U.S. Economy in a Snapshot
Research & Statistics Group
October 2021

The *U.S. Economy in a Snapshot* compiles observations of staff members of the Federal Reserve Bank of New York’s Research and Statistics Group. The views, model results, and analysis presented are solely those of the individual contributors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System. The analysis presented herein is based on data released through October 13, 2021.
Consumer spending on durable goods fell, labor market data were mixed, and monthly core inflation rates eased from Q2’s rapid pace.

- Output in Q2 moved above its pre-pandemic level.
  - Growth was driven by higher consumer spending, while inventories, federal government spending, and net exports were drags on growth.

- Personal income increased modestly in August.
  - Compensation rose while proprietors' income fell.
  - Saving as a percent of personal income dipped, but remained well above pre-pandemic levels.

- Payroll employment growth slowed in September while the unemployment rate fell sharply.

- Core PCE inflation over the year stayed at 3.6% in August.

- The 10-year Treasury yield rose from 1.30% in mid-September to 1.55% in early October. The S&P 500 stock index moved modestly lower, but was still up 17% year-to-date on October 8. The market-implied federal funds rate path shifted up and steepened.

**Output in Q2 was above its pre-pandemic level**

- After rapid growth in the past four quarters, Q2 GDP was 0.9% above its previous peak in Q4 2019.
  - The median estimate for the longer-run GDP growth rate was 1.8% in the September Summary of Economic Projections (SEP).
  - The October Blue Chip survey had expected average annual growth over the 2023-27 period at 2.1%.
  - The Q2 GDP level is more than 2.0% below what it would have been if, since Q4 2019, it grew at a rate close to longer-run forecasts.

- Labor market data suggest there still is notable slack.
  - The 4.8% unemployment rate in September was above the consensus long-run forecasts of 4.0% in the Blue Chip survey and the median SEP projection of 4.0% for the longer-run unemployment rate.
OVERVIEW

Labor Market Indicators

- Employment growth slowed in September
  - Nonfarm payroll employment increased by 194,000 in September, below the median Bloomberg survey of 500,000.
    - Payrolls in private service-providing industries rose by 265,000, with notable gains in professional and business services (60,000), retail trade (56,000), and transportation and warehousing (47,000).
    - Government employment fell by 123,000, primarily due to a 144,000 decline in local government education.
  - The unemployment rate declined from 5.2% to 4.8%.
  - The labor force participation rate ticked down to 61.6%, while the employment-to-population ratio was up 0.2 percentage point to 58.7%.

Inflation remained elevated in August

- PCE inflation ticked up from 4.2% over the year in July to 4.3% in August.
  - Durable goods inflation moved from 6.9% to 7.0%.
  - Nondurable goods inflation increased from 4.4% to 4.6%.
  - Services inflation was unchanged at 3.6%.
- Core inflation stayed at 3.6%.
  - A major driver of core inflation was the 29% increase in used motor vehicle prices over the year.
- The monthly change in core PCE averaged 0.3% in July and August.
  - This is down from the average rate of 0.6% in Q2.
ECONOMIC ACTIVITY

GDP Growth
4-quarter % change

Source: Bureau of Economic Analysis via Haver Analytics

GDP growth was robust in Q2

- According to the third estimate, GDP rose at a 6.7% annual rate in Q2, after rising at a 6.3% rate in Q1.
  - The third estimate is a slight upward revision from the second estimate of 6.6%.
  - A small change to consumption was the major factor in the upward revision.

- Consumption was the principal contributor to Q2 growth and inventory investment was a significant drag.

- Real gross domestic income (GDI) rose at a modest 2.3% annual rate in Q2.
  - However, the four-quarter change in GDI was 12.8%, somewhat above that of GDP (12.2%).

Manufacturing Index
Index, 2017=100

Source: Federal Reserve Board via Haver Analytics

Manufacturing activity increased modestly in August

- The manufacturing index rose 0.2% in August after jumping 1.4% in July.
  - The index was 1.0% above its February 2020 level.

- A major source of volatility across industries was the motor vehicles category, which was unchanged in August after falling 5.0% in June and increasing 9.5% in July.
  - The index was down 5.6% compared to February 2020.
  - Overall manufacturing excluding motor vehicles and parts was 1.6% above its pre-pandemic level.

- The ISM index remained at a high level in September.
The growth in personal income slowed in August

- Nominal personal income increased 0.2% in August after increasing 1.1% in July.
  - The July data were pushed higher by the initial round of the Advance Child Tax Credit.
  - Compensation growth fell from a strong 1.0% pace in July to 0.4%.
  - Proprietors’ income retreated from a high level.
  - Nominal disposable income rose 0.1% and real disposable income fell 0.3%.

- Nominal Personal Consumption Expenditures (PCE) increased 0.8% in August.
  - Real PCE rose 0.4%, putting spending 2.8% above its February 2020 level.

Consumer expenditures continued to rebalance

- Expenditures continued to shift away from durable goods and towards services in August.
  - Some of this rebalancing likely reflects continued supply shortages of goods, particularly motor vehicles.

- Real expenditures on goods were up 0.6% (-1.3% for durables and +1.7% for nondurables) and up 0.3% for services.
  - Despite the increase, real services expenditures were still 2.3% below their level in February 2020.
  - In contrast, real goods expenditures are 14.5% above their pre-pandemic level, with spending on durables up 17.3% and nondurables up 13.1%.
Equipment spending increased sharply in Q2

- Real business equipment spending rose at a 12.1% annual rate in Q2, its fourth straight double-digit increase.
  - Equipment added 0.7 percentage point to annualized GDP growth in the quarter.
  - There were large increases in industrial and transportation equipment, but a fall in the information processing category.
  - Equipment spending in Q2 was 3.3% above its previous peak in Q2 2019.

- Orders of capital goods increased again in August, indicating continued momentum in equipment spending.

Nonresidential structures spending fell in Q2

- Real nonresidential structures investment spending decreased at a 3.0% annual rate in Q2.
  - The decline in spending subtracted 0.1 percentage point from annualized GDP growth.
  - Nonresidential structures spending was 5.6% below its year-ago level and 19.5% below its Q4 2019 level.

- The level of spending in the energy sector again was an outlier as it increased for the third straight quarter.
  - Spending on mining exploration, shafts, and wells was still down 24.2% from its Q4 2019 level.

- Monthly data on nonresidential construction through August do not yet point to a turnaround in the sector.
### Residential Investment

Billions of 2012 dollars, annualized

- Residential investment fell modestly in Q2, taking 0.6 percentage point off annualized GDP growth.
  - Residential investment was still 15.7% above its Q4 2019 level.
- Investment has been strong in both single-family and multi-family structures during the pandemic.
  - Single-family construction was up 24.8% in Q2 relative to Q4 2019 and multi-family construction was up 23.6%.
- Housing starts data for July and August suggest residential investment will be relatively unchanged in Q3.

### New and Existing Home Sales

Thousands, annualized

- Existing single-family home sales fell 1.9% in August, to 5.2 million units (annualized).
  - Sales were down from Q4 2020 but remained well above pre-pandemic levels.
- New single-family home sales rose slightly to 740,000 units in August.
  - Sales were down from Q4 2020 and near pre-pandemic levels.
- Supply constraints have seen a modest relaxation in recent months due to higher residential investment spending over the past year.
**Real federal spending slumped in Q2**

- Real federal government spending subtracted 0.4 percentage point from annualized GDP growth in Q2, partially offsetting the 0.8 percentage point contribution in Q1.
  - Spending was down 0.9% over the year, but up 4.5% since Q4 2019.

- The decline was almost entirely in nondefense spending.
  - Real nondefense spending subtracted 0.3 percentage point from growth, while real defense spending subtracted 0.1 percentage point.

- Lower payments to banks related to the Paycheck Protection Program account for most of the fall in spending.

**State and local government spending was flat in Q2**

- Real state and local government spending was unchanged in Q2.
  - Spending remained slightly above the Q4 2019 level.

- S&L consumption rose 0.8% over the quarter.
  - This spending was up 0.5% relative to Q4 2019.

- Investment spending fell 3.3%, pulled down by a 3.8% drop in construction and a 4.3% drop in equipment purchases.
  - Total investment spending was down 2.3% relative to Q4 2019.
  - Purchases of intellectual property products remained significantly above pre-pandemic levels.
**INTERNATIONAL DEVELOPMENTS**

**Exports and Imports of Goods and Services**
Billions of 2012 dollars, annualized

- Imports rose faster than exports in Q2.
  - Net exports took 0.2 percentage point off annualized GDP growth, as exports added 0.8 percentage point to growth and higher imports subtracted 1.0 percentage point.
- Exports were still below pre-pandemic levels.
  - Sales of aircraft and oil were down sharply.
  - Services trade, particularly tourism, remained depressed.
- Imports moved past pre-pandemic levels.
  - Purchases of durable consumer goods and capital goods were particularly strong.
  - High goods imports more than offset low services imports.

Source: Bureau of Economic Analysis via Haver Analytics

**Crude Oil Prices**
Dollars per barrel (WTI)

- Oil prices (WTI) rose from $68/barrel in August to $72/barrel in September and to near $80/barrel in early October.
  - Prices averaged $66/barrel in Q2 and $71/barrel in Q3.
  - Global production is estimated to have remained below consumption in Q3 2021, with the gap not narrowing.
- Demand for liquid fuels (crude and natural gas liquids) is forecast to have increased from 96.7 million barrels per day (mb/d) in Q2 to 98.5 mb/d in Q3.
  - China's demand fell 0.5 mb/d, while U.S. demand rose 0.1 mb/d and Europe's demand jumped 1.1 mb/d.
- Liquid fuel production rose from 94.8 mb/d to 96.6 mb/d.

Source: Energy Information Administration via Haver Analytics
**LABOR MARKET**

**Payroll Employment and Hours Worked**

- Nonfarm payroll employment rose by 194,000 in September, following the 366,000 increase in August.
  - The median Bloomberg survey had forecast nonfarm payroll growth to register at 500,000.
  - This figure is well below the average growth of 806,000 in the previous three months.
- Gains were primarily concentrated in private service-providing industries.
  - Leisure and hospitality (74,000) and professional business services (60,000) registered the largest gains.
- Government employment fell sharply, driven by a 144,000 decline in local government education.

**Unemployment Rate by Race**

- The 0.4 percentage point decline in the unemployment rate was driven by a decrease in Black unemployment.
  - The Black unemployment rate fell 0.9 percentage point in September, erasing a 0.6 percentage point increase in August.
  - The white unemployment rate fell 0.3 percentage point.
- Over the course of the recovery, the racial gap in the unemployment rate has declined from a pandemic high of 5.4% to its current level at 3.7%.
  - However, declines in the white unemployment rate paired with the large uptick in the Black unemployment rate in August have widen the gap from its pandemic low of 3.4%.

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[Source: Bureau of Labor Statistics via Haver Analytics]
LABOR MARKET

Cumulative Employment Recovery
Percent Recovered Feb. 2020 – Sep. 2021 (Total Gains / Total Losses)

- Goods-producing
- Private-service-providing
- Federal Government
- State Government
- Local Government

Source: Bureau of Labor Statistics via Haver Analytics

State and local government employment has lagged
- The goods producing and private-service-providing industries have recovered 79% and 83% of their employment losses since February 2020, respectively.
  - Transportation and warehousing employment has surpassed its February 2020 level and financial activities employment has reached its February 2020 level.
  - Utilities employment has continued to decline throughout the pandemic.
- Federal government employment exceeded its February 2020 level.
  - State and local government employment have respectively recovered 51% and 63% of their losses since February 2020.

Average Hourly Earnings and the ECI

- Average hourly earnings rose by 0.6% over the month, matching the increase in August
  - Average hourly earnings were up 4.6% on a 12-month basis.
  - Average hourly earnings growth was especially pronounced in education and health services (1.5%) and leisure and hospitality (0.5%).
  - The large employment swings during the pandemic complicate the analysis of average hourly earnings, which vary significantly across industries.

Source: Bureau of Labor Statistics via Haver Analytics
Core CPI inflation was modest in September

- The core CPI was up 0.2% in September, after rising 0.1% in August.
  - Monthly changes averaged 0.8% in Q2 and 0.2% in Q3.
  - The inflation rate for core goods fell from 0.3% to 0.2% in September, with lower prices for apparel and used motor vehicles.
  - The inflation rate for core services prices increased from 0.0% to 0.2%, with higher prices for shelter and lower prices for medical insurance and air travel.
- On a 12-month basis, core inflation was unchanged at 4.0%.
  - Core goods inflation fell from 7.7% to 7.3%.
  - Core services inflation rose from 2.7% to 2.9%.

Shelter inflation remained stable

- The consumer price index for shelter rose 0.4% over the month in September and 3.2% over the year.
  - Prices rose at the same average monthly rate in Q2 and Q3.
- Rent inflation over the year came in at 2.4%, well below the 3.7% rate in the five years before the pandemic.
  - The inflation rate on a 24-month basis was 2.6%, annualized.
- Owners’ equivalent rent inflation rose to 2.7%, which was below the pre-pandemic rate of 3.2%.
**10-Year Treasury and Term Premium**

- **10-Year Treasury yields rose since September**
  - On a five-day moving average basis, the 10-year Treasury yield was at 1.55% on October 8 and has risen markedly since mid-September.
    - The yield was below the range observed in the period from the Global Financial Crisis until the beginning of the pandemic, but it remains about 1.0% higher relative to the lows observed in the summer of 2020.
    - Estimates from the Adrian-Crump-Moench term structure model attribute most of the recent rise in the 10-year Treasury yield to a rise in the term premium.

**U.S. Equity Market Index and Volatility**

- **Equity prices fell and the VIX rose in September**
  - U.S. equity prices moved modestly lower from the first week of September through early October.
    - The S&P 500 index was still up 16.7% year-to-date on October 8.

  - Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), has also risen since early September.
    - The VIX Index averaged 21.7 during the week ending on October 8, above its median value of 17.7 over the period from 2000 to present.
    - The VIX Index was higher than its pandemic-era low of 15.07, but well below its average since March 2020.
Implied path for federal funds rate shifted up

- The expected path of the federal funds rate on October 8 implied by rates on overnight indexed swaps was above the path observed on September 3 and the curve steepened.

- The market-implied federal funds rate at the end of 2023 was below the median value of the FOMC’s Summary of Economic Projections (SEP) from September 2021, which was 1.0%.

- At the five-year horizon, the market-implied expectation of the federal funds rate was around 1.6%, which is below the median SEP longer-run federal funds rate of 2.5%.

The dollar has strengthened since early September

- The exchange value of the dollar against a weighted average of currencies appreciated 2.3% between September 3 and October 8.
  - The dollar has appreciated 2.2% against the euro and 1.4% against the Japanese yen.

- The dollar has appreciated 4.7% against a basket of currencies since the beginning of the year.
NY Fed manufacturing survey points to solid growth

- Manufacturing activity continued to increase at a solid pace in October.
  - The Empire Survey’s headline index fell nearly 15 points, but at 19.8, pointed to ongoing solid growth in manufacturing activity in New York State.
  - The prices paid index rose to 78.7, and the prices received index came in at 43.5, both near record highs.
  - Delivery times lengthened considerably.
  - Businesses expressed widespread optimism about the six-month outlook, with the index for future business activity rising to 52.0.

Employment gains lag the rest of the country

- Employment has continued to increase at a slow and steady pace across the region in recent months.
  - Employment across most of the region has increased by around 2% thus far in 2021, below the nationwide pace of about 3%.
  - Employment remains below pre-pandemic levels across the region, and to a greater extent than nationally, except in Puerto Rico.
  - Job shortfalls as of August relative to February 2020 are around 10% for downstate New York, 5% for Northern New Jersey and Fairfield, 7% for upstate New York, and 2% for Puerto Rico, compared to about 3.5% nationally.