The 2022 Forecast:
Closer to Normal

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Economic Performance Under COVID

Overview

The best way to think about our current economy is to recognize several conditions that affect us today: *First,* we have compressed structural changes to labor market—more workers withholding labor, more workers seeking employment through remote work, and a growing preference for jobs offering lower unemployment risk. Meanwhile, many firms see opportunity in remote work, and there is a distinct increase in demand for higher-skilled workers. Over the past year, help wanted (job) listings for college graduates have risen by 7.0 percent, while job listings for high school graduates have declined by 8.0 percent. That means there are about five times as many job openings for college grads than there are for high school graduates nationwide.

Second, there's unusual forecast uncertainty. This problem affects not only economists, but also business production, investment and hiring decisions. COVID is still with us. It resulted in the death of over 250,000 workers and it sickened or disabled an additional unknown share of workers.

The forecast uncertainty and unemployment leave us with significant labor force supply issues. Part of this is on the labor supply side, with workers remaining hesitant to return to the workplace, but part is on the demand side. Businesses that are uncertain about future demand will not be able to effectively hire and compensate workers, and whole sectors may face large uncertainty about the sustainability of demand growth into the next year.

Third, we've had a large, and even unprecedented, policy response with an uncertain tail. Fiscal and monetary policy responded forcefully to COVID. Household savings were bolstered by declining spending, which propelled savings rates to record highs for several months in 2020 and early 2021.

Families are now spending some of those excess savings that contributed to the occasional shortages in late summer and early fall. Monetary policy expanded access to credit, driving real interest rates into sustained negative levels. This fueled home price growth and a buying spree that likely has peaked in the 2021 holiday season.

These changes accompany higher-than-expected price level changes that raise the risk of inflation. There is little evidence of long-term changes to inflation expectation, or of increasing demand that would fuel accelerating price levels. Still, the current environment recommends tightened monetary policy and more conservative fiscal policy in 2022.

With tightened monetary policy and what today appears to be a diminishing tail of fiscal policy, we anticipate GDP growth to return to trend in 2022, with annualized real growth of 2.1 percent nationally.

Effects on the Labor Market

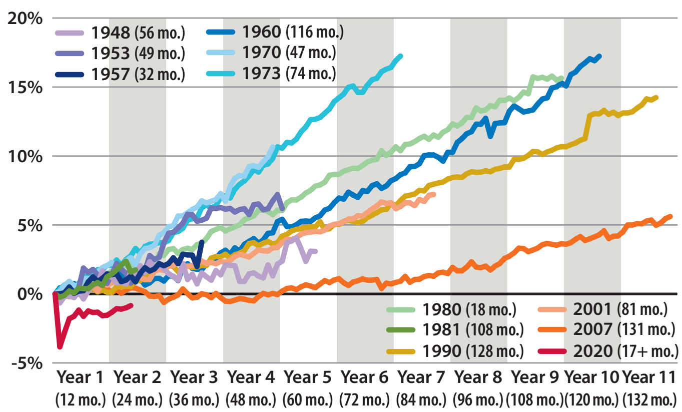
The COVID pandemic began the deepest, shortest business cycle since WWII. Levels of employment and labor force remain well below pre-pandemic levels, and they remain even farther below the level we would have expected if the recovery from the Great Recession had not been interrupted in February 2020 by the pandemic.

The lingering employment challenges come directly from the presence of COVID, with ample evidence that government COVID restrictions have done almost nothing to reduce household consumption. The data on this could hardly be clearer. Household spending on restaurants and accommodations in Indiana dropped to its lowest point a full week before Governor Holcomb declared a stay-at-home order. Families responded to COVID, not government restrictions. During the early post-vaccination months, the single biggest determinant of employment growth at the state level was the rate of vaccination. Economic distress was always a consequence of the disease, rather than the government response to the disease.

Finally, this trend continued well past the period of full vaccine availability and early evidence of worker shortages. The 25 states with the highest vaccination rates saw employment growth through Summer 2021 at more than three times the rate of the 25 states with the lowest vaccination shares. The 26 states that ended their Pandemic Unemployment Insurance early following

Figure 1. Change in Labor Force by Business Cycle Downturn, Post-WWII Years

Source: Bureau of Labor Statistics and National Bureau of Economic Research, via Federal Reserve Economic Database (with author's calculations)



complaints of labor shortages saw their employment growth lag by more than 50 percent the rate of the 24 states that did not. This issue is important; it means that the interruption of COVID-19 effects – not fiscal or labor market policies – are the source of economic stability.

Underlying labor market conditions demonstrate a far slower-than-typical return to the labor force by affected workers. This is the only postwar recession in which the labor force had not fully recovered within the first eight months. *See Figure 1*.

The geography of work has changed, with a large share of existing jobs continuing to be performed remotely. The Bureau of Labor Statistics (BLS) reports that over 11 percent of jobs remain fully remote due to the pandemic, and as much as 30 percent of work is now being performed remotely. *See Figure 2*.

Help wanted advertisements for remote work grew from a modest 2-3 percent in the year preceding the pandemic, to 13-15 percent today. A full third of those are part-time positions, a condition that introduces increased flexibility for workers in today's economy. This may also make hiring in-person employees more difficult, particularly among occupations traditionally held by women and younger workers.

Figure 2. Weekly Help Wanted Ads and Remote Work Shares, Sept. 2, 2019-Aug. 31, 2021

Source: Jobs EQ, Chmura Economics

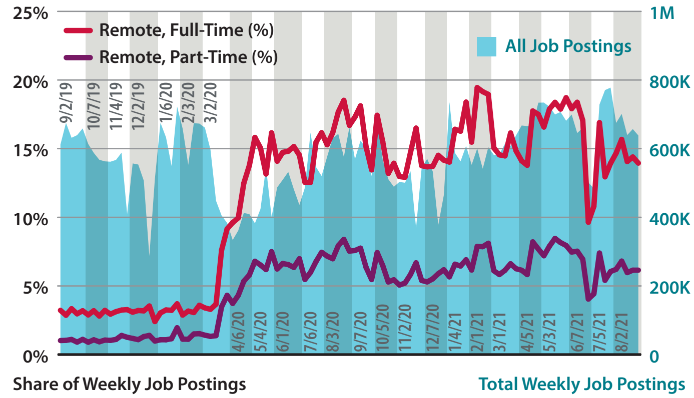
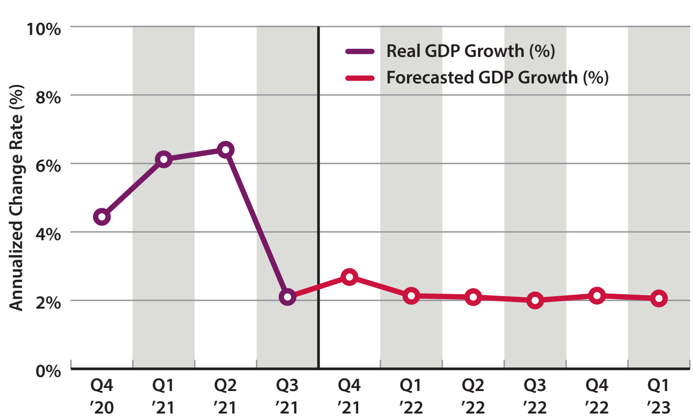


Figure 3. Real GDP Trend and Forecast

Source: Bureau of Labor Statistics, via Federal Reserve Economic Database (with author's calculations)



The 2022 Economy

The Indiana Econometric Model was developed to provide federal, state, and local forecasts of economic activity. It forms the basis for recent projections by the Center for Business and Economic Research. We estimate GDP growth in this model, and from that discuss other important variables, such as employment and income growth.

Our first projection is that Gross Domestic Product (GDP) growth will start the year healthy, but slow. We forecast a return to the pre-pandemic trend by mid-year with inflation-adjusted growth in the 2.0-2.2 percent range. *See Figure 3*.

Our forecast is in the middle range of more recent projections, which find GDP growth slowing through 2022. These forecasts do not reflect declining optimism, but rather a growing realization that the labor market response to faster GDP growth is likely to remain muted, and that the demand for goods that surged in 2021 seems likely to return to trend in 2022.

Our state-level forecasts reflect a return to trend for states. Indiana experienced a strong 2021, recovering at near the national rate. We expect 2022 to see more modest growth. *See Table 1*.

Table 1. State GDP Forecasts

Source: Bureau of Labor Statistics and forecast from the model proposed by Hicks, Michael J. "Forecasting State Level Economic Activity: An Error Correction Model with Exogenous National Structural Forecast Components." Proceedings of the 101st Annual Conference of the National Tax Association.

State Forecasts	IL	IN	KY	MI	OH
2021 GDP	3.1%	**3.4%**	3.5%	3.9%	3.9%
2022 GDP	1.2%	**1.4%**	2.6%	3.3%	2.5%

Figure 4. Government Expenditures vs. Federal Funds Rate, 2000-2021

Source: Office of Management and Budget; Federal Reserve, via Federal Reserve Economic Database (with author's calculations)

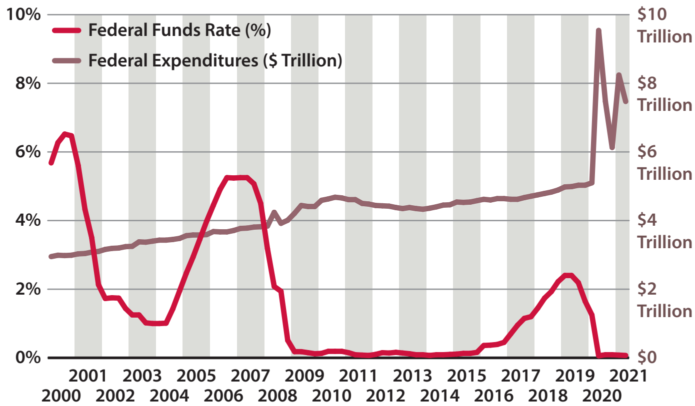
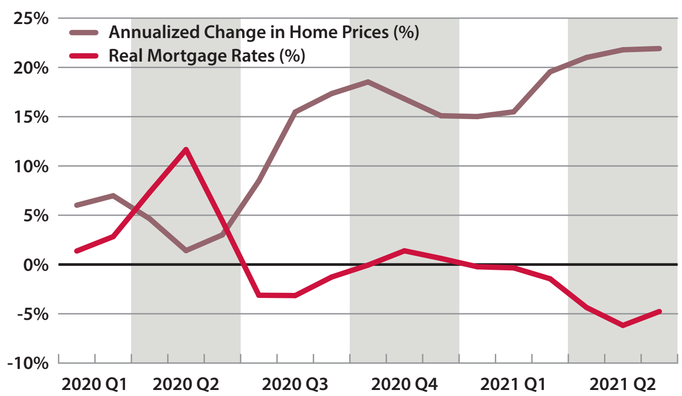


Figure 5. Home Prices vs. Mortgage Rates

Source: Case-Shiller Home Price Index; Federal Reserve mortgage survey, via Federal Reserve Economic Database (with author's calculations)



Projections of GDP and personal income rest heavily on our understanding of domestic demand for goods and services. We illustrate the huge one-year change in both the policy interest rates and federal fiscal stimulus. *See Figure 4*.

Rising Prices

The combination of historically large fiscal and monetary interventions affected markets across the U.S. from used cars and homes to commodities and labor markets. The home buying frenzy of 2021 was fueled either partially or wholly by mortgage rates, which dropped below zero in real terms. *See Figure 5*.

The fiscal stimulus (CARES Act and American Rescue Plan) also led to significant changes in household consumption patterns, temporarily reversing more than a century-long shift towards higher consumption share of services. *Figure 6* clearly shows a spike in non-durable goods purchases (e.g., toilet paper, grocery items, and PPE), accompanied by household savings rates that were four times the average of the previous 50 years. As recently as Spring 2021,

Figure 6. Household Savings vs. Consumption

Source: Federal Reserve

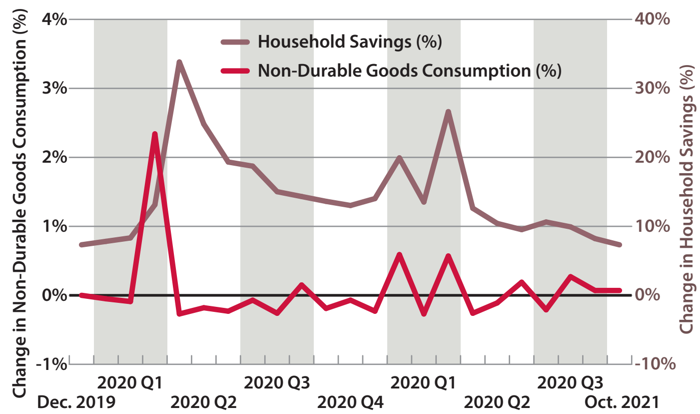
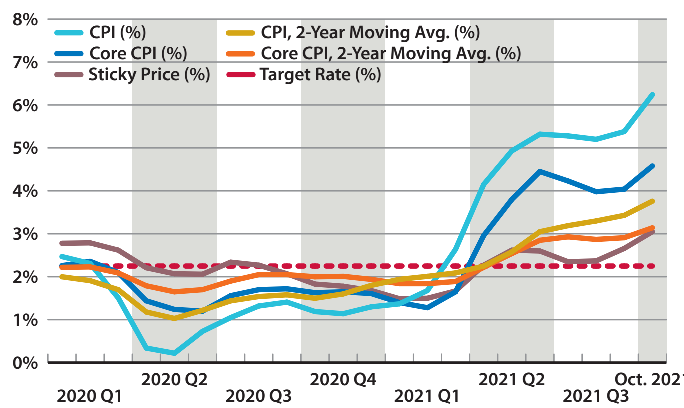


Figure 7. Inflation and CPI, Jan. 2020-Oct. 2021

Source: Federal Reserve



household savings rates exceeded 25 percent of income. That excess buying power pushed domestic manufacturing to a new inflation-adjusted record in 2nd Quarter 2021 and pushed U.S. imports of manufactured goods to a new record in Summer 2021. Both of these measures use the most recent data. *See Figure 6*.

We anticipate no further meaningful fiscal stimulus, and feel confident that absent significant economic setbacks, the Federal Reserve will move to tighten monetary policy in 2022. This confidence is based upon the risk of inflation, which is apparent in the data over the past few months.

Although the Federal Reserve has widened its accommodation to inflation risks to the 2.0-2.5 percent range, all current price indices suggest recent changes above that target level. We provide five inflation series. *See Figure 7*.

The first two series are the current CPI and Core CPI. (For reference, Core CPI omits more volatile items like energy and food.) Both measures are high in comparison to last year. However, because last year was a deflationary period, we offer a two-year moving average, which indicates a more modest price level increase. So, if we compare prices today with where they were in Fall 2019, we see annual increases of 3.1 percent for Core CPI. This is higher

Table 2. East Central Indiana Population Change

Source: U.S. Census Bureau

County	2010 Pop.	2020 Pop.	Avg. Annual Pop. Losses	Avg. Annual Percent Loss
Delaware, IN	117,665	113,649	-421	-0.36%
Fayette, IN	24,325	23,180	-143	-0.59%
Henry, IN	49,530	47,495	-150	-0.30%
Jay, IN	21,179	19,563	-76	-0.36%
Madison, IN	131,619	129,557	-194	-0.15%
Randolph, IN	26,178	24,242	-199	-0.76%
Wayne, IN	68,889	65,398	-311	-0.45%

than the Fed would wish to accommodate, but it not yet in an area from which modest policy interventions should be sufficient.

Inflation appears in the data, but there are no clear factors that would cause it to move from a modest cost increase into accelerating levels that would spark far more serious economic concerns and warrant very serious policy interventions.

East Central Indiana

Population decline continues to plague the region of East Central Indiana (ECI), and a straightforward economic or demographic projection would strongly suggest a continuing trend. Indeed, the demographic declines first evident in the 1950s are only strengthened by preliminary data from the 2020 Census. The only exception is Madison County, which saw population growth from 2019 to 2020.

There are few policy initiatives today that will counteract broad population decline in ECI, rather the growth in the region that is observed is primarily due to the expanding reach of the Indianapolis metropolitan area. The growth in Madison County, western Henry County, and western Delaware County is primarily an extension of residential location choices following the time-worn patterns of family migration.

In the short run, ECI faces the same economic recovery and challenge as faced by Indiana. The COVID-affected sectors of leisure and hospitality have seen fairly continued recovery through 2021. Expansion of these sectors will be muted due to the availability of workers and the diminished demand for services in regions with declining populations.

One aspect of the recovery that is too early to deal with formally is the likelihood that expanded remote work will sever a non-trivial share of households from their place of work. Even if this break is partial (i.e., requiring workplace attendance once or week or so), this will open a substantial area of Indiana to remote workers and their families. The magnitude of this shift may range from a modest 150,000 families to more than a half million today. This has the potential to materially change the economic conditions of places with high-quality public services and private sector amenities.

Table 3. Real GDP in East Central Indiana

Source: Indiana Econometric Model

COVID-Affected Sectors	2021	2022
Retail	1.8%	1.6%
Accommodations and Food Services	4.3%	3.7%
Arts, Entertainment and Recreation	4.3%	3.5%
Finance	4.5%	4.0%
Transportation and Warehousing	3.5%	3.0%
Other Sectors	**2021**	**2022**
Manufacturing	1.9%	1.7%
Utilities	1.9%	1.8%
Construction	-0.5%	-0.6%
Information	2.1%	1.9%
Healthcare	3.8%	3.4%
Professional Services	2.9%	2.7%
Wholesale	2.1%	1.9%

Summary

We project that the domestic economy, which is currently performing well, to settle down into pre-pandemic growth rates of 2.0-2.5 percent GDP growth in 2022. This is due to the tapering of excess consumer demand, tighter monetary policy and continued slow labor supply growth.

We anticipate that the structural change in labor markets will continue to influence the economy in unexpected ways. Among changes we do expect is an adjustment to the geography of work, with an increasing share of jobs to remote workers.

The price increases of recent months are likely to be largely permanent for many goods and services, but we do not anticipate either higher rates of inflation or accelerating increases in the price level in 2022. Inflationary pressures are still well within the ability of traditional policies to control. COVID is still affecting the economy, and will likely continue to reduce the level of GDP and employment through 2022.

ABOUT BALL STATE CBER

The Center for Business and Economic Research (CBER) at Ball State University conducts timely economic policy research, analysis, and forecasting for a public audience ranging from public officials and policy makers to journalists and citizens.

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