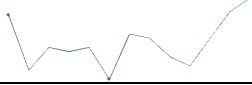


Source: Markit, Various TrendMacro calculations

Eastern Europe data: at a glance

Manufacturing	Last	Prev	13-mo history	Services	Last	Prev	13-mo history
Russia Oct	52.4	51.1		Russia Oct	52.7	53.0	
Poland Oct	50.2	49.8					
Turkey Oct	52.2	48.3					



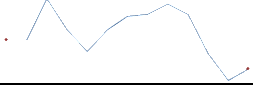
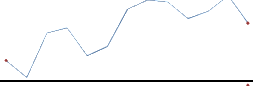
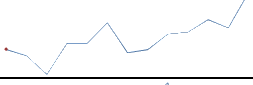
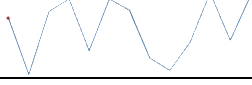

Source: Markit, TrendMacro calculations

China data: at a glance

Manufacturing	Oct	Prev	13-month history	Services	Oct	Prev	13-month history
China	51.2	50.4		China	54.0	53.7	
Prices paid	62.6	57.5					
Employment	48.8	48.6		Employment	50.0	49.7	
Orders	52.8	50.9		Orders	50.9	51.4	





Source: China Federation of Logistics and Purchasing, TrendMacro calculations

Asia data: at a glance

Manufacturing	Last	Prev	13-mo history	Services	Last	Prev	13-mo history
Hong Kong Oct	48.2	49.3					
Taiwan Oct	52.7	52.2					
S. Korea Oct	48.0	47.6					
Vietnam Oct	51.7	52.9					
India Oct	54.4	52.1		India Oct	54.5	52	
Indonesia Oct	48.7	50.9					


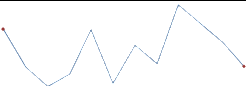
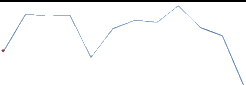
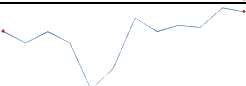
Source: Markit, TrendMacro calculations

Americas data: at a glance

Manufacturing	Last	Prev	13-mo history	Services	Last	Prev	13-mo history
Brazil Oct	46.3	46.0		Brazil Oct	43.9	45.3	
Mexico Oct	51.8	51.9					
Canada Oct	51.1	50.3					

Source: Markit, TrendMacro calculations

Middle East/Africa data: at a glance

Manufacturing	Last	Prev	13-mo history
Saudi Arabia Oct	53.2	55.3	
UA Emirates Oct	53.3	54.1	
Egypt Oct	42.0	46.3	
S. Africa Oct	50.5	50.7	

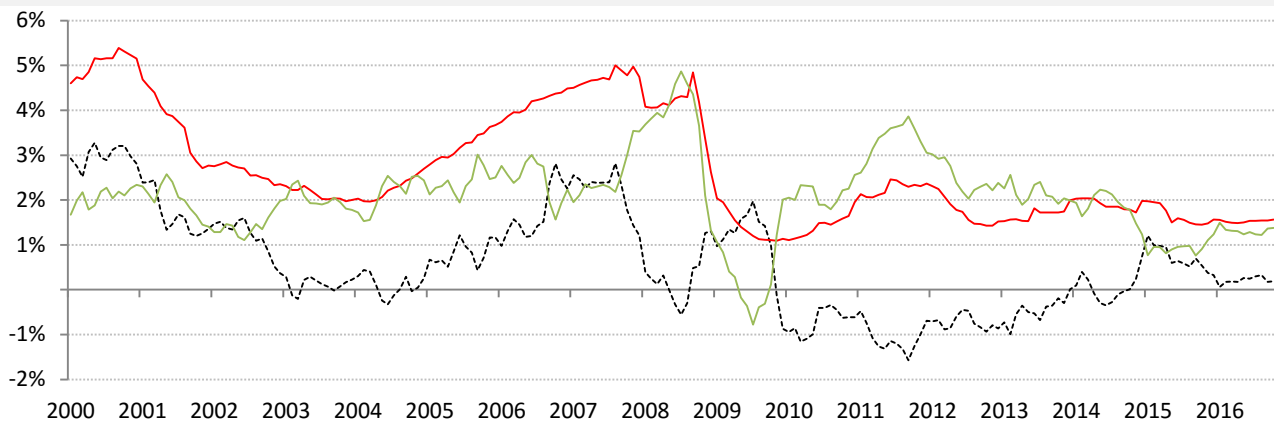
Source: Markit, TrendMacro calculations

Data Insights: Global Real Rates and Long-term Yields

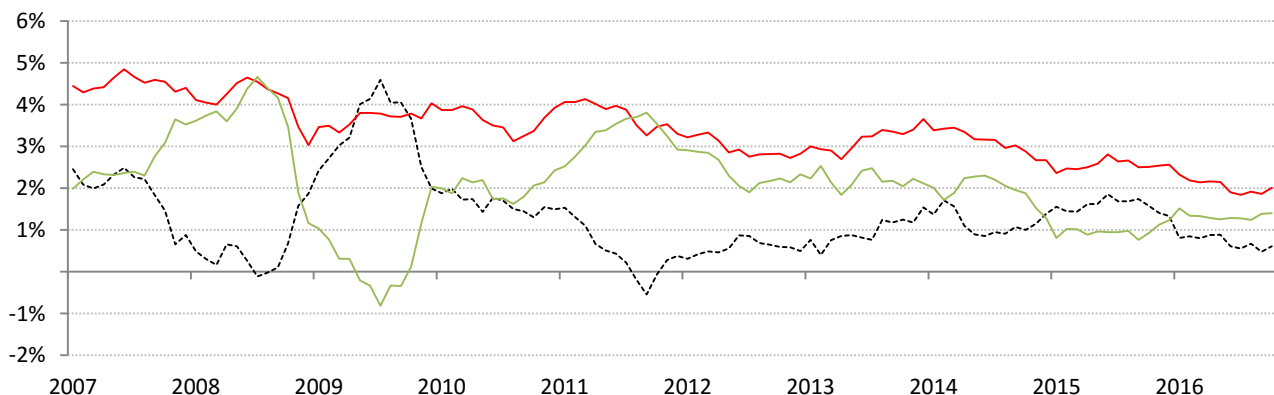
Tuesday, October 17, 2016

The world-wide average inflation-adjusted cost of debt

US, Euro Area, Japan, UK, Brazil, India and China rates and yields weighted by nominal GDP at official USD
(For 10-year, Euro Area is capital-key weighted average of DE, FR, IT, ES, ND, BE)



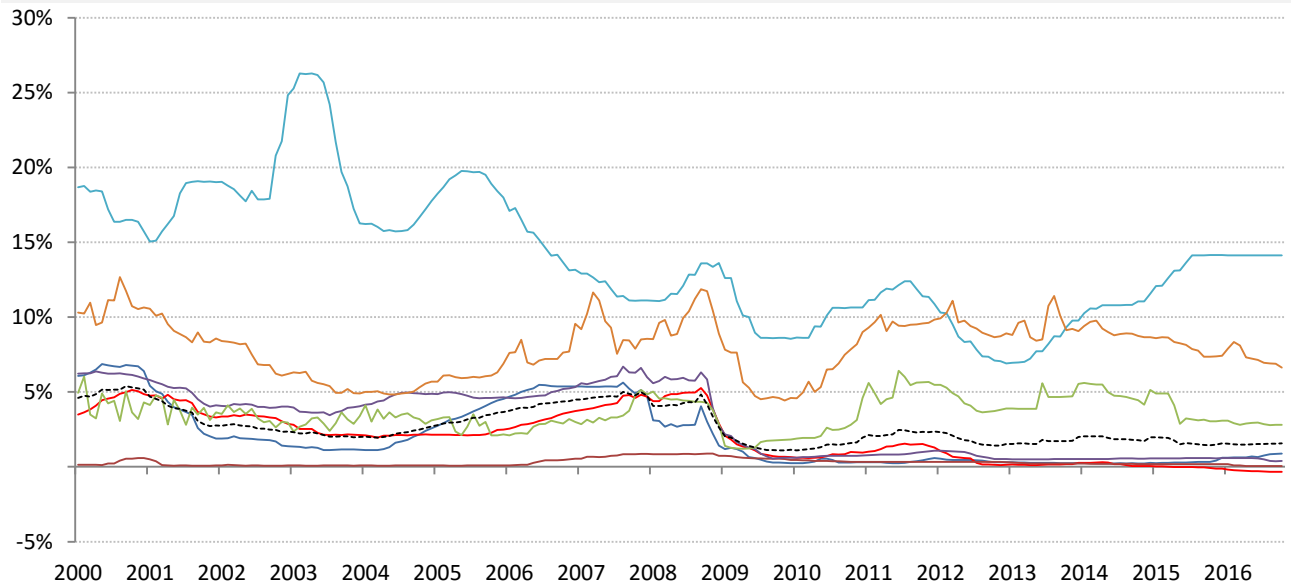
	Global	US	Euro Area	Japan	UK	Brazil	India	China
Nom 90-day interbank	1.57%	0.88%	-0.32%	0.06%	0.40%	14.13%	6.63%	2.80%
less	CPI	1.10%	0.40%	-0.50%	0.60%	9.15%	5.30%	2.00%
equals	Real rate	0.19%	-0.22%	-0.72%	0.56%	-0.20%	4.98%	1.33%



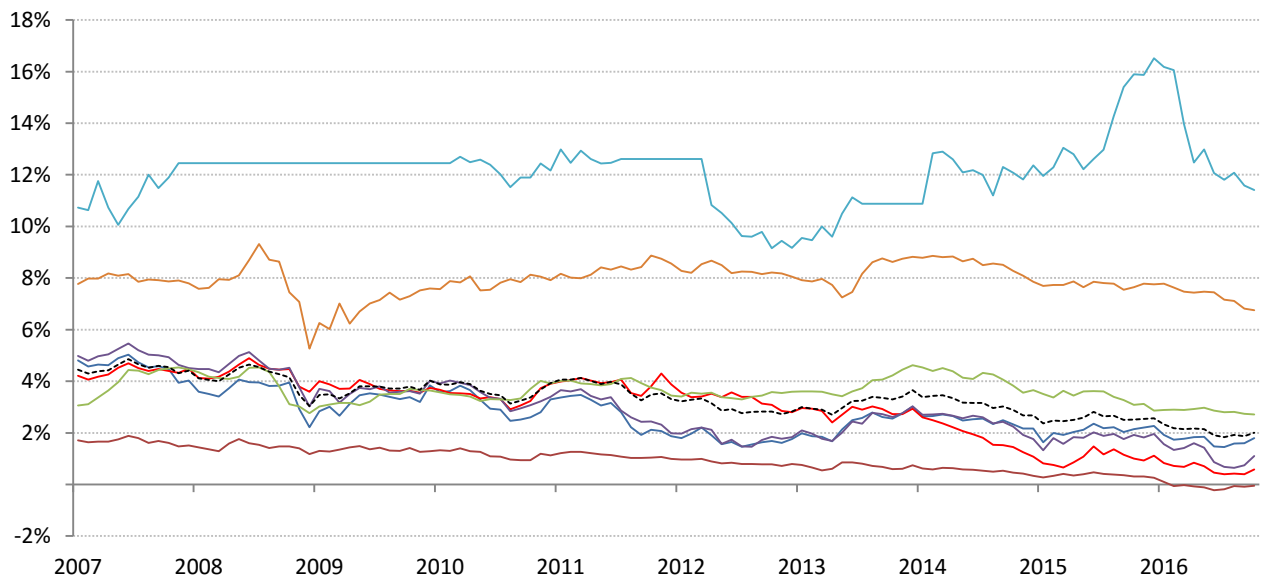
	0	US	Euro Area	Japan	UK	Brazil	India	China
Nominal 10yr govt yield	2.01%	1.80%	0.58%	-0.05%	1.10%	11.40%	6.75%	2.71%
less	CPI	1.10%	0.50%	-0.50%	0.60%	9.15%	5.30%	2.00%
equals	Real yield	0.61%	0.70%	0.08%	0.45%	0.50%	2.25%	1.45%

Source: Respective data bureaus, TrendMacro calculations

Nominal rates and yields



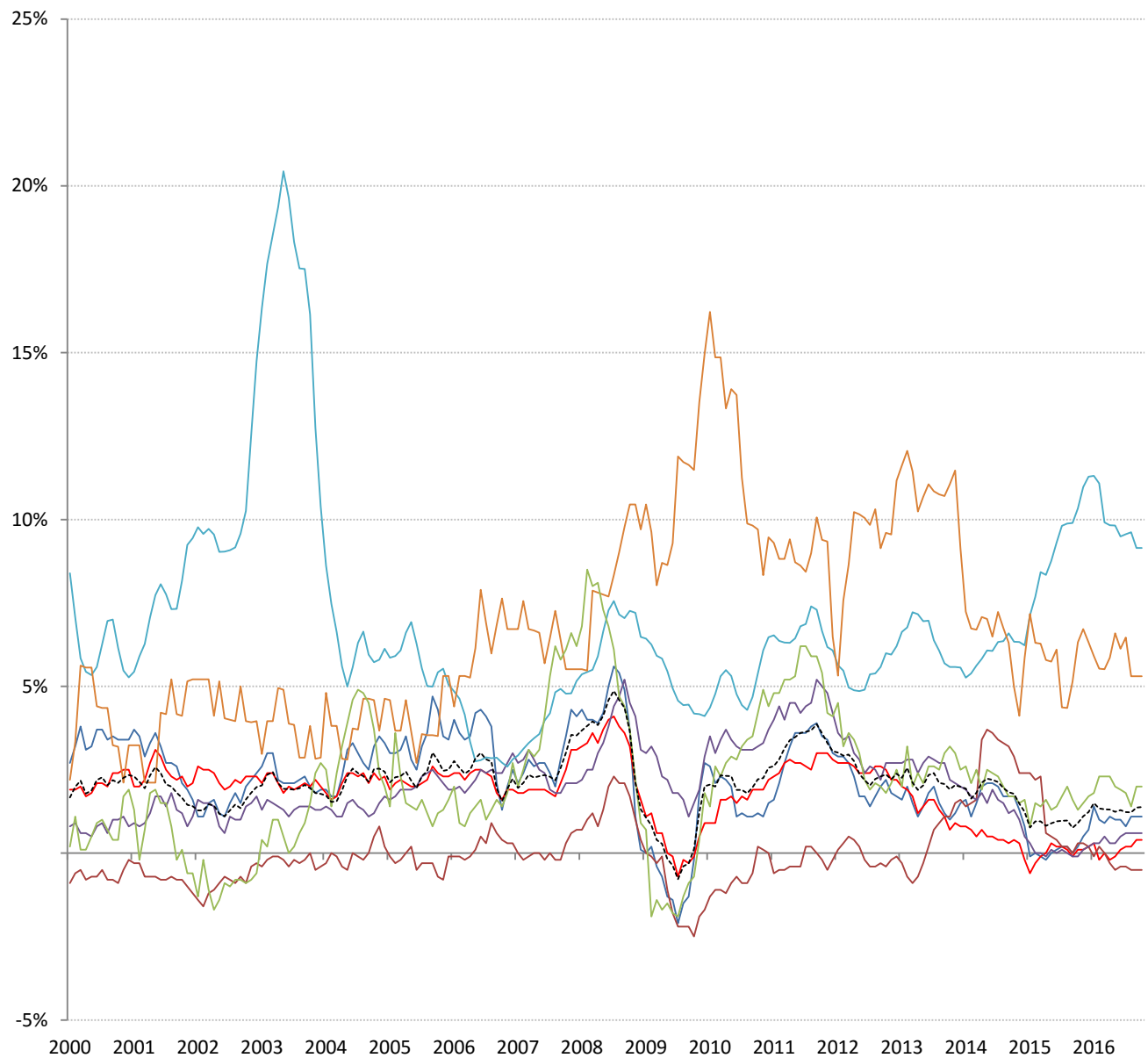
	Global	US	Euro Area	Japan	UK	Brazil	India	China
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	Global	US	Euro Area	Japan	UK	Brazil	India	China
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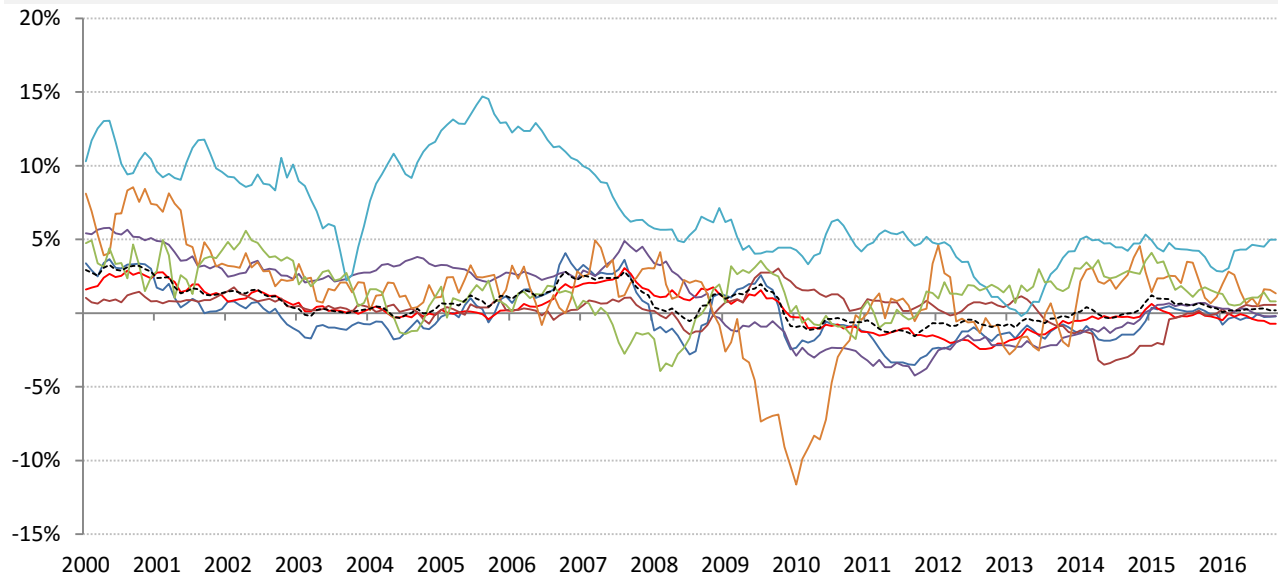
Source: Bloomberg, TrendMacro calculations

Inflation: Year-over-year change in headline consumer prices

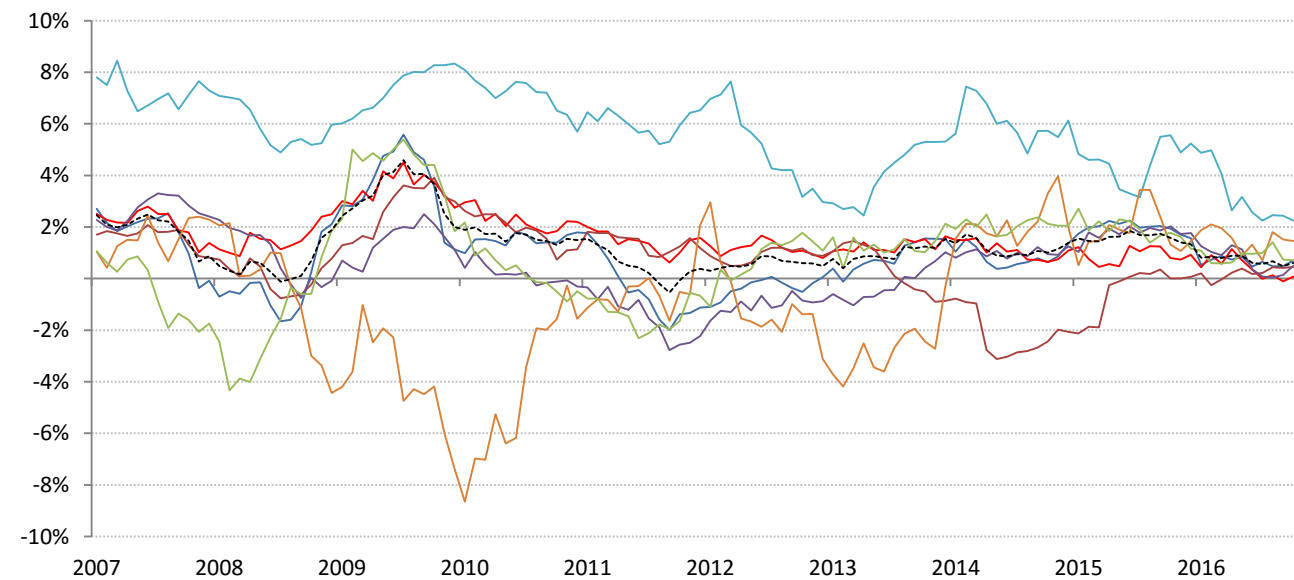


Source: Respective data bureaus, TrendMacro calculations

Real rates and yields: nominal minus YOY headline CPI change



	Global	US	Euro Area	Japan	UK	Brazil	India	China
Real rates	0.19%	-0.22%	-0.72%	0.56%	-0.20%	4.98%	1.33%	0.80%



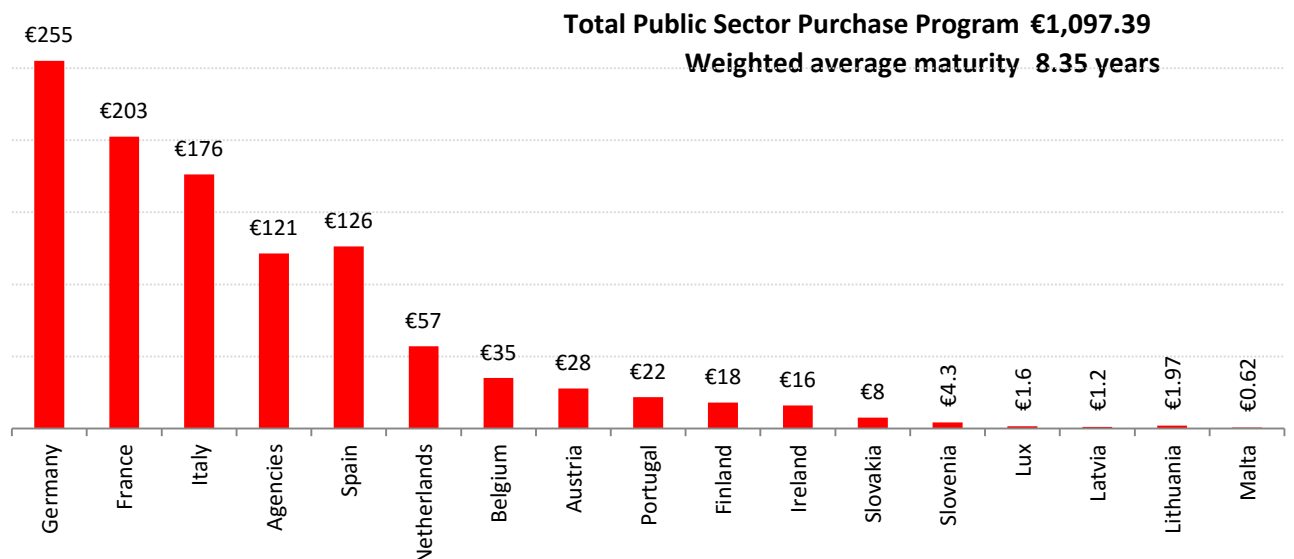
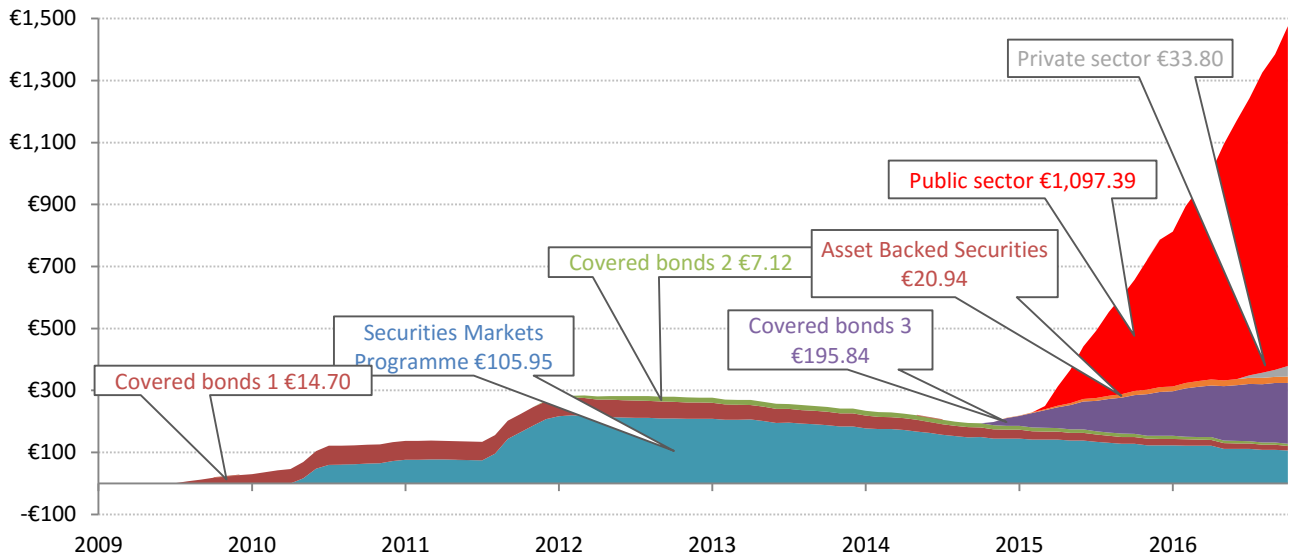
	Global	US	Euro Area	Japan	UK	Brazil	India	China
Real yields	0.61%	0.70%	0.08%	0.45%	0.50%	2.25%	1.45%	0.71%

Source: Bloomberg, respective data bureaus, TrendMacro calculations

Data Insights: Euro Area Recovery Monitor

Thursday, October 20, 2016

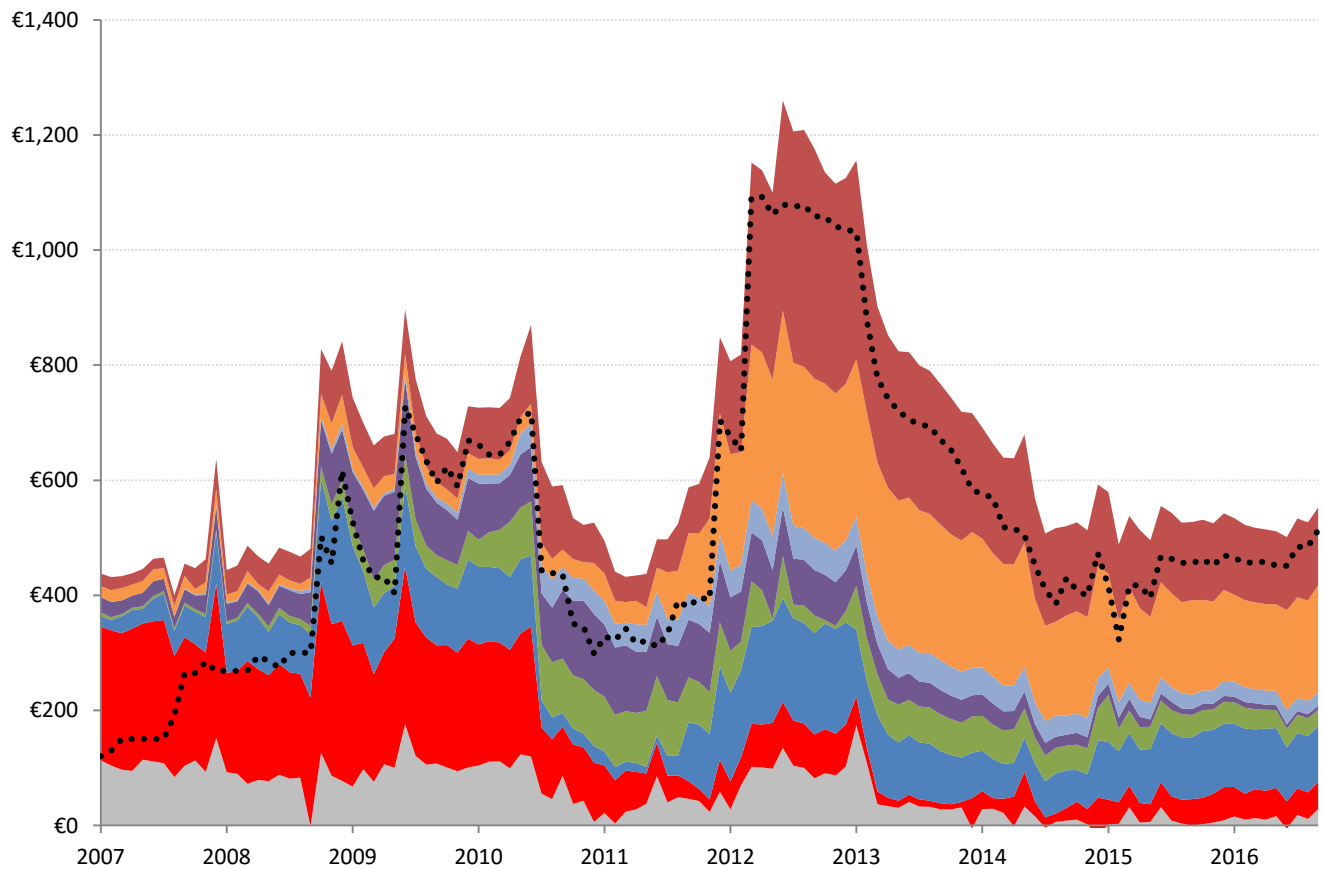
The ECB's drive to build purchased assets (€ billions)



Source: ECB, TrendMacro calculations

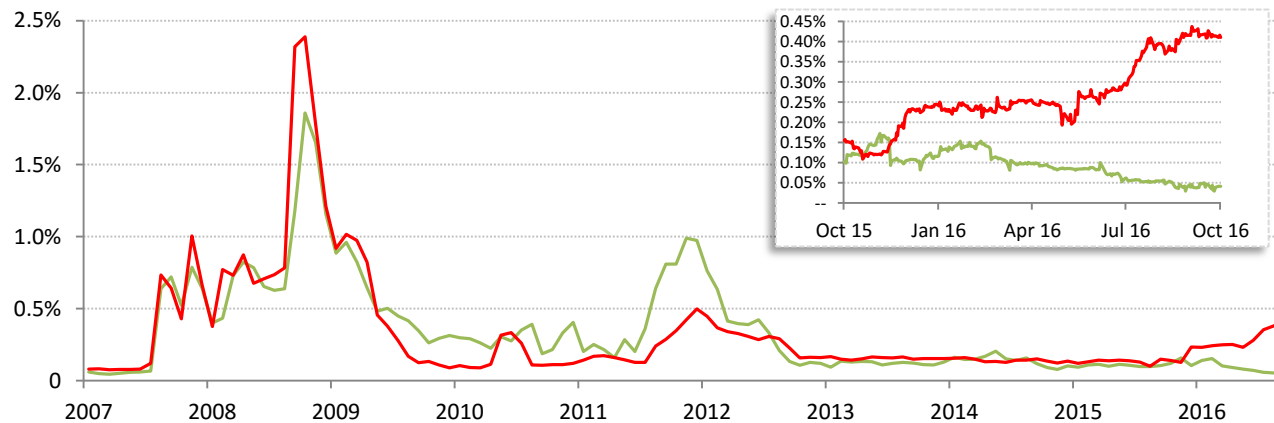
Banking system dependency: borrowing from the ECB (€ billions)

--- Total LTRO Spain Italy Portugal Ireland Greece France Germany Other



Source: ECB, National central banks, TrendMacro calculations

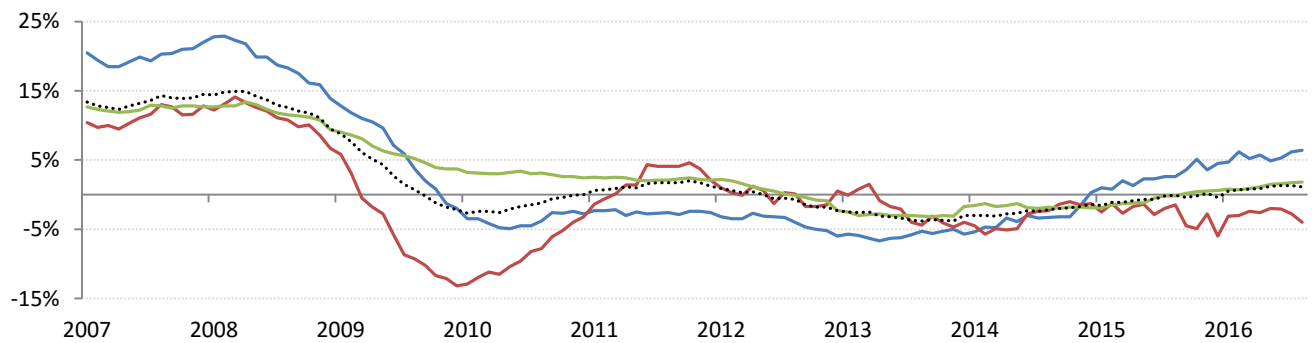
Bank stability: 90-day LIBOR/OIS spreads — USD — EUR



Source: Bloomberg, TrendMacro calculations

The credit drought: loans to non-financial businesses (YOY growth)

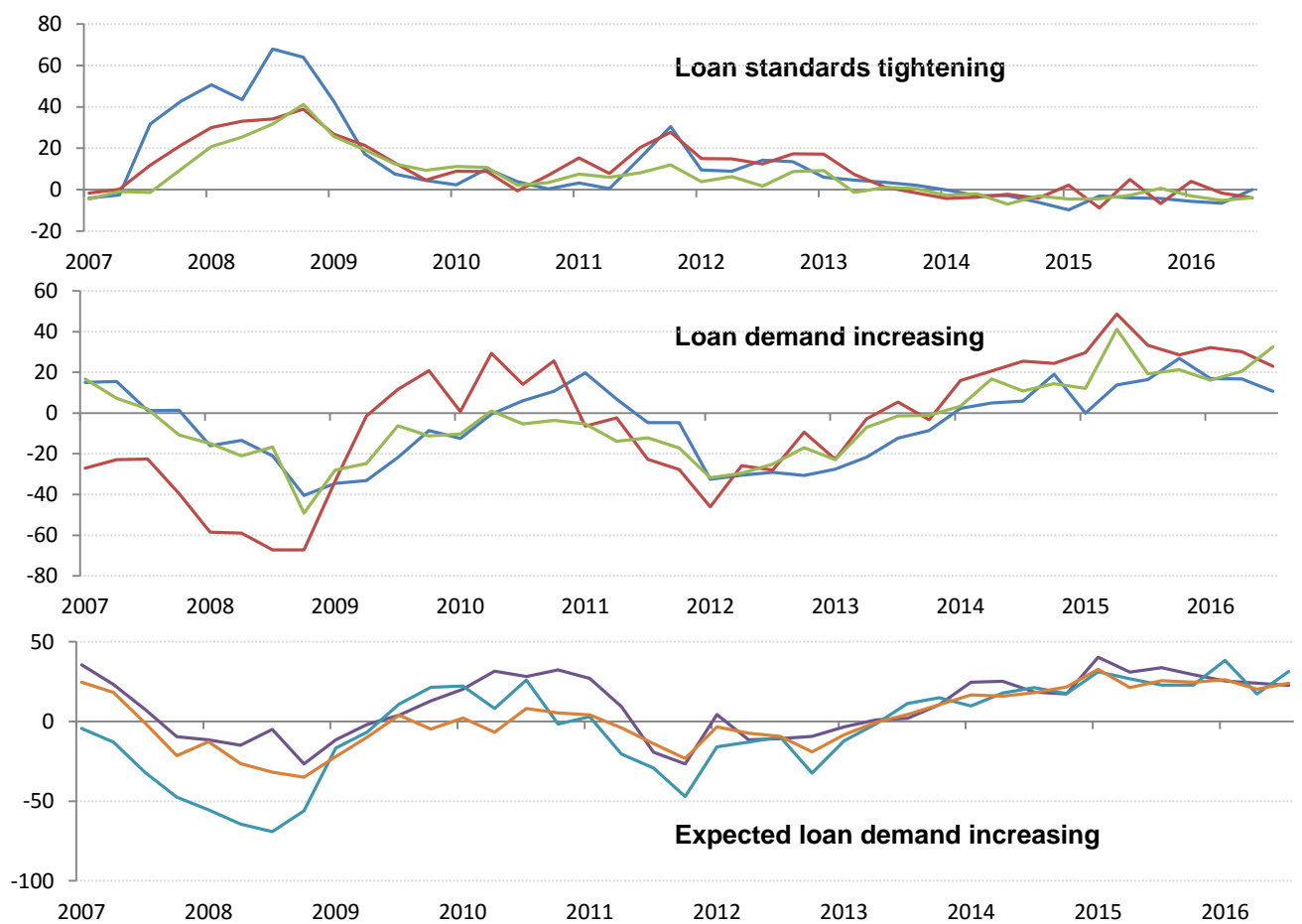
— Loans to 1 year — Loans 1-5 years — Loans 5 years plus ... Total



Source: ECB, TrendMacro calculations

Supply and demand for lending: ECB Bank Survey

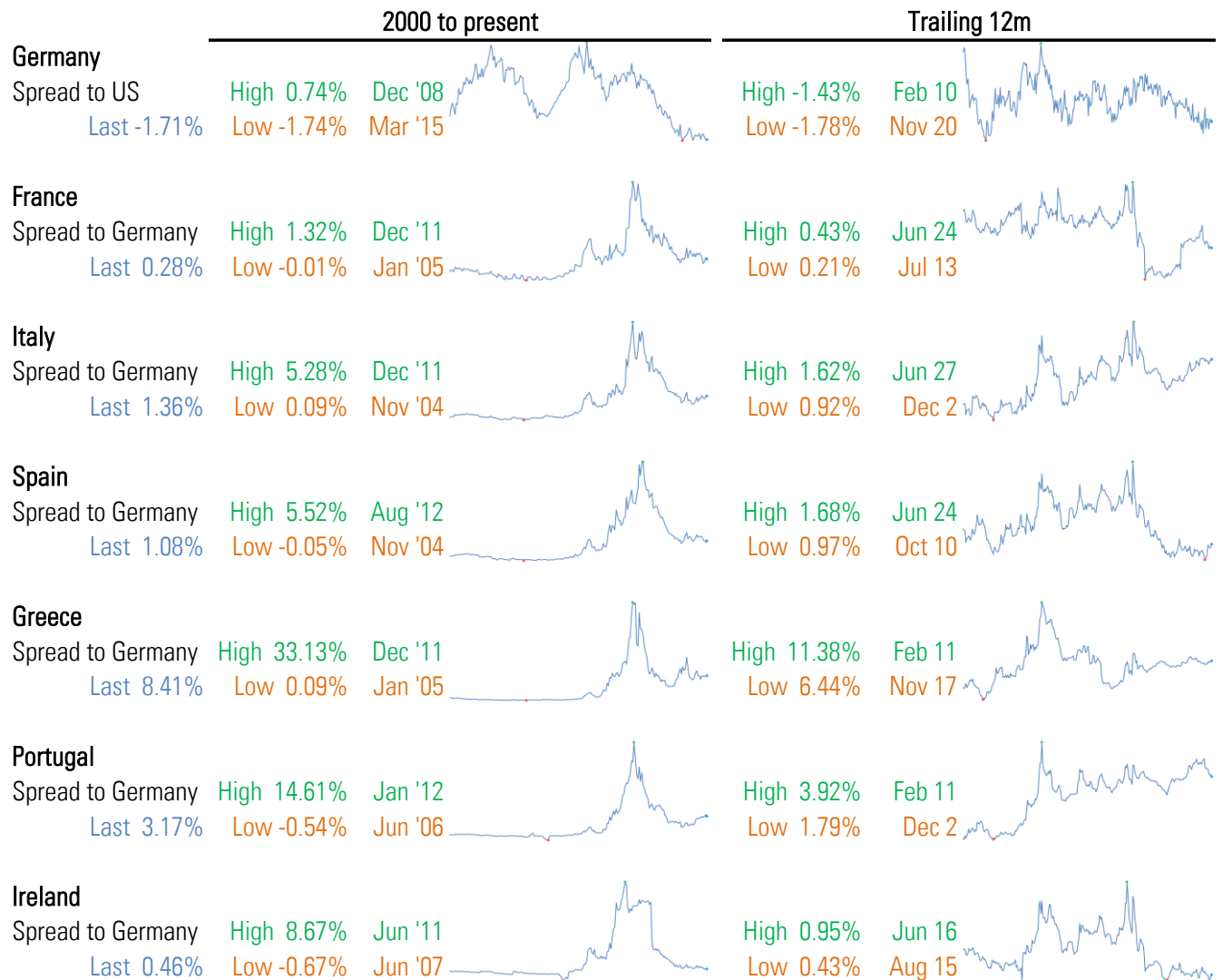
Net number of banks reporting for: — Enterprises — Home mortgage — Consumer



Source: ECB, TrendMacro calculations

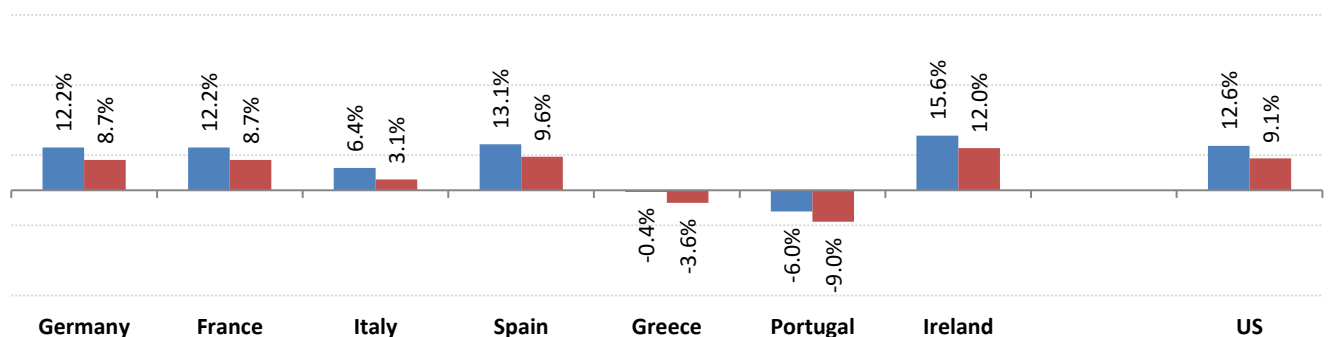
Sovereign stress monitor: 10-year bond spreads

· High · Low · Last



10-year sovereign bond total returns, trailing 12-months

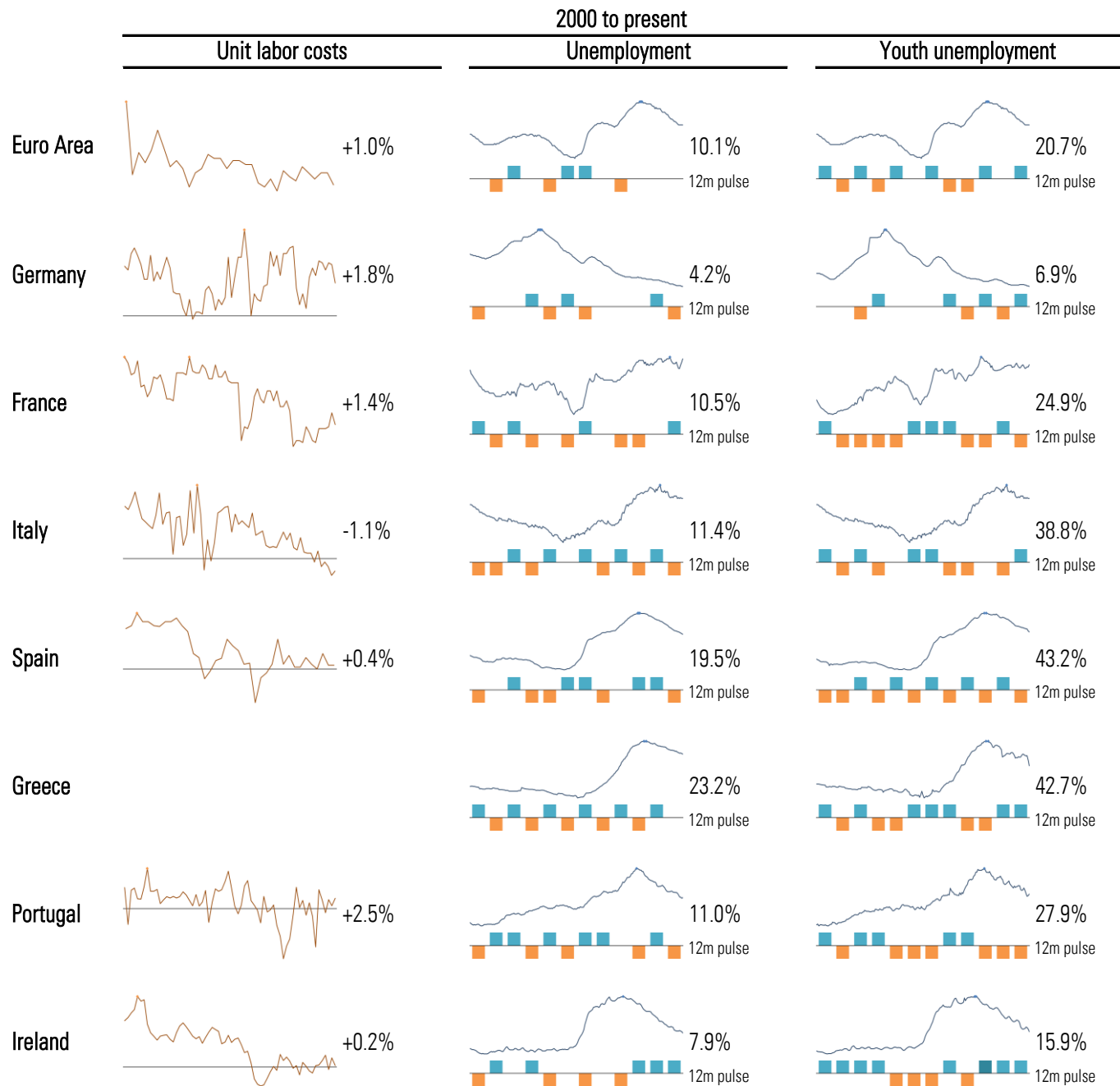
■ EUR ■ USD



Source: Bloomberg, TrendMacro calculations

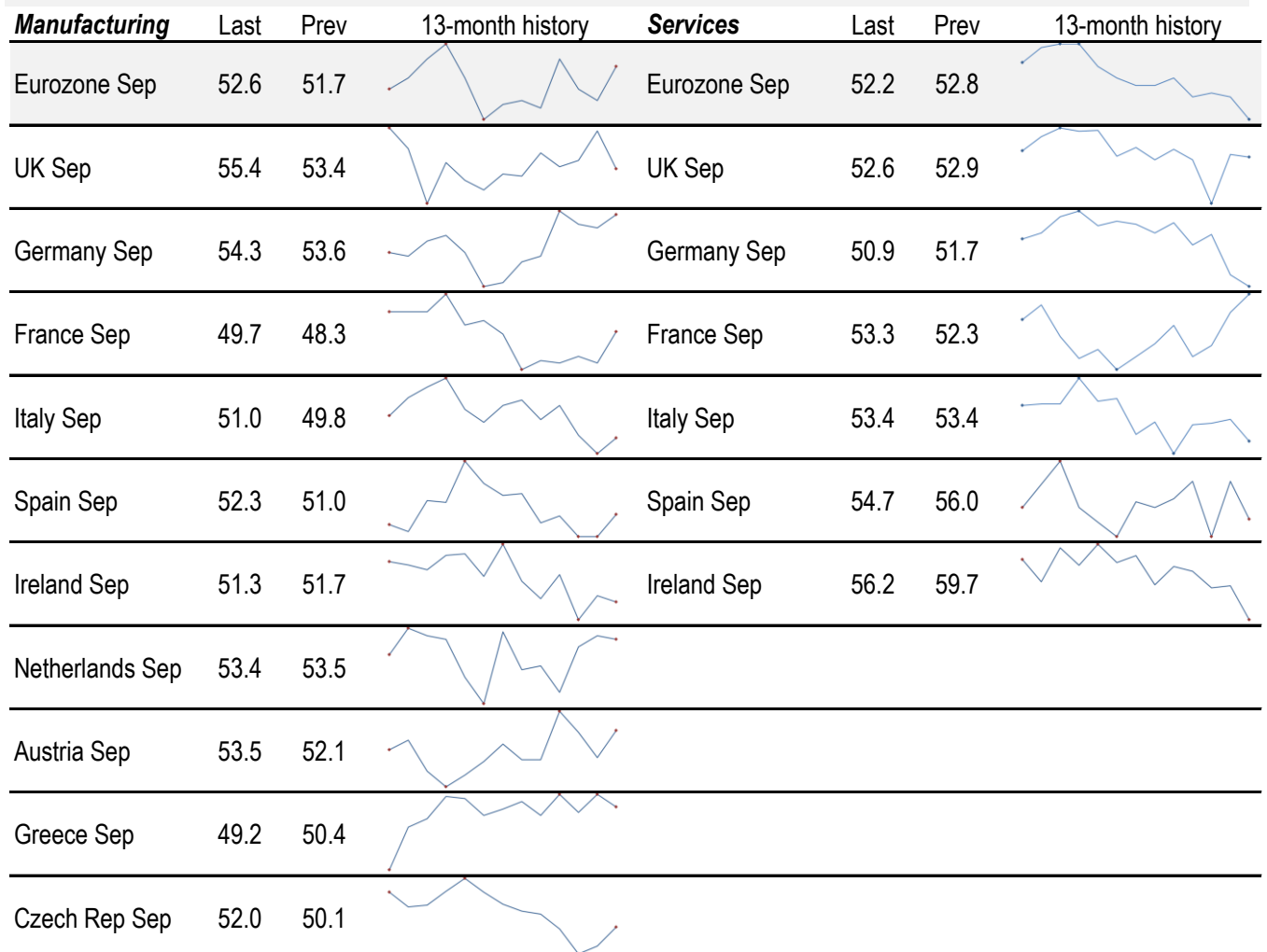
Labor market in intensive care

ULC: Nominal, quarterly YOY UE: High 12m pulse: monthly ■ improvement or ■ worsening in rate of change



Source: Eurostat, TrendMacro calculations

Purchasing Manager Indices



Source: Markit, TrendMacro calculations

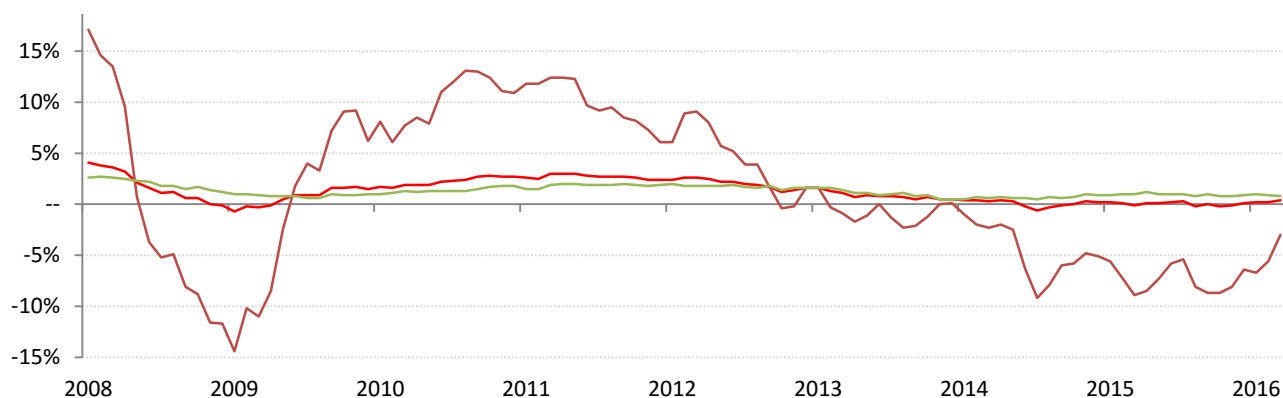
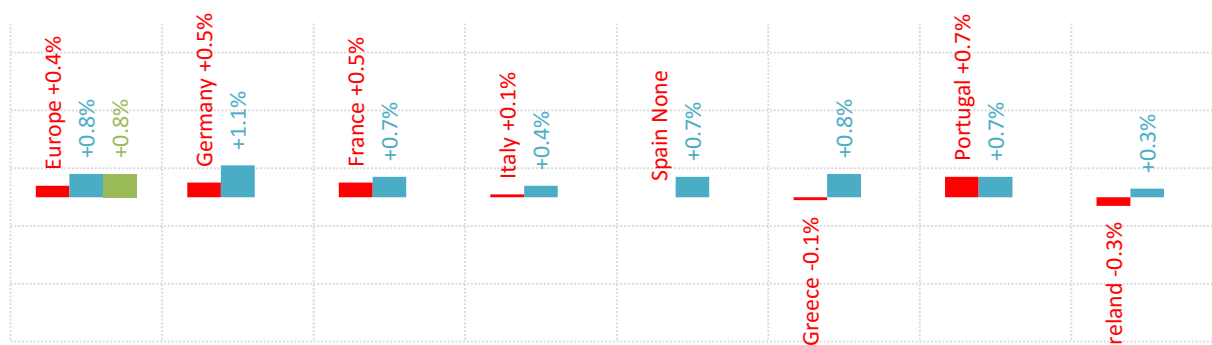
Regional currency flight — Euro vs Swiss franc — Swiss National Bank floor — SNB FX reserves



Source: Bloomberg, TrendMacro calculations

Euro area consumer inflation, year on year

Country: ■ Headline ■ Ex-food and energy ■ Ex-energy Euro area: — Headline — Energy — Ex-energy



Source: Eurostat, TrendMacro calculations

Draghi's dashboard: swap-implied inflation expectations since "Whatever it takes"

— 5-year inflation-swap rate, 5 years forward



Source: Bloomberg, TrendMacro calculations