

Global Risk Outlook May 2016



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- Oxford Economics is a world leader in global forecasting and quantitative analysis. Our worldwide client base comprises over 1,000 international corporations, financial institutions, government organizations and universities.
- Founded in 1981 as a joint venture with Oxford University, Oxford Economics is now a leading independent economic consultancy.
- Headquartered in Oxford, with offices around the world, we employ 250 people, including 150 economists, and a network of 500 contributing researchers.
- The rigor of our analysis, caliber of staff and links with other leading research groups make us a trusted resource for decision makers.



Markets have rebounded.... but stress is palpable

2006

2008

Source: Haver Analytics

World: Stock markets



US: Market volatility OCBOE Market Volatility Index, VIX OCBOE Market Volatility Index, VIX OCBOE Market Volatility Index, VIX

2010

2012

2014

2016

Economic news less disappointing

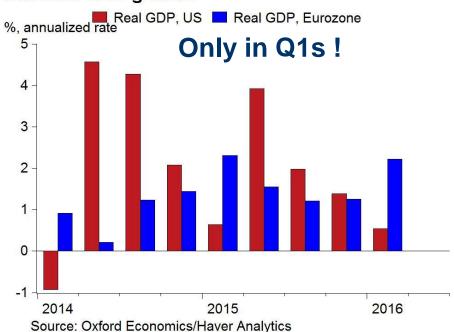
World: Economic surprise indices



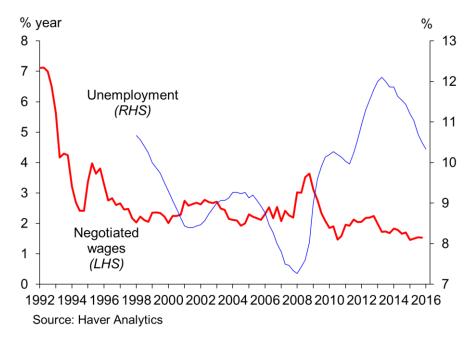
Source: Oxford Economics/Haver Analytics

Eurozone is fastest growing advanced economy??

US: Real GDP growth 5

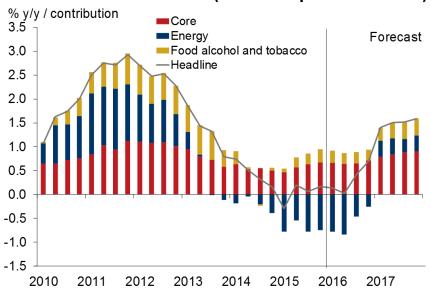


Eurozone: Wages and unemployment



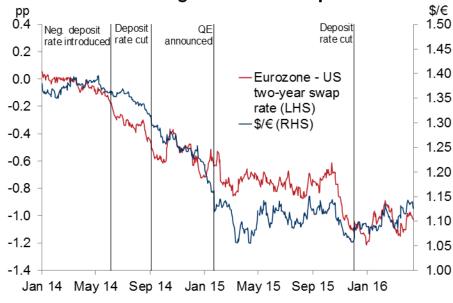
Inflation to rebound but ECB closely monitoring

Eurozone: CPI Inflation (Bottom-up f'cast model)



Source: Oxford Economics/Haver Analytics

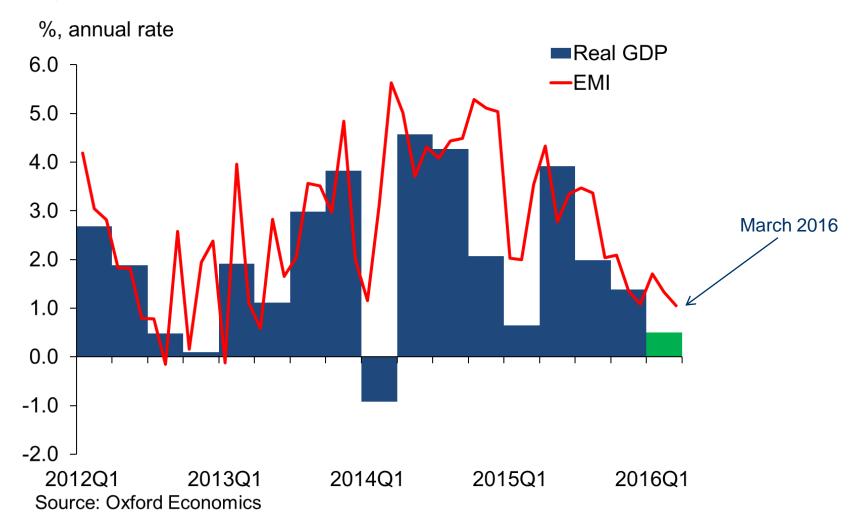
Eurozone: Exchange rate and swap rates



Source: Oxford Economics/ Bloomberg

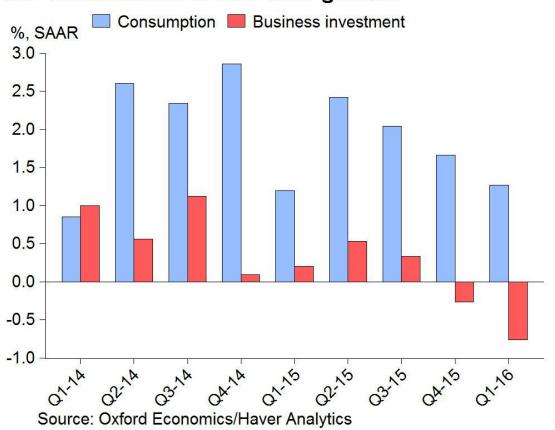
The end of 2015 slowdown is proving to be "sticky"

US: OE's Economic Momentum Indicator



Usual culprits behind slowdown

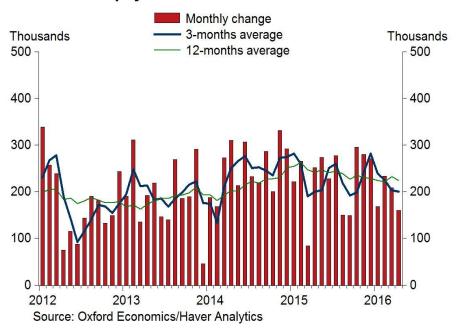
US: Contribution to real GDP growth



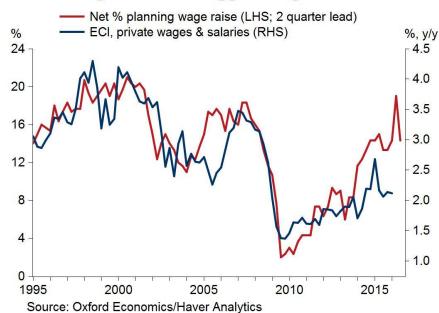
Culprits: Strong US dollar Weak global growth Depressed oil and gas activity + Modest consumer spending

Employment growth is robust

US: Nonfarm payrolls

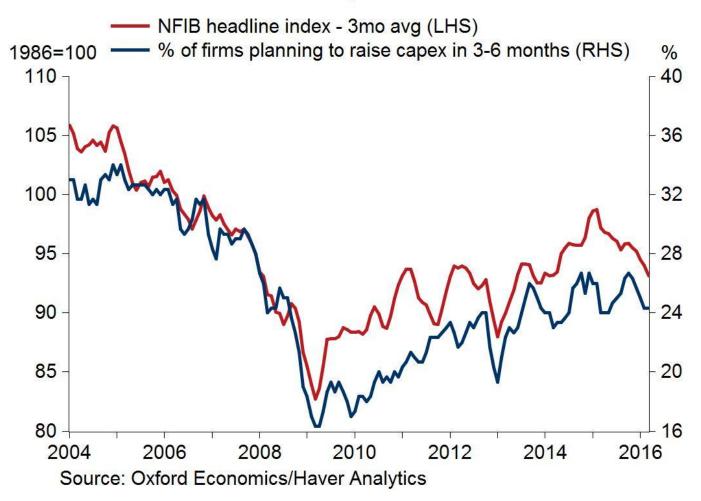


US: Leading indicators suggest wages to rise

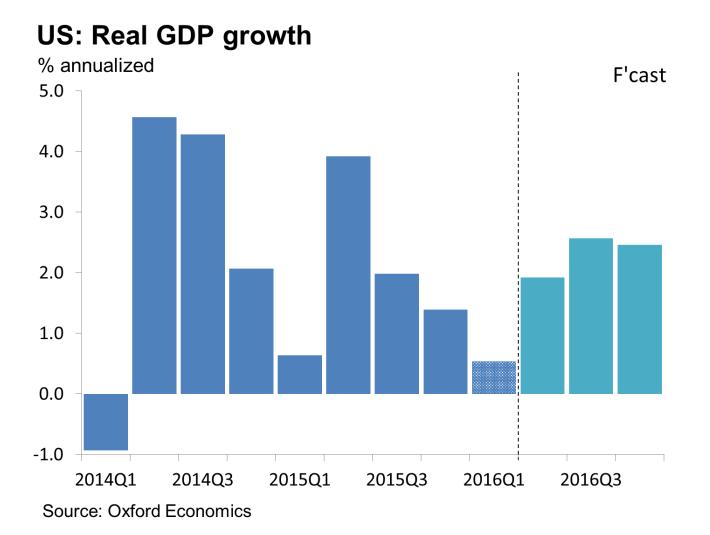


Business investment to remain sluggish in 2016

US: NFIB Small Business Optimism Index



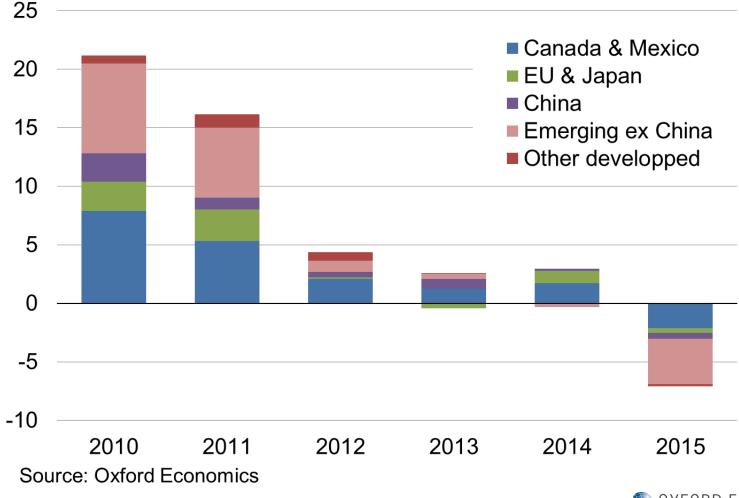
2% growth miss is likely



Global headwinds are restraining net exports

US: The 'emerging markets' threat

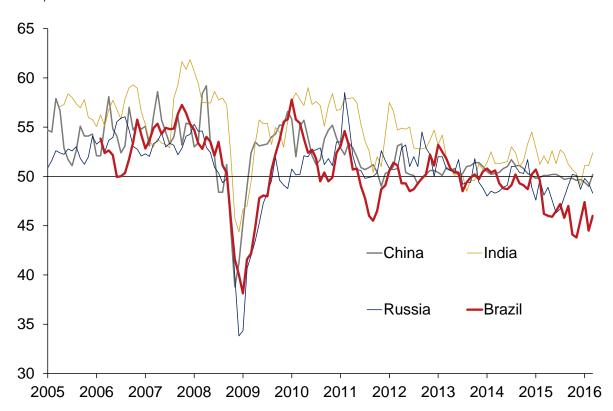
Percentage points contribution to US merchandise export growth



Leading indicators suggest EM weakness

BRICs: Manufacturing Purchasing Managers' Index

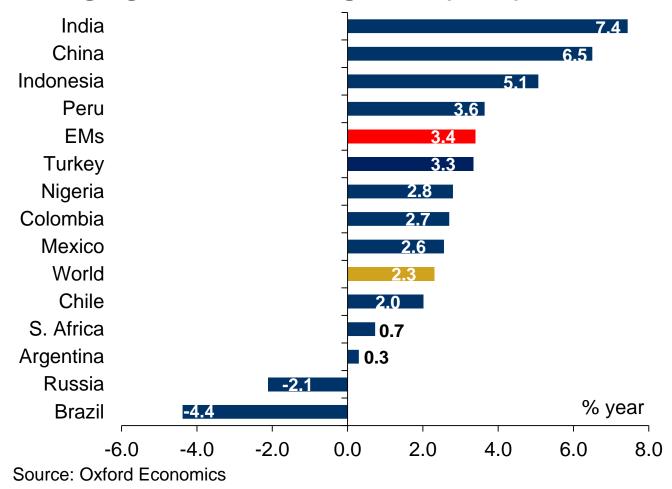
Index, breakeven level=50



Source: PMI/Markit/China NBS/Haver Analytics

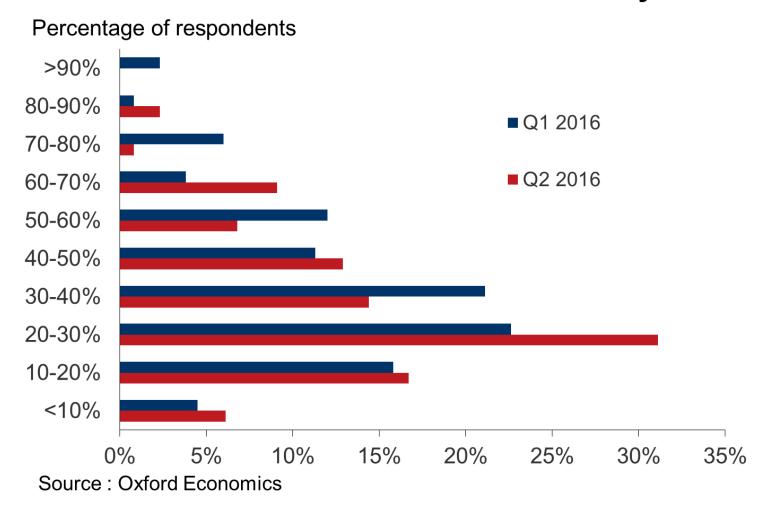
Who are the out/underperformers within EMs?

Emerging markets: GDP growth (2016)



Risks remain skewed to downside...

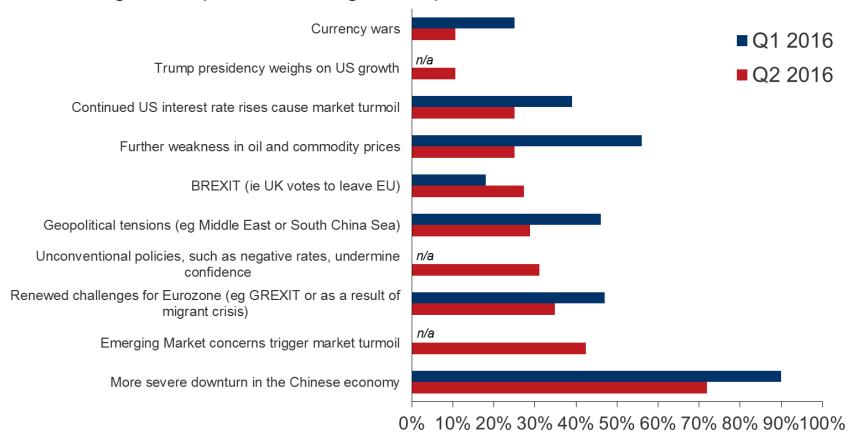
What probability do you place on a global downturn or recession over the next two years?



China the biggest concern

What do you see as the top three downside global economic risks over the next two years?

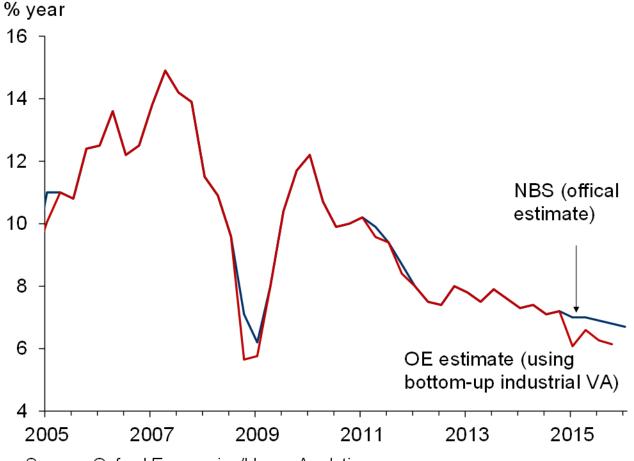
Percentage of respondents citing as a top 3 risk



Source: Oxford Economics Global Risk Survey

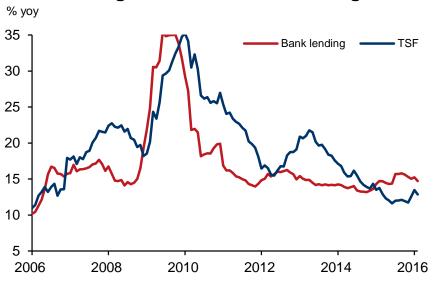
Real growth slowed more than NBS data show

China: GDP growth estimates

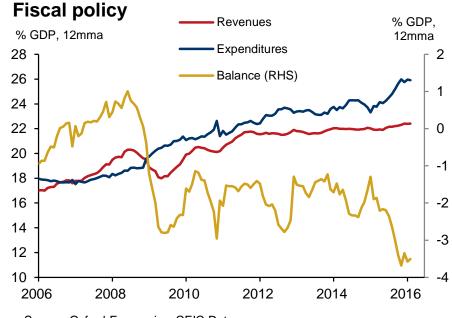


China: Generous monetary and fiscal policy

Bank lending and total social financing

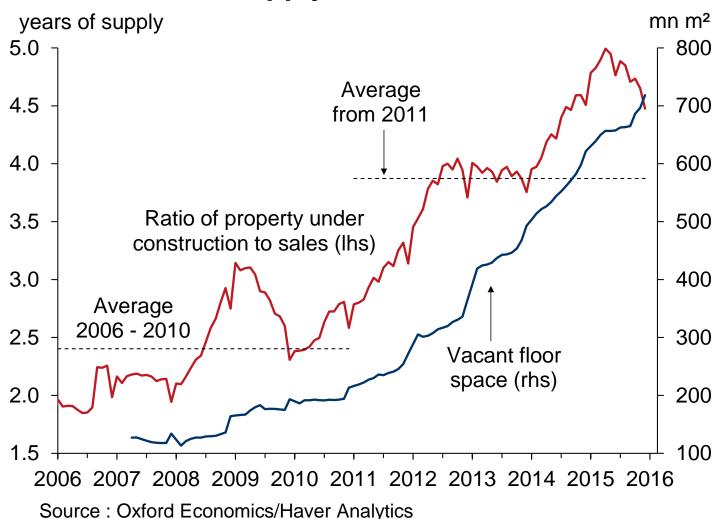


Source: Oxford Economics, CEIC Data



Excess supply in real estate significant...

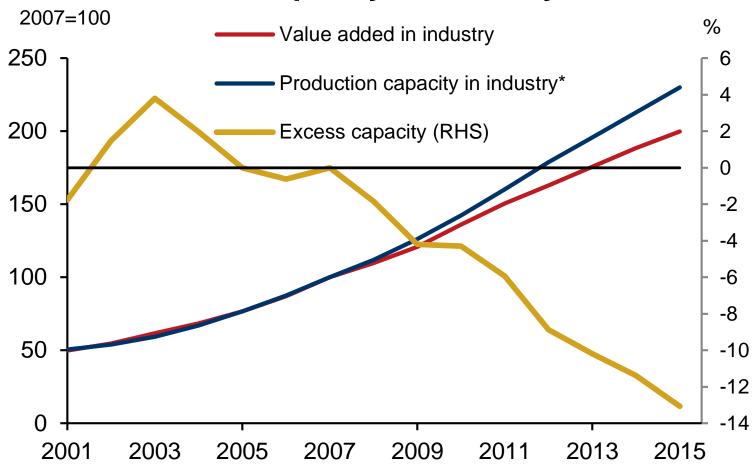
China: Excess supply in the real estate sector



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...and excess capacity in industry still on the rise

Production and capacity in industry

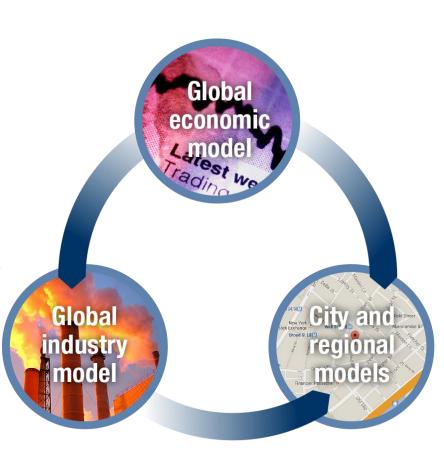


Source: Oxford Economics, CEIC Data

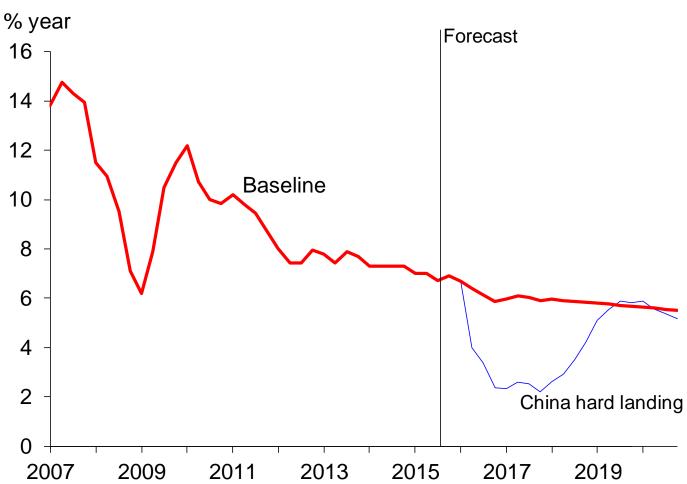
^{*} From growth accounting

Our modelling expertise sets us apart

- Oxford Economics has developed the world's leading globally integrated economic model, relied on by over 150 leading organisations around the world.
- Our model replicates the world economy by interlinking 46 countries, 6 regional blocs and the Eurozone. It is available with 5, 10 and 25-year forecasting horizon.
- 29 additional country models being added from May.
- The global economic model feeds into a series of industry, sub-regional and city models. So, you can quantify the impact of global events on a consistent basis down to your industry and local markets.
- Our team of 150 economists set underlying global assumptions and ensure that the data, forecasts and formulas in these models are fully up-to-date.

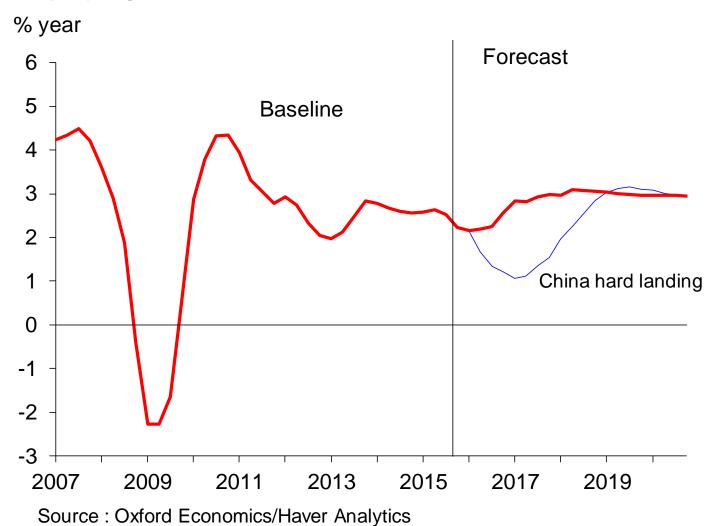




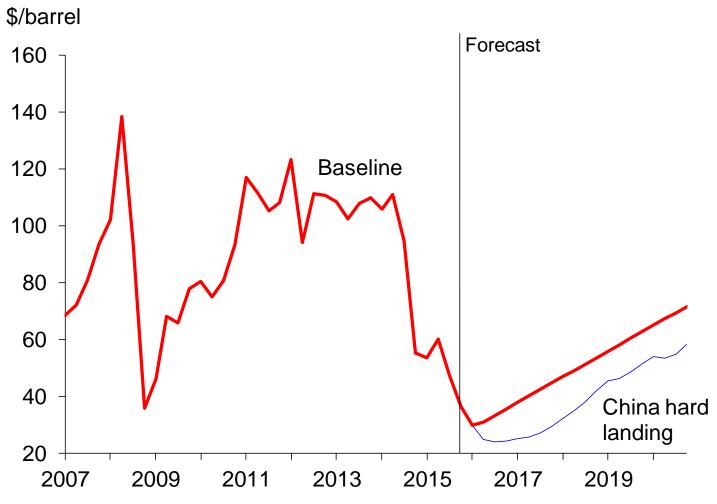


Source: Oxford Economics/Haver Analytics

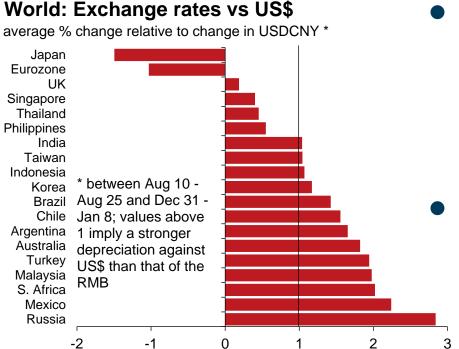
World: GDP



World oil price



Source: Oxford Economics/Haver Analytics



Source: Oxford Economics / Haver Analytics

The domestic policy response

 Chinese authorities embark on a range of actions, including faster policy rate cuts and currency devaluation

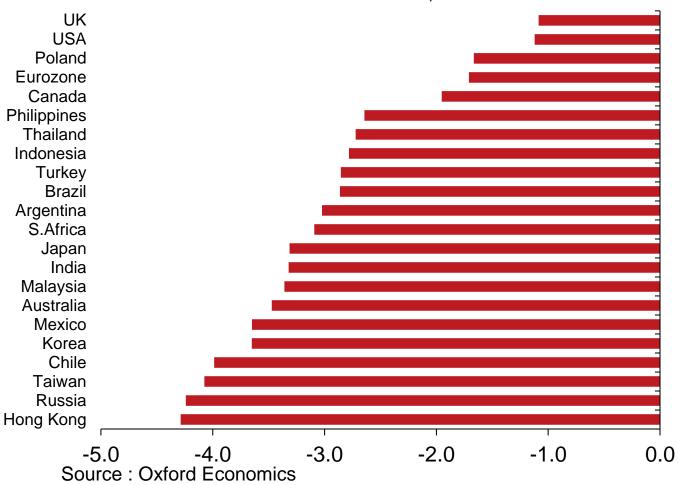
Global impact and policy actions

- The slowdown weighs on world trade, commodity prices and other asset prices – and global monetary policy adjusts accordingly
- Global exchange rates adjust sharply in line with recent episodes of stronger RMB weakening

Asia and commodity producers hit hardest

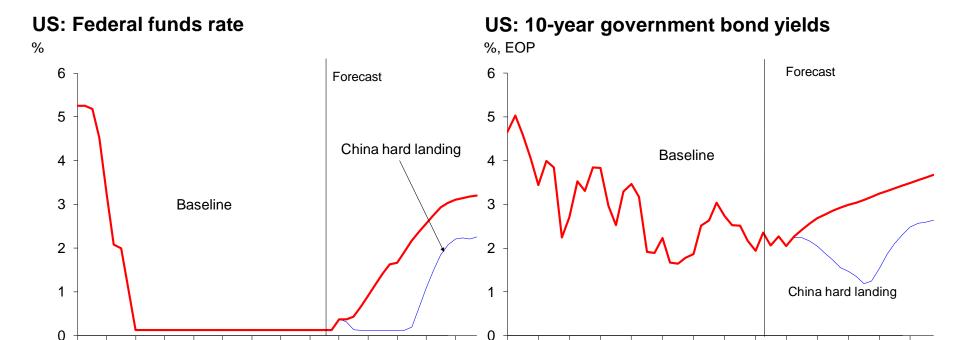
World: GDP in downside scenario

% difference in level of GDP versus baseline, 2017



US Treasury yields fall below 2%

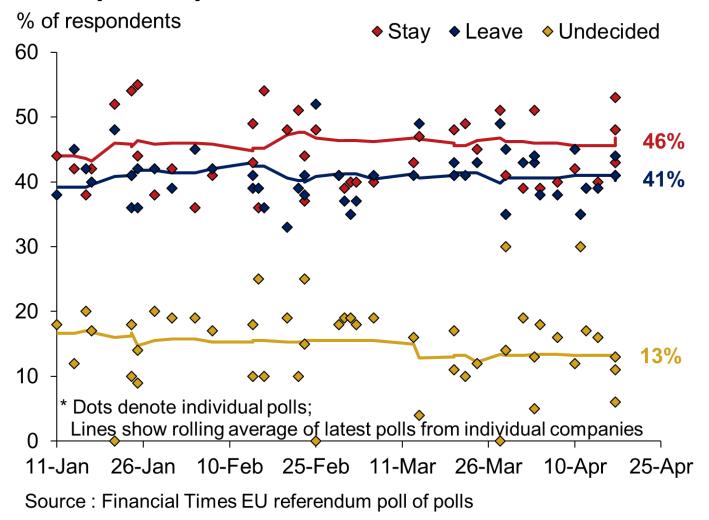
Source: Oxford Economics/Haver Analytics



Source: Oxford Economics/Haver Analytics

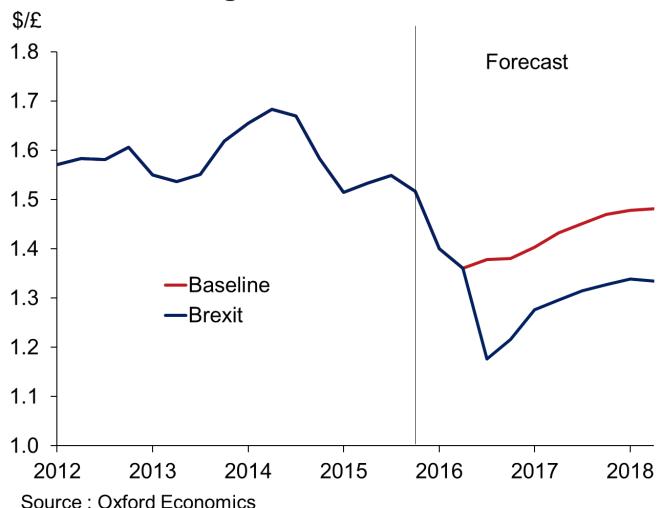
'Remain' enjoy a narrow lead in the polls

UK: Opinion polls on Brexit*



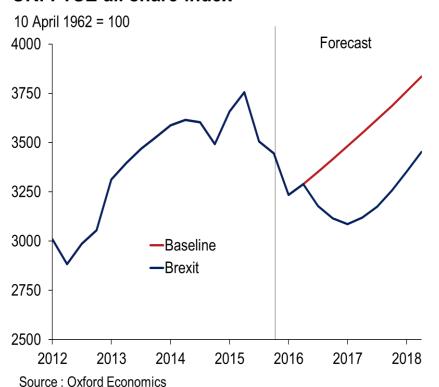
Option prices imply 15% depreciation post-Brexit



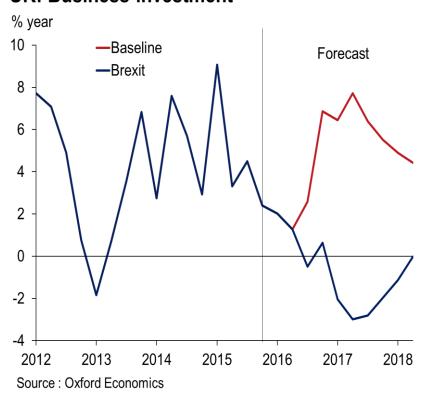


Investor & corporate confidence would be hit

UK: FTSE all share index

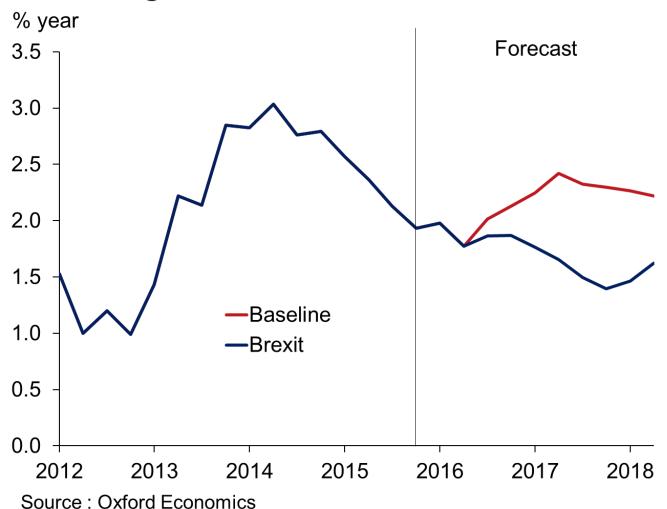


UK: Business investment



GDP impact: noticeable but not catastrophic





Financial fragility

Risks remain skewed to downside...



Chinese hard landing (15%)

Housing sales slump sharply, triggering renewed house price falls and a sharp fall in housing construction.

Domestic and external confidence is hit hard, resulting in lower FDI inflows, private investment and consumption

The shock to growth spills over to emerging economies and sparks major currency realignment

Geopolitical tensions (2%)

A dramatic worsening in Saudi-Iranian relations triggers a violent reversal of recent oil price declines

Crude oil prices rise back above \$80 per barrel

While the disruption is relatively short-lived, the global impact is material and varies hugely across countries

Financial market contagion (10%)

Amid signs of weakening growth, the current market gloom persists and weighs on global growth

Equity price falls generate negative wealth effects, consumer and business confidence fade, and credit conditions tighten

The Fed responds and reverses course; but some EMs are forced into rate hikes to defend their currencies

Commodity demand weakness (10%)

Oil prices fall further as global demand weakness weighs on commodity markets

At current low oil prices, that drags modestly on global growth

The boost to energy importers is outweighed by strains placed on exporter sovereigns and the US shale industry

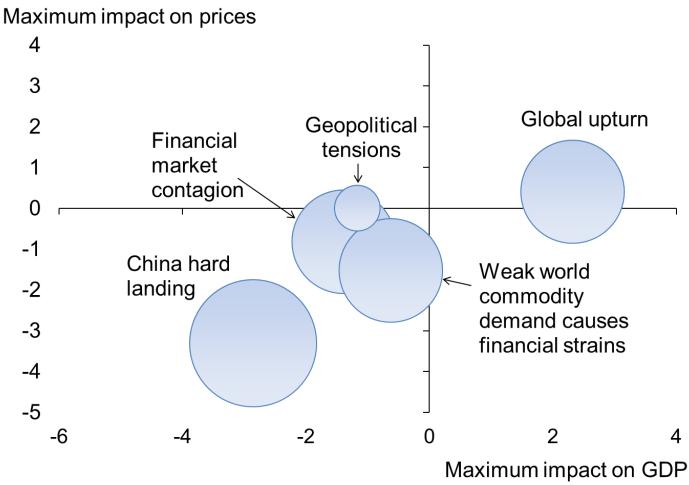
Emerging market commodity producers and the US are among those hit hardest

Domestic demand fragility



...with significant real economy implications

Global scenarios

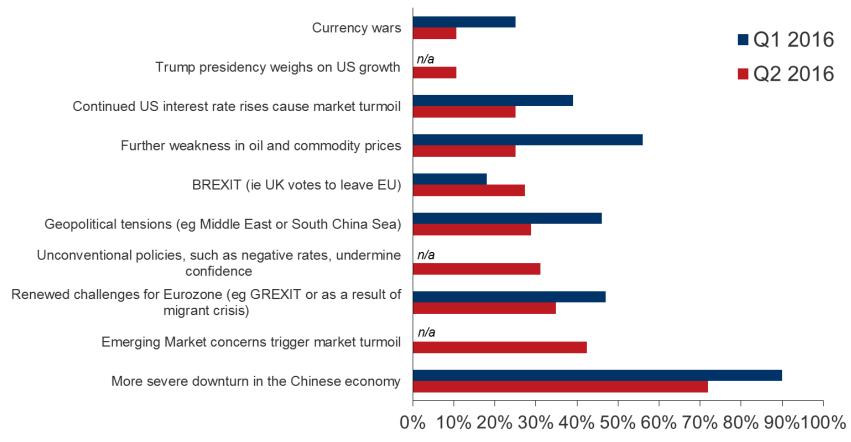


Source: Oxford Economics

China the biggest concern

What do you see as the top three downside global economic risks over the next two years?

Percentage of respondents citing as a top 3 risk



Source: Oxford Economics Global Risk Survey

Trump: trade protectionism

Estimated negative impact from Trumps' proposed trade tariffs				
(% change in levels vs our base case of no new tariffs)				
			Consumer	
<u>Year</u>	<u>GDP</u>	Employment	Spending	Inflation *
2020	-1.6	-0.9	-2.2	3.5

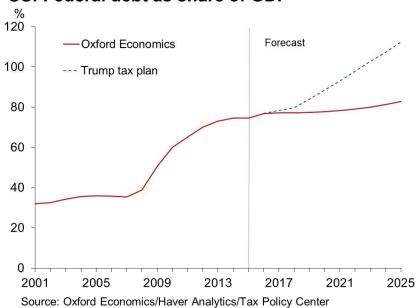
Source: Oxford Economics

 The risk of a global trade war would unfold, which would yield much more negative implications than our scenario illustrates.

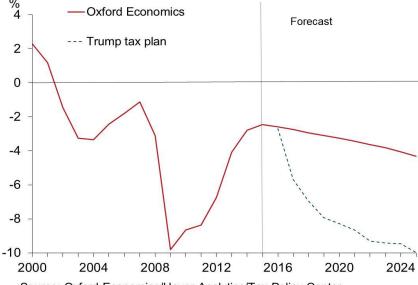
^{*} Inflation rate under scenario (base case 2.3%)

Trump: tax

US: Federal debt as share of GDP



US: Federal deficit as a share of GDP



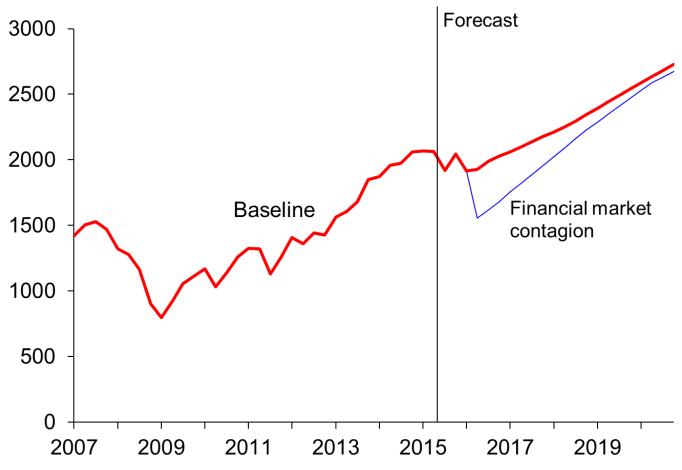
Financial market contagion



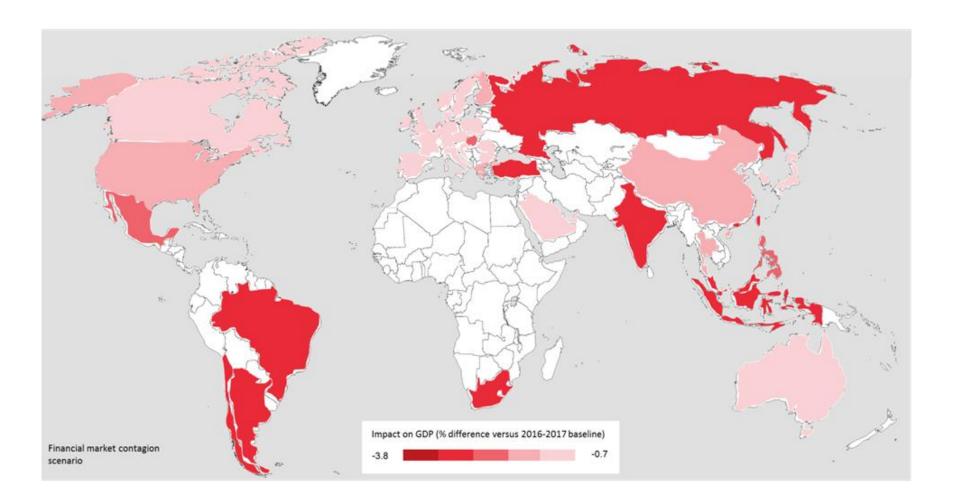
Financial market contagion

US: Equity

S&P 500 composite index, EOP



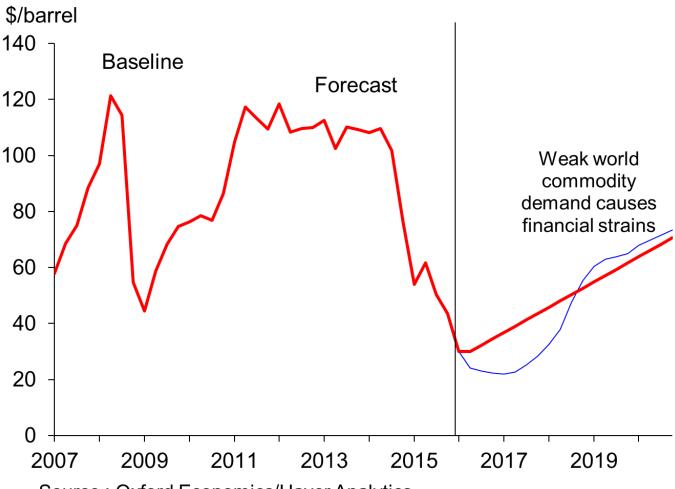
Financial market contagion



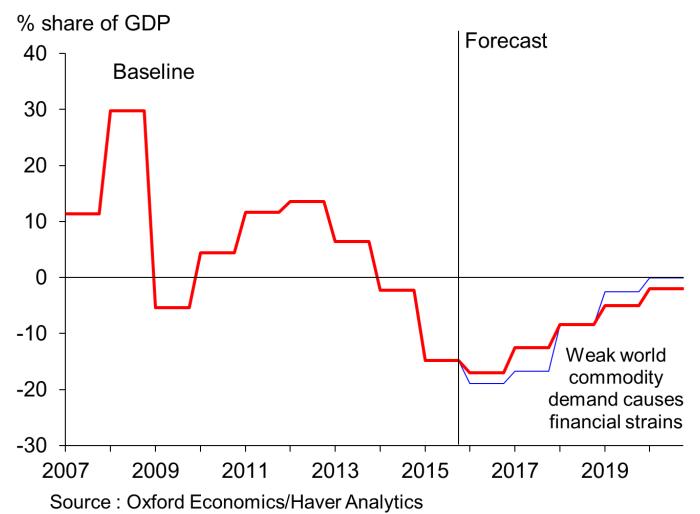
Commodity demand weakness



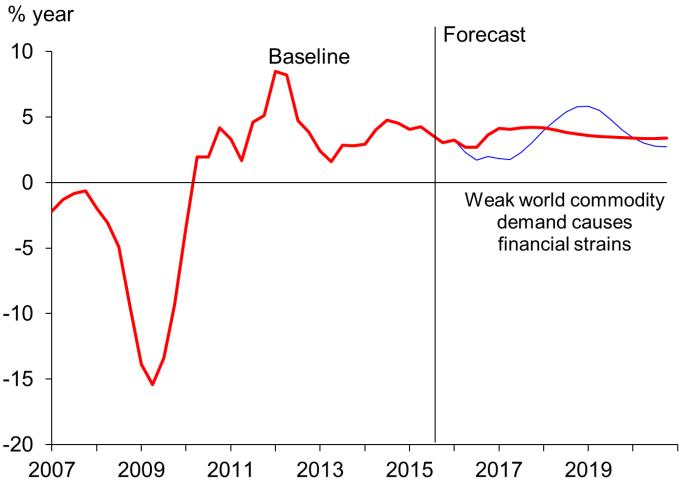
World: Oil price

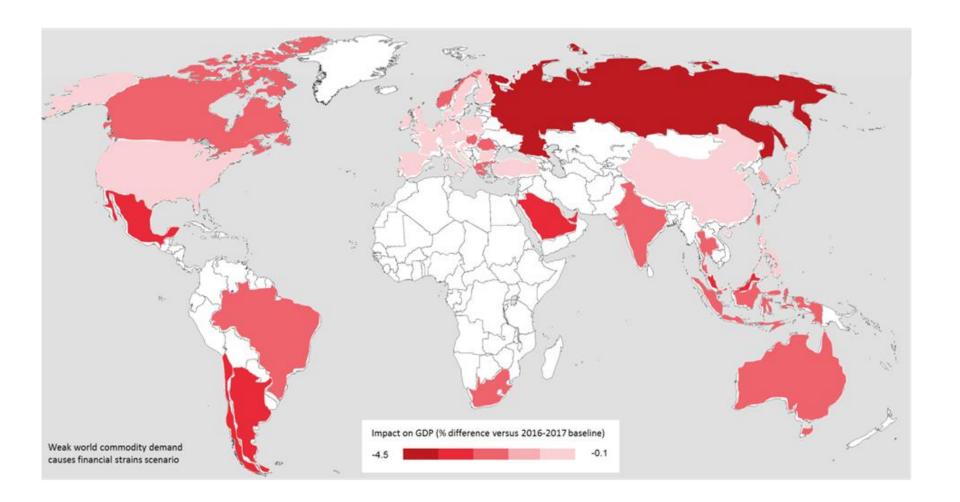


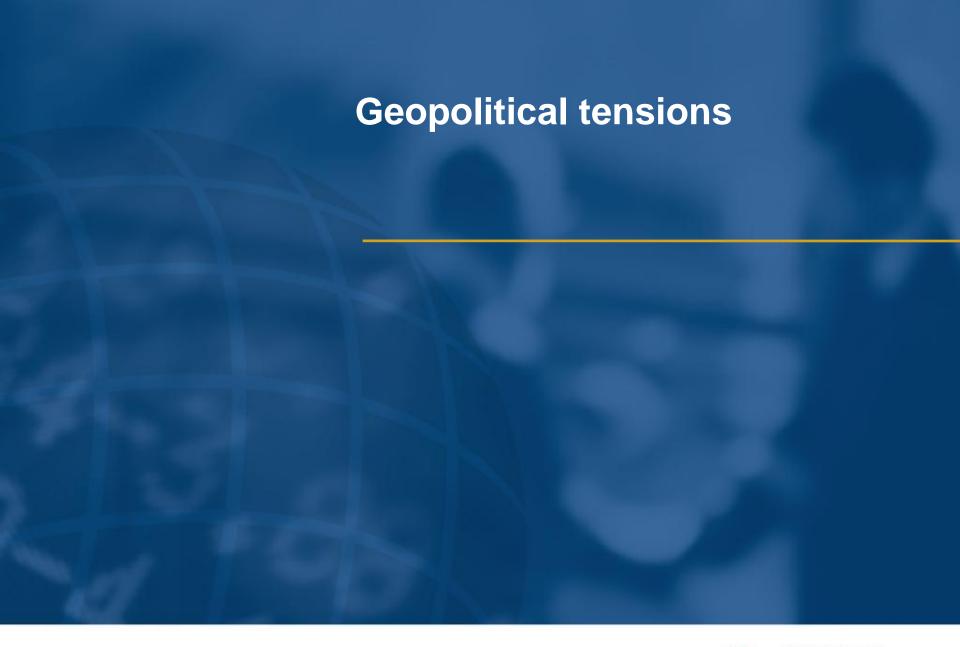
Saudi Arabia: Government balance





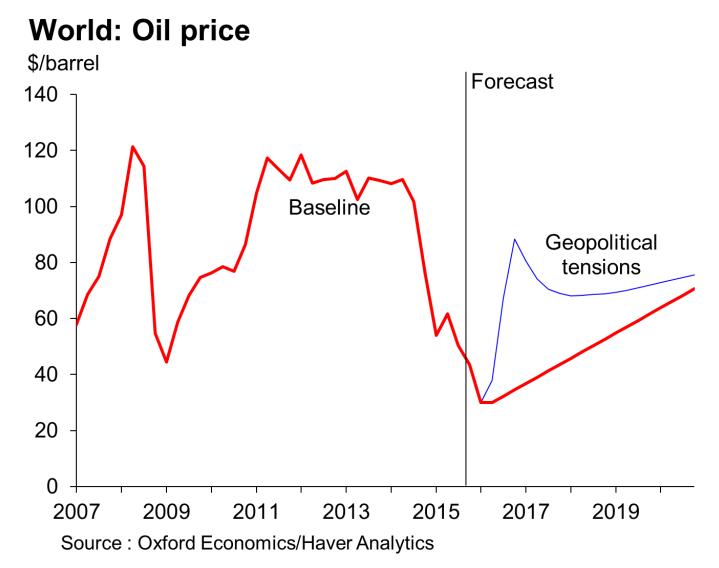




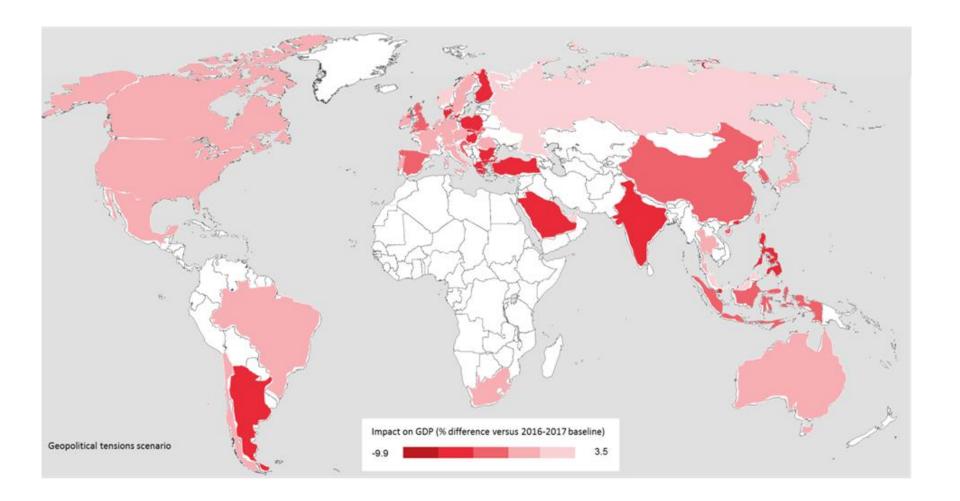


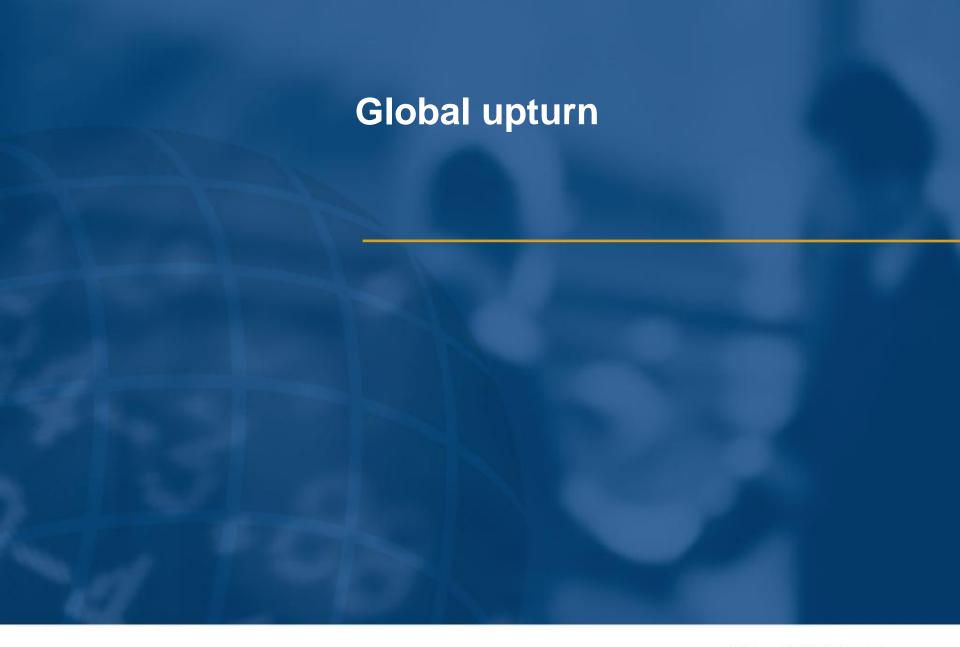


Geopolitical tensions scenario



Geopolitical tensions scenario

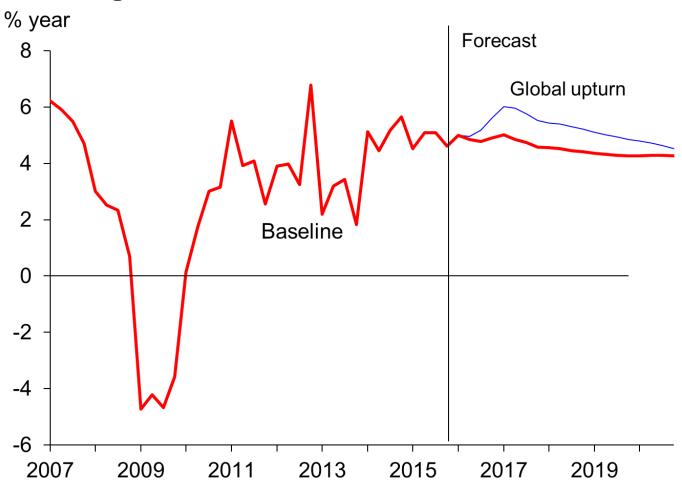






Global upturn

US: Wages and salaries





Global Risk Outlook May 2016



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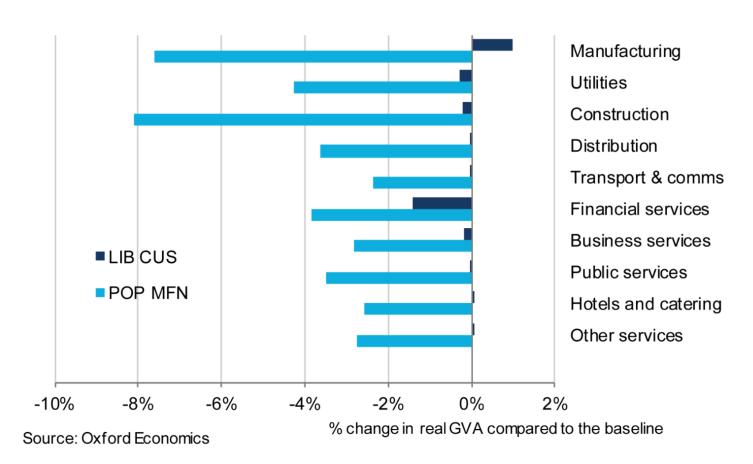
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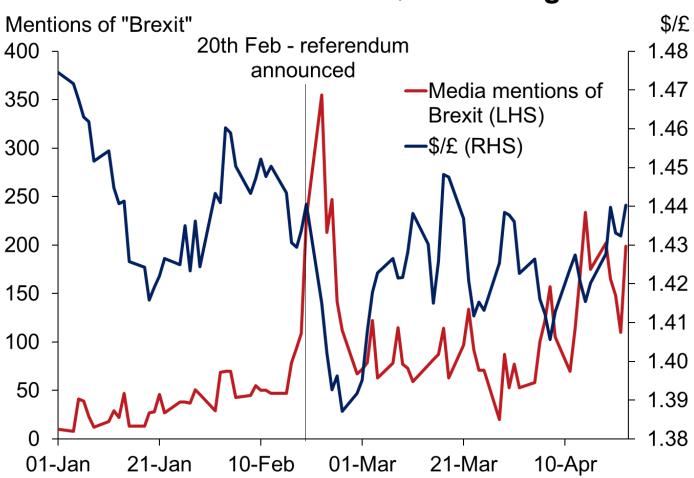
EUROPE: BREXIT economic impacts

Fig: Implications of Brexit for the UK's economic sectors in 2030



Markets reacted badly to the referendum

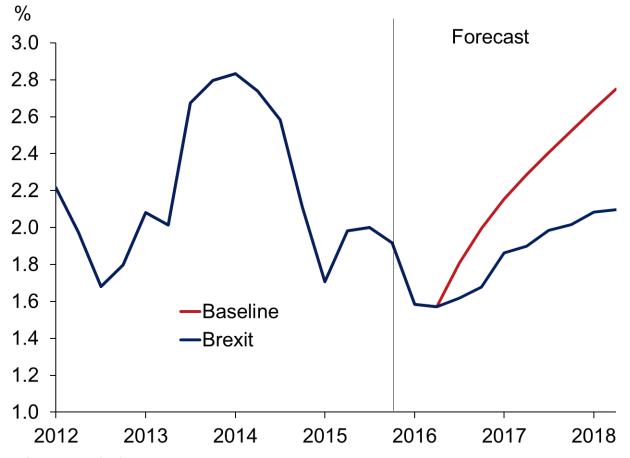
UK: Mentions of "Brexit" & \$/£ exchange rate



Source: Oxford Economics/Bloomberg

We would expect gilt yields to move lower

UK: 10-year government bond yield



Source: Oxford Economics

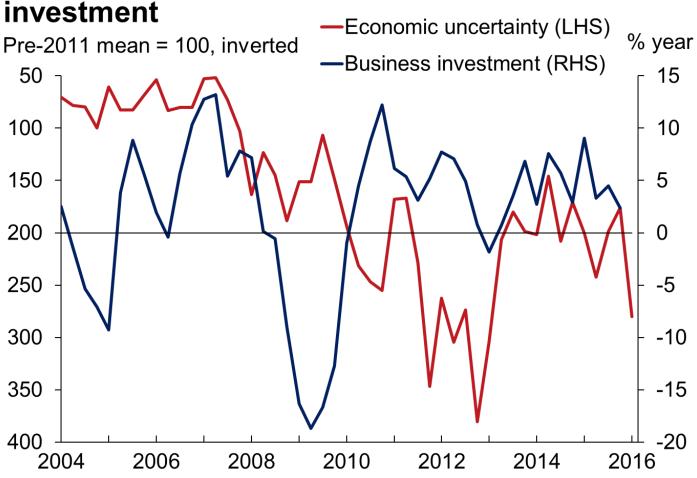
Would gilt yields rise?

- Modest increase in borrowing
- ✓ Ratings agencies likely to put UK on negative watch
- Short-term interest rates lower
- Any risk premia
 would soon fade if
 MPC demonstrated
 it was in control
- UK would remain a safe haven



Uncertainty could dampen activity in short-term

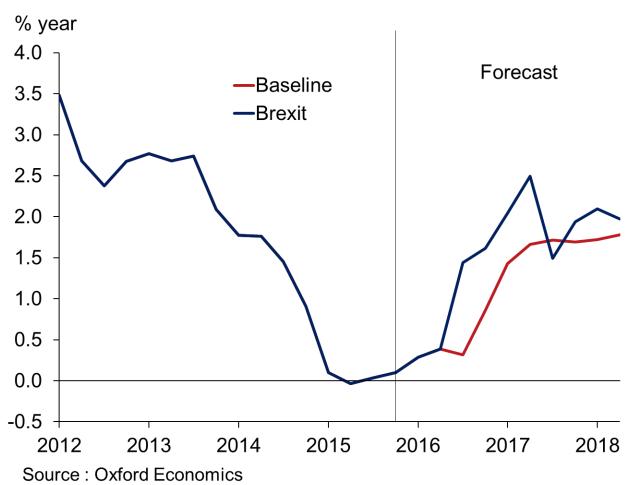
UK: Economic policy uncertainty & business investment



Source : Haver Analytics

A weaker £ would drive up inflation

UK: CPI inflation



...but exporters in price-sensitive sectors would benefit



Brexit would pose a dilemma for policymakers

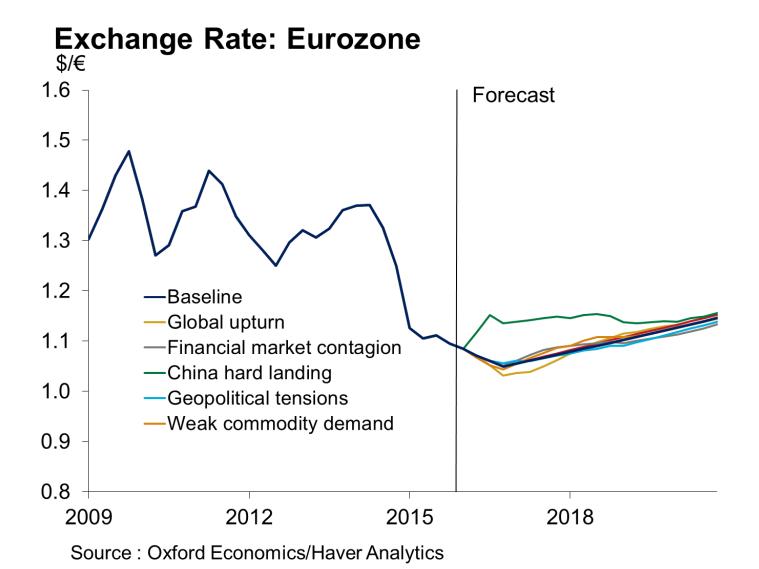
Monetary policy

- Inflation moves above target by early-2017
- But MPC have been happy to look through temporary, sterling-generated, overshoots before
- Recent dovishness suggests rate cut is the most likely response given growth concerns

Fiscal policy

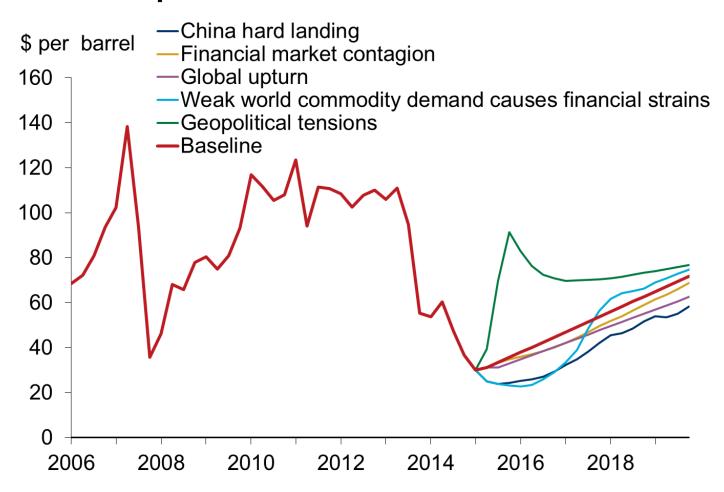
- OBR would judge government in breach of fiscal mandate
 & growth not weak enough to trigger escape clause
- Chancellor likely to plead extenuating circumstances

...with significant implications for financial markets

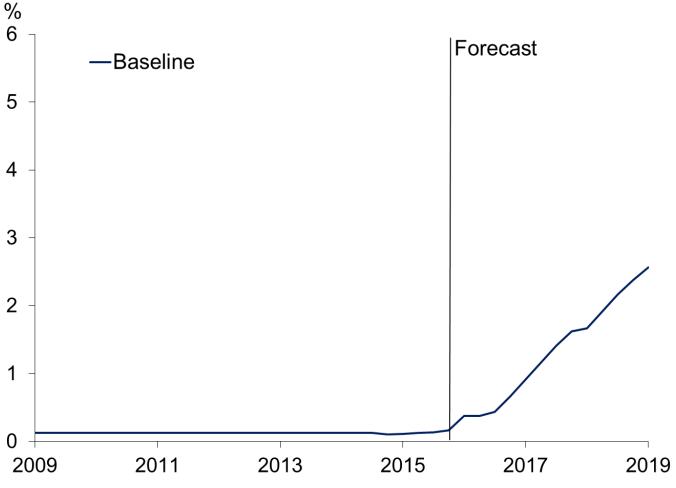


...and significant implications for commodities

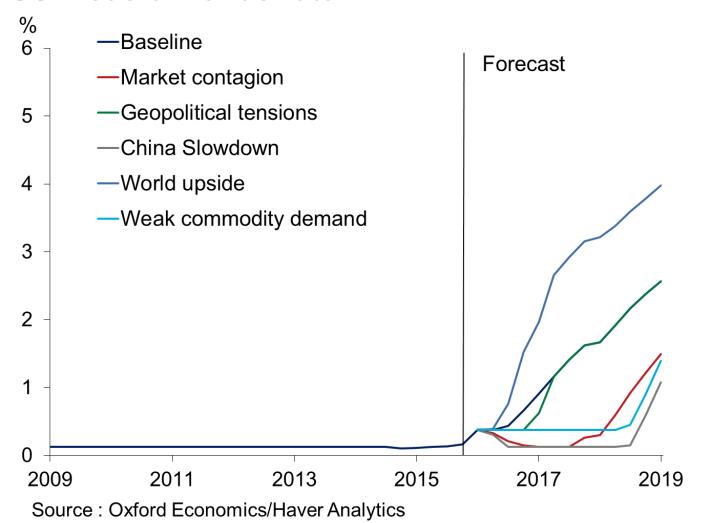
World oil price



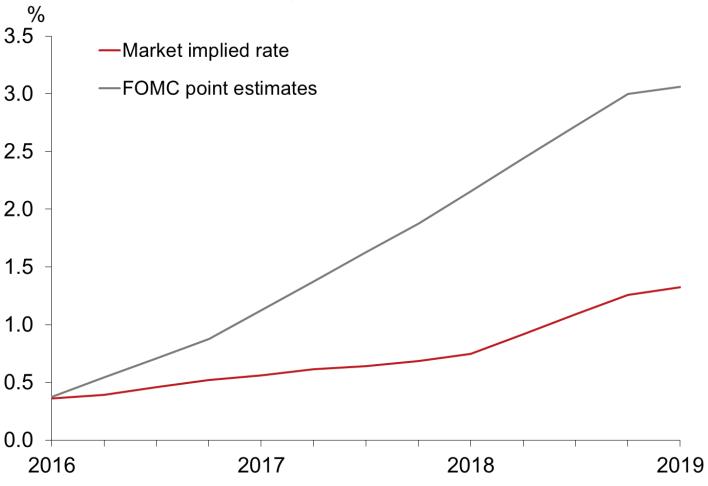
US: Federal Funds rate



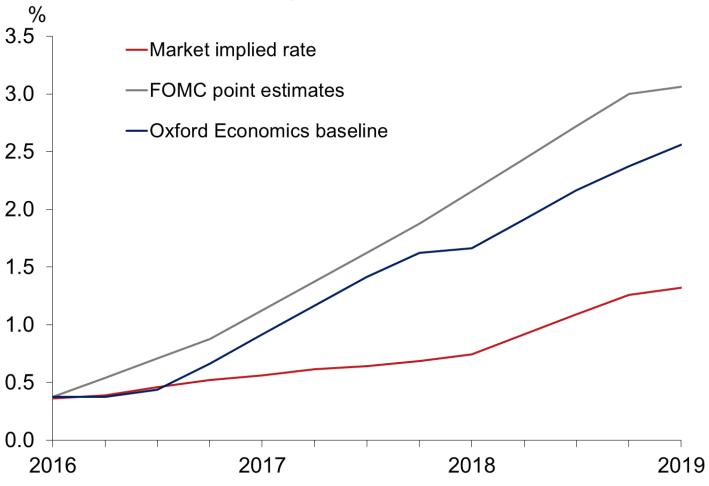
US: Federal Funds rate



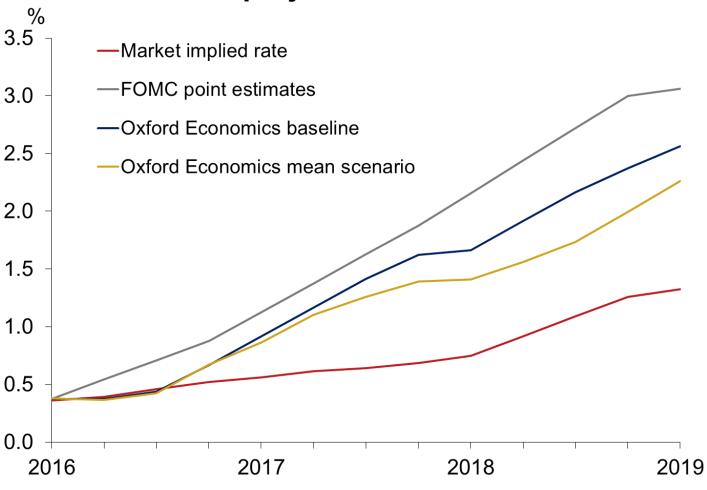
Fed Funds rate projections



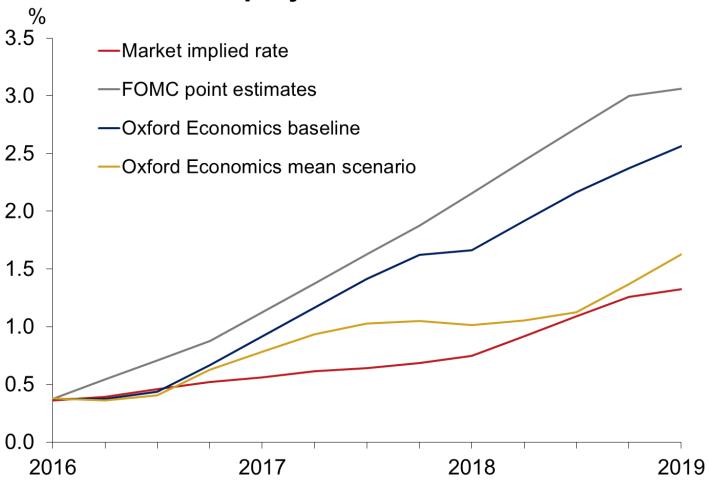
Fed Funds rate projections



Fed Funds rate projections



Fed Funds rate projections



Global economy: Feeble, Fickle & Fragmented

- World GDP growth for 2016: 2.3% slowest pace of global growth since 2009.
 Forecast for 2017 cut further to 2.7%.
- EMs economies expected to remain subpar.
- Strains in financial markets have abated but conditions still tighter conditions than end-2015, and global risks are still skewed to the downside.
- Slowdown in US is proving to be "sticky", but fundamentals remain strong.
- Central banks increased use of unconventional policy tools lends support to near-term growth (Japan, EZ), but there are questions about marginal benefits.

Triple F: Feeble, Fickle and Fragmented

- Key risk: financial market strains:
 - → confidence, wealth and credit shock
 - → China & EMs

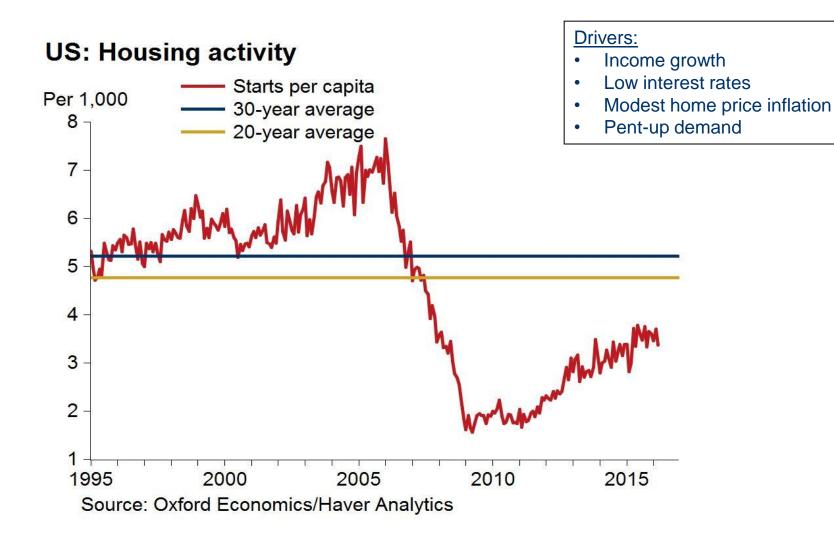


Ammunition?

→ Geopolitical?

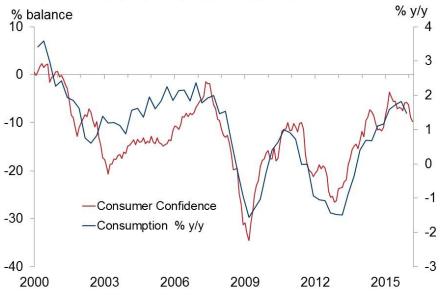


Housing recovery remains very gradual...



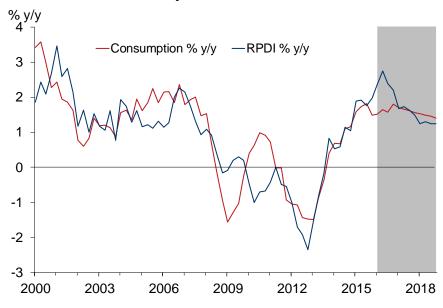
Labor market supporting domestic demand

Eurozone: Consumer confidence



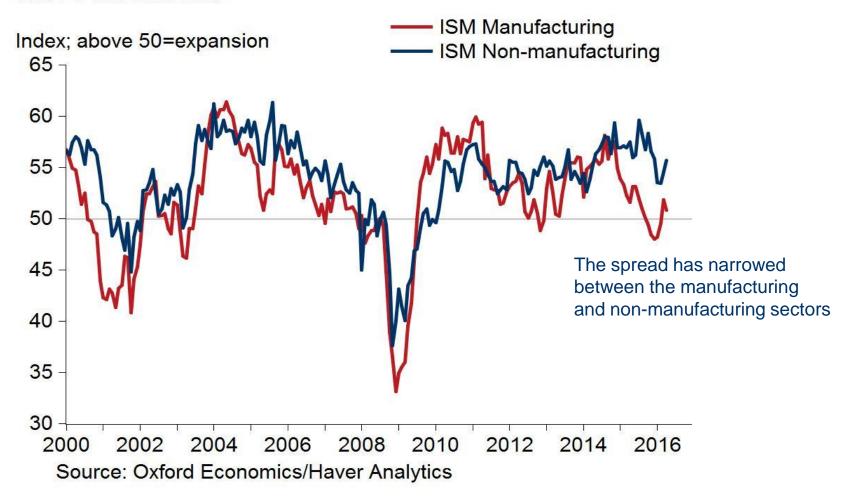
Source: Oxford Economics/Haver Analytics

Eurozone: consumption and real income



ISM manufacturing has rebounded

US: PMI Indices



Today's Global Economic Model

- Oxford's Global Economic Model is the world's leading globally integrated macro model, used by over 140 clients around the world, including finance ministries, leading banks, and blue-chip companies.
- With a 30-year track record, the model provides a rigorous and consistent structure for forecasting, scenario analysis, stress testing and impact analysis.
- The model covers 46 countries in detail, plus the Eurozone, and provides headline forecasts for another 30 countries. Remaining countries are covered in trading blocs.
- Data and forecasts in the model are **updated each month.** The model is available with 5, 10 and 25-year forecast horizons.
- Oxford Economics provides telephone and e-mail support, and runs regular training workshops.

