IHS ECONOMICS

US Economic Outlook

The US Economic Outlook

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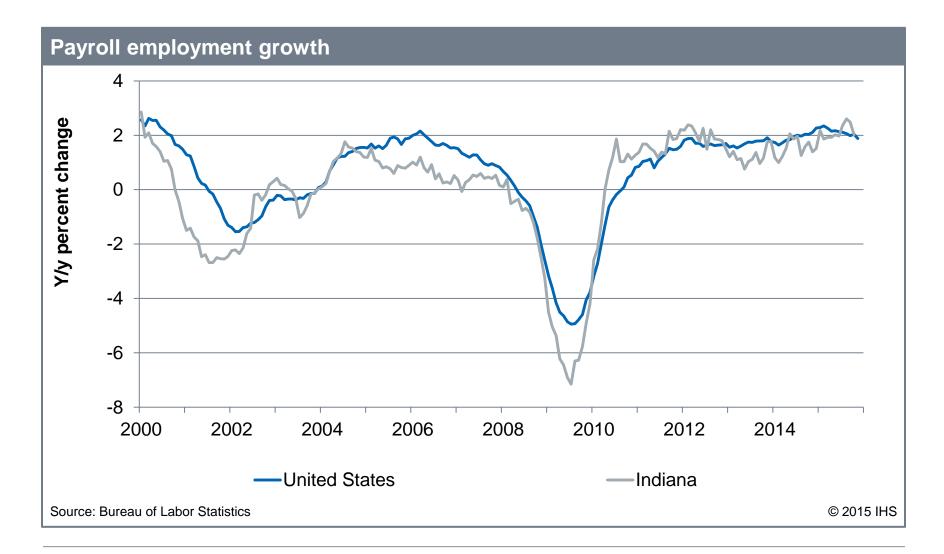
The US economy on a moderate growth path

- Real GDP growth will pick up from 2.5% in 2015 to 2.7% in 2016.
- Consumer spending is supported by solid gains in employment, real disposable income, and housing asset values.
- Housing construction will steadily recover in response to rising employment, easing credit, and a higher household formation rate.
- Business investment in equipment, software, and commercial structures will post robust growth.
- A two-year federal budget agreement and suspension of the debt ceiling boosts near-term spending and reduces policy uncertainty.
- Interest rates will gradually increase from late 2015 through 2018 as monetary accommodation is withdrawn.

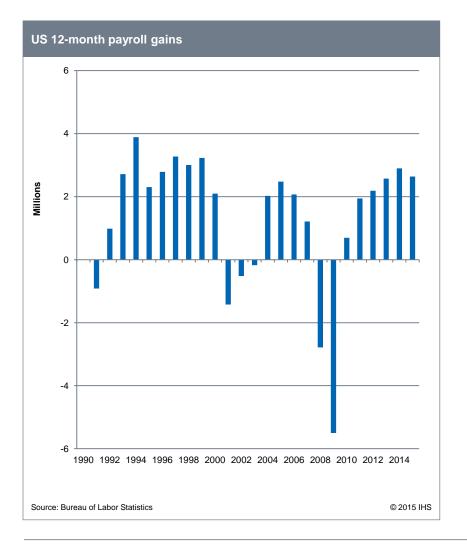
Private employment at an all-time high

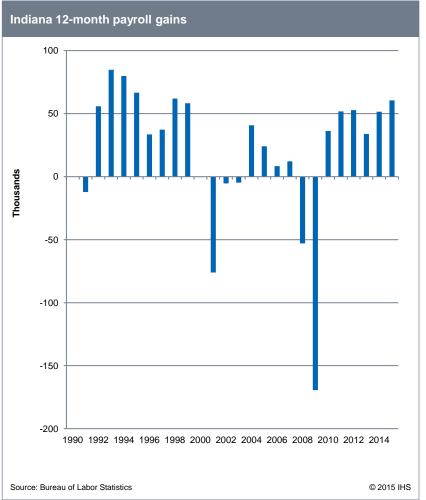


Jobs!

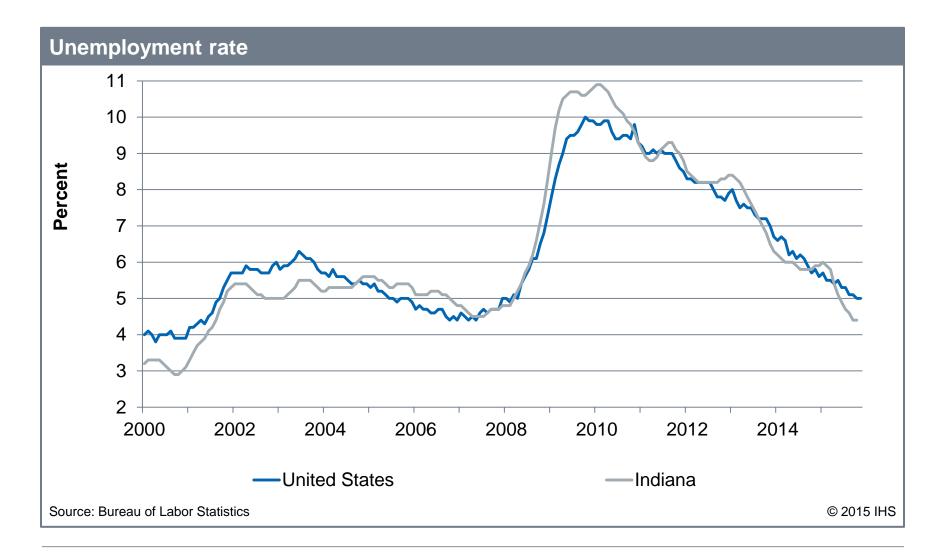


Solid gains in 2015

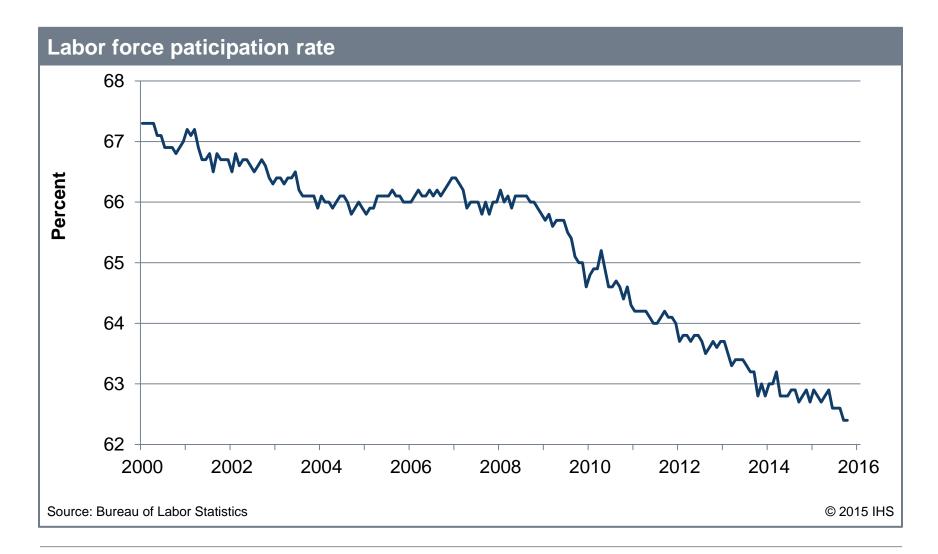




Close to full employment!!!



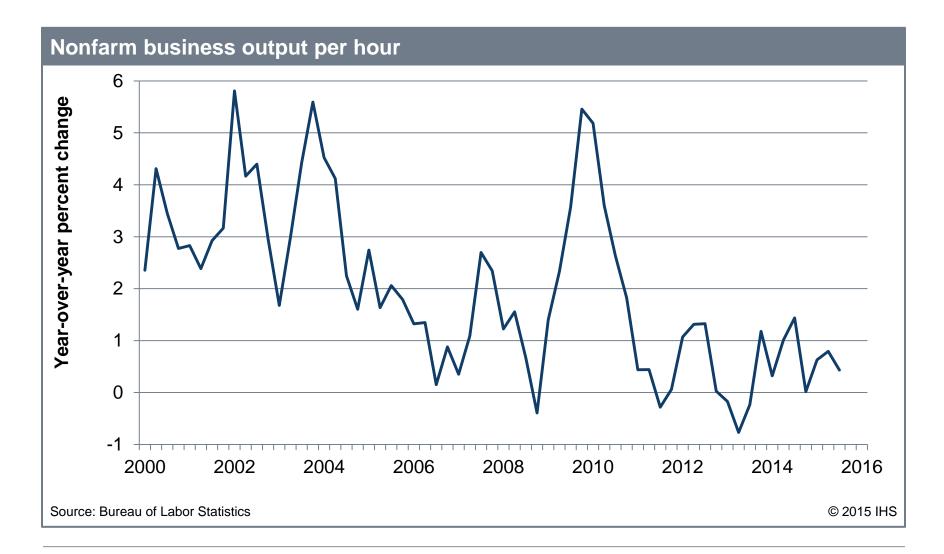
Participation rate: at 1978 levels



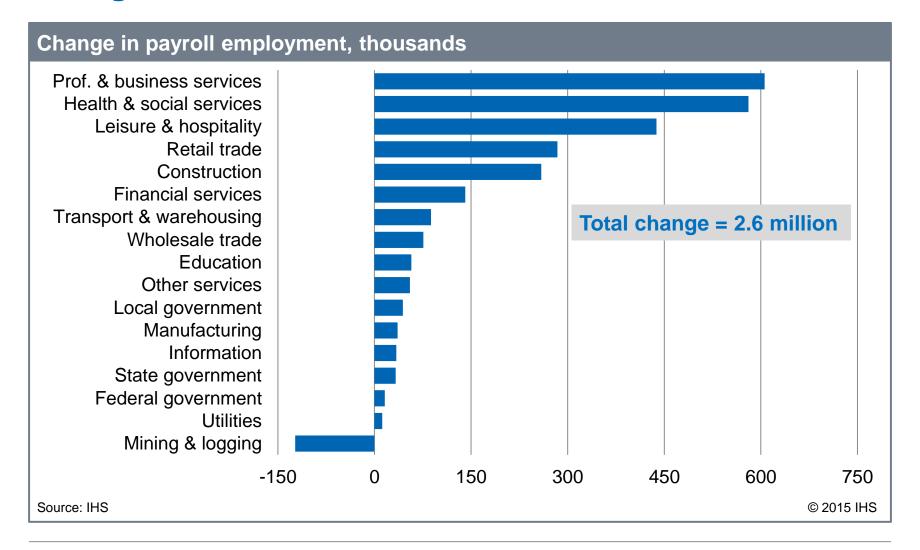
Little Wage inflation



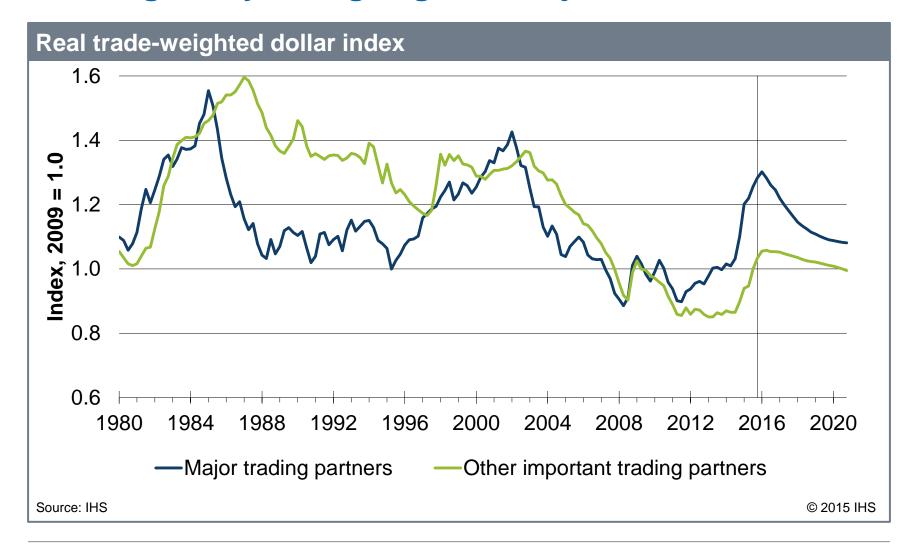
Stagnant productivity growth



Services recorded the largest employment increases during the 12 months ended November 2015



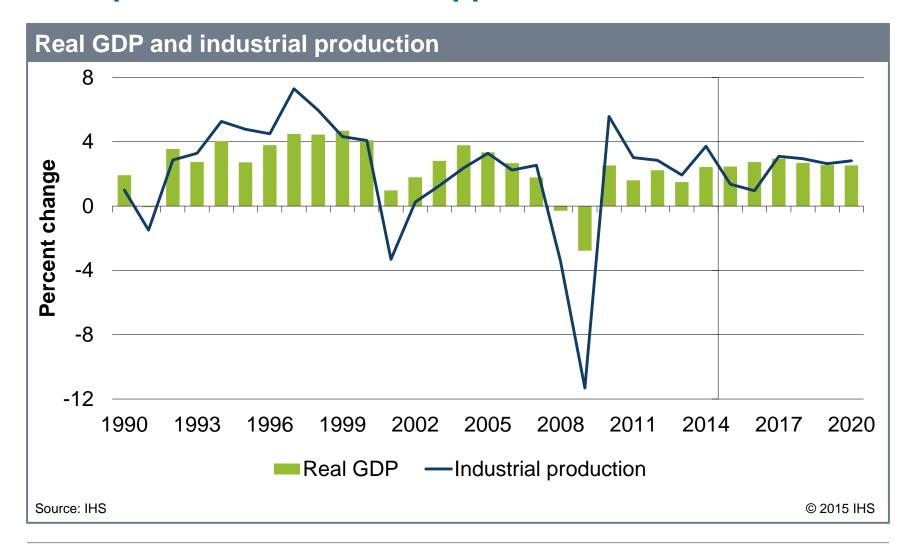
The dollar's real exchange value is appreciating, reaching a 12-year high against major currencies



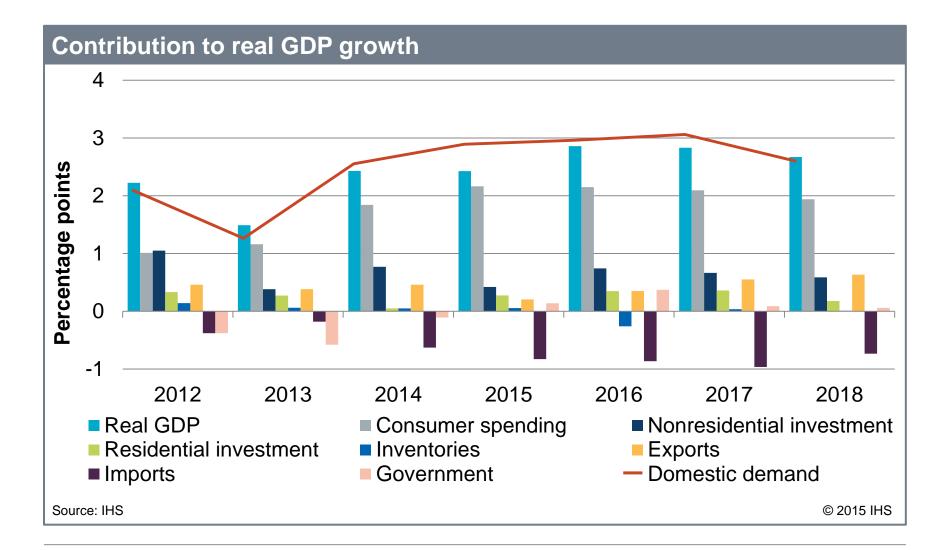
The Institute for Supply Management's indexes signal a stall in manufacturing and moderate growth in services



Industrial production growth has slowed sharply in 2015 in response to the dollar's appreciation



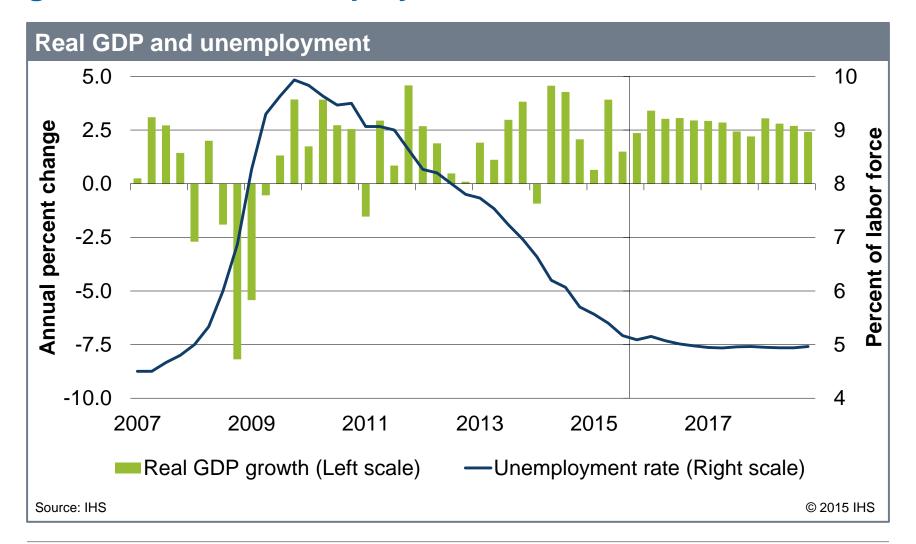
Sources of growth in US real GDP



US economic growth by sector

Real GDP and its components					
Percent change	2014	2015	2016	2017	
Real GDP	2.4	2.5	2.7	3.0	
Consumption	2.7	3.1	3.1	3.2	
Residential investment	1.8	8.4	9.0	10.3	
Business fixed investment	6.2	3.3	5.3	5.1	
Federal government	-2.4	-0.4	3.6	-0.8	
State & local government	0.6	1.5	1.4	1.2	
Exports	3.4	1.0	2.5	5.4	
Imports	3.8	4.8	4.8	7.5	

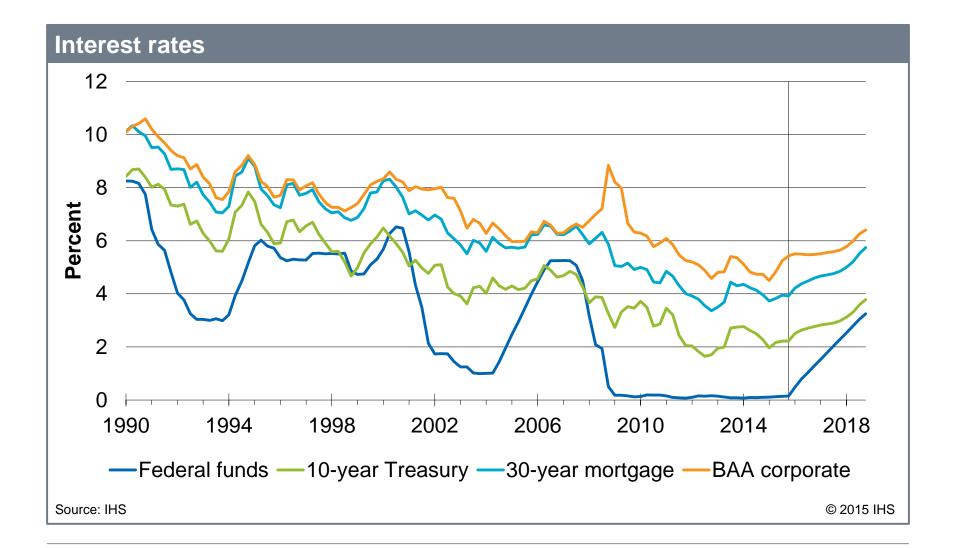
The US economy is near full employment: Real GDP growth and the unemployment rate



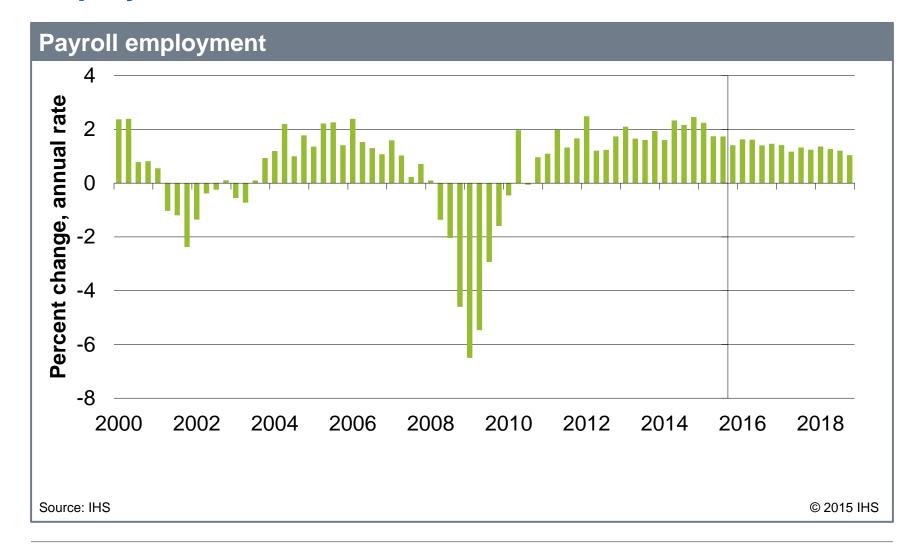
Other key US indicators

Key indicators				
Percent change	2014	2015	2016	2017
Industrial production	3.7	1.4	1.0	3.1
Payroll employment	1.9	2.1	1.6	1.3
Light-vehicle sales (Millions)	16.4	17.4	17.8	18.2
Housing starts (Millions)	1.00	1.10	1.23	1.42
Consumer Price Index	1.6	0.1	1.4	2.8
Core CPI	1.7	1.8	2.0	2.1
Brent crude oil price (USD/barrel)	100	54	54	65
Federal funds rate (%)	0.1	0.1	0.9	1.9
10-year Treasury yield (%)	2.5	2.1	2.7	2.9

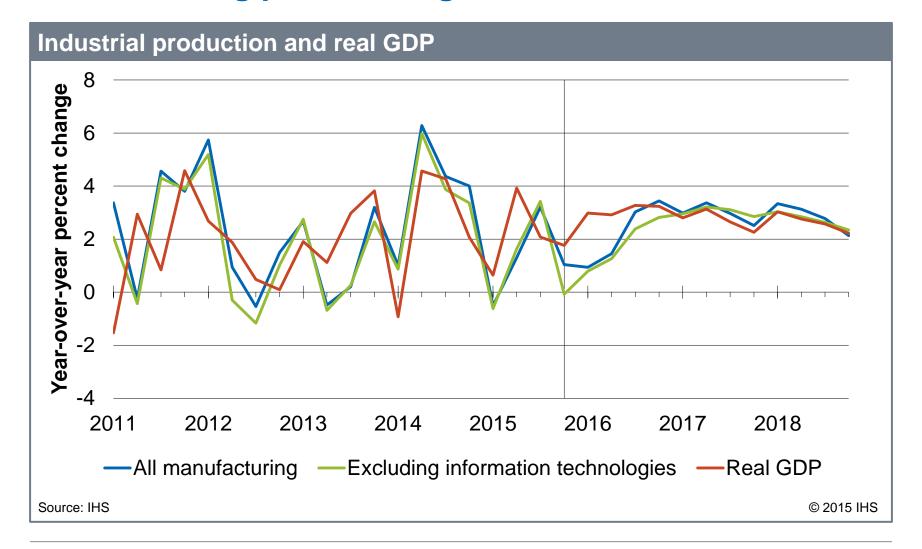
Interest rates will rise from exceptionally low levels



Job growth will slow as the US economy approaches full employment



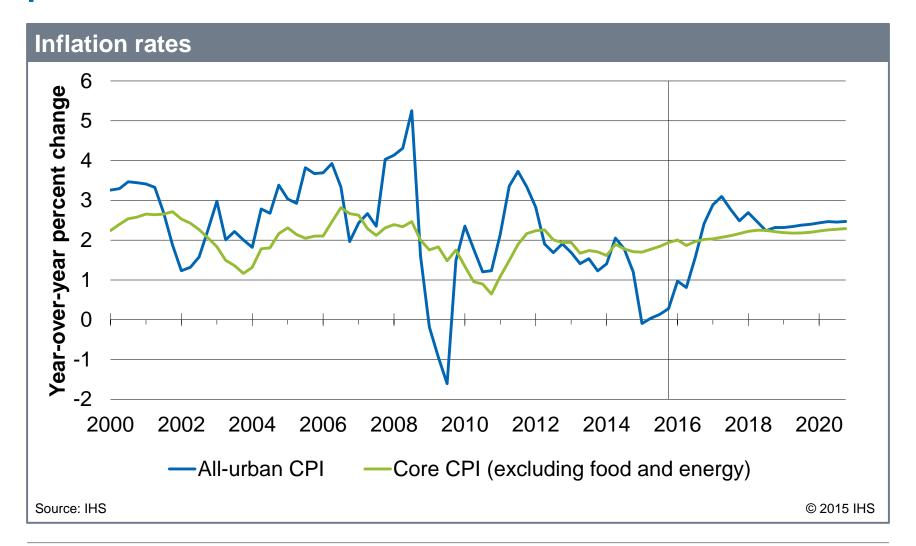
After an inventory correction in late 2015 and early 2016, manufacturing production growth will rebound



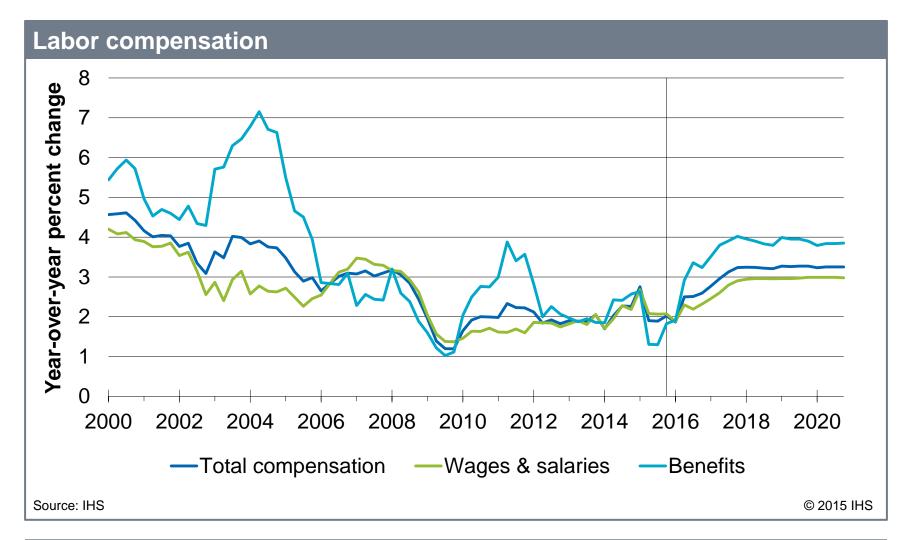
US industrial production growth

Industrial production				
Percent change	2014	2015	2016	2017
All manufacturing	2.8	2.1	2.2	3.2
Motor vehicles & parts	10.4	9.2	6.5	3.6
Computers & electronics	2.9	1.4	3.8	6.6
Electrical equip. & appliances	2.1	3.6	2.5	3.3
Machinery	4.7	-0.3	-1.7	4.7
Textiles	3.4	-0.6	0.0	-1.3
Furniture	6.5	3.6	2.1	3.7
Chemicals	1.8	3.4	2.1	4.2

Consumer price inflation will pick up as commodity prices recover



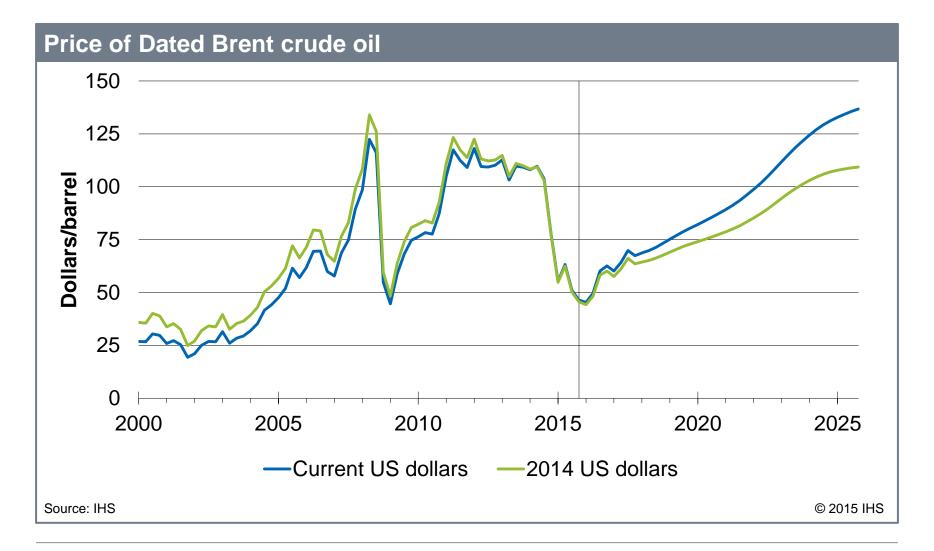
Worker compensation will accelerate as labor markets tighten and the Affordable Care Act is implemented



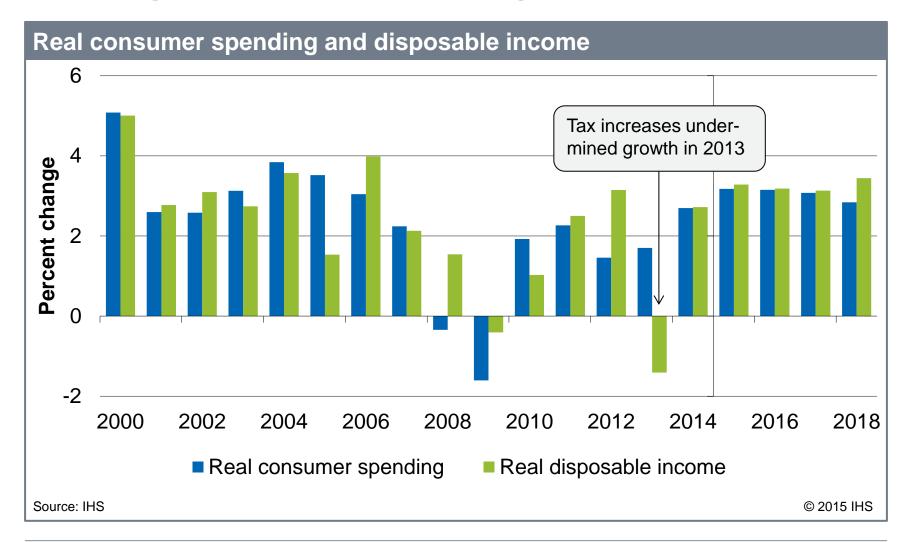
The consumer market environment is improving

Consumer market indicators				
Percent change	2014	2015	2016	2017
Real consumption	2.7	3.1	3.1	3.2
Real disposable income	2.7	3.6	3.1	3.2
Real household net worth	3.9	4.1	3.1	3.1
Payroll employment	1.9	2.1	1.6	1.3
Real wage rate	0.6	1.9	1.0	0.5
Consumption price deflator	1.4	0.3	1.2	2.1
Light-vehicle sales (Millions)	16.4	17.4	17.8	18.2
Single-family home sales (Millions)	4.77	5.17	5.39	5.58

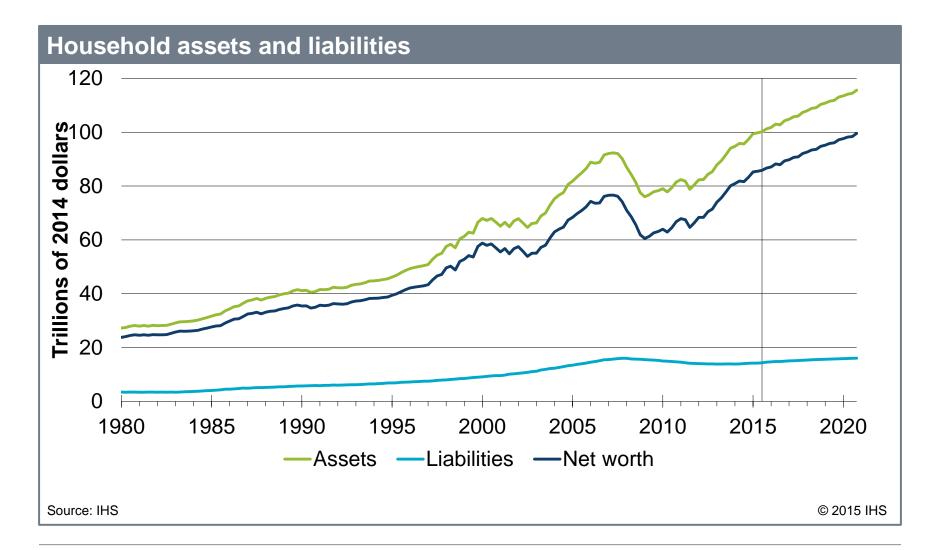
Crude oil prices will gradually recover



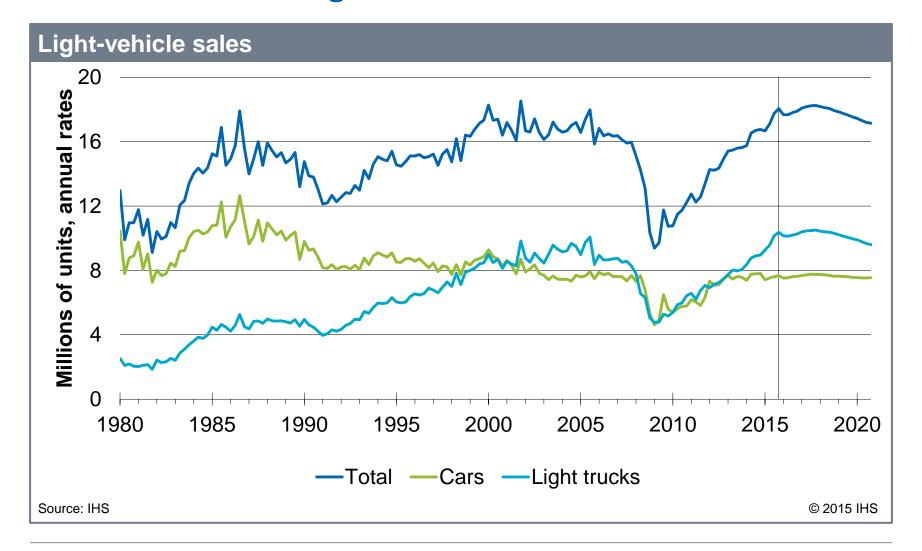
Consumer spending growth depends on disposable income growth, which has strengthened in 2015



Real household net worth has reached a new high



Light-vehicle sales will peak in 2017; low gasoline prices boost demand for light trucks

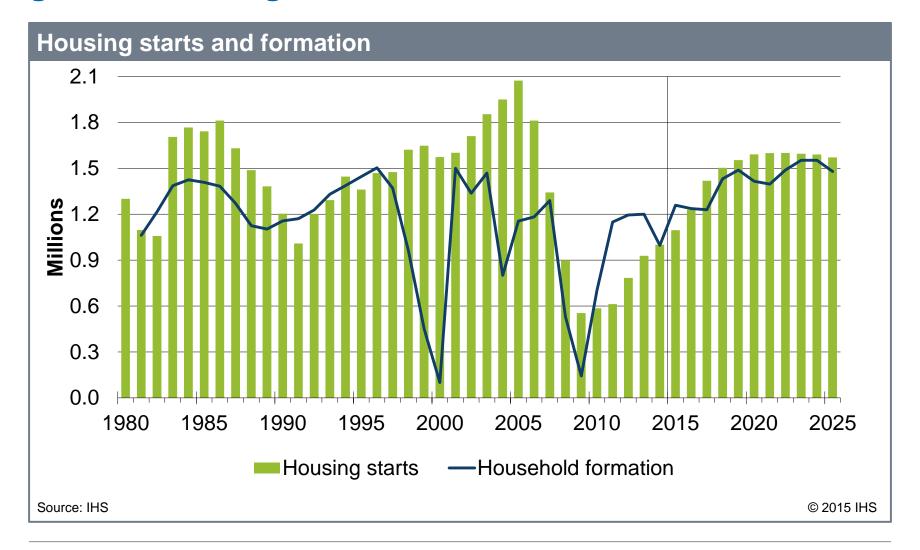


The recovery in housing markets is gaining momentum

- Sustained job growth will support increases in housing demand.
- Credit availability is improving for home buyers and builders.
- Supplies of new and existing homes are tight, driving up prices.
- Multifamily units will account for about one-third of housing starts.
- Young adults have postponed homeownership, resulting in pent-up demand.
- Sales to first-time buyers are rising rapidly.
- Baby boomers are starting to downsize.



A recovery in household formation will support further gains in housing starts



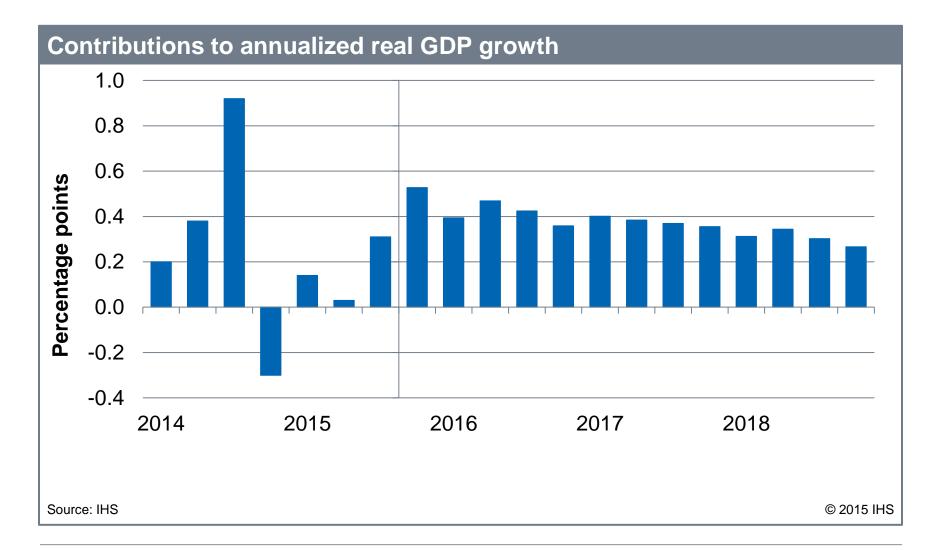
Single-family home sales and construction are not expected to regain 2005 peaks



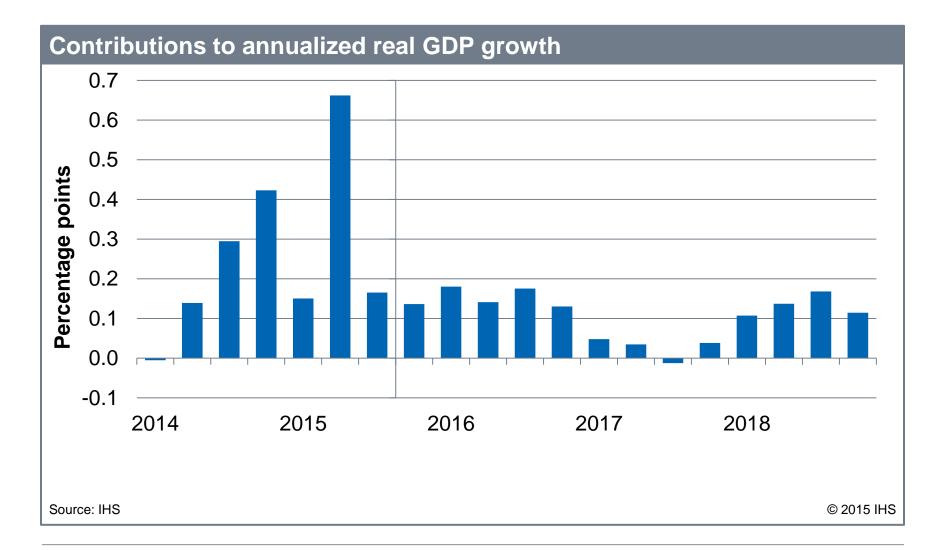
Nonresidential fixed investment has slowed

- Most companies are investing at steady rates
- However, companies exposed to foreign competition (manufacturing), low oil and gas prices, and falling agricultural prices have cut capital spending sharply
 - Agricultural machinery is down 48% year-over-year, due to falling agricultural prices
 - Mining and oilfield machinery equipment is down 48% year-over-year—blame low oil prices
 - Railroad equipment is down 56% year-over-year
 - Special industrial machinery is down 20% year-over-year, thanks to the strong dollar
 - Mine and well structures are down 44% year-over-year

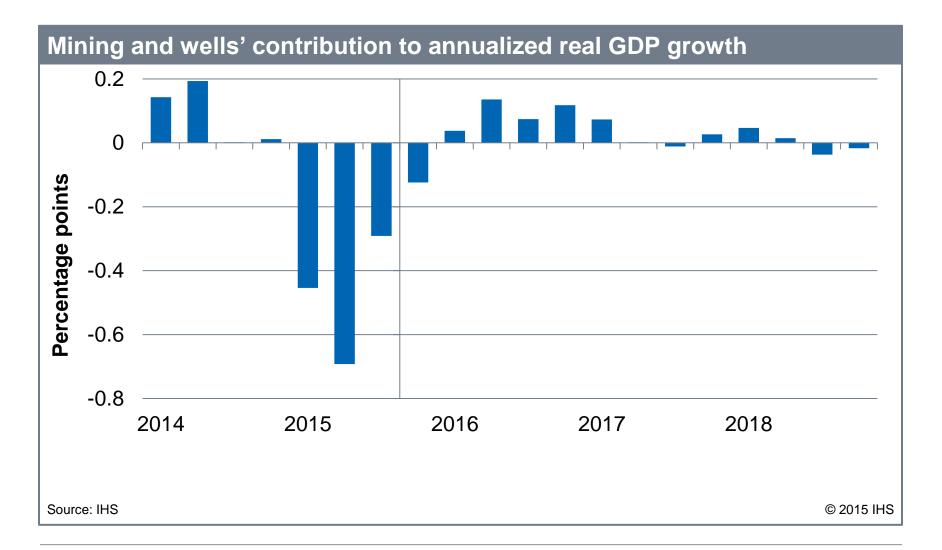
Business equipment investment spending will pick up



Building structures: A small plus for growth



Drilling for oil will edge up as oil prices rise



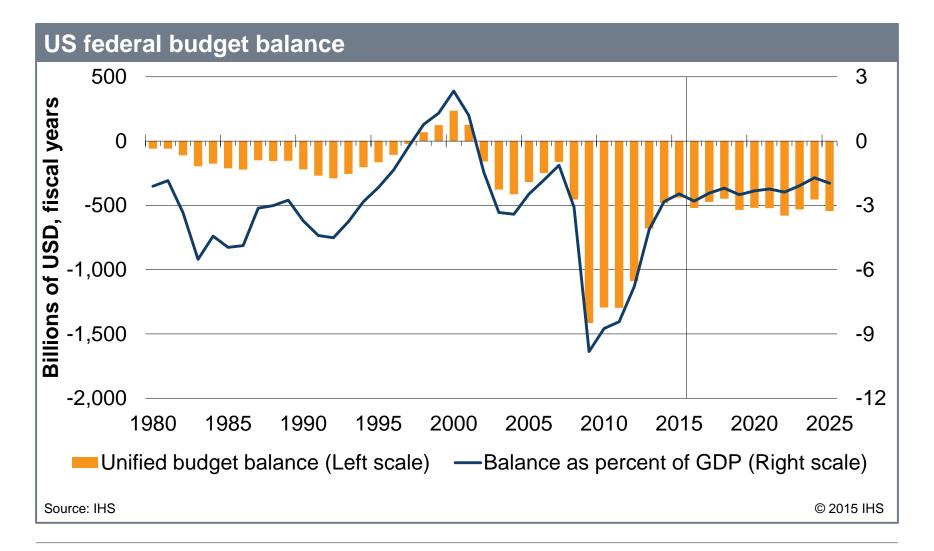
US real construction growth by sector

Real investment in structures	S			
Percent change	2014	2015	2016	2017
Total construction	4.7	3.8	6.6	7.6
Residential	1.7	8.5	9.1	10.4
Commercial	19.3	12.0	9.0	11.2
Manufacturing	11.2	50.1	12.7	-13.4
Mines & wells	6.5	-34.7	-17.1	17.1
Healthcare	-7.6	15.7	6.9	12.4
Public utilities	6.2	-9.9	1.5	-3.8
Highways & streets	2.4	6.3	3.6	-0.2
Public education	-1.7	5.9	5.3	2.1

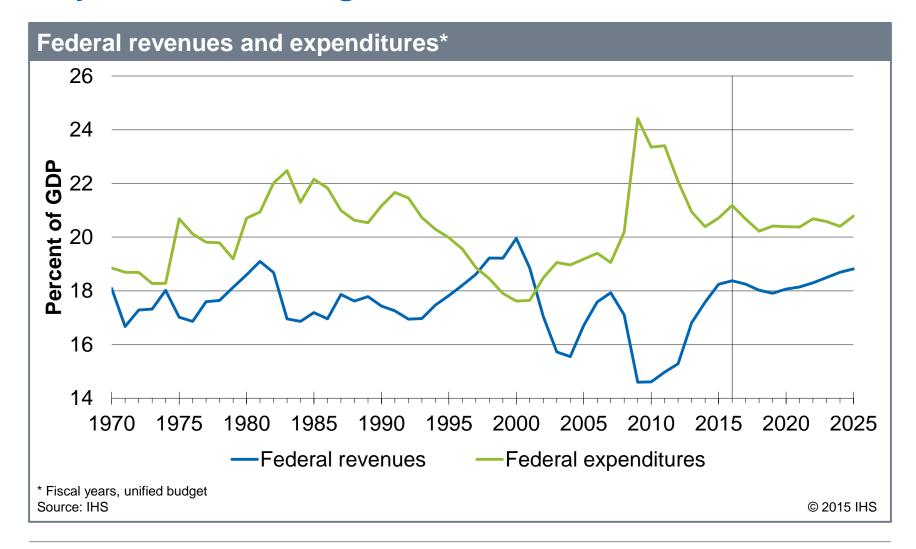
The Bipartisan Budget Act of 2015 brings some clarity to federal fiscal policy

- The federal debt ceiling is suspended through March 2017.
- The federal government is funded through September 2017.
 - Budget authority is increased by \$50 billion in fiscal 2016 and \$30 billion in fiscal 2017 from previous budget caps.
 - These increments are divided equally between defense and nondefense discretionary spending.
 - An omnibus appropriations bill must still be enacted by 11 December.
 - Consistent with Congressional Budget Office estimates, we assume that outlays are increased by \$30 billion in both 2016 and 2017, and the remainder is spread through 2021.
- The agreement is expected to raise the level of real GDP by 0.2% in 2016 and 0.1% in 2017.

The US federal budget will remain in deficit



The gap between federal expenditures and revenues will stay in the 2–3% range of GDP

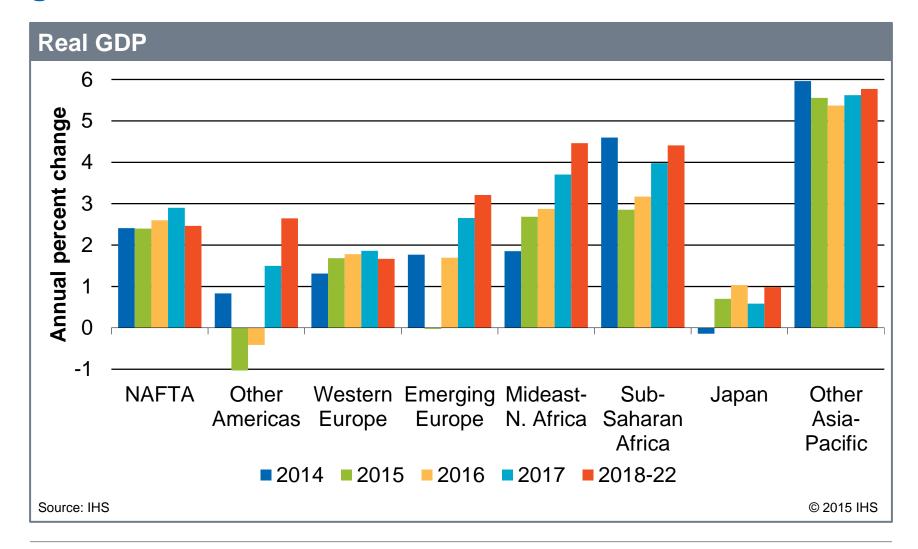


A gradual acceleration in the global economy

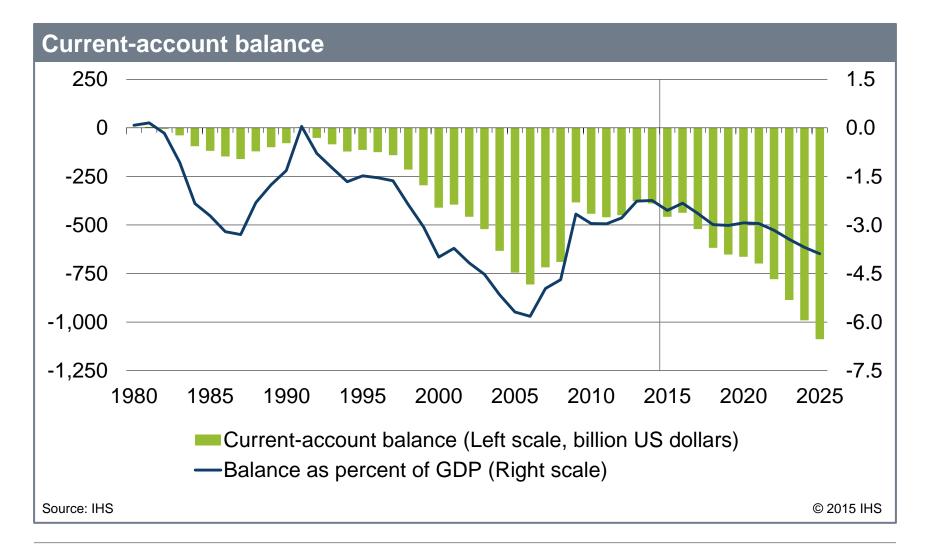
- The world economy remains in low gear; only a modest pickup in growth is expected in 2016.
- Eurozone growth will improve slightly, aided by monetary stimulus, currency depreciation, and pent-up demand.
- China's economic growth will slow further in 2016 because of imbalances in credit, housing, and industrial markets.
- The plunge in materials prices is restraining growth in the commodityexporting countries of the Americas, Africa, and Asia-Pacific.
- Prospects for emerging markets depend on structural reforms that raise productivity and allocate capital more efficiently.



Asia-Pacific (excluding Japan) will achieve the fastest growth in real GDP



The US current account will remain in deficit



Bottom line for the US economy

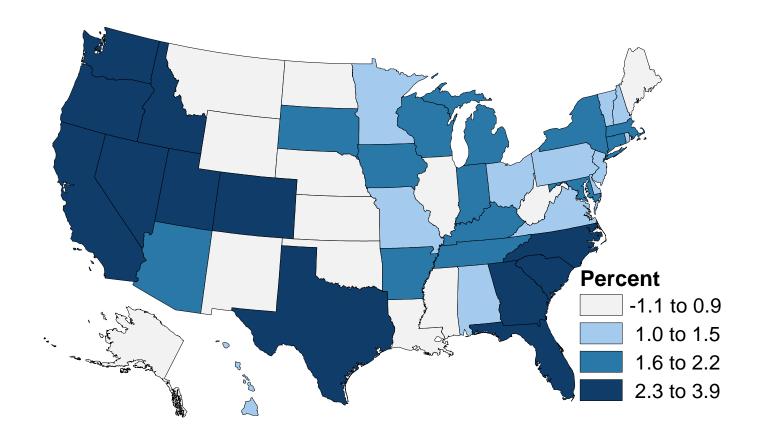
- Consumer spending will be supported by gains in employment, real disposable income, and household net worth.
- Homebuilding will rise as credit availability improves and demand from young adults strengthens.
- Foreign trade will be a drag on US economic growth through 2018, due to a strong dollar and sluggish growth in major export markets.
- Real business fixed investment will post solid gains, led by information technology equipment and commercial structures.
- The Federal Reserve will likely begin to raise the federal funds rate in December; it will reach an equilibrium at 3.25% in late 2018.
- Core inflation will edge upward to the central bank's 2% target.
- Forecast risks are weighted to the downside.

Regional and Indiana Economic Outlook

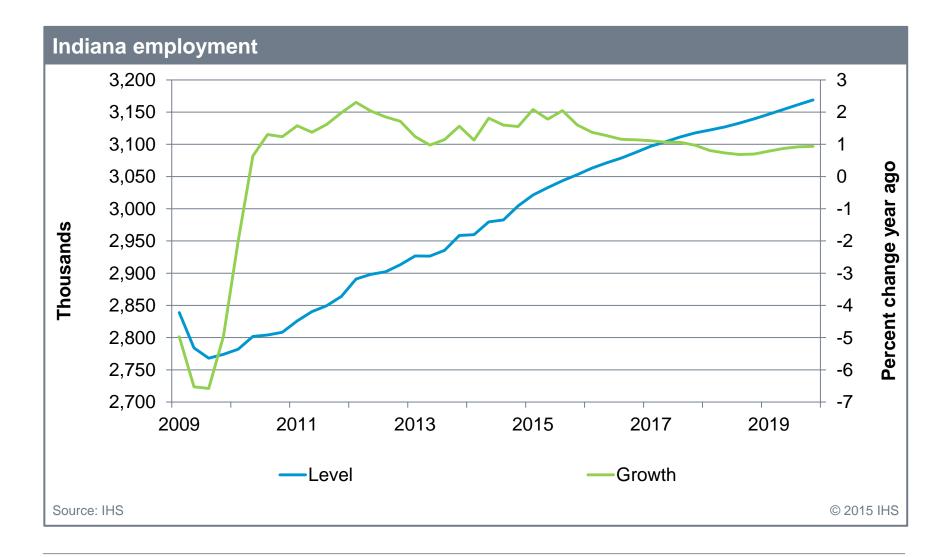
U.S. Regional Outlook

- States in the West and Sunbelt will continue to growth fastest.
 - These states saw the worst housing busts.
 - Population growth fastest in these regions.
 - People go where the jobs are, but jobs also go where the people are.
 - Weaker service-sector growth in states with low population growth.
- Manufacturing gains, especially from the auto sector supply chain, have been a key to the improving Midwestern economy.
- Drop in oil prices, combined with weakness in natural gas and coal, has slammed the brakes on natural resource and mining sector.
 - Demand for steel pipe, machinery, transportation, construction cut.

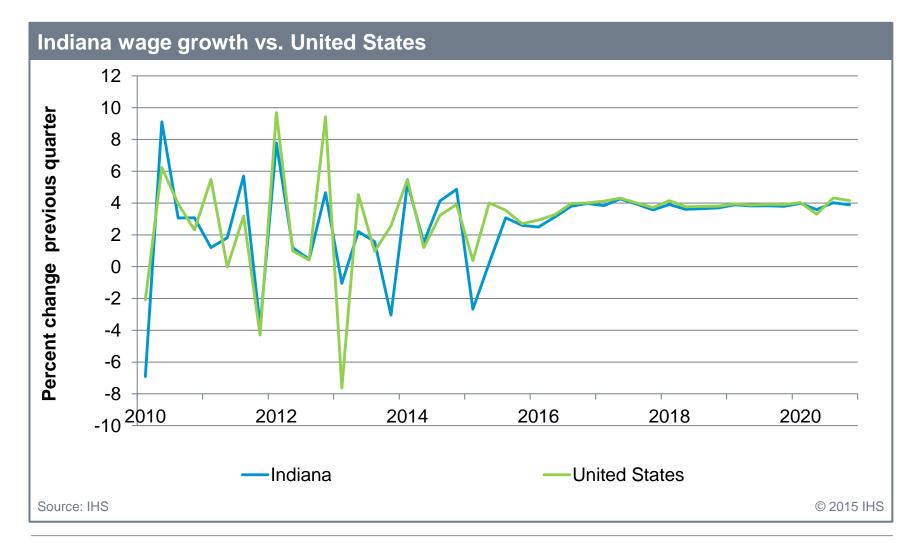
2015 jobs growth concentrated in West, Southeast Resource-heavy states in a struggle; Indiana ranks 13th



Employment growth to slow in 2016 and beyond



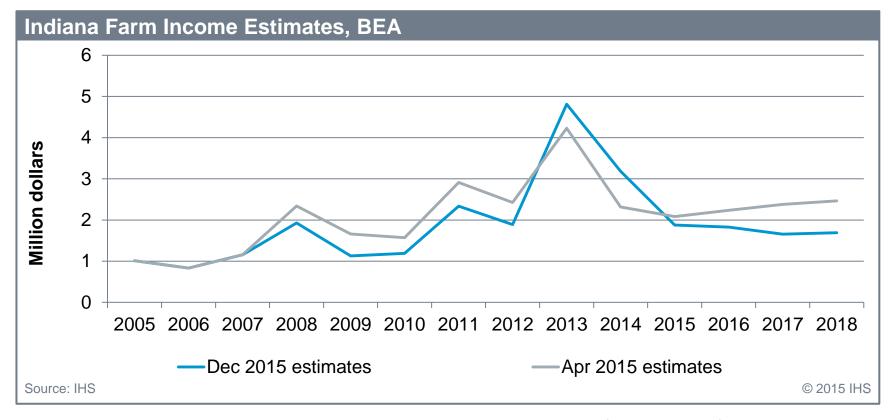
Indiana wage growth lagged nation in early 2015 Weighted annual average wage, all sectors



Indiana housing starts will increase in 2016 and beyond Auto sales growth to slow as recovery matures

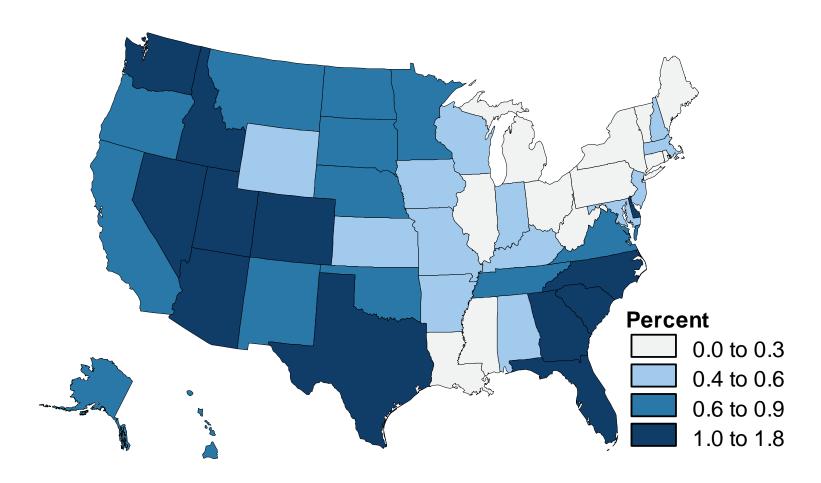


Hoosier farm income varies along with the nation's Can be hard to know where we've been, let alone where we're going



- Farm income is a small proportion of total personal income (0.5% to 2%), but volatile
 - Can be up to 20% of proprietor income, usually much less
 - · Subject to large revisions of historic estimates
- Impact on household wealth can be greater than impact on income measures

Population continues to move south, west; Northeast getting left out in the cold



Compound annual average growth, 2015 to 2020

Indiana Forecast Summary

Key indicators				
Percent change	2014	2015	2016	2017
Total employment	1.5	2.2	1.5	1.2
Unemployment rate (%)	5.9	5.0	4.5	4.5
Real personal Income	2.3	3.6	2.9	2.8
Real gross state product	0.4	1.5	2.5	2.8
Personal consumption				
expenditures	3.1	2.9	4.1	5.4
Housing starts (Thousands)	17.5	15.9	19.8	23.8
Share of multi-family (%)	28.5	22.8	22.6	18.8

IHS Forecast Track Record

	U.S. GDP		Indiana Employment		Indiana Income				
	Percent change								
Forecast Date	2014	2015	2014	2015	2014	2015			
Dec 2013	2.4	3.2	1.6	1.7	4.4	4.6			
Dec 2014	2.2	2.7	1.8	1.7	2.1	4.0			
Apr 2015	2.4	2.8	1.5	1.9	2.5	4.0			
Dec 2015	2.4	2.5	1.5	2.2	3.8	3.8			

- Income estimate for 2015 and beyond lowered slightly by lower expected wages
 - Largely due to revisions in BLS data in early 2015
 - Transportation, manufacturing, construction most affected

Bottom line for the Indiana economy

- Near-term economic growth will continue to be favorable.
- Manufacturing, especially related to the transportation sector, has spurred Indiana's economic recovery over the past five years.
 - Manufacturing provides 17% of state's payroll jobs, first in the nation.
 - National average is 9%.
 - Sales of cars and light trucks a huge factor; demand from oil and gas industry for steel pipe, machinery, etc., has also helped.
 - Domestic demand maturing, strong dollar reduces competitiveness.
- Expanding service employment is key to long-run economic growth.
 - High-tech area is where value is being added.
 - Requires ongoing investment in education, R&D, infrastructure.
- Long-term slow population growth a potential drag on economy.

Thank you!

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