



Nationwide Economics Economic & Financial Markets Monthly Review

September 2021

Economic growth continues but slowed by lingering supply constraints/Delta variant

Growth is slowing as Covid-caused supply chain issues persist

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Equities higher again

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Supply constraints to linger

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What's happening and why in the economy and financial markets

Economic Review

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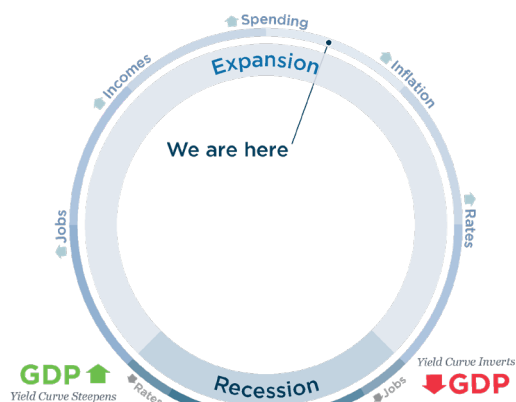
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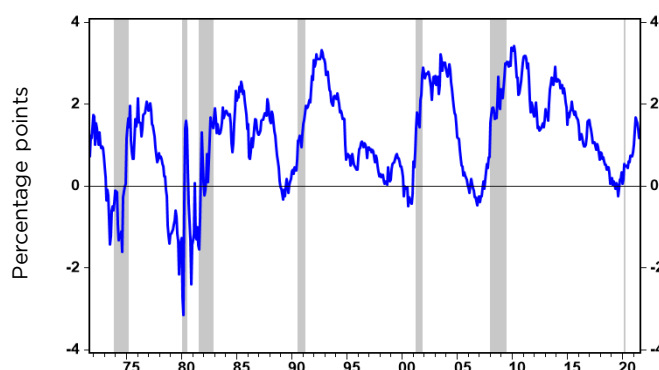
Business Cycle Update



The COVID-19 recession was officially the shortest on record — lasting only for the two months ending in April 2020. Since then, the economy has seen perhaps the fastest recovery ever, with the level of real GDP now above the pre-Covid peak. There is still lots of room to be made up with labor and capacity utilization, however, suggesting that there is still enough of an output gap that the economy should be able to grow at an above-trend pace for at least another year. Moreover, this gap should allow inflation to move lower once supply chains have healed over the next year.

Yield Curve Update

Spread between 10-year and 1-year U.S. Treasury note yields



Sources: Bureau of Labor Statistics; Haver Analytics
Shaded areas depict recessionary periods

One of the best predictors of an economic downturn is a fully inverted yield curve, when short-term rates are above long-term rates for a sustained period. But the new world of the COVID-19 pandemic and government responses to the virus superseded the usual recession rules early last year. The yield spread between 10-year and 1-year Treasury notes has edged upward over the past month to the highest level since mid-July — remaining above the long-term average and suggesting continued growth ahead.

Economic Review

Growth is slowing as Covid-caused supply chain issues persist

Growth was mostly solid for August, but it continued to be held back by supply constraints throughout much of the economy as well as an inability by many firms to fill open positions. A rise in Covid infections due to the Delta variant has resulted in only modest changes from consumers, but production continues to be impacted and this is slowing the pace of third-quarter growth. Most forecasters (us included) have reduced their projections for annualized real GDP growth to around 3.5 percent — down from around 7.0 percent just a couple of months ago.

Growth in nonfarm payrolls slows

August's job growth was the slowest since January as nonfarm payrolls rose by just 235,000, missing expectations by a wide margin. Leisure and hospitality, which has consistently led in recent months as the industry recovers from the pandemic, added no net jobs in August, while retail sales saw a decline. Given that job openings rose to a record high at the end of July, this appears to be more a case of workers pulling back rather than employers. Moreover, there were sharp upward revisions to June and July's numbers, with job gains in the two months now averaging about a million. And August has historically seen significant upward revisions, as well.

The U-3 unemployment rate dropped to 5.2 percent, the lowest since the onset of the pandemic, while the broader U-6 rate fell to 8.8 percent. The labor force participation rate remained steady at 61.7 percent (the 15th straight month in the narrow 61.4 – 61.7 percent range). Despite the disappointing payroll number, there is still evidence that the labor market is tight. Average hourly earnings rose by a very strong 0.6 percent — a sign of excess demand.

Home sales and ISM surveys strong, but limited by supply

New and existing home sales both rose modestly for July and are a good representation of much of the economy right now.

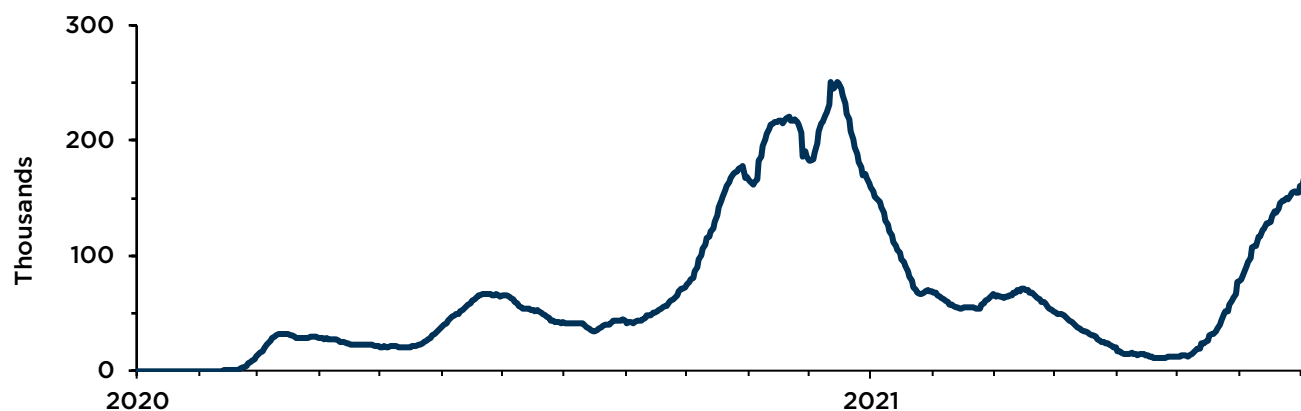
Sales numbers are strong in an absolute sense, but because of supply limitations sales are weaker than they otherwise would be. Activity is being held back by the near-record low number of existing homes for sale. Recent small increases in that number are seasonal, only. Additionally, new home builders face intense supply constraints, which have caused construction costs to soar, and labor shortages, which limit the number of contracts builders can accept due to their inability to complete them on time.

Similarly, the Institute for Supply Management (ISM) manufacturing and services indices continued to show strong growth in August, albeit well down from their recent peaks (March for manufacturing, July for services). Growth in supplier delivery delays and input prices continue to highlight stressed supply chains. But positively, growth in new orders (often seen as a leading indicator for future production) remained very strong for services and climbed to a three-month high for manufacturing.

Possible preview of Delta impacts in consumer surveys?

While impacts on the economy from the Delta variant have come primarily from the supply side, there may be some evidence that the demand side could be hit, as well. The consumer confidence index, which had recovered nearly all its Covid-related decline by June, fell to the lowest point since February in August. While the percentage of consumers intending to take a vacation in the next six months continued to rise in August's survey, concerns about Delta variant trends were at least on the minds of survey respondents (along with concerns about the prices of gasoline and food). In addition, the University of Michigan's consumer sentiment index plummeted to its lowest reading since December 2011. Still, into early September, high-frequency data suggest only minor consumer impacts in response to rising Covid cases.

Daily Covid infections have been rising again, but may have peaked



Sources: Bloomberg

Financial Markets Review

Equities higher again

The S&P 500 Index rose for a seventh straight month in August, exceeding 4,500 for the first time. Optimism lifted earnings expectations, adding to investors' enthusiasm despite the growing possibility of higher corporate tax rates ahead. Longer-term interest rates edged higher in August, with the yield on the 10-year Treasury note rising toward the upper end of its recent range. In general, the commodities decline continued last month, but the price of natural gas rose dramatically as both domestic and international supply constraints persisted.

On a roll

The current streak of monthly gains for the S&P 500 Index is the longest since ten straight increases ended in January 2018. While impressive, the recent consecutive monthly uptick falls far short of the post-1927 record of 12 months that ended in April 1936. On a calendar basis, 2021 has already hit the average of seven positive months, with a record-tying 11 possible if gains persist through year end.

Since last October, the index has soared past benchmark levels of 3,500, 4,000, and 4,500, ending August almost 75 percent higher than at the end of March 2020. But the rally has raised concerns over lofty valuation multiples. At the end of August, the S&P 500 traded at roughly 22 times forward earnings. While this market multiple is historically high, earnings growth has been strong, boosted by robust retail spending.

Small-cap stock indexes maintained their year-to-date lead in this year's race, barely ahead of the large- and mid-caps. Healthy gains by financials and industrials, the S&P 600 Index's top two sectors, showed a further broadening of the market. Compared with the S&P 500 Index, the small-cap group trades at a price to earnings multiple near 15, a 30 percent discount to the large-cap measure. The gap highlights investors' preference for large companies as the expansion takes hold and emphasizes the vast difference in valuation.

Equities in developed countries are also in rally mode. Gains over the past several months have brought them almost back to their October 2007 high. While domestic and emerging

markets have achieved record levels lately, however, the lagging nature of developed country equities shows vulnerability to global supply chains and opportunities to recover as international trade routes are reestablished.

The fixed income yield curve steepened modestly in August as short rates remained anchored with unchanged Fed policy and long rates moved a bit higher (with the 10-year U.S. Treasury note yield a bit above 1.30 percent). Even this modest steepening of the yield curve was enough to bring the 10-year/2-year spread up to its highest level since mid-July after Labor Day.

Natural gas bucks the trend

Hurricane-induced production cuts and lower storage levels drove the price of natural gas higher, pushing the commodity above \$4.60 per mmbtu as the new month started. Government officials announced that almost 85 percent of U.S. production was forced offline by Hurricane Ida. Low storage levels only exacerbated the supply concerns. Even if natural gas production is quickly increased, achieving adequate pre-winter storage levels will be difficult, perhaps keeping the price elevated into the winter months.

But other commodity prices fell over the month, with the CRB commodity index down by nearly 0.5 percent despite the jump in natural gas prices. Lumber, hogs, soybeans, and oil all fell by more than seven percent in August. In May, lumber topped \$1,700 per thousand board feet, and in mid-August, it fell to near \$450, an illustration of the power of markets to respond to shortages.

The dollar was up by a tad in August. International manufacturing activity was healthy and trade activity accelerated. Still, production limitations persist as the Delta variant hits developing countries, which continue to struggle to acquire vaccines. These foreign production shortages, combined with transportation difficulties, are holding back U.S. production and ultimately sales to consumers. Real GDP growth in the third quarter continues to be marked down by forecasters, principally from these supply-side restrictions.

Asset Class Performance	1-month	6-months	12-months
S&P Composite 500 Index	3.04%	19.52%	31.17%
S&P Midcap 400 Index	1.95%	10.97%	44.77%
S&P Smallcap 600 Index	2.02%	7.54%	53.97%
EAFE ¹	1.52%	8.65%	23.37%
U.S. Dollar Index ²	0.42%	0.28%	-2.23%
CRB Commodity Index ³	-0.46%	15.02%	41.77%
Intermediate Treasuries ⁴	-0.17%	0.54%	-0.70%
Long Treasuries ⁵	-0.21%	4.62%	-7.27%
Investment-grade Corporate Bonds ⁶	-0.30%	2.85%	2.53%

Total returns represented as of 8/31/21

¹ Index measuring equity performance of developed markets outside of the U.S. and Canada

² Federal Reserve trade-weighted broad currency index

³ Commodity Research Bureau; CRB spot index

⁴ Index of 1-year to 10-year Treasury notes

⁵ Index of 10-year and longer Treasury notes and bonds

⁶ Index of U.S. investment-grade corporate bonds

Sources: Bloomberg; Haver Analytics

The Outlook

Supply constraints to linger

Among the defining characteristics of the current business cycle thus far have been widespread shortages of labor and materials occasioned by the pandemic. These constraints have helped to lift the inflation rate (at least temporarily) while also tempering the pace of economic expansion (despite its strength).

Unfilled positions have soared

Job openings, for example, are building at by far their fastest pace on record, rising by an average of nearly 600,000 per month to this point in 2021 versus a trend across the last cycle of less than 40,000 (note that these numbers are only partially a function of the post-lockdown snapback; job openings had recovered to pre-pandemic levels by early this year and are up by a still-hearty 210,000 per month since the outset of 2020). Moreover, the most recent data (July) showed a rise in job openings to yet another all-time high. Along these same lines, record numbers of small business survey respondents have indicated recently that they have few or no qualified applicants for open positions.

Constraints in production, as well

The shortage of labor is in turn exacerbating the bottlenecks in goods production and transportation initially fueled by the rapid turnaround in demand last spring. Many businesses were caught flat-footed by the fleeting nature of the recession — at two months, it was by far the briefest in U.S. history — and were left with inadequate inventories as the economy recovered. Given increasingly fragmented and complex supply

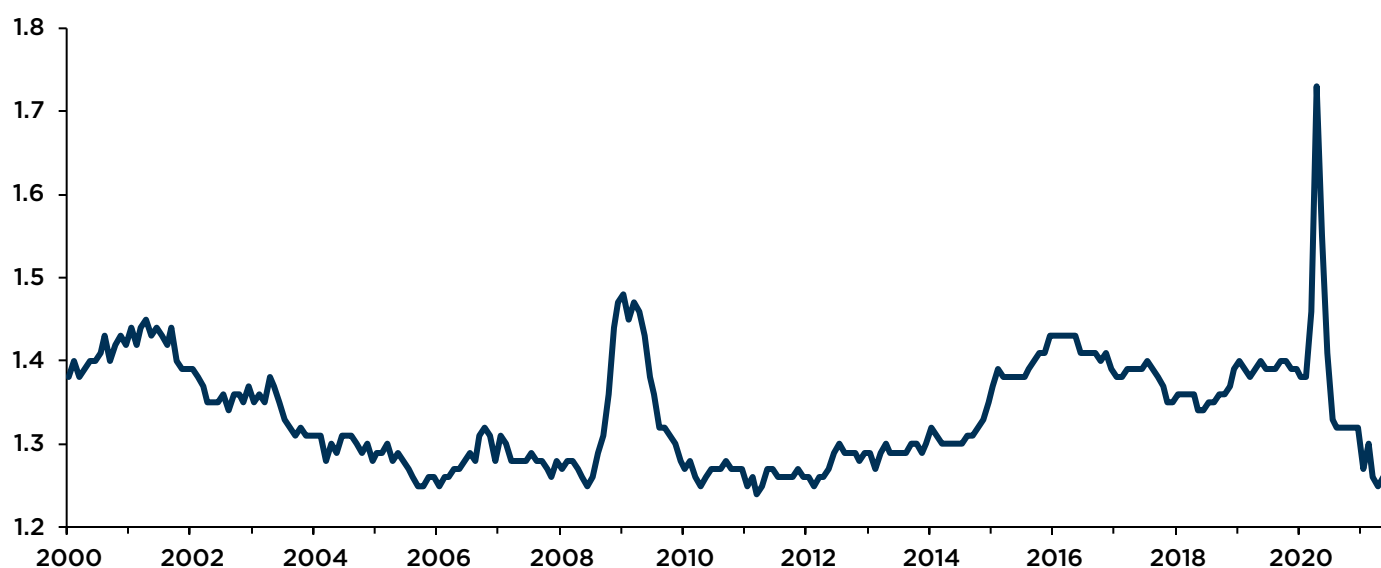
chains, these shortfalls quickly cascaded and solidified. The inventory/sales ratio, which surged during the first wave of the pandemic, now stands just above an all-time low.

A slow healing process

The lack of restocking even as an expansion has firmly taken hold is a strong signal that supply chains are healing only slowly and unevenly. Moreover, there are also structural factors at play that will likely forestall a return to normal for some time. It could take years for a renewed equilibrium in the semiconductor market, for example, due to the ramped-up demand for technology products and the time and expense required to bring new production online. In addition, skills mismatches and a growing preference for leisure over work could mean persistent labor shortfalls, especially should this nascent cycle be sustained in the manner of those in recent decades.

That said, it is telling that real GDP and payroll employment have both advanced robustly since the downturn came to an end even as these constraints have festered. Bottlenecks have been an undeniable weight on economic growth, but they haven't come close to stalling or reversing it. And it is to be expected that the healing process will continue, however gradually, as the pandemic finally wanes, and society more fully normalizes. Shortages of labor and goods may well prove to be chronic headwinds, but their impacts, which have been insufficient to imperil this expansion even at their most acute, are a safe bet to diminish further as the cycle matures.

Inventory/Sales Ratio: Total Business

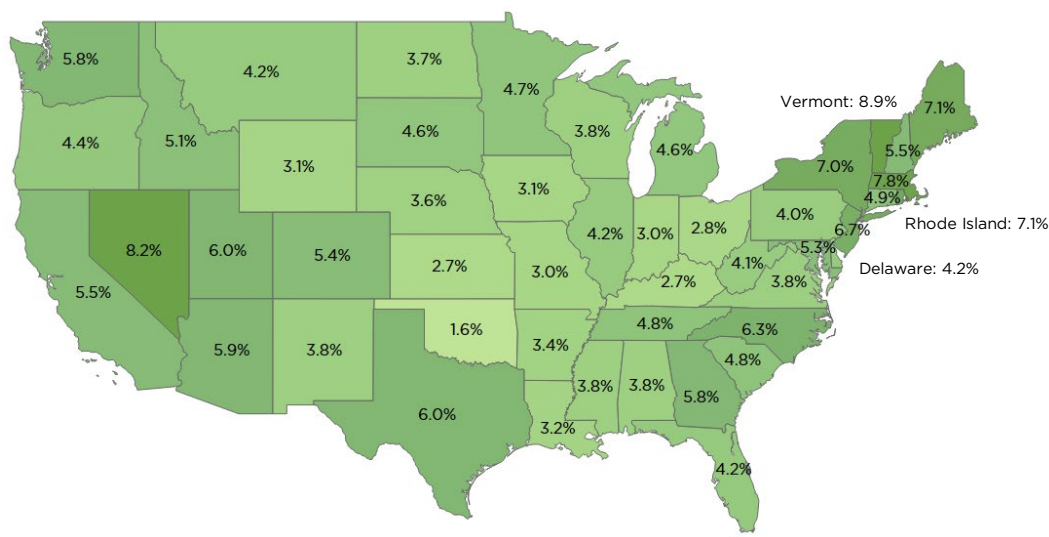


Sources: Census Bureau

Charts & Commentaries

Solid job gains in most states over the past year

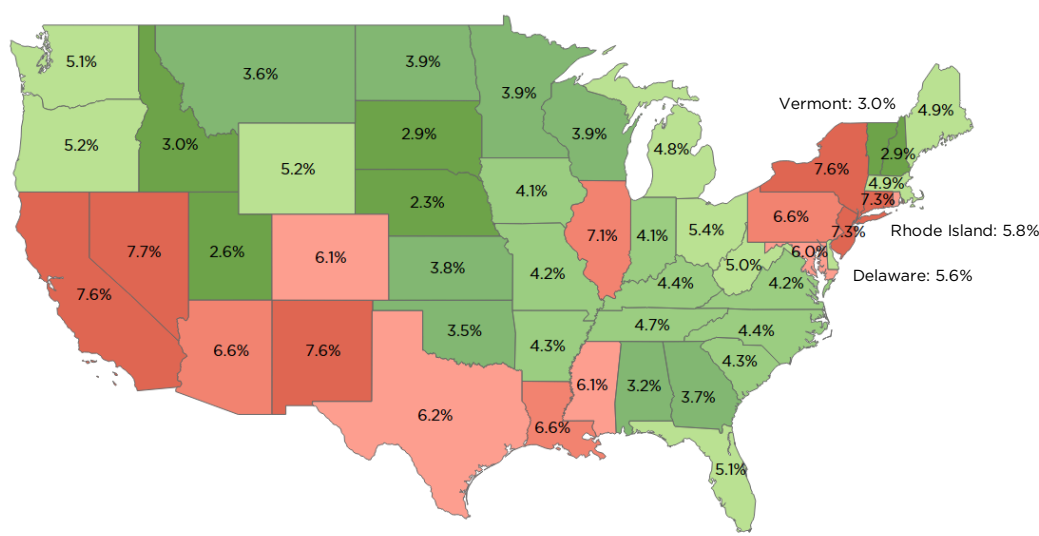
- Over the past 12 months, national payrolls climbed by more than 5.0 percent — paced at the state level by gains of 7.0 percent or more in Hawaii (not shown), Nevada, New York, and much of New England.
- Job growth over the past year was a little slower in the middle of the country where there were relatively fewer job losses during last year's downturn.



Sources: Bureau of Labor Statistics; Haver Analytics
 Twelve-month growth rate in nonfarm payroll employment, July 2021

State unemployment rates trending downward

- Unemployment readings in the middle of the country have mostly dropped to pre-Covid levels, with 10 states at-or-below 4.0 percent in the Intermountain West and Great Plains regions (plus Vermont, New Hampshire, Alabama, and Georgia).
- But multiple states still have unemployment rates well above their pre-Covid averages, with eight states above 7.0 percent in July (including Hawaii not shown).

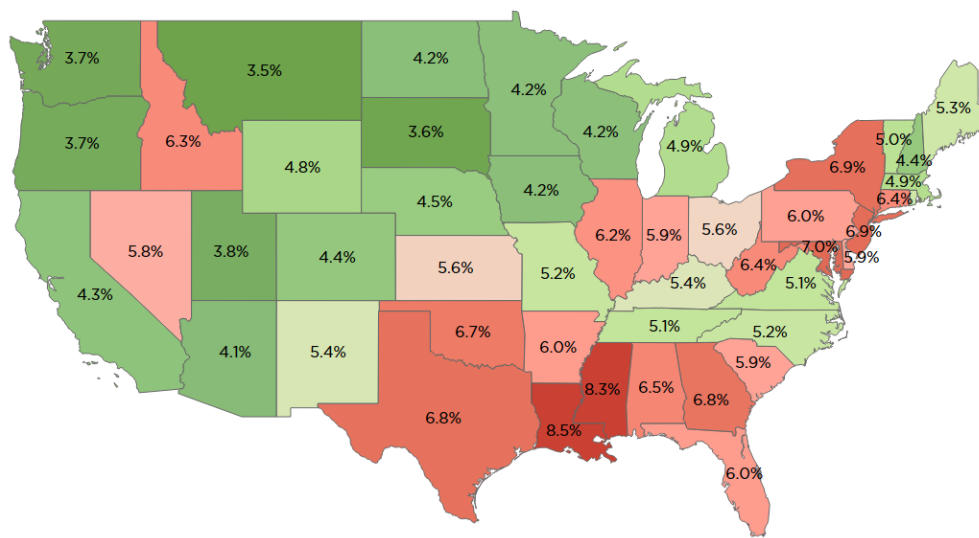


Sources: Bureau of Labor Statistics; Haver Analytics
 Civilian unemployment rate, July 2021

Charts & Commentaries

Many mortgage delinquencies are still in the system

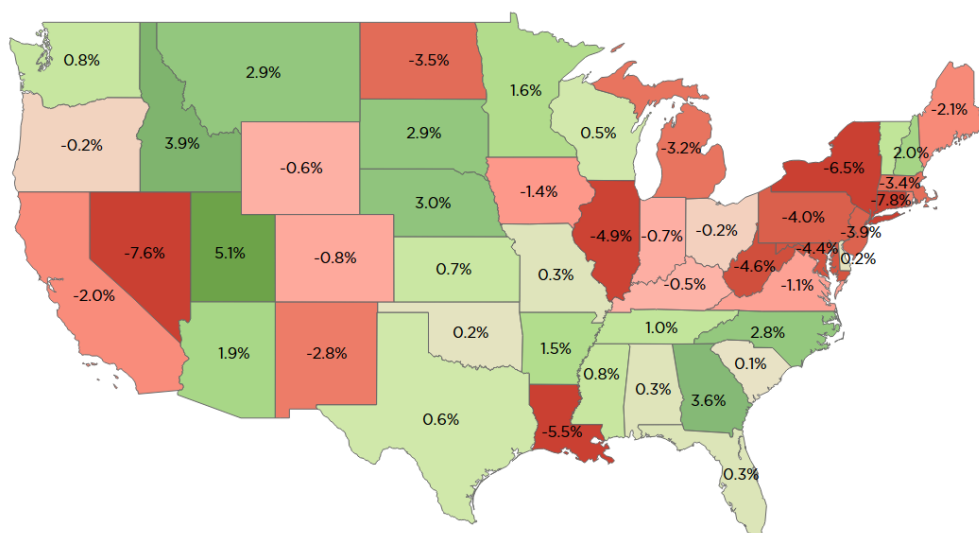
- Although down from last year's peak, mortgage delinquency rates (5.5 percent at the national level) remain elevated as many delinquent homeowners are still participating in extended forbearance programs (keeping default rates low).
- Delinquencies are more prevalent in the South and Mid-Atlantic regions with rates higher than the national average, led by Louisiana and Mississippi above 8.0 percent.



Sources: Mortgage Bankers Association; Haver Analytics
Share of mortgages past due, 2021 Q2

Uneven recovery from last year's downturn across states

- The Philadelphia Fed's coincident index, which tracks key labor market and production data, shows that nearly half of the states have surpassed pre-Covid readings — led by solid increases in Utah, Idaho, and Georgia.
- Several states with stricter Covid restrictions over the past year or with a greater dependence upon tourism have seen a more sluggish rebound in overall activity, including Connecticut, Nevada, New York, and Illinois, among others.

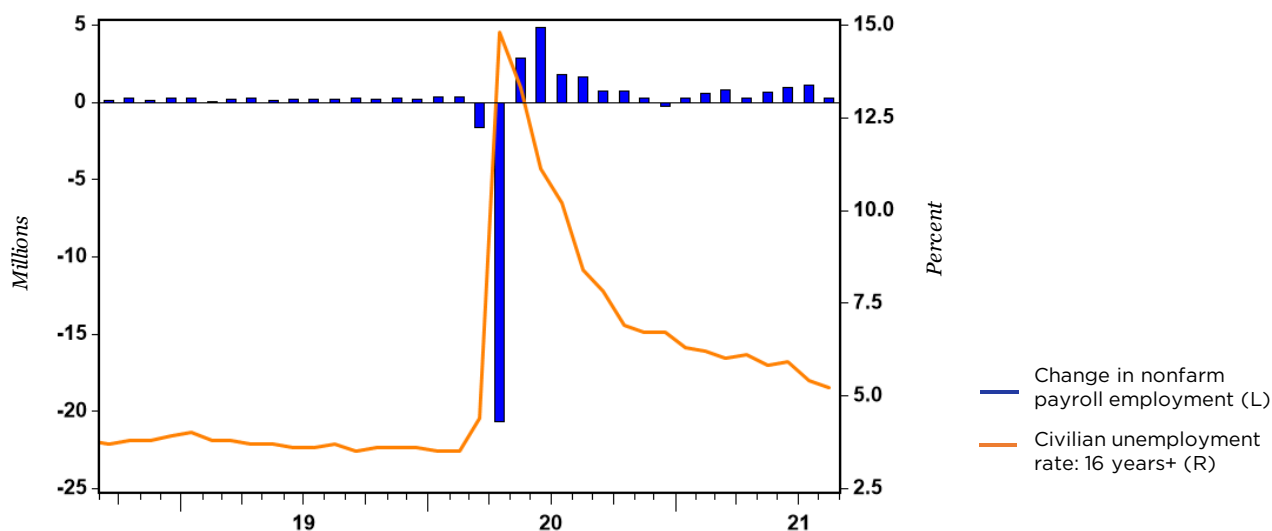


Sources: Federal Reserve Bank of Philadelphia; Haver Analytics
Coincident economic activity index, difference from February 2020 to July 2021

Charts & Commentaries

Hiring slows for August

- Nonfarm payrolls grew by only 235,000 for August as the Delta variant slowed hiring across many in-person focused sectors. There were upward revisions to June and July, however, with 2.25 million in job gains over the past three months.
- The U-3 unemployment rate fell to 5.2 percent for August as labor market conditions continue to tighten with demand for workers high. Labor force participation remains low, however, as many workers are still out of the workforce.

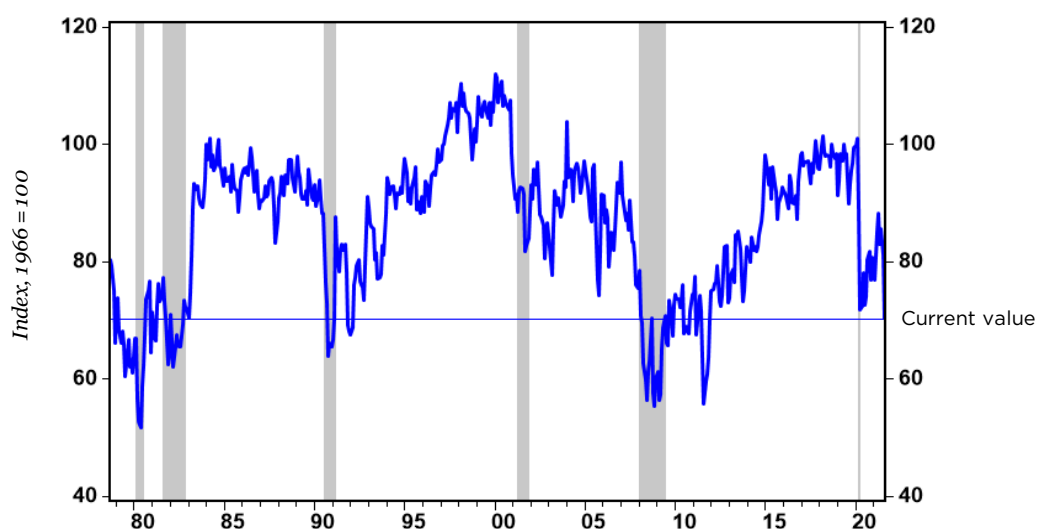


Sources: Bureau of Labor Statistics; Haver Analytics

Monthly change in nonfarm payroll employment; level of the civilian U-3 unemployment rate, August 2021

Delta variant concerns drop sentiment to a pandemic low

- Consumer sentiment reacted strongly to the surge in Covid cases, plunging during August to a new pandemic low on sharply lower future growth expectations.
- The big drop in consumer survey readings (consumer confidence also fell) suggests some downside risk to consumer spending in the near term, especially for in-person activities.



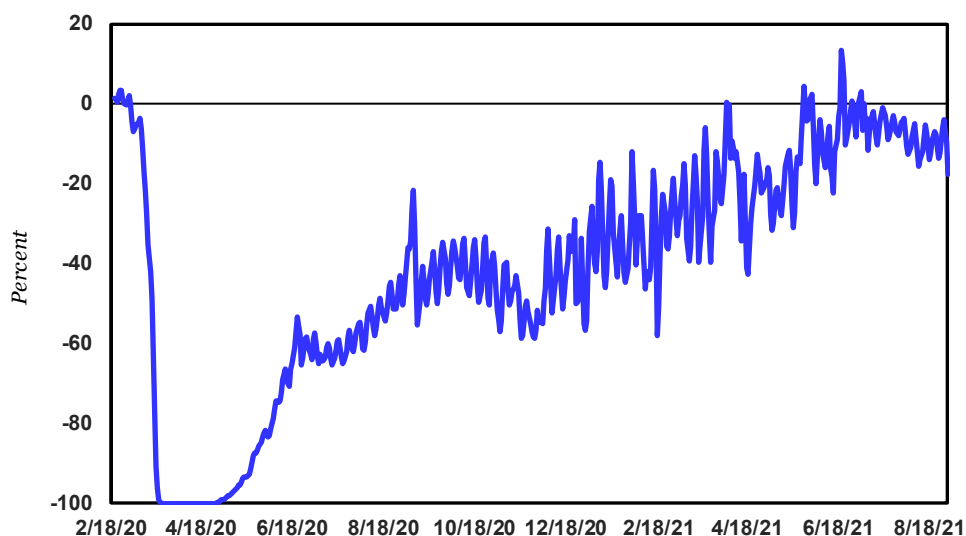
Sources: University of Michigan; Haver Analytics; Shaded areas depict recessionary periods

Consumer sentiment, August 2021

Charts & Commentaries

Modest impact from Delta on seated diners so far

- Restaurant diners, which finally climbed back to pre-Covid levels in June, have edged lower over the past two months, likely in response to building concerns about the Delta variant.
- The decline through August has been small with total diners just under levels from 2019, as governments have shown little interest in repeating the restrictive health orders seen last year.

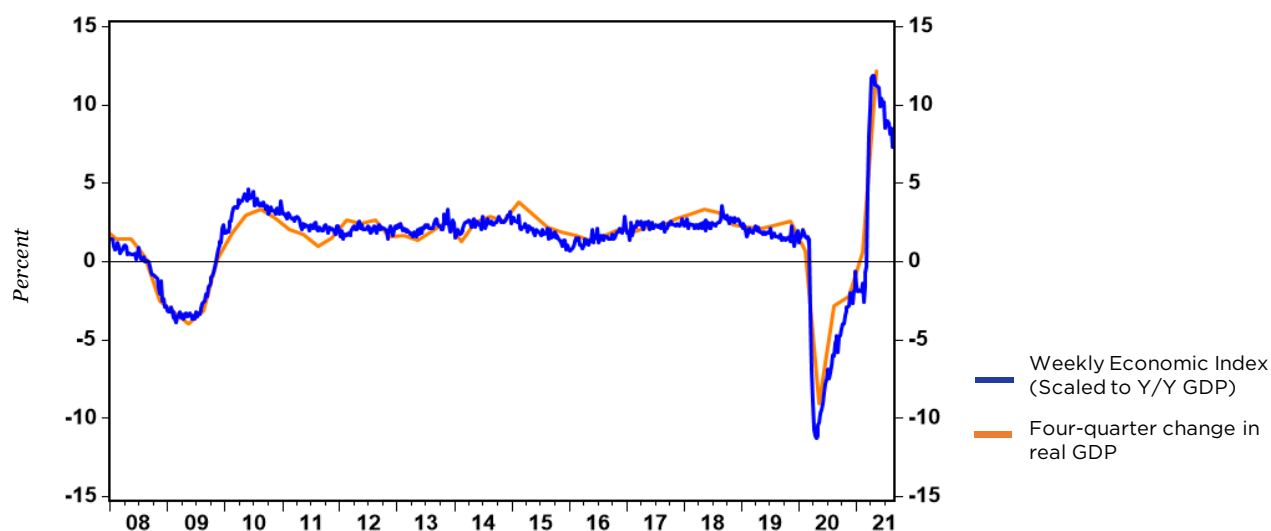


Sources: OpenTable.com

U.S. seated diners, percentage change from same date in 2019; August 31, 2021

Decelerating growth signals but still strong

- The Weekly Economic Index (WEI) from the Federal Reserve Bank of New York tracks closely with year-over-year real GDP growth. The drop in the WEI through August suggests slower growth during the third quarter.
- Still, the pace of economic activity remains strong and well-above trend as rapid job and income gains should continue to feed consumer spending over the rest of the year and into 2022.



Sources: BEA; FRB New York; Haver Analytics; Real GDP – 2021Q2; WEI – August 28, 2021

Forecast

Nationwide Economics Forecast

As of September 2021	Actual		Estimate	Forecast			
	2019	2020	2021	2022	2023	2024	2025
Real GDP ¹	2.2%	-3.4%	5.8%	4.7%	2.5%	2.0%	1.8%
Unemployment Rate ^{2,7}	3.7%	8.1%	5.5%	4.3%	3.8%	3.7%	3.9%
Inflation (CPI) ⁵	2.0%	1.2%	4.8%	2.7%	2.5%	2.6%	2.7%
Total Home Sales ^{3,7}	6.03	6.46	6.73	6.65	6.30	6.00	5.85
S&P/Case-Shiller Home Price Index ⁹	3.7%	10.3%	15.1%	7.4%	4.6%	3.8%	3.2%
Light Vehicle Sales ^{3,7}	16.9	14.5	15.9	16.6	17.0	16.5	16.3
Federal Funds Rate ^{2,4,6}	1.50%	0.00%	0.00%	0.00%	0.25%	0.50%	0.75%
1-Year Treasury Note ^{2,4}	1.59%	0.10%	0.08%	0.12%	0.50%	0.70%	0.90%
5-Year Treasury Note ^{2,4}	1.69%	0.36%	0.85%	1.05%	1.30%	1.50%	1.70%
10-Year Treasury Note ^{2,4}	1.92%	0.93%	1.60%	1.95%	2.15%	2.30%	2.45%
30-Year Fixed-Rate Mortgage ^{2,4}	3.74%	2.67%	3.05%	3.35%	3.55%	3.70%	3.85%
Money Market Funds ^{2,8}	1.55%	0.47%	0.14%	0.14%	0.22%	0.48%	0.74%

¹ Percent change year-to-year² Percent³ Million units⁴ Year end⁵ Percent change Q4-to-Q4⁶ Target rate, lower limit⁷ Year average⁸ Annual return⁹ Percent change Dec-to-Dec

Sources: Haver Analytics (actuals); Nationwide Economics (estimates and forecasts); except Money Market Funds (all data from Nationwide Economics)

Major forecast changes from last month:

- 1) The Delta variant and continuing supply chain problems have slowed economic activity sharply in the current quarter. While we think this will be temporary, it is significant enough to modestly lower our real GDP growth forecast for all of 2021.
- 2) Lack of homes for sale combined with strong demand continue to drive up home prices rapidly this year. As a result, we have pushed our projection for 2021 house price appreciation up to above 15 percent. Similarly, new car production remains depressed by microchip shortages (and other supply chain problems), significantly lowering reported sales over the past few months – resulting in a lower annual estimate of around 15.9 million total unit sales for 2021.
- 3) Long-term interest rates remain low as the Fed continues its monthly asset purchases while inflation and growth expectations have come down from their peaks. Reflecting the lower current starting point, and with only a bit more than three months to go before year end, we have lowered our projections for 5- and 10-year Treasury note yields for this year modestly – with even smaller projection declines for next year.

The information in this report is provided by Nationwide Economics and is general in nature and not intended as investment or economic advice, or a recommendation to buy or sell any security or adopt any investment strategy. Additionally, it does not consider the specific investment objectives, tax and financial condition or particular needs of any specific person.

The economic and market forecasts reflect our opinion as of the date of this report and are subject to change without notice. These forecasts show a broad range of possible outcomes. Because they are subject to high levels of uncertainty, they may not reflect actual performance. We obtained certain information from sources deemed reliable, but we do not guarantee its accuracy, completeness or fairness.

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NFM-11356AO.3