Indiana Economic Forecast Update

By Tom Jackson, Principal Economist

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With the US economy operating near full capacity, growth will eventually slow

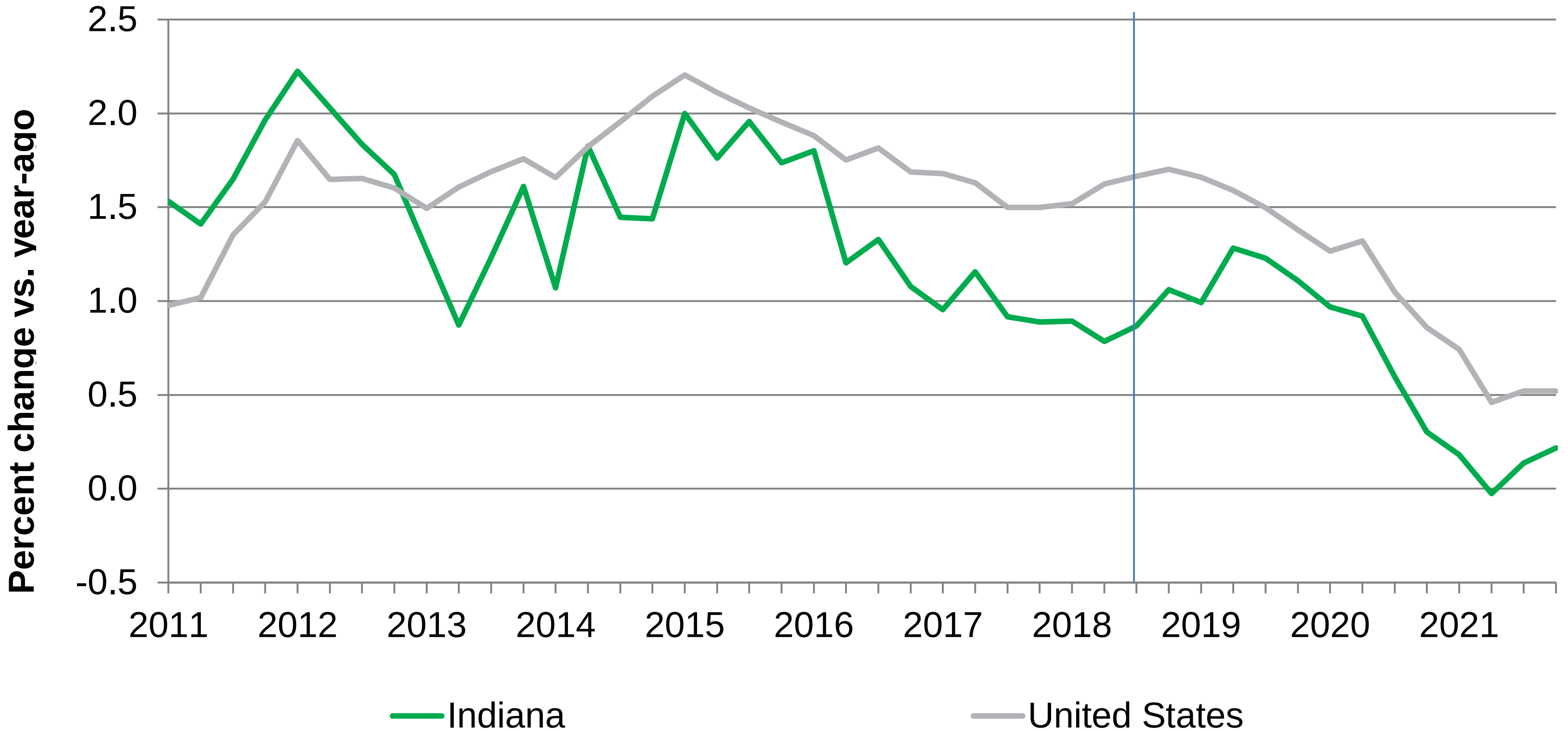
- Boosted by tax cuts and additional federal spending, real GDP will expand 2.9% in 2018 and 2.7% in 2019.
- Tariffs imposed to date will have a small adverse impact on GDP.
- Consumer spending will be supported by solid growth in employment, real disposable incomes, and asset values.
- Business fixed investment will benefit from sustained growth in global markets, along with an improving tax and regulatory environment.
- The Fed will gradually raise the federal funds rate to a high near 3.50% in 2020; it later retreats to a long-run equilibrium of 2.75%.
- Real GDP growth will slow to 2.1% in 2020 and 1.6% in 2021 owing to labor-supply constraints, tightening policies, and rising interest rates.

Indiana economic overview

- Indiana employment growth has leveled off at around 1%, while U.S. growth has picked up in 2018
  - > We don't believe this reflects anything "wrong" with the state economy, and expect state to move closer to U.S. next year
  - > Overall manufacturing job growth fell below U.S. average for first time in years – didn't come from transportation sector; mostly in non-durables
- Job growth will slow to a crawl by 2021 in many states, as their economies reach literal "full employment"
  - > States in the Northeast, Mid-Atlantic, Midwest most prone to this due to lower population growth
- Wage growth remains muted, but will pick up by 2020
- Housing growth solid, not spectacular
  - > Rising interest rates, labor shortage, lack of buildable lots, high student loan debt cited as drags

Indiana's job market weakened in 2018; service sector growing more slowly than national average

Indiana employment growth vs. United States



Source: IHS Markit

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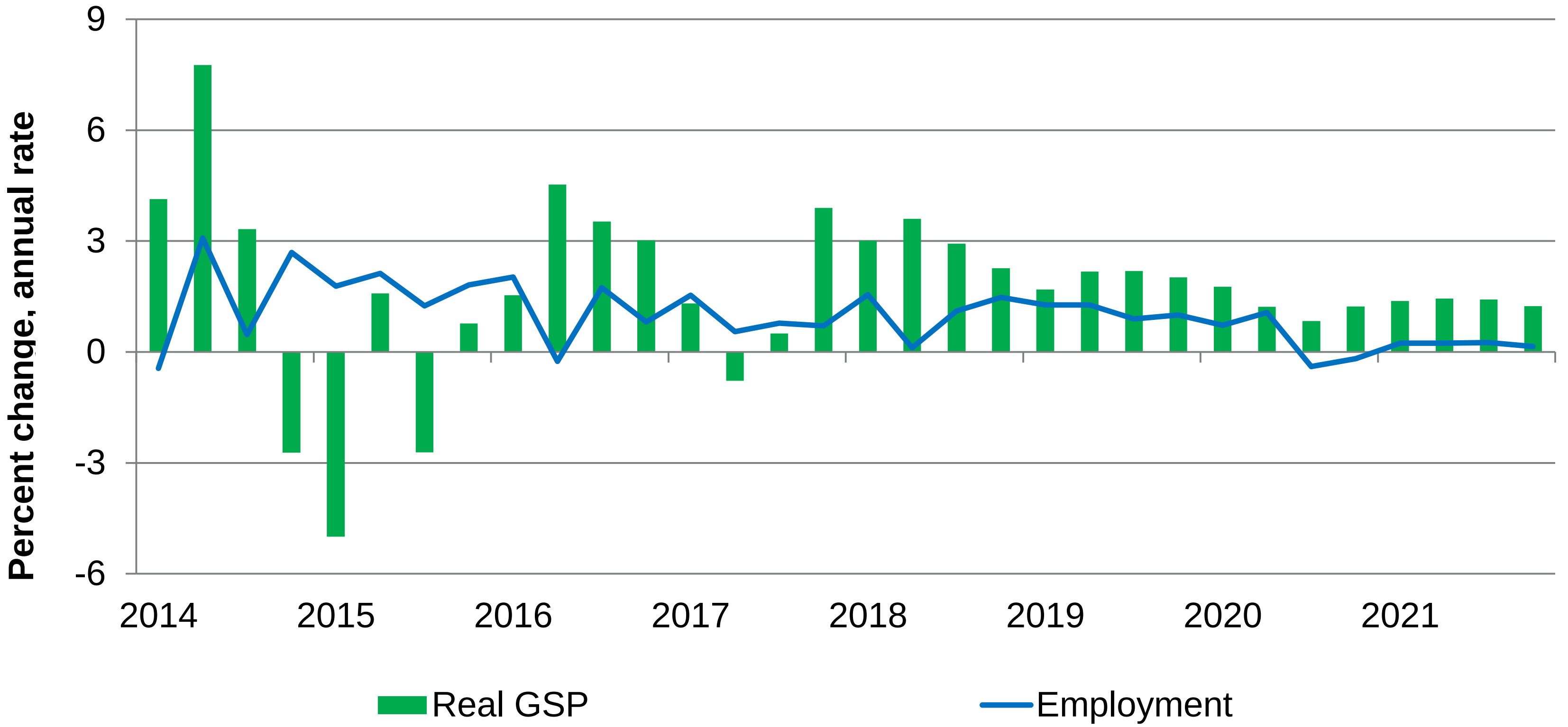
Indiana's real GSP growth outpaces payroll growth, indicating higher productivity

Indiana real GSP and payroll employment



Source: IHS Markit

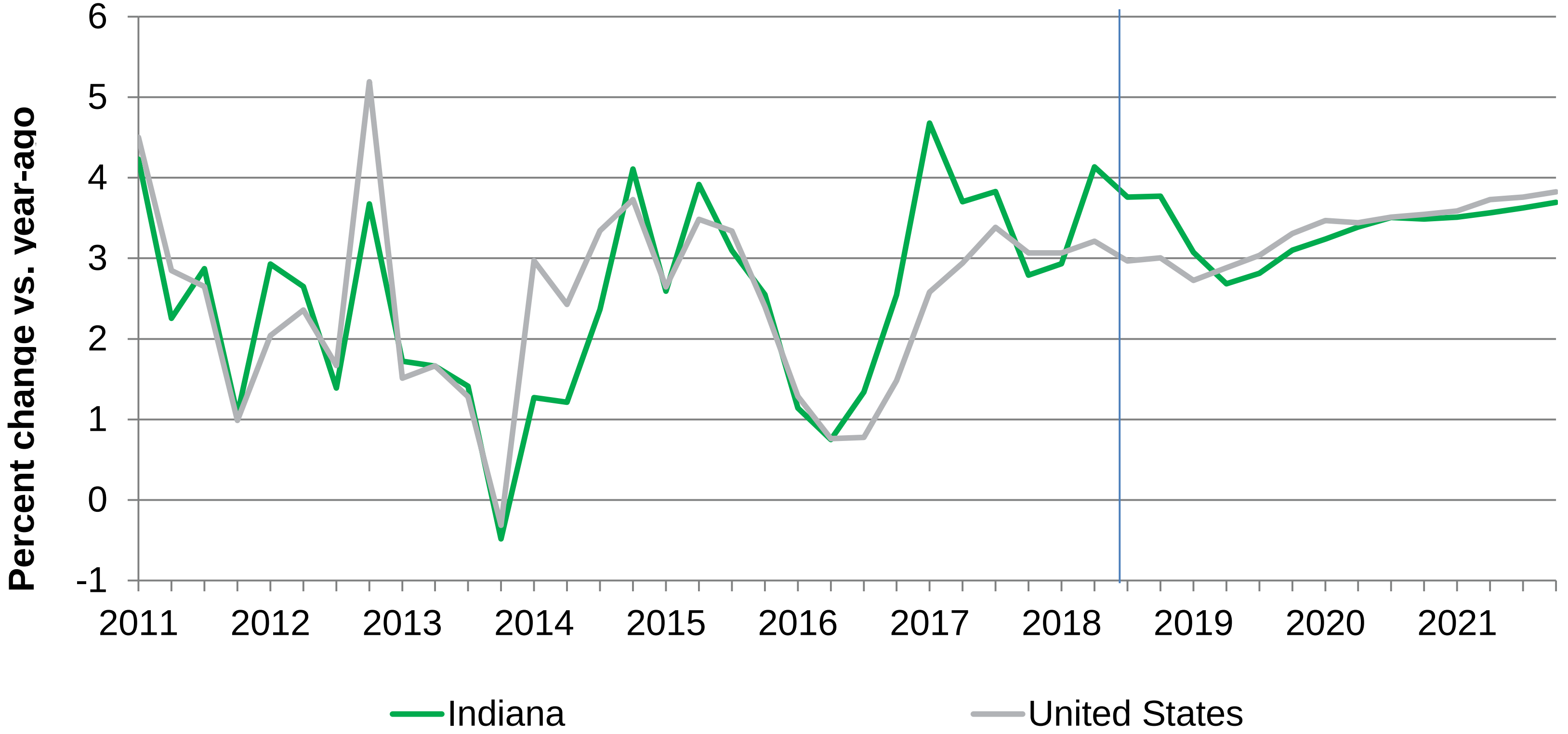
Key Economic Indicators for Indiana

Real GDP and its components					
Percent change	**2017**	**2018**	**2019**	**2020**	**2021**
Payroll employment	1.0	0.9	1.3	0.7	0.2
Unemployment rate (%)	3.5	3.3	3.1	3.1	3.2
Wage income	4.7	4.6	4.3	4.1	3.7
Personal income	4.1	4.2	4.4	4.6	4.0
Real gross state product	1.8	2.7	2.5	1.6	1.3
Personal consumption exp.	4.6	4.9	5.0	3.9	3.9
Housing starts (thousands)	20.7	21.4	22.1	23.4	23.3

Source: IHS Markit

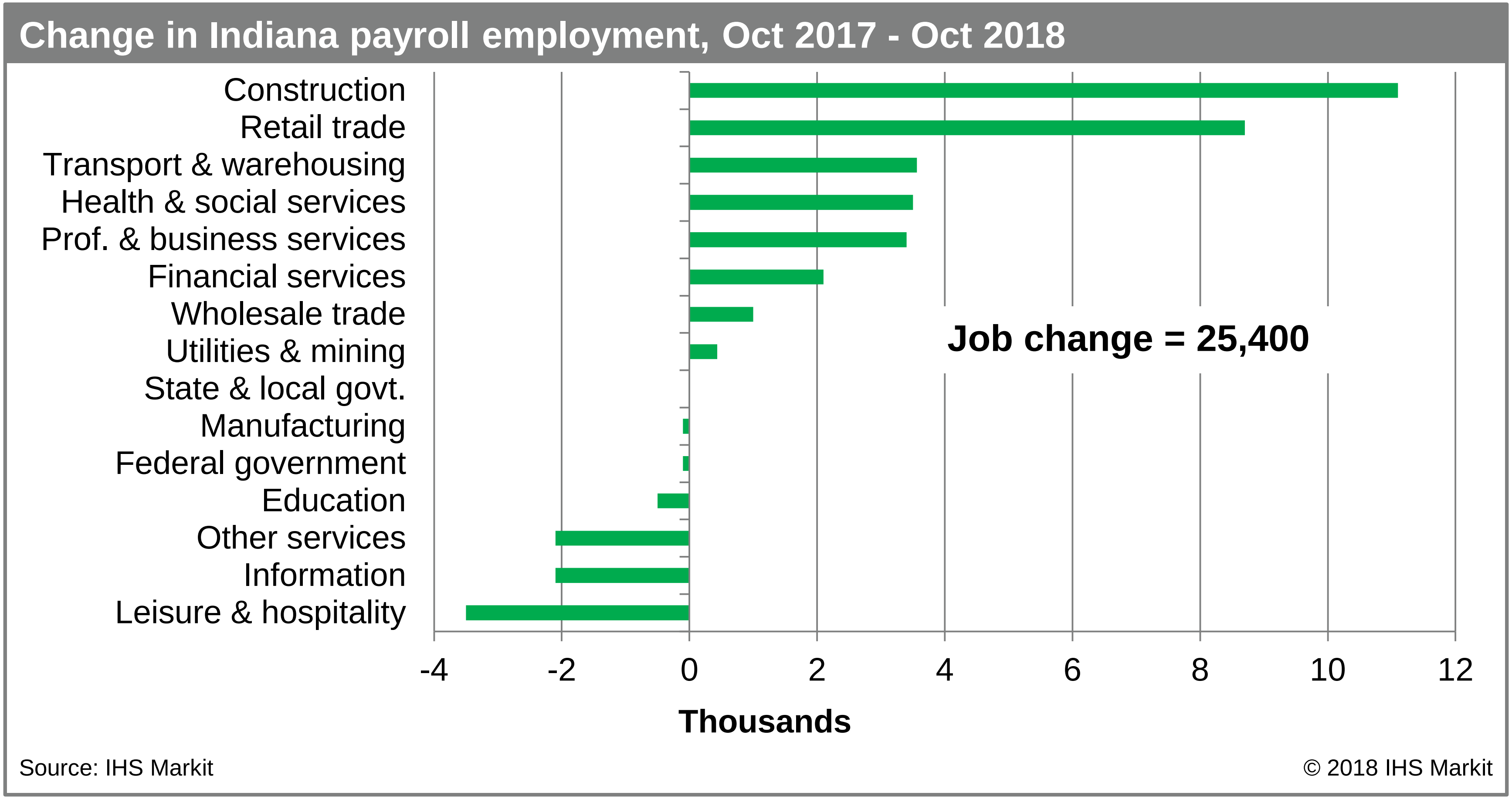
Higher productivity, fewer available workers will translate into higher wages

Indiana wage growth vs. United States



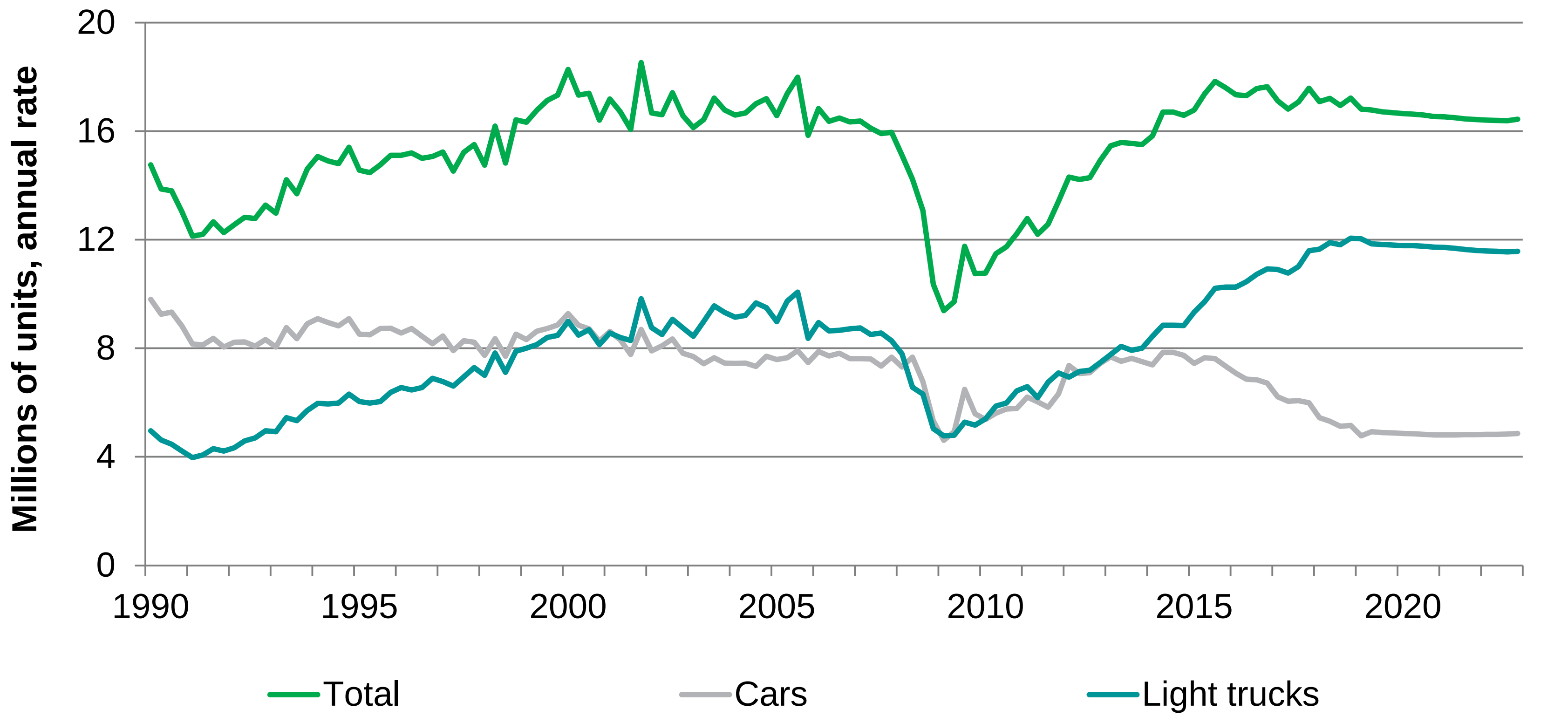
Source: IHS Markit

Construction sector emerges as a leader in state job growth



Change in buying patterns leads to changing product mix among auto manufacturers, a major Indiana employer

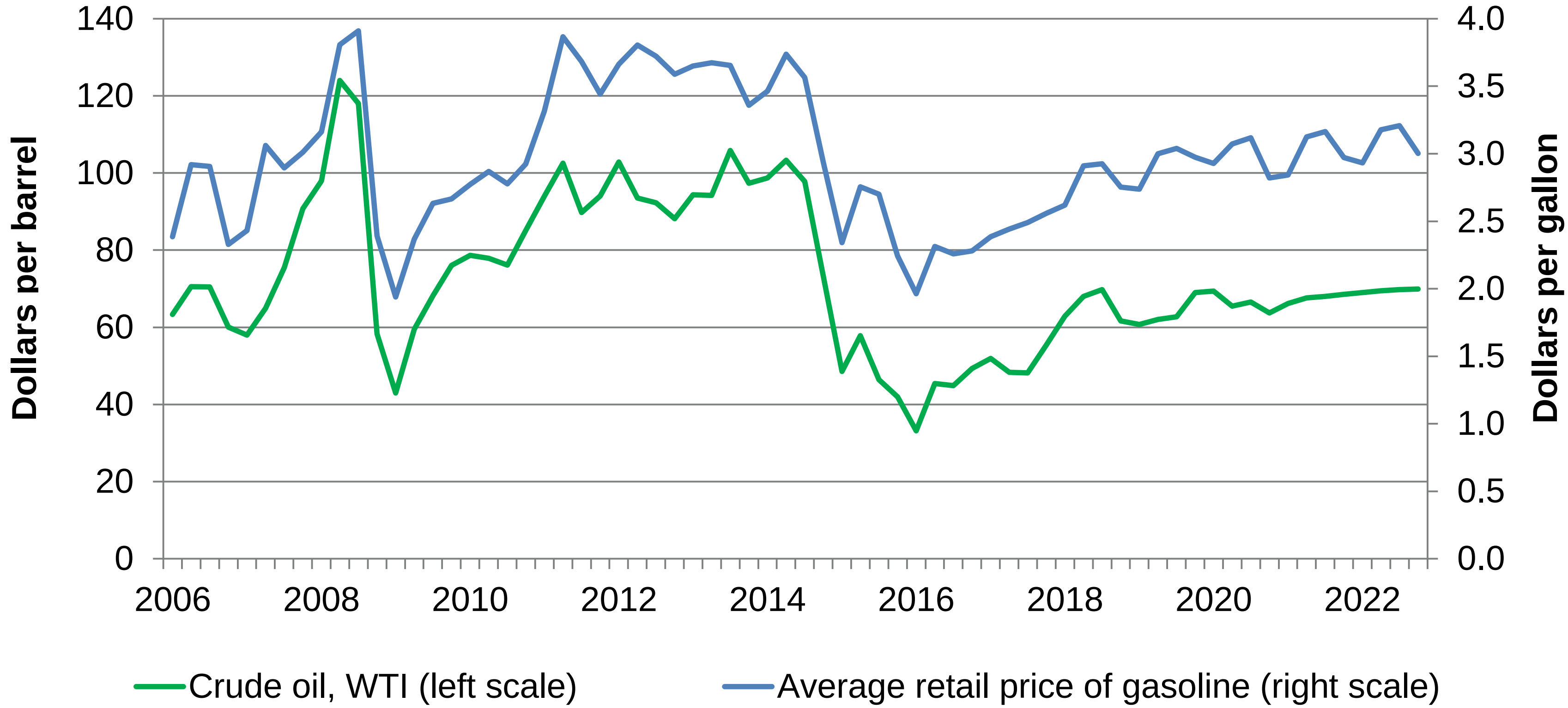
Light-vehicle sales



Source: IHS Markit

Gasoline prices remain moderate, allowing consumers to spend elsewhere (including on trucks and SUVs)

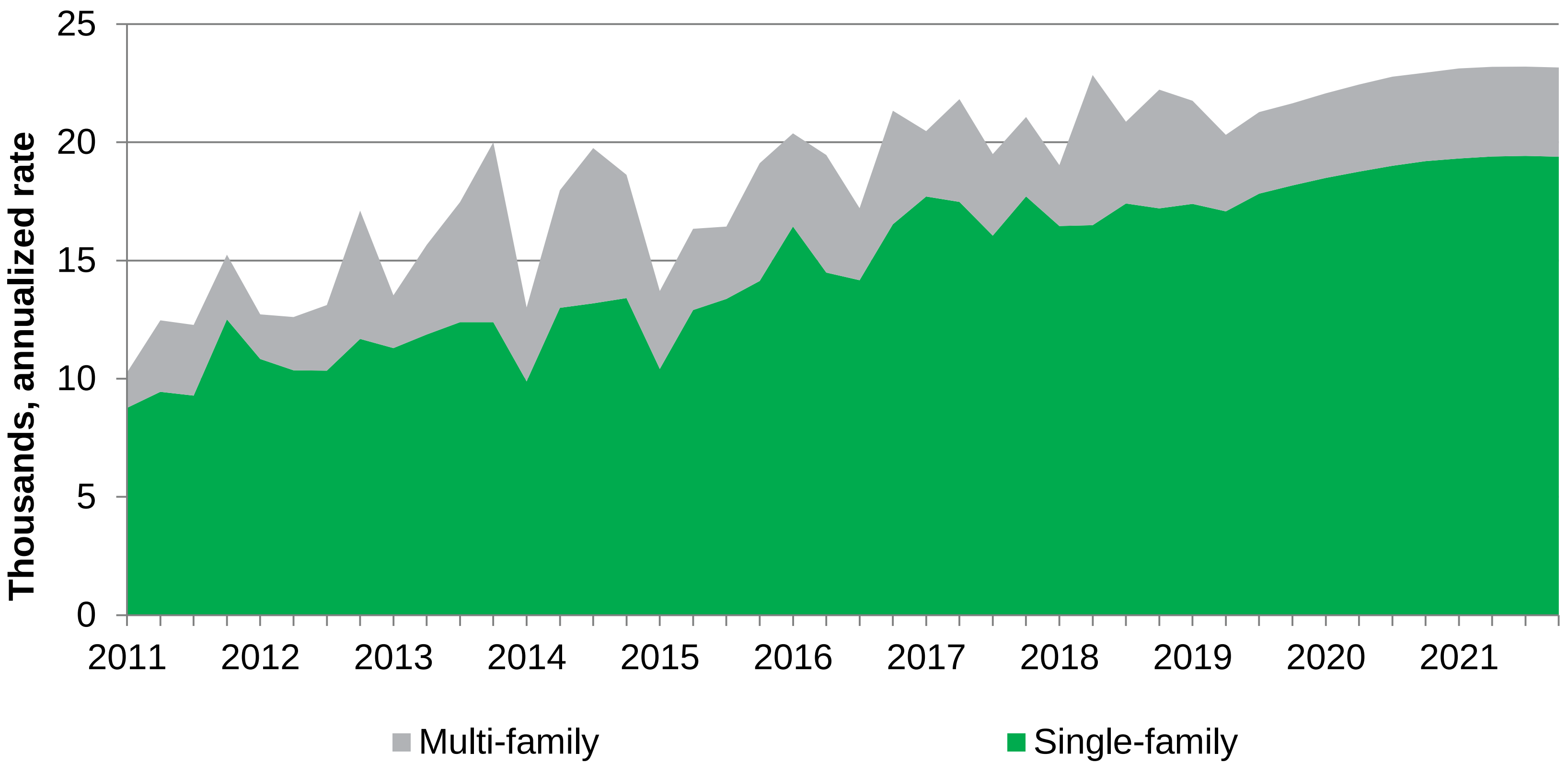
Crude oil and gasoline prices



Source: IHS Markit

Home-building increasing gradually in Indiana, but remains relatively slow given apparent demand

Indiana housing starts



Source: IHS Markit

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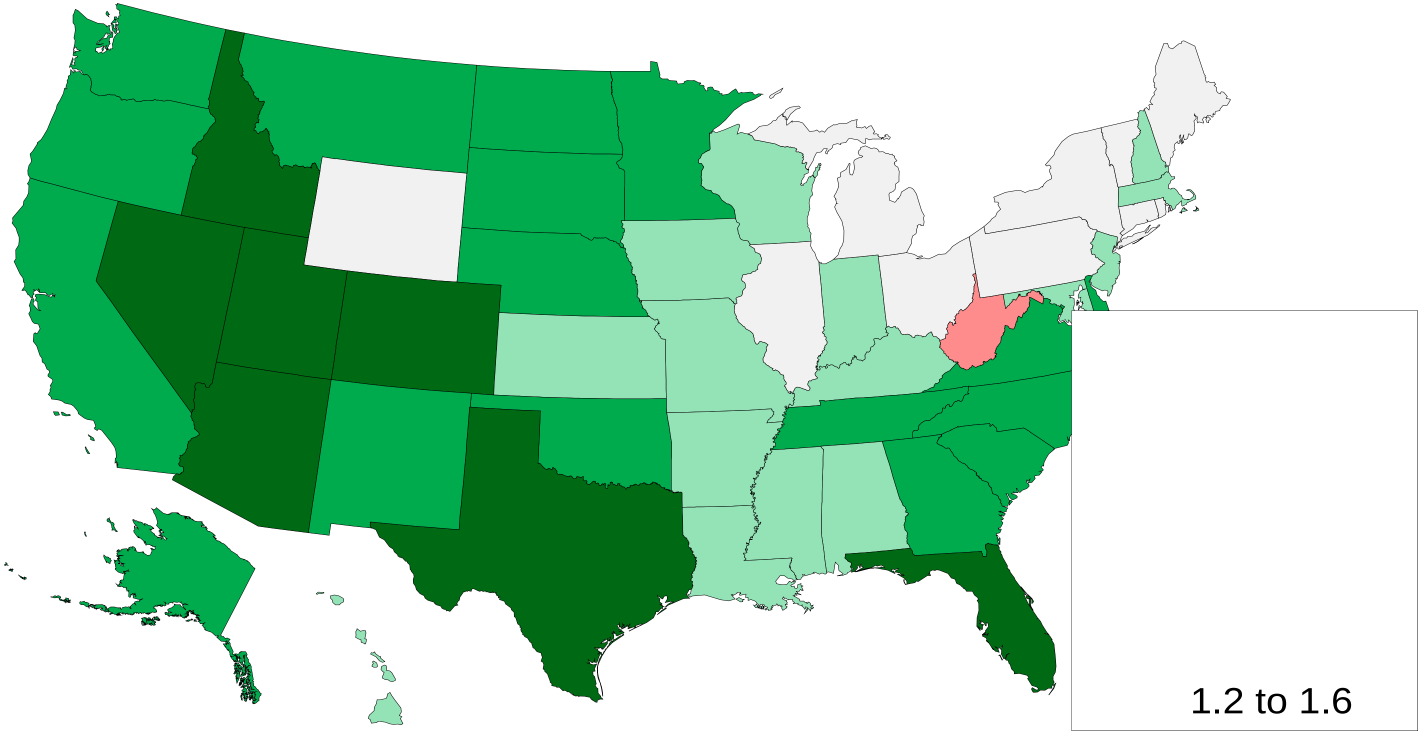
Indiana population growth relatively slow, but outpacing most neighboring states

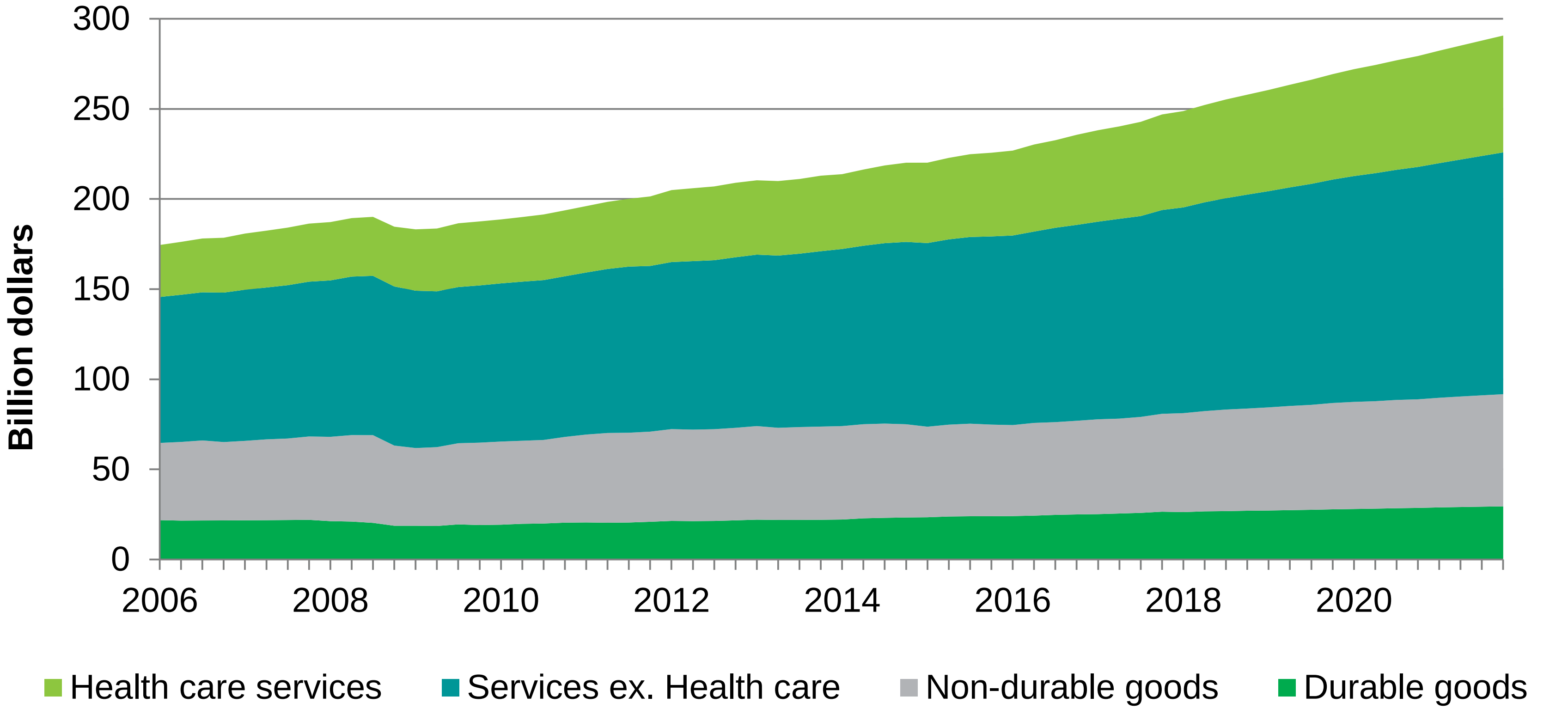
- **Average annual population growth through 2023**



Source: IHS Markit

Personal consumption expenditures continue trend toward services

Personal consumption expenditures by category, Indiana



Source: IHS Markit

Bottom line for Indiana

- Wage and salary income continues steady growth
  - > Gains will need to come from wage rates more than payroll growth as state approaches full employment
- Manufacturing employment will reach a peak in 2020
  - > Major shifts in trade policy creating winners and losers, lots of uncertainty along the way
- Transportation sector thriving as shipping activity and shift toward shopping-at-home drive demand
- Continued increase in labor force is key to attracting and retaining employers and sustaining state economic growth
  - > Could use help from in-migration and increased participation
- Service sector can be supported by strong education system, attractive business environment
  - > High-tech sectors a bright spot in diversifying state's economic base
  - > Some sectors are dependent on local population growth as demand base

Forecast track record

	U.S. GDP		Indiana Employment		Indiana Personal Income	
			Annual growth rate			
Forecast date	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**
Dec 2016	2.3	2.6	0.8	0.9	4.2	4.8
Mar 2017	2.3	2.6	1.0	1.0	4.0	4.7
Dec 2017	2.3	2.6	1.2	1.2	3.7	4.2
Dec 2018	2.2	2.9	1.0	0.9	4.1	4.3

US Economy Appendix

Bottom line for the US economy

- Led by robust consumer spending and inventory accumulation, real GDP increased at a 3.5% annual rate in the third quarter, following 4.2% growth in the second quarter. This was the best two-quarter performance in four years.
- Tailwinds from fiscal stimulus will support annual real GDP growth of 2.9% in 2018 and 2.7% in 2019, sending the unemployment rate down to 3.4%.
- Tightening labor and product markets will push core inflation above 2%, but well-anchored inflation expectations should help to limit the overshoot.
- The Federal Reserve is expected to raise the federal funds rate to a high near 3.50% in 2020, temporarily surpassing its long-run equilibrium of 2.75%.
- Decelerating global demand, a strong dollar, and accumulating adverse effects of tariffs will restrain near-term US economic growth.
- Real GDP growth will subside to 2.1% in 2020 and 1.6% in 2021 in response to higher interest rates, waning support from fiscal stimulus, and capacity limits. With growth below its potential rate in 2021–24, the unemployment rate will rise to 4.5% by the end of 2024.

Consumers, government stimulus boost economic growth into 2019

Components of GDP growth

Percent change	**2017**	**2018**	**2019**	**2020**	**2021**
Real GDP	2.2	2.9	2.6	2.0	1.6
Consumption	2.5	2.7	2.7	2.5	2.2
Residential investment	3.3	-0.2	-1.1	4.3	3.1
Business fixed investment	5.3	6.8	4.1	3.2	2.8
Federal government	0.7	3.0	4.9	0.5	-1.0
State & local government	-0.5	1.0	1.3	1.1	1.0
Exports	3.0	4.1	4.0	5.3	3.1
Imports	4.6	4.8	5.8	6.5	4.6

Source: IHS Markit

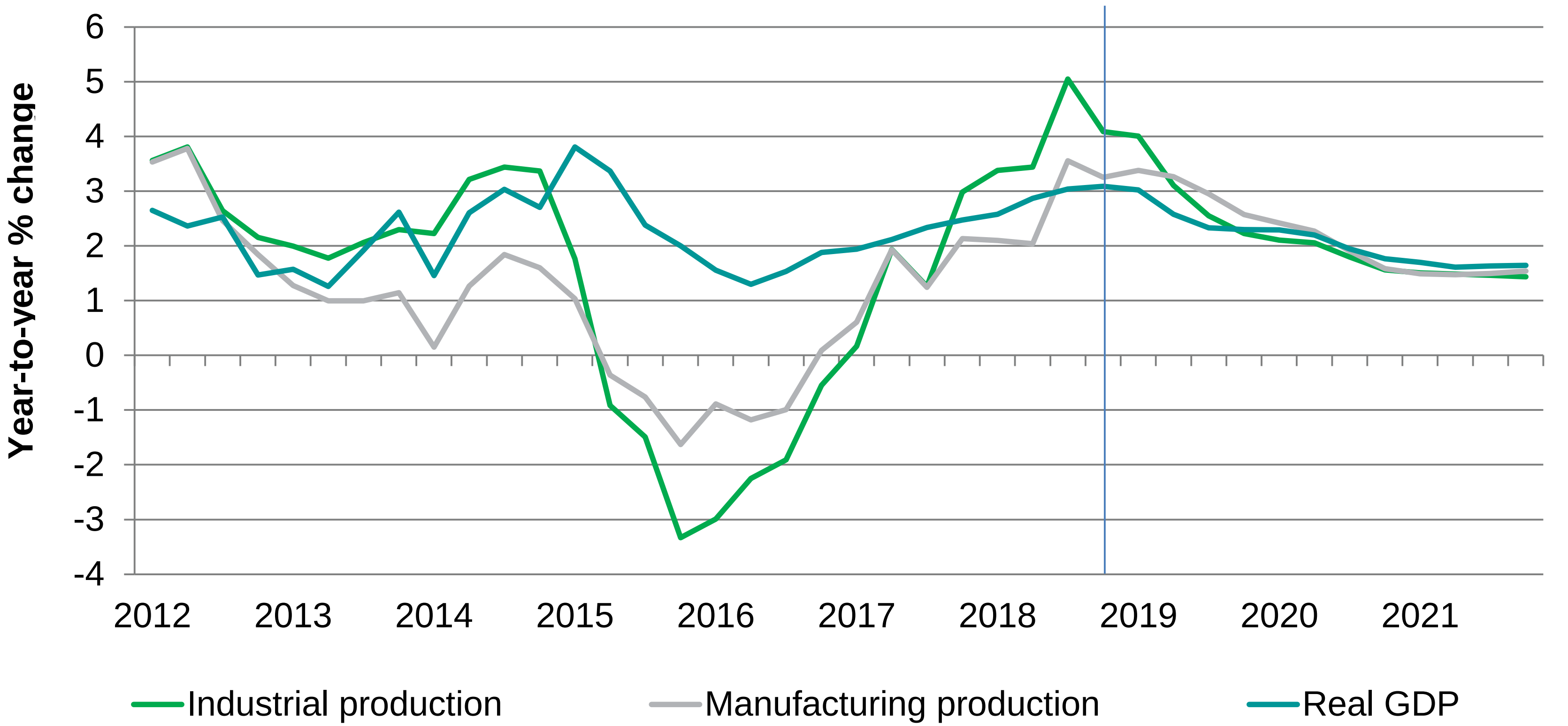
Other key US indicators

Key indicators					
Percent change	**2017**	**2018**	**2019**	**2020**	**2021**
Industrial production	1.6	4.0	3.0	1.9	1.5
Payroll employment	1.6	1.6	1.4	1.1	0.6
Light-vehicle sales (million)	17.1	17.1	16.7	16.6	16.5
Housing starts (million)	1.21	1.26	1.287	1.38	1.43
Consumer Price Index	2.1	2.4	2.2	2.2	2.3
Brent crude oil price ($/bbl)	55	72	73	72	73
Federal funds rate (%)	1.0	1.8	2.8	3.3	3.4
10-year Treasury yield (%)	2.3	2.9	3.3	3.5	3.6

Source: IHS Markit

US industrial production has surged in response to rising demand and energy production

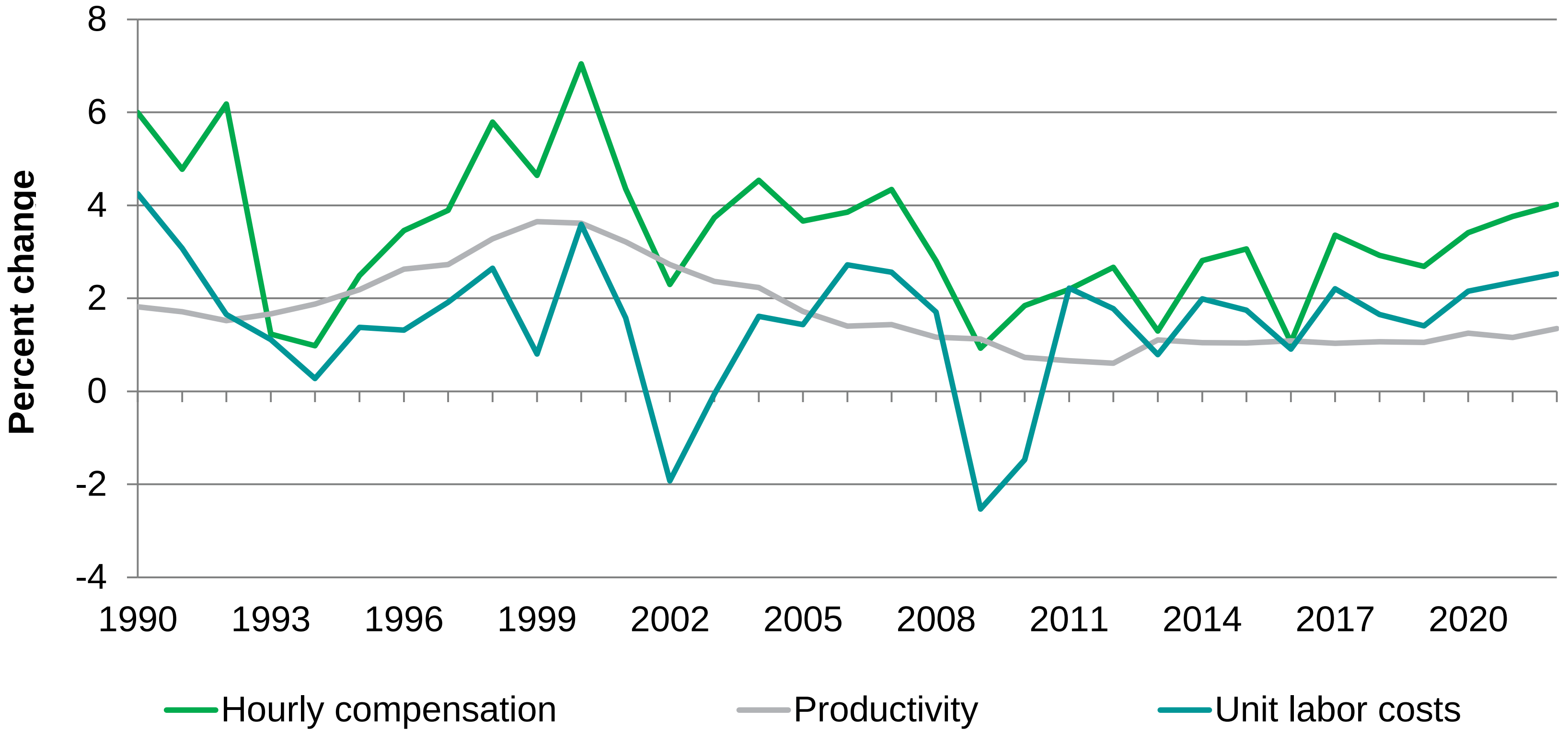
Industrial production and real GDP



Source: IHS Markit

Labor productivity growth helps to restrain the rise in unit labor costs

Private nonfarm sector



Source: IHS Markit

Risks to the US forecast

Scenario	Characteristics
Loss of confidence leads to a three-quarter recession (Probability = 25%)	• After a record-long expansion, real GDP contracts over three quarters beginning in the first quarter of 2020. • A broad loss of confidence and corrections in real estate prices and equity values lead to declines in homebuilding, business investment, and consumer durables spending. • With limited scope for policy stimulus, recovery is slow.
Strong productivity growth and less inflation (Probability = 15%)	• Faster productivity gains restrain inflation and boost real income growth. Real GDP growth about 1.0 percentage point above the baseline over 2019–28. • Household formation picks up, supporting homebuilding. • The full-employment unemployment rate is 4.0%. • Stronger global economic growth boosts exports.
Baseline forecast (Probability = 60%)	• Tax cuts and higher federal spending boost near-term economic growth but aggravate federal budget deficits. • The Federal Reserve gradually raises interest rates. • The full-employment unemployment rate is 4.8%. • Consumer spending, homebuilding, and business fixed investment post sustained, moderate growth.