Economics and Country Risk

Indiana Economic Forecast Update

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GDP accelerates in the fourth quarter, pulling growth from 2022; Omicron a wild card

- Our forecast of real GDP growth for 2021 is revised up from 5.5% to 5.7%; the forecast for 2022 remains 4.3%.
- The upward revision for 2021 arose from unexpected surges in October of exports and inventory investment that, even assuming partial reversals in November, encouraged us to revise up our projection of Q4 growth from 4.4% last month to 7.1% this month.
- We revised up our forecast of CPI inflation for 2021 from 4.5% to 4.6%, and for 2022 from 3.3% to 3.7%, the result of an unexpectedly sharp jump in prices in October.
- As supply disruptions wane, and with long-run inflation expectations anchored near the Fed's 2% objective, we expect core PCE inflation to subside to moderately above 2% by 2023.
- Given persistent inflation pressures, a sharp jump in the employment ratio in November, and considering recent Fed communications, we now expect the Fed to quicken the pace of the "taper", completing it in March.

Policy assumptions in the December forecast

- The forecast reflects all pandemic relief measures of 2020 and the $1.9 trillion American Recovery Plan (ARP) enacted in March. The support to incomes, which averaged $2.7 trillion (annual rate) over the first half of 2021, will drop sharply to less than $0.5 trillion by the fourth quarter of the year, and even less in 2022.
- The forecast also includes the Infrastructure Investment and Jobs Act (IIJA) enacted by President Biden on 15 November; it does not yet include the “Build Back Better” reconciliation bill, the size, scope, and timing of which remain uncertain.
- Strong revenues limit the usual cyclical state and local fiscal contraction. States and localities receive unrestricted ARP funding in two tranches: the first in the second quarter of 2021, and the second in the second quarter of 2022.
- The Fed tapers its purchases of Treasury and mortgage-backed securities to zero by March 2022; begins raising its policy rate in September of 2022; and tolerates inflation modestly above 2% after 2023 to affirm its long-run 2% objective is an average, not a ceiling.

The Indiana economy has largely rebounded from pandemic, but faces same hurdles as most of the nation

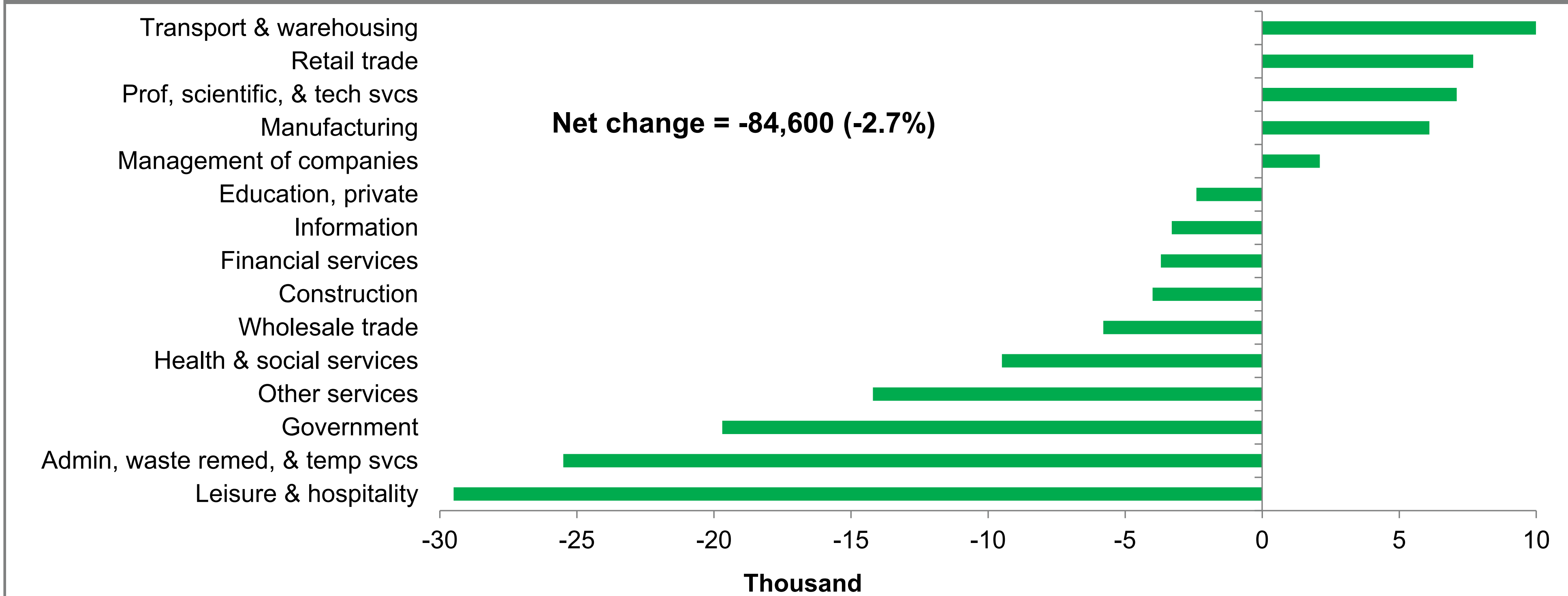
- Indiana is having a relatively quick rebound from the sharp downturn of spring 2020
  - Overall economic output regained pre-downturn level by early 2021
  - Manufacturing bounced back much more quickly than usual from the downturn
  - Recent surge in virus cases may alter some behavior, but not expected to be a major economic factor
- Manufacturers enjoying robust demand for products, but activity is being held back
  - Lack of semiconductors probably the single biggest limiting factor for makers of autos, other equipment
  - Labor shortages an ongoing concern; some of this predates 2020
    - Aging population, slowdown in immigration, lack of needed skills
- Job recovery has resumed after a slowdown, but lower-wage service jobs will be difficult to restore or replace.
  - State payroll employment will return to pre-pandemic peak by late 2022
  - Return to offices is underway, but pace appears to be slow
- Much travel and leisure activity is returning; sporting events leading the way
  - Business travel and convention activity is still reduced

Changes to December forecast from April

- Real GDP growth for 2021 now 5.7%, vs. 6.2% in April
  - Supply-side issues the culprit; e.g., light-vehicle sales 1.5 million lower than expected
  - Wage growth higher, more than offsets lower growth in overall jobs
  - Inflation higher, more sustained than earlier expected
- “Hard infrastructure” bill was passed, now included in forecast
  - Limited impact on growth forecast as spending is spread out and much was already expected to happen
- Revisions to first-half 2021 Indiana data were mostly minor
  - Wage income higher than earlier expected, transfer payments slightly higher
- 2022-23 forecast for Indiana wages, personal income, consumer spending has been raised
  - Gain in consumer spending focused on goods; services slightly lower (but still growing)

Payrolls in lower-wage occupations still well below pre-pandemic levels

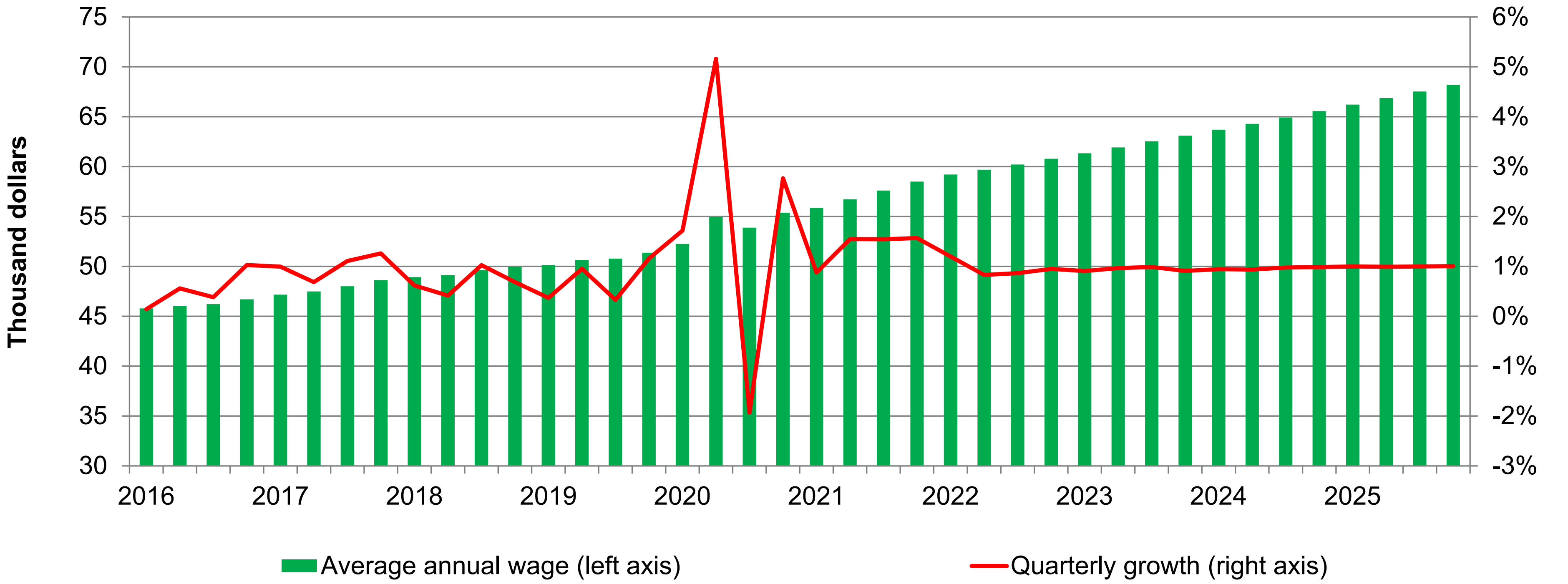
Change in Indiana payroll employment, Feb 2020 - Oct 2021



Source: IHS Markit

Pay raises, changes in jobs mix push up wage growth

Indiana wage growth



Source: IHS Markit

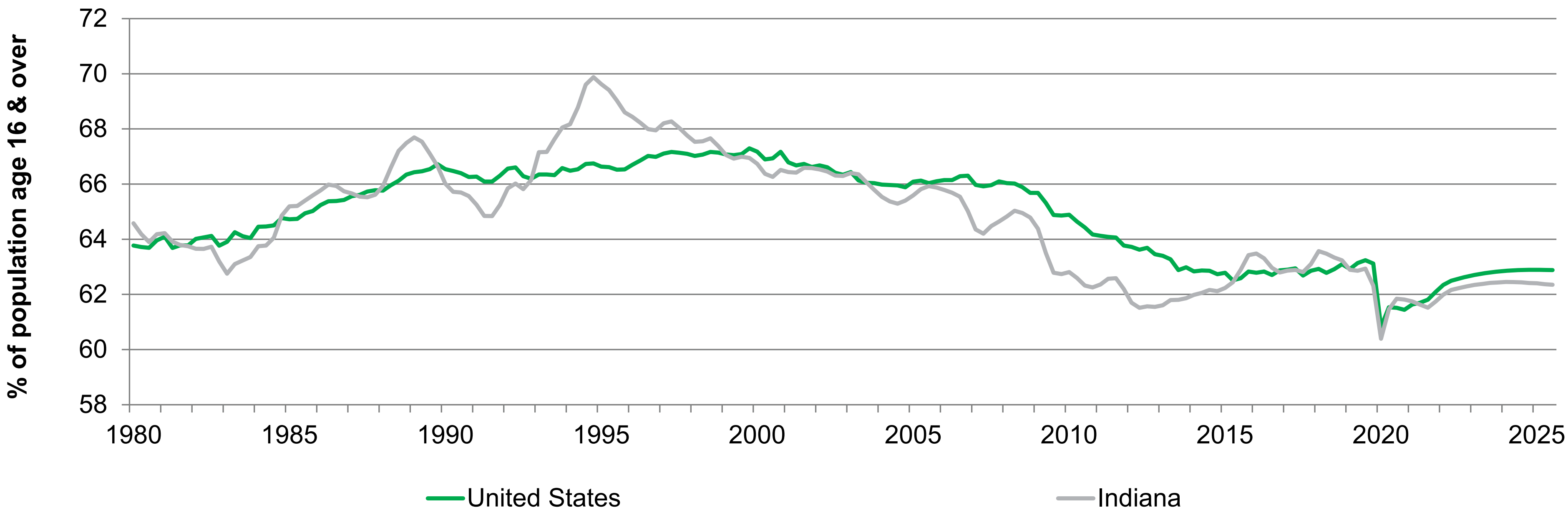
Key economic indicators for Indiana

	2020	2021	2022	2023	2024
Units: Percent change					
Payroll employment	-5.5	2.2	3.1	1.5	0.7
Unemployment rate (%)	7.2	3.9	3.1	3.1	3.3
Wage income	0.8	8.1	8.1	5.3	4.6
Personal income	6.4	7.8	0.4	4.7	4.8
Real gross state product	-2.5	6.5	2.8	2.0	2.3
Personal consumption exp.	-1.1	12.1	6.2	3.5	4.2

- Personal income boosted by Federal stimulus/extra unemployment payments, rebound in wage disbursements in 2021; absence of stimulus checks shows in 2022
- PCEs boosted by stimulus checks and pent-up demand from 2020

Labor force participation bouncing back but longer-term momentum is lower

Labor force participation rate, United States and Indiana



Source: IHS Markit

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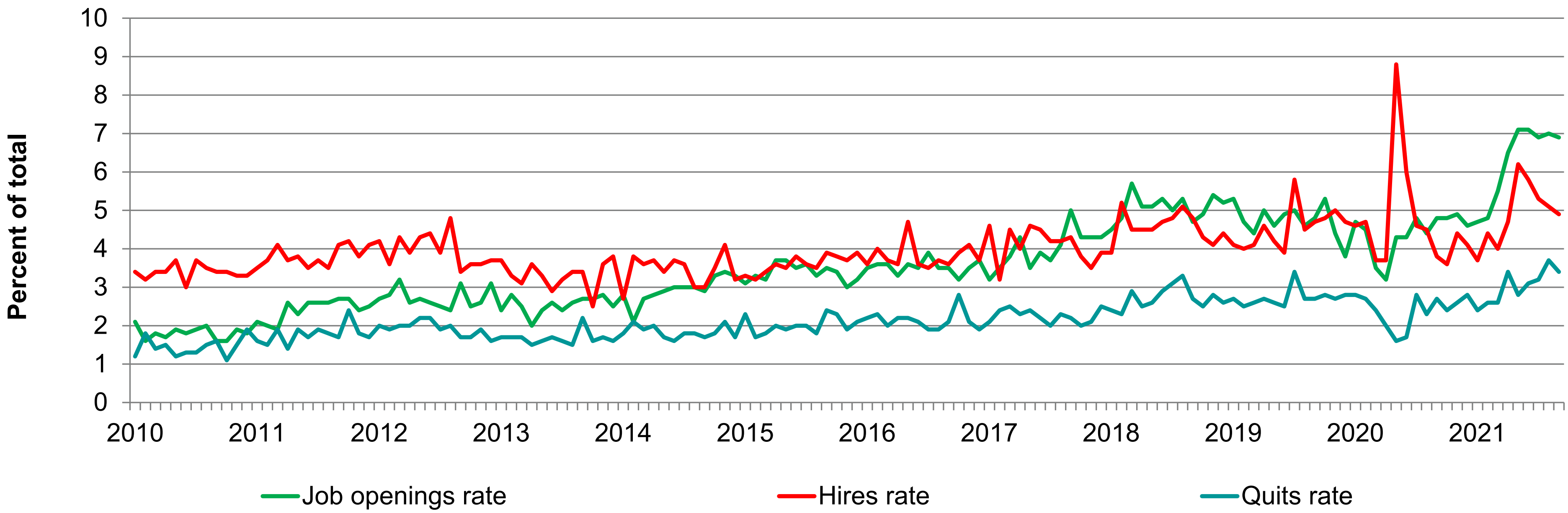
- Lack of child/senior care, health concerns, need to retrain are sidelining workers in short term
- Higher share of workers aged 55-65 have retired, at least for now
- Aging population, peak in participation by women were already having an effect

Job openings have reached historic highs

Job Openings and Labor Turnover indicators, Indiana

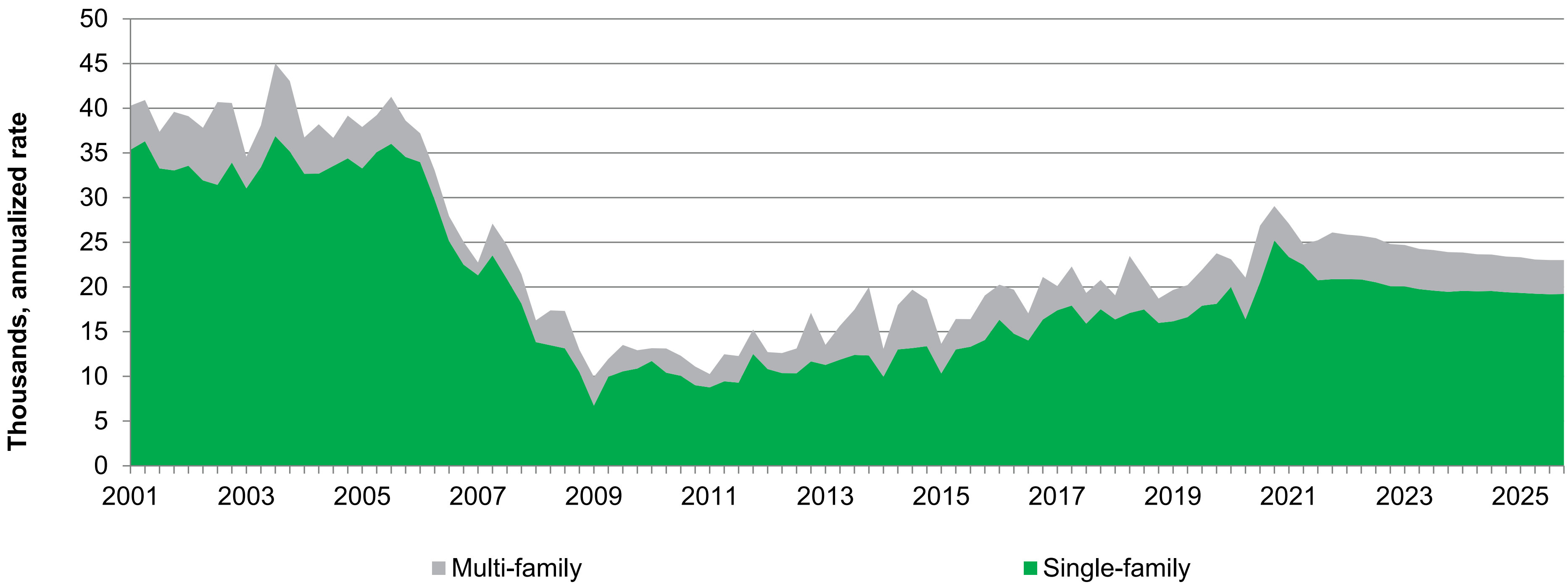


Source: IHS Markit, Bureau of Labor Statistics "JOLTS" report

- Hires spiked when pandemic restrictions were lifted – mostly re-hires of furloughed workers
- Rate of openings rose gradually from 2010, but has gone way above earlier levels

Housing starts pushed to highest level since 2006, still well below "boom"

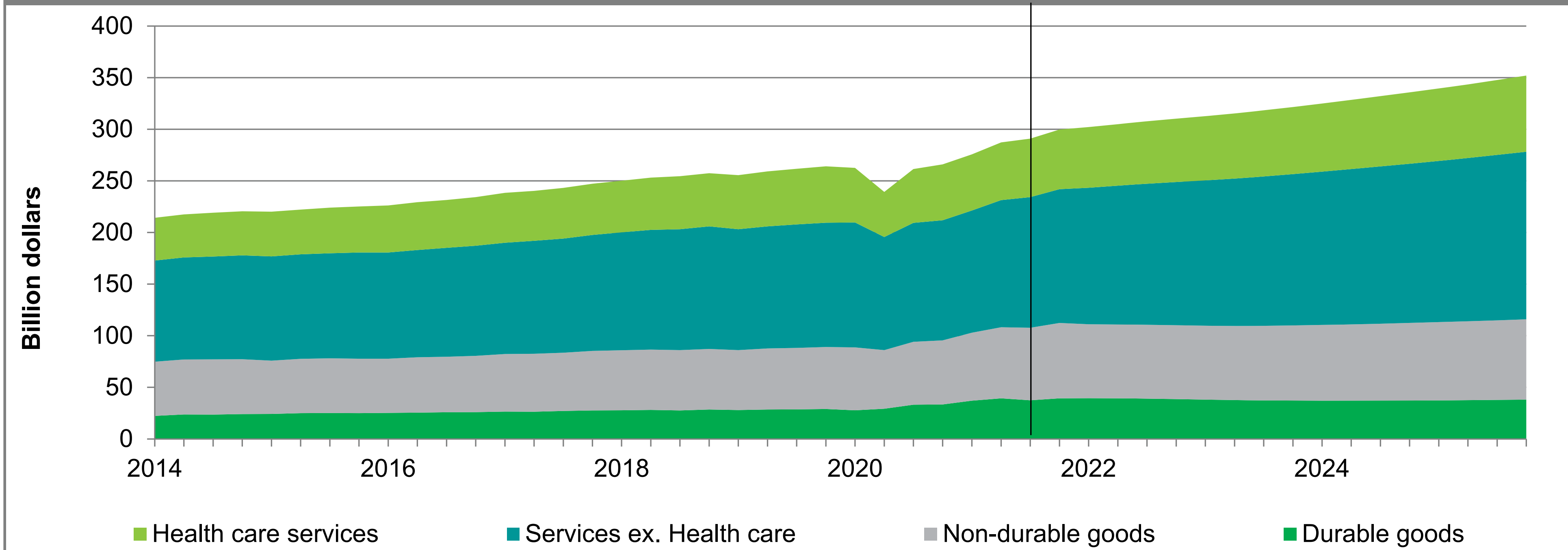
Indiana housing starts



Source: IHS Markit

Spending on services will regain share as economy gets back to normal

Personal consumption expenditures by category, Indiana



Source: IHS Markit

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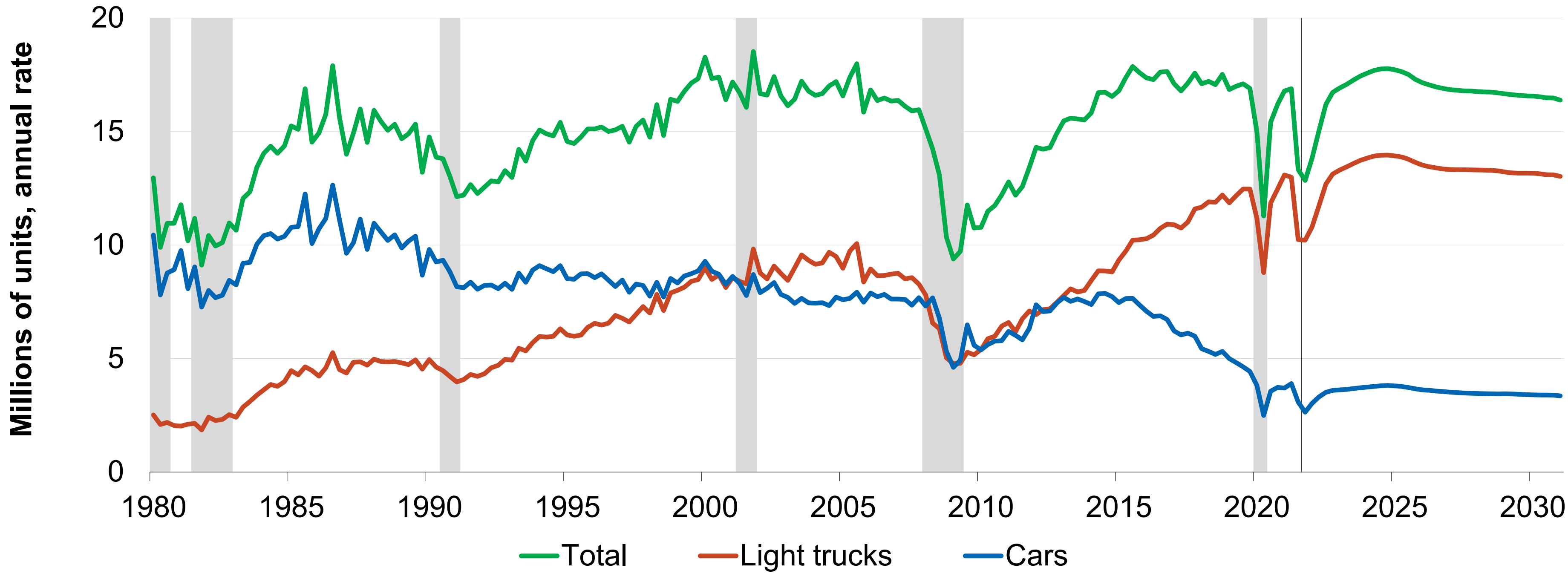
- Goods displaced services as consumers stayed home while receiving Federal stimulus

Limited inventories weigh on auto sales

Total U.S. light-vehicle sales



Source: IHS Markit

Bottom line for Indiana

- The state economy is on solid footing, despite broader macro concerns
  - Inflation is raising costs on households and businesses, eating into gains from higher wages and revenues
  - Labor force participation is still in recovery mode, causing reduced activity for some businesses
  - The state's research and development resources are generating and attracting cutting-edge business in a variety of areas
- Outlook for manufacturing output and employment remains solid
  - Demand for goods supported by robust personal income, high rates of saving
  - Supply chain issues expected to gradually improve, pose less of a hindrance
  - Reconfigured supply chains (re-shoring) could provide opportunity, but too early to tell
- The pace of homebuilding will slow a bit from 2021 levels, but remain above pre-pandemic level
  - Housing supply not expanding rapidly enough to address affordability issues in many areas
- Longer-term fundamentals remain the same – labor force must continue to grow in size and skill level to allow existing business to expand and to attract new business

Evolution of short-term Indiana forecast

	U.S. GDP		Indiana employment		Indiana income	
Forecast date	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**
Dec 2019	2.0	1.7	0.3	0.1	3.8	4.0
Apr 2020	6.3	4.0	-1.4	5.3	2.6	2.6
Dec 2020	4.3	3.7	2.5	1.9	0.6	2.4
Apr 2021	6.2	4.3	3.6	2.0	7.4	-0.4
Dec 2021	5.7	4.3	2.2	3.1	7.8	0.4

Units: Percent change

Source: IHS Markit

US macro outlook – supplemental information

US economic growth by sector

Percent change	2020	2021	2022	2023
Real GDP	-3.4	5.7	4.3	2.6
Final sales	-2.9	5.5	3.3	2.4
Consumption	-3.8	8.1	3.8	2.0
Light vehicle sales (Millions)	14.5	15.0	15.4	17.2
Residential fixed investment	6.8	8.8	-4.4	-3.7
Housing starts (Millions)	1.40	1.57	1.46	1.33
Business fixed investment	-5.3	7.4	6.1	4.6
Federal government	5.0	0.6	-1.6	-0.2
Exports	-13.6	4.2	5.7	8.0
Imports	-8.9	13.2	4.9	3.5

Source: IHS Markit

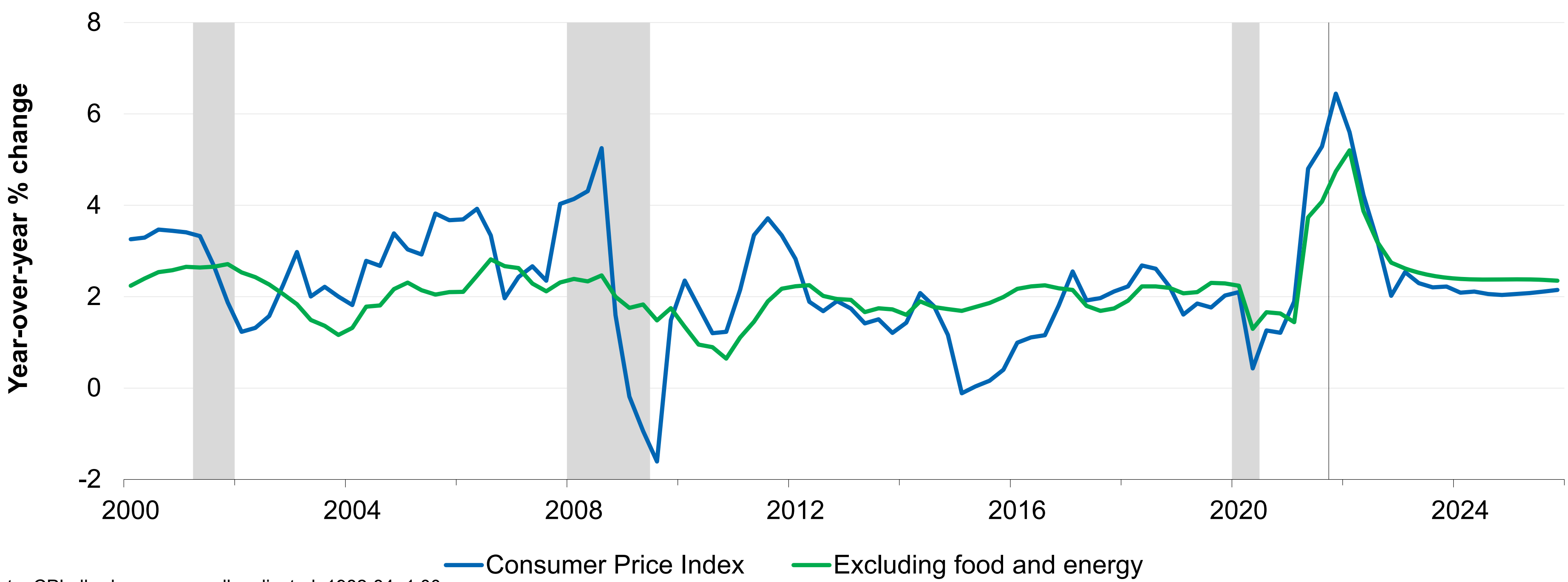
Other key US indicators

Key indicators				
Percent change	**2020**	**2021**	**2022**	**2023**
Industrial production	-7.2	5.6	4.5	2.4
Payroll employment	-5.7	2.7	3.8	1.4
Consumer Price Index	1.2	4.6	3.7	2.3
Core CPI	1.7	3.5	3.7	2.5
Brent crude oil price (USD/barrel)	41.8	70.7	75.2	72.3
Federal funds rate (%)	0.38	0.08	0.17	0.75
10-year Treasury yield (%)	0.89	1.44	1.74	2.32

Source: IHS Markit

Spike in energy costs is driving up the Consumer Price Index

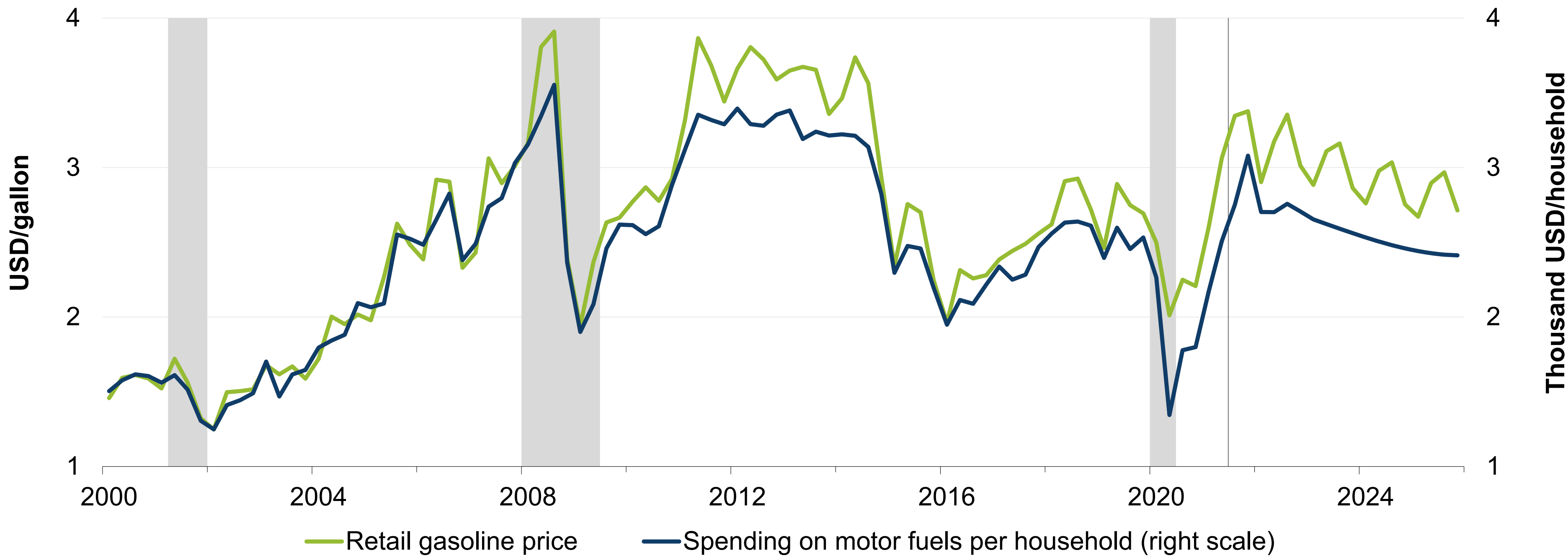
Consumer Price Indexes



Note: CPI all-urban, seasonally adjusted. 1982-84=1.00
Source: IHS Markit

Retail gasoline prices reflect changes in crude oil prices

Retail gasoline price and annualized spending on motor fuels



Source: IHS Markit

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Housing starts and sales are having a remarkable year

- Builders are putting up new houses at a furious pace. In October, the number of homes under construction moved up to 1.451 million (seasonally adjusted), the highest total since February 1974.
- Housing starts and single-family housing starts are on track to have their best year since 2006, despite steady declines from January and continuing headwinds.
- After steadily falling in the first half of the year, existing home sales caught a second wind. Entering the home stretch, sales are on an upward path—on pace to reach a 15-year high.
- Home prices, as measured by the FHFA home price indexes, grew at double-digit rates from a year earlier in all 50 states and by more than 20% in 16 states. When will the unprecedented surge in house prices end? Turning points are difficult to time, but with the protection of forbearance ended, and more potential buyers priced out of the market, we expect a cooling early next year.

Risks to the US forecast

Scenario	Characteristics
Pessimistic: Recovery stumbles as supply issues persist and Omicron variant spreads (Probability = 30%)	• Resurgent virus this winter, causing an alarming rise in cases and hospitalizations. • Deterioration in the ongoing supply-chain issues leads to a prolonged delay in the production and shipment of consumer durable goods. • Real GDP rises at a 5.1% annual rate in the fourth quarter and 0.5% pace in first quarter of 2022. • The unemployment rate declines at a gradual pace, eventually declining to 4.1% by early 2023. • Core PCE inflation starts out elevated, but gradually declines to around 1.0% by mid-2023 and remains below the FOMC's 2% target through 2025.
Optimistic: Return to "normal", still more stimulus, and improving supply issues drive faster growth (Probability = 20%)	• We assume the consumer and business response to the upcoming Infrastructure Investment and Jobs act is more robust than in the baseline. • Consumers spend down some of the excess savings that accumulated over 2020 and 2021, allowing consumer • spending to rise 5.6% over 2022 . • Declining COVID-19 cases over the winter inspire stronger consumer confidence. • Business fixed investment rises more quickly and remains elevated relative to baseline thanks to an acceleration in productivity. • Real GDP rises at a 9.1% annual rate in the fourth quarter, and at a 5.0% average pace over the four quarters of 2022. • As a result of faster GDP growth, the unemployment rate quickly falls below 4.0% by early 2022. • The Fed begins to raise the federal funds rate in early 2022, two quarters earlier than in the base forecast.
Baseline forecast (Probability = 50%)	• COVID-19 cases continue to decline gradually as more Americans become vaccinated, resulting in far fewer deaths and hospitalizations. • Real GDP rises at a 7.1% annual rate in the fourth quarter and 3.7% pace in first quarter of 2022. • Core personal consumption (PCE) price inflation remains elevated at 3.2% in 2021 and 2022 as supply chains are stretched, but ticks down to 2.3% in 2023. • The federal funds rate is held near zero until September 2022.

Bottom line for the US economy

- Our forecast of real GDP growth for 2021 is revised up from 5.5% to 5.7%; the forecast for 2022 remains 4.3%.
- We revised up our forecast of CPI inflation for 2021 from 4.5% to 4.6%, and for 2022 from 3.3% to 3.7%, the result of an unexpectedly sharp jump in prices in October that, given its timing, raised the CPI in 2022 more than in 2021.
- We now expect the Fed to quicken the pace of the “taper”, completing it in March. We’ve also moved “lift-off” of the funds rate from March of 2023 to September of next year.
- The forecast does not (yet) include the Build Back Better Act, the legislative fate of which remains uncertain. Our initial assessment suggests BBB is more about income redistribution than economic growth.
- While the Omicron strain of the coronavirus has emerged as a downside risk to the forecast, too little is known about it yet to adjust directly our projections of growth and inflation.

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