FEDERAL RESERVE BANK *of* NEW YORK

U.S. Economy in a Snapshot

Research & Statistics Group

September 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 September 9, 2021.

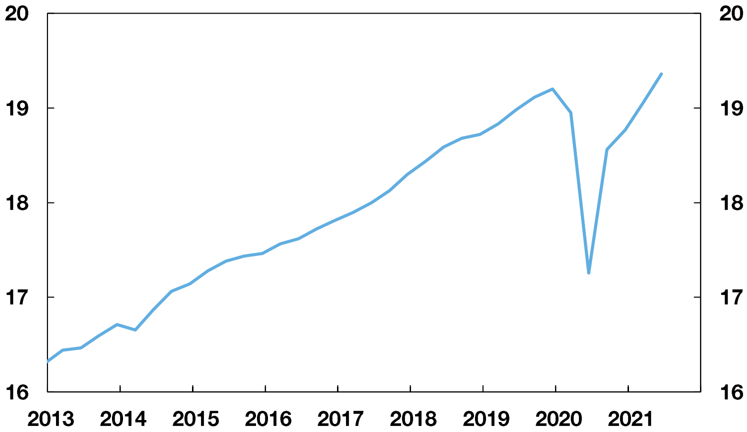
OVERVIEW

Data over the month showed slower employment growth and some easing of inflationary pressures.

- Output in Q2 moved above its pre-pandemic level.
  - **Growth was driven by consumption, with inventories, federal government spending, and net exports all drags on growth.**
- Personal income increased in July, helped by the first round of Child Tax Credit payments.
  - **Compensation rose while proprietors' income fell.**
  - **Higher income and only slightly higher consumer spending caused saving as a percent of personal income to rise.**
  - **The saving rate was well above its pre-pandemic level.**
- Payroll employment growth slowed in August and the unemployment rate fell.
- Core PCE inflation over the year reached 3.6% in July.
- The 10-year Treasury yield was around 1.4% at the beginning of September. The S&P 500 stock index was up 22% year-to-date on September 3. The market-implied federal funds rate path shifted up and steepened between August 3 and September 3.

Real GDP

Trillions of 2012 dollars, annualized



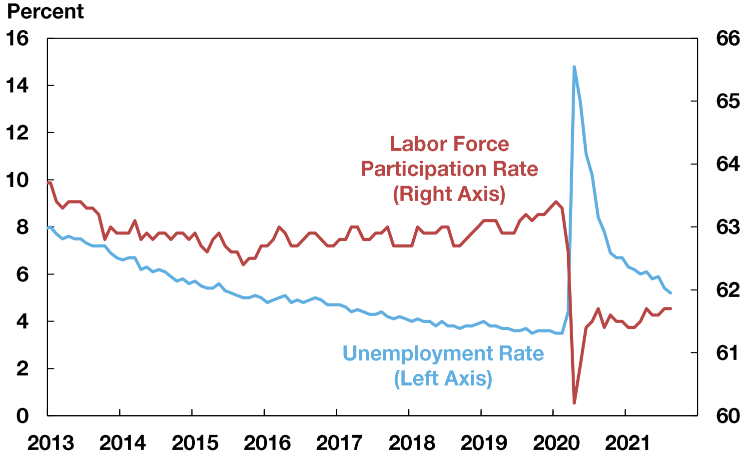
Source: Bureau of Economic Analysis via Haver Analytics

Output in Q2 was above its pre-pandemic level

- After rapid growth in the past four quarters, Q2 GDP was 0.8% above its previous peak in Q4 2019.
  - **The median estimate for the longer-run GDP growth rate was 1.8% in the June Summary of Economic Projections (SEP).**
  - **The March 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 significant slack in the economy.
  - **The 5.2% unemployment rate in August was above the long-run forecasts of near 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

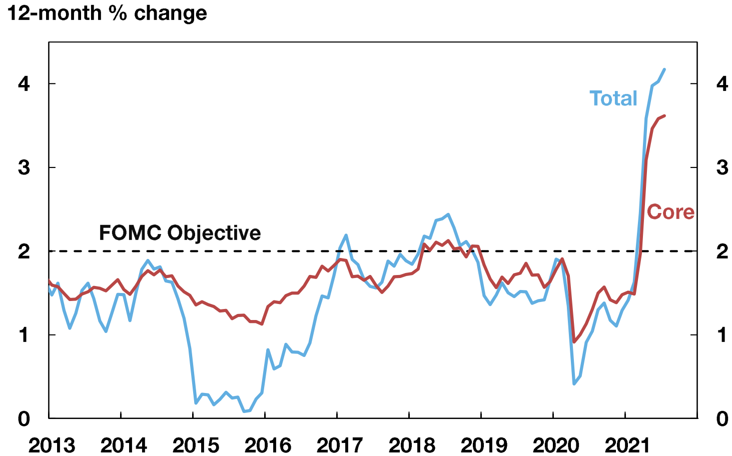


Source: Bureau of Labor Statistics via Haver Analytics

Labor market gains were below expectations

- Nonfarm payroll employment increased by 235,000 in August, below the median Bloomberg survey of 725,000.
  - **Payrolls in private service-providing industries rose by 203,000, with notable gains in education and health services (35,000), professional and business services (74,000), and transportation and warehousing (53,200).**
  - **Employment in goods-producing industries increased by 40,000, driven by gains in manufacturing (37,000).**
- The unemployment rate declined from 5.4% to 5.2%.
- The labor force participation rate was little changed at 61.7%, while the employment-to-population ratio ticked up 0.1 percentage point to 58.5%.

PCE Deflator



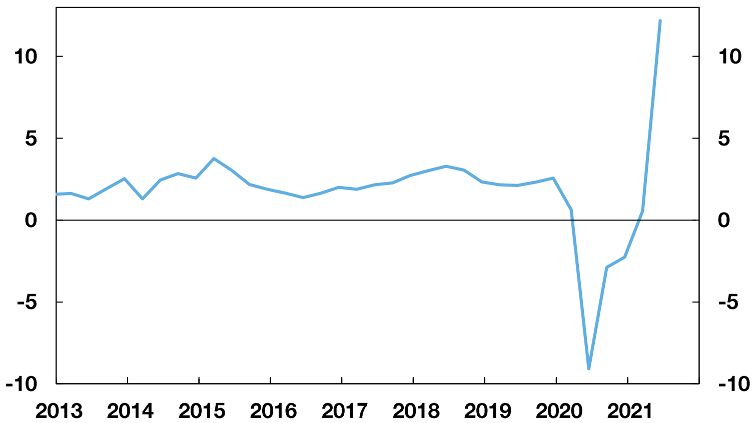
Source: Bureau of Economic Analysis via Haver Analytics

Inflation remained elevated in July

- PCE inflation rose from 4.0% in June to 4.2% in July.
  - **Durable goods inflation fell from 7.2% to 7.0%.**
  - **Nondurable goods inflation increased from 4.1% to 4.4%.**
  - **Services inflation rose from 3.4% to 3.5%.**
- Core inflation ticked up from 3.5% to 3.6%.
  - **A major driver of core inflation was the 37% increase in used motor vehicle prices over the year.**
- Year-over-year calculations are distorted by the pandemic.
  - **Core inflation over two years, annualized, increased from 2.8% in June to 2.9% in July.**

GDP Growth

4-quarter % change



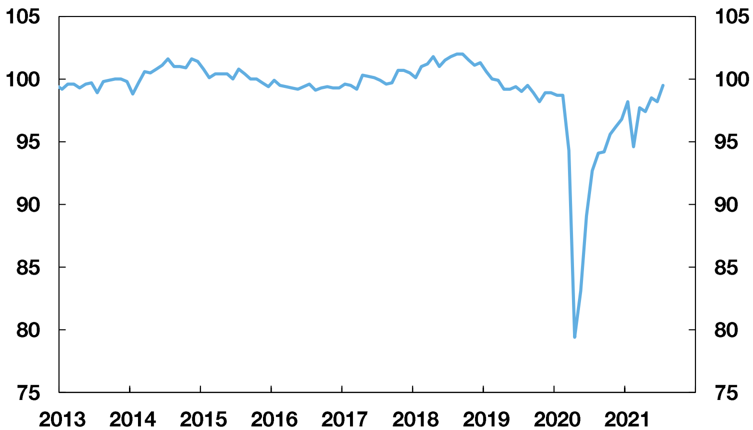
Source: Bureau of Economic Analysis via Haver Analytics

GDP growth remained robust in Q2

- According to the second estimate, GDP rose at a 6.6% annual rate in Q2, after rising at a 6.3% rate in Q1.
  - **The second estimate is a small upward revision from the first estimate of 6.5%.**
  - **Net exports was a major factor in the upward revision while inventory investment was revised downward.**
- Consumption was the principal contributor to Q2 growth and inventory investment was a significant drag.
- Real gross domestic income (GDI) rose at a modest 1.6% annual rate in Q2.
  - **However, the four-quarter change in GDI was 12.6%, which was near that of GDP (12.2%).**

Manufacturing Index

Index, 2017=100

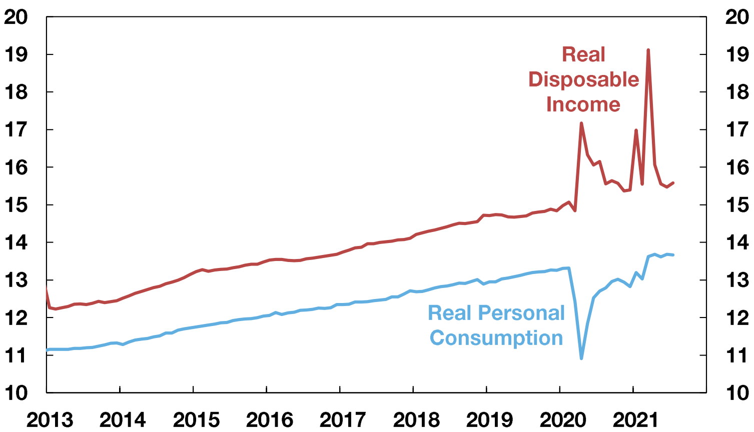


Source: Federal Reserve Board via Haver Analytics

Manufacturing activity increased in July

- The manufacturing index jumped 1.4% in July.
  - **The index was 0.8% above its February 2020 level.**
- The major outlier across industries was the motor vehicles category, which rose 11.2% after falling 6.6% in June.
  - **The vehicle index was down 3.7% compared to February 2020.**
  - **The index has been volatile in recent months as firms cope with semiconductor shortages.**
  - **Overall manufacturing excluding motor vehicles was 1.2% above its pre-pandemic level.**
- The ISM index remained at a high level in August.

Disposable Income and Consumption

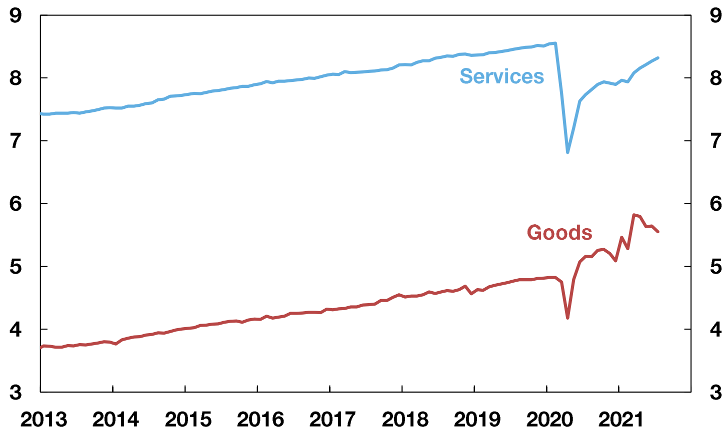


Source: Bureau of Economic Analysis via Haver Analytics

Personal income rose in July

- Nominal personal income increased 1.1% in July after increasing 0.2% in June.
  - **Current transfer receipts increased 2.9% in July, due to the initial round of advanced Child Tax Credit payments.**
  - **Compensation of employees rose 0.9% in July, with wages and salaries up 1.0%.**
  - **Real disposable income increased 0.7% in July and was 3.4% above its February 2020 level.**
- Nominal Personal Consumption Expenditures (PCE) increased 0.3% in June.
  - **Real PCE declined 0.1% but remains 2.7% above its February 2020 level.**

Consumer Spending

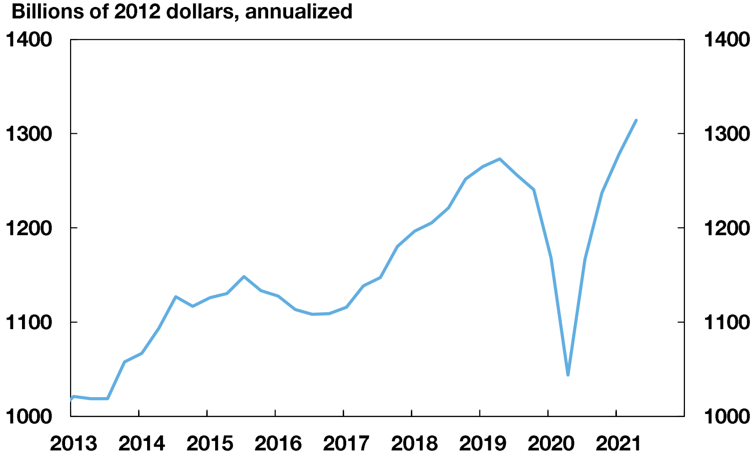


Source: Bureau of Economic Analysis via Haver Analytics

Consumer expenditures continued to rebalance

- Expenditures continued to shift away from goods (especially durables) in July and towards services.
  - **Some of this rebalancing might reflect continued supply shortages of goods and the increase in goods prices relative to services prices.**
- Real expenditures on goods fell 1.6% (-2.6% for durables and -0.9% for nondurables) and rose 0.6% for services.
  - **Despite the July increase, real services expenditures are still 2.7% below their level in February 2020.**
  - **In contrast, real goods expenditures are 14.8% above their pre-pandemic level, with spending on durables up 20.8% and nondurables up 11.8%.**

Business Investment Spending on Equipment

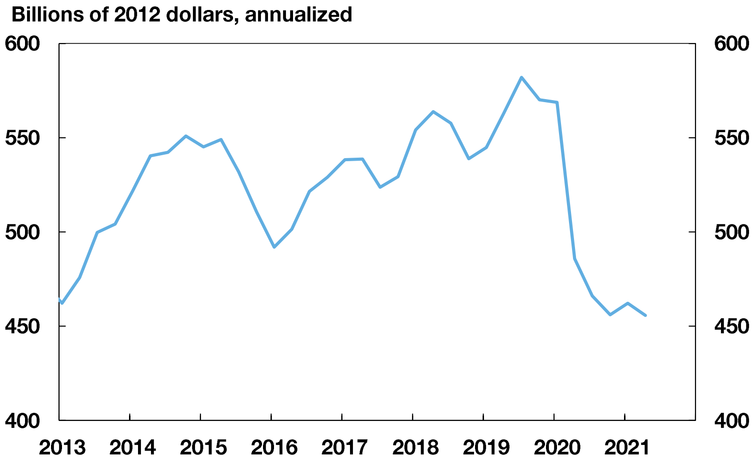


Source: Bureau of Economic Analysis via Haver Analytics

Equipment spending rose strongly again in Q2

- Real business equipment spending rose at a 11.6% annual rate in Q2, its fourth straight double-digit increase.
  - **Equipment added 0.6 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 3.2% above its previous peak in Q2 2019.**
- Although there was only a small increase in July, recent data on orders of capital goods still suggest momentum in equipment spending.

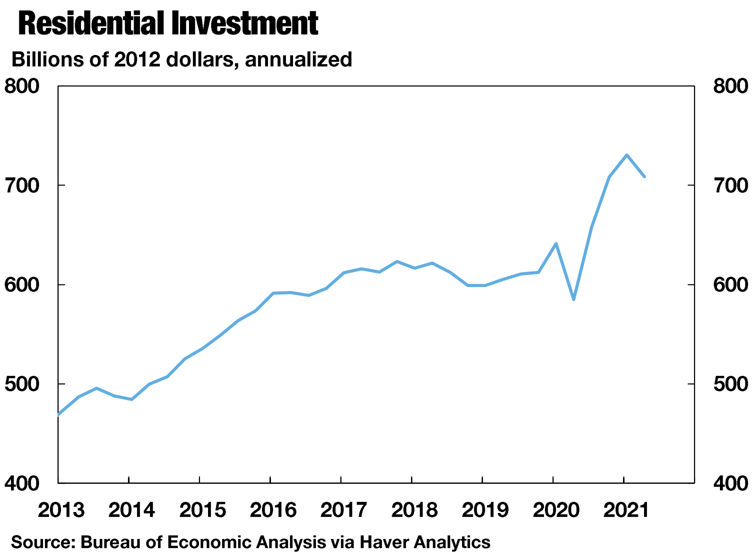
Business Investment in Nonresidential Structures



Source: Bureau of Economic Analysis via Haver Analytics

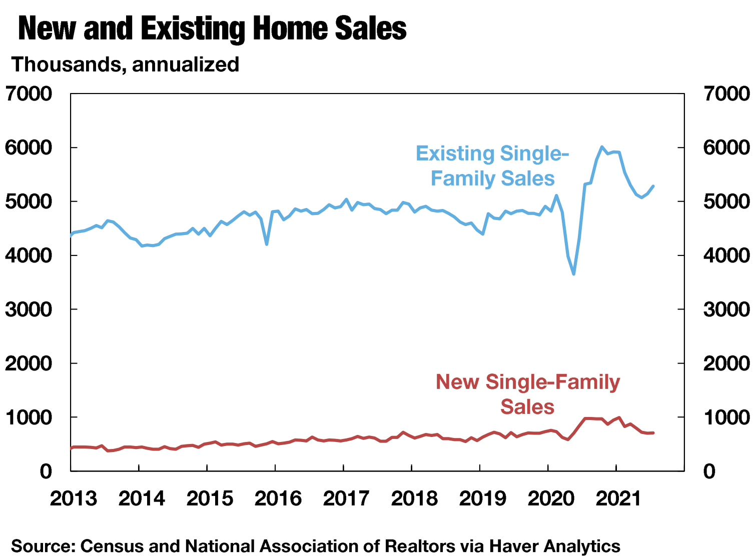
Nonresidential structures spending fell in Q2

- Real nonresidential structures investment spending decreased at a 5.4% annual rate in Q2.
  - **There were sizable declines in most major categories of structures.**
  - **Nonresidential structures spending in Q2 was 6.2% below its year-ago level and 20.1% 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.
  - **Mining exploration, shafts, and wells spending was still down 23.7% from its Q4 2019 level.**
- Monthly data on nonresidential construction through July do not yet point to a turnaround in the sector.



Residential investment fell in Q2

- Residential investment fell modestly in Q2, taking 0.6 percentage point off annualized GDP growth.
  - **Residential investment was still 15.8% 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 24.7% in Q2 relative to Q4 2019 and multifamily construction was up 23.8%.**
- July housing starts data suggest residential investment was soft at the beginning of Q3.

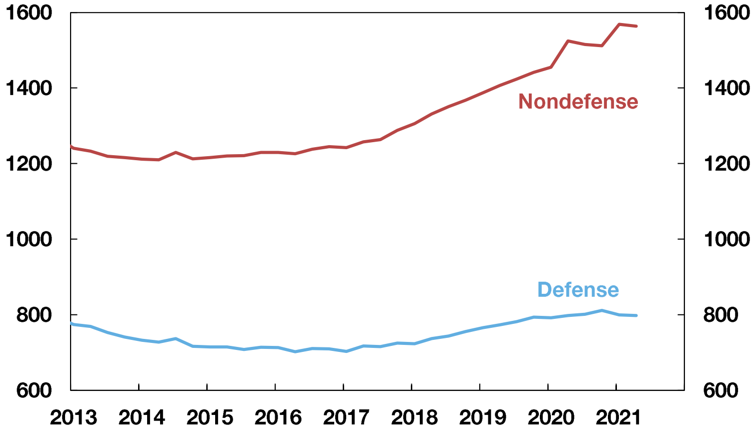


Existing home sales increased

- Existing home sales rose 2.0% in July, to 6.0 million units (annualized).
  - **Sales were down substantially from Q4 2020 but still 11% higher than they were in July 2019.**
- New single-family home sales were unchanged at 708,000 units in July.
  - **Sales were down substantially from the Q1 2021 level.**
- Supply constraints have seen a modest relaxation in recent months due to higher residential investment spending over the past year.

Federal Government Spending

Billions of 2012 dollars, annualized



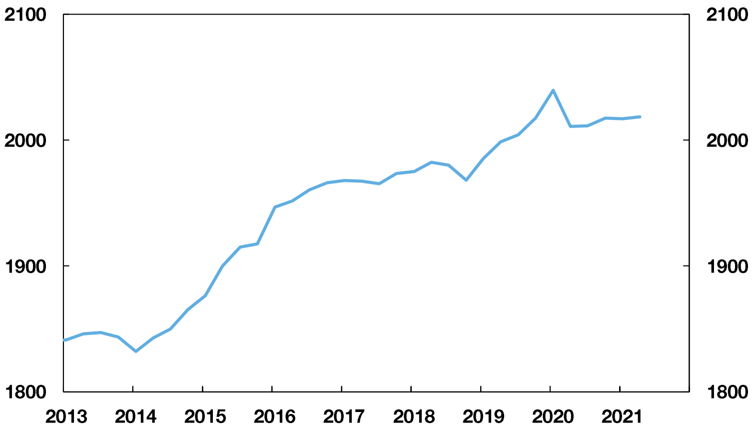
Source: Bureau of Economic Analysis via Haver Analytics

Real federal spending slumped in Q2

- Real federal government spending subtracted 0.4 percentage point from annualized Q2 GDP growth, partially offsetting the 0.8 percentage point contribution in Q1.
  - **Spending was down 0.8% over the year, but up 4.6% 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 less than 0.1 percentage point.**
- A drop in payments to banks for processing and administration of Paycheck Protection Program loan applications accounts for most of the fall in spending.

State and Local Government Spending

Billions of 2012 dollars, annualized



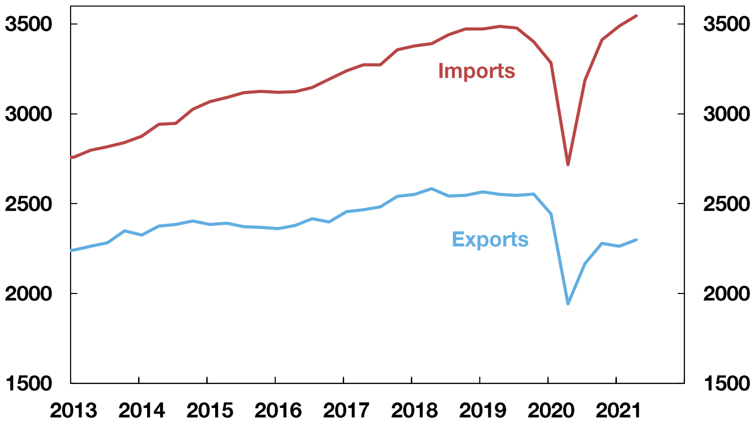
Source: Bureau of Economic Analysis via Haver Analytics

State and local government spending was flat in Q2

- Real state and local government spending added less than 0.1 percentage point to annualized Q2 GDP growth.
  - **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 3.2%, pulled down by a 3.7% drop in construction and a 4.3% drop in equipment purchases.
  - **This spending was down 2.2% relative to Q4 2019.**
  - **Purchases of intellectual property products remained significantly above pre-pandemic levels.**

Exports and Imports of Goods and Services

Billions of 2012 dollars, annualized



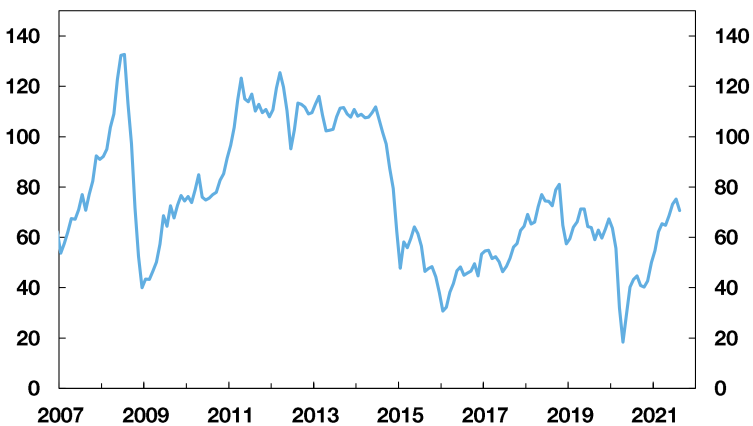
Source: Bureau of Economic Analysis via Haver Analytics

Net exports were a drag on Q2 growth

- Imports rose faster than exports in Q2.
  - **Net exports took 0.2 percentage point off annualized GDP growth, as exports added 0.7 percentage point to growth and higher imports subtracted 0.9 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.**

Crude Oil Prices

Dollars per barrel (WTI)

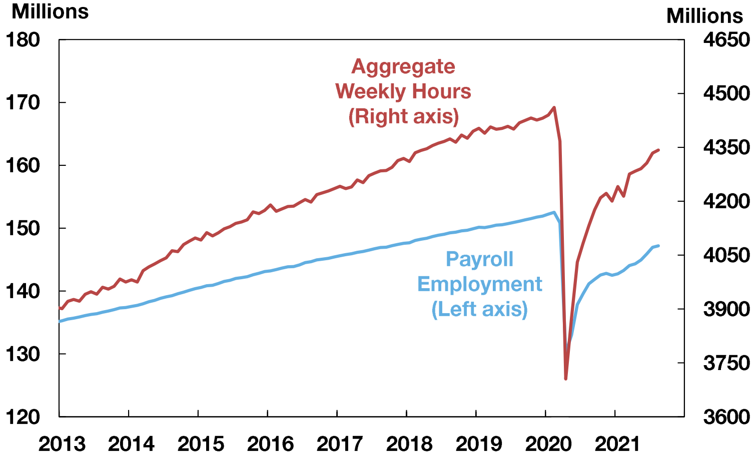


Source: Energy Information Administration via Haver Analytics

Oil prices fell in August

- Oil prices (WTI benchmark) dropped from $72/barrel in July to $68/barrel in August.
  - **OPEC crude oil production is estimated to have increased 3% in July and 2% in August.**
- Demand for liquid fuels (crude and natural gas liquids) is forecast to be down 3% in Q3 relative to Q3 2019.
  - **China's demand is projected to be up 4%.**
  - **U.S. demand is expected to be down 3% and Europe's demand to be down 6%.**
- Supply has fallen with demand, with liquid fuel production forecast to be down 2% relative to Q3 2019.
  - **U.S. crude oil production is set to be down 3%, while OPEC production to be down 5%.**

Payroll Employment and Hours Worked

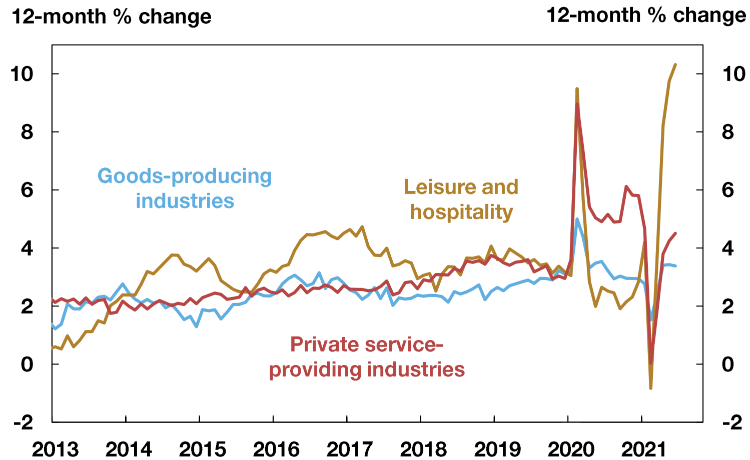


Source: Bureau of Labor Statistics

Payroll employment growth fell below expectations

- Nonfarm payroll employment rose by 235,000 in August, following an increase of 1,053,000 in July.
  - **The median Bloomberg survey had forecast nonfarm payroll growth to register at 725,000.**
  - **This figure is well below the average growth of 876,000 in the previous three months.**
- Gains were primarily concentrated in private service-providing industries.
  - **Professional and business services (74,000) and transportation and warehousing (53,200) registered the largest gains.**
  - **Notably, leisure and hospitality recorded a gain of zero.**

Average Hourly Earnings by Industry

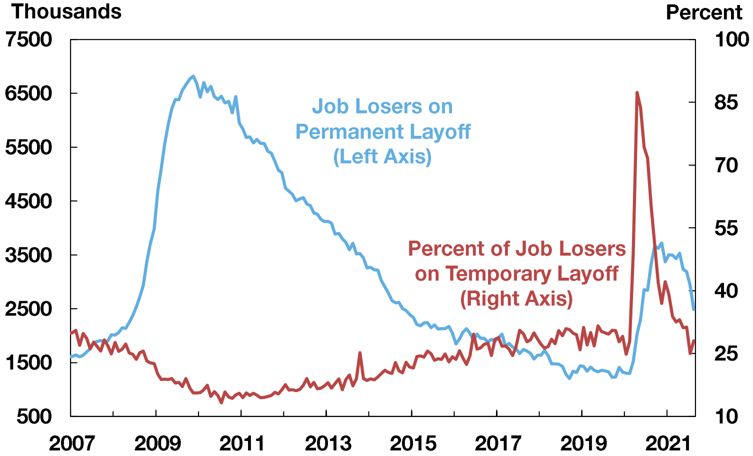


Source: Bureau of Labor Statistics via Haver Analytics

Average hourly earnings varied greatly by industry

- The 12-month percent change in average hourly earnings for leisure and hospitality reached a series high of 10.3%.
  - **In June and July, average hourly earnings for leisure and hospitality grew 8.2% and 9.8% on a 12-month basis, respectively.**
- Earnings in goods-producing industries grew at a slower rate.
  - **The 12-month change of goods-producing industries came in at 3.4%, compared to 4.5% for services-providing industries.**

Permanent and Temporary Layoffs

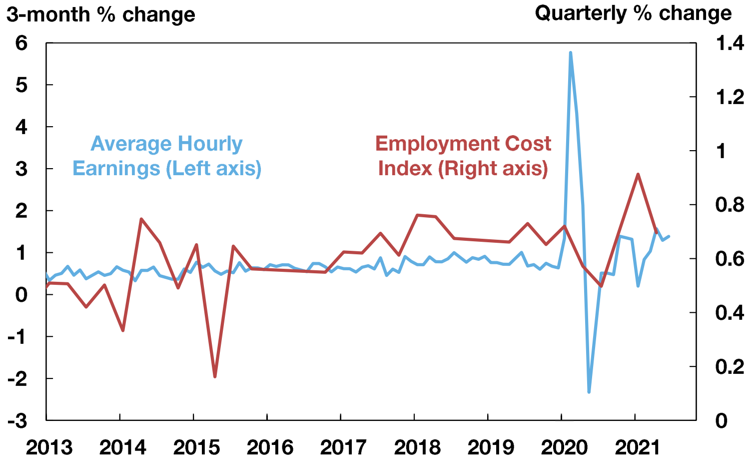


Source: Bureau of Labor Statistics

The number of permanent job losers decreased

- The number of permanent job losers continued its downward trajectory, declining by 443,000 to 2.5 million in August.
  - **This marks the lowest level of this series since May 2020.**
- The number of job losers on temporary layoff registered a slight increase.
  - **After an average decline of 292,000 in the past three months, the number of job losers on temporary layoff ticked up slightly.**
  - **As a result, the share of job losers on temporary layoff out of all job losers rose to 28% in August from 25% in July, the largest one-month increase since December 2020.**

Average Hourly Earnings and the ECI

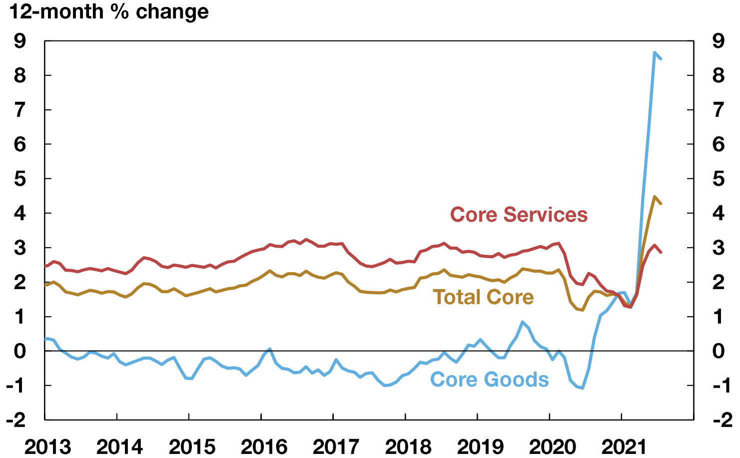


Source: Bureau of Labor Statistics via Haver Analytics

Average hourly earnings growth increased

- Average hourly earnings rose by 0.6% over the month, surpassing increases in June (0.4%) and May (0.4%).
  - **Average hourly earnings rose 4.3% on a 12-month basis.**
  - **The large employment swings during the pandemic complicate the analysis of average hourly earnings, which vary significantly across industries.**

Core CPI Inflation

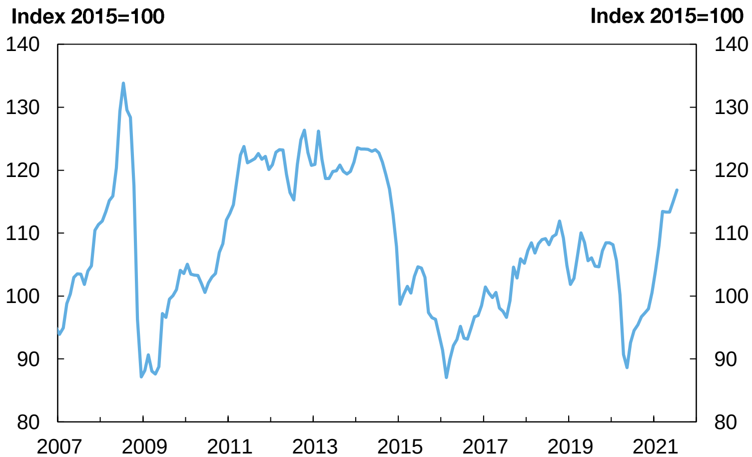


Source: Bureau of Labor Statistics via Haver Analytics

Core CPI inflation eased in July

- The core CPI was up 0.3% in July, after rising 0.9% in June.
  - **The monthly inflation rate for core goods fell from 2.2% in June to 0.5% as the prices for used motor vehicles stopped rising.**
  - **The inflation rate for core services prices fell from 0.4% to 0.3%.**
- On a 12-month basis, core inflation was up 4.3%, a decrease from June's 4.5% rate.
  - **Core goods inflation fell from 8.7% to 8.5%.**
  - **Core services inflation fell from 3.1% to 2.9%.**
  - **Shelter inflation rose from 2.6% to 2.8%.**

CPI Inflation: Energy Prices

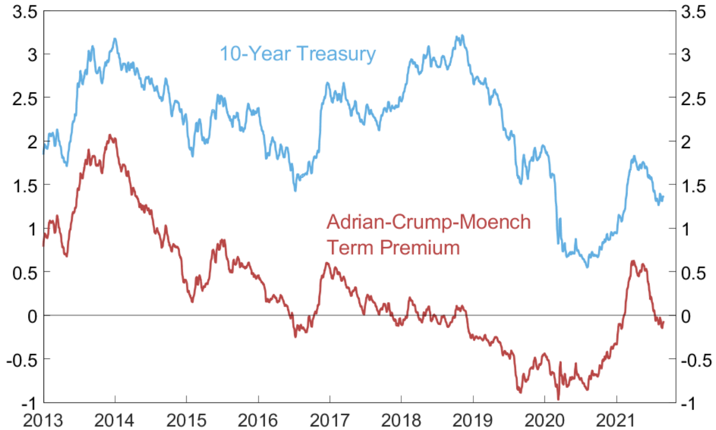


Source: Bureau of Labor Statistics via Haver Analytics

Energy prices were above pre-pandemic levels in July

- The energy component of the CPI was 10% above its pre-pandemic level (February 2020) in July.
  - **The index rose sharply in Q1 2021, was stable in April and May, and then moved higher in June and July.**
- The energy index's volatility is driven by gasoline prices.
  - **The gasoline subindex was 14% above its pre-pandemic level.**
  - **The recent stability in crude oil prices suggests the index will be roughly unchanged in August.**
- Prices for electricity have been on an upward trend since last August, with the subindex up 4.0% over the year.
  - **The index was largely unchanged from 2014 to 2019.**

10-Year Treasury and Term Premium



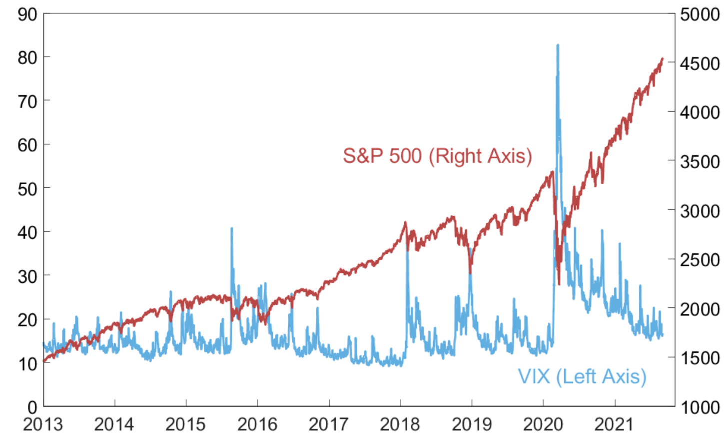
Source: NY Fed calculations, Federal Reserve Board

Note: 5Y MA, zero-coupon yield.

Ten-year Treasury yields remained low

- On a five-day moving average basis, the 10-year Treasury yield was near 1.4% on September 3.
  - **The yield averaged 1.3% in Q1 and 1.6% in Q2.**
  - **The yield was below the range observed in the period from the Global Financial Crisis until the beginning of the pandemic, but remains 80 basis points higher relative to the lows observed during the summer of 2020.**
- Estimates from the Adrian-Crump-Moench term structure model attribute most of the decline in yields since April 2021 to a lower term premium.

U.S. Equity Market Index and Volatility

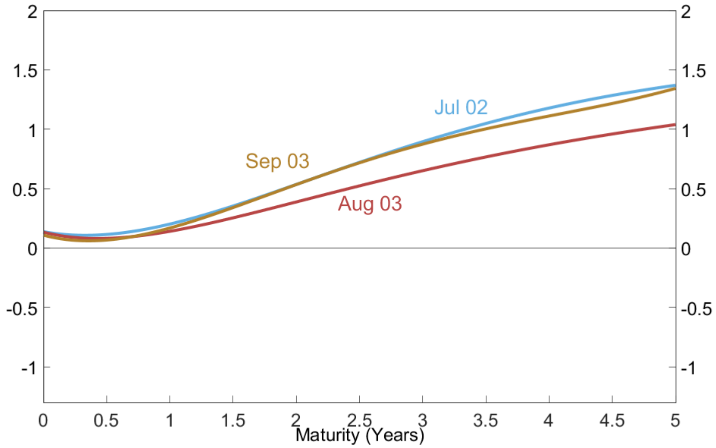


Source: Bloomberg Finance L.P.

Equity prices rose

- U.S. equity prices increased over the month.
  - **The S&P 500 index was up 22% year-to-date on September 3.**
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), was stable.
  - **The VIX Index closed at 16.63 on September 3, below its post-2000 median value of 17.75.**
  - **The VIX Index was higher than its pandemic-era low of 15.07.**

Expected Federal Funds Rate



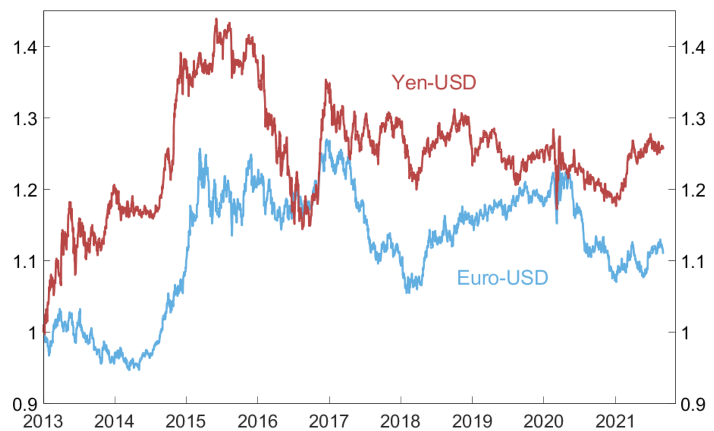
Source: NY Fed calculations, Bloomberg Finance L.P.

Note: Estimated using OIS quotes

Implied path for federal funds rate rose

- The expected path of the federal funds rate on September 3, implied by rates on overnight indexed swaps, was above the path observed on August 3 and was steeper.
- The market-implied federal funds rate at the end of 2023 was slightly below the median value of the FOMC's Summary of Economic Projections (SEP) from June 2021.
- At the five-year horizon, the market-implied expectation of the federal funds rate was near 1.3%.
  - **This rate is about 120 basis points below the median SEP longer-run federal funds rate from June 2021.**

USD Exchange Rates



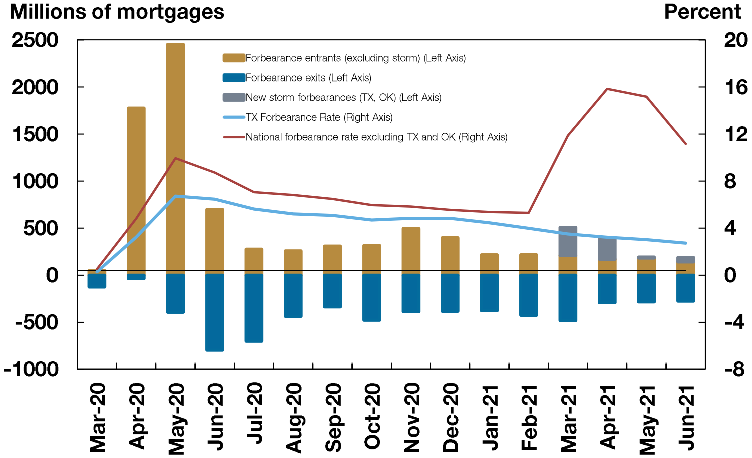
Source: Bloomberg Finance L.P.

Note: Start date 01/03/2013 = 1.

The dollar was stable in August

- The value of the dollar against a weighted average of currencies was essentially unchanged from August 2 to September 3.
  - **During this period, the dollar was stable against the euro and appreciated 0.5% against the Japanese yen.**
- The dollar has appreciated 2.5% against the basket of currencies since the beginning of the year.

Forbearance participation, entry, and exit

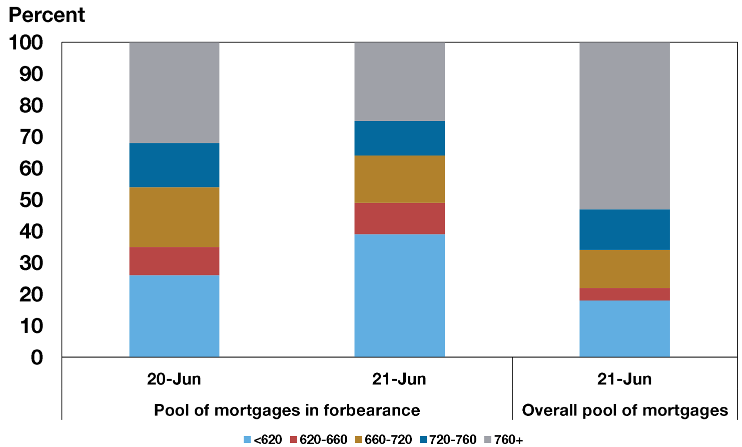


Source: New York Fed Consumer Credit Panel / Equifax

Forbearance participation has fallen

- Forbearances on federally-backed mortgages have been in place since the pandemic began.
- The forbearance participation rate has declined as the program is scheduled to end.
  - **These declines were offset by the storm-related forbearances in Texas and neighboring states.**
  - **Forbearance rates, including the natural disaster forbearances, spiked to over 16% of mortgages in Texas.**
  - **Meanwhile, the national forbearance rate excluding the storm related forbearances declined to just 2.7% of mortgages.**

Credit score composition of mortgages outstanding



Source: New York Fed Consumer Credit Panel / Equifax

Forbearance participation tilts to subprime borrowers

- When participation in the forbearance program peaked, 32% of the participating mortgages were to those with credit scores over 760.
- Many high-score borrowers have exited the program, leaving the remaining participants disproportionately comprised of those with lower credit scores.
  - **As of June 2021, 39% of the remaining pool of forbearance participants had credit scores under 620 at origination.**
  - **Only 25% of forbearance participants had credit scores of 760 or higher.**
  - **This distribution is different than the overall pool of mortgages, of which 56% of borrowers have credit scores over 760.**