FEDERAL RESERVE BANK *of* NEW YORK

U.S. Economy in a Snapshot

Research & Statistics Group

December 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 December 15, 2021.

OVERVIEW

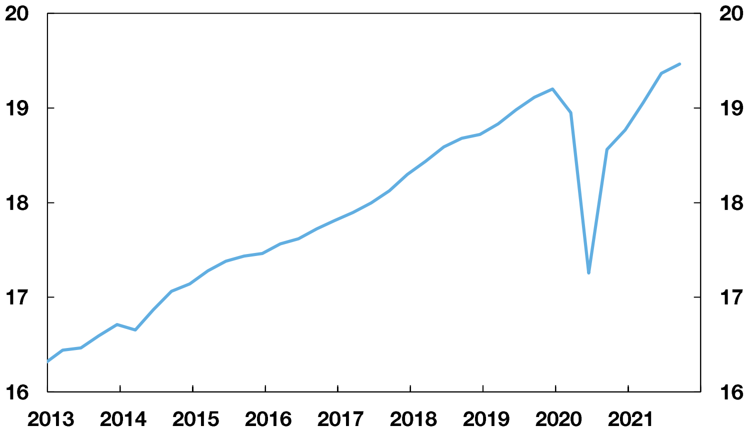
The unemployment rate fell, consumer spending on durable goods picked up, and inflation remained elevated.

- GDP growth slowed in Q3.
  - **Consumer spending increased at a much slower pace, with a drop in purchases of goods offsetting more spending on services.**
  - **Investment spending on equipment, residential investment, exports, and federal government spending all declined.**
- Real disposable income fell in October.
  - **Nominal income growth was restrained by decreases in unemployment insurance payments and PPP income.**
  - **Compensation rose at a robust pace.**
  - **Saving as a percent of personal income retreated to pre-pandemic levels.**

- Payroll employment growth slowed in November, while the unemployment rate fell sharply.
- Core PCE inflation over the year increased in October, with a jump in prices for goods driving the acceleration.
- The 10-year Treasury yield stayed near 1.50% while the estimated term premium fell. The S&P 500 stock index was relatively unchanged, putting the index up 25% year-to-date on December 10. The market-implied federal funds rate path shifted up.

Real GDP

Trillions of 2012 dollars, annualized



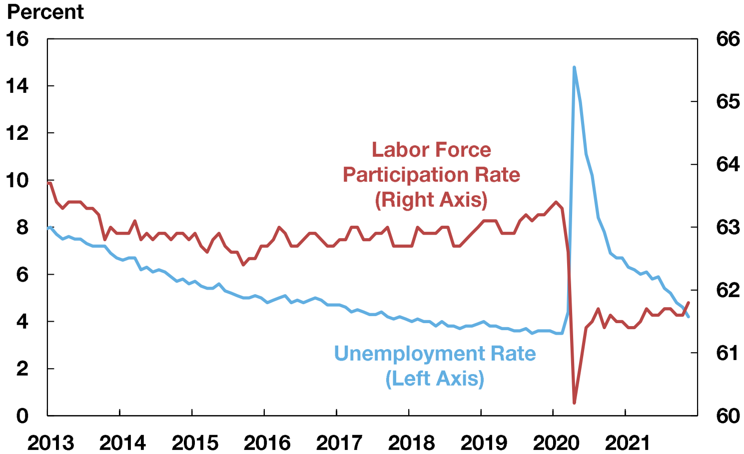
Source: Bureau of Economic Analysis via Haver Analytics

Output in Q3 was below its pre-pandemic trend level

- Q3 GDP was 1.4% 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%.**
  - **Q3 GDP was about 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 some slack.
  - **The 4.2% unemployment rate in November 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.**
  - **The labor force participation rate in November was still more than one percentage point below pre-pandemic levels.**

OVERVIEW

Labor Market Indicators

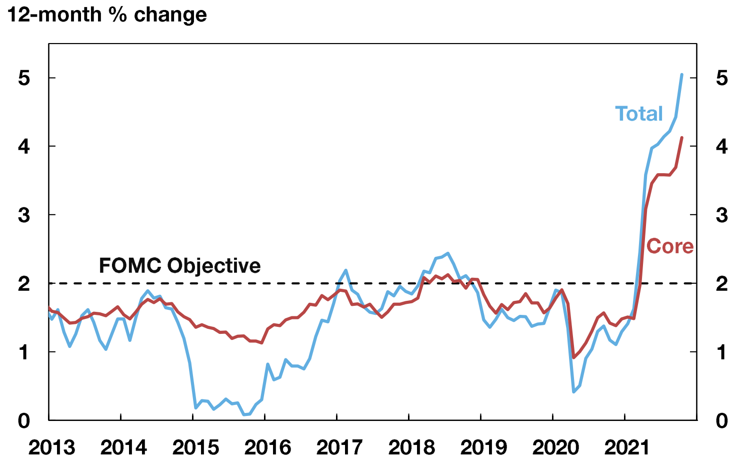


Source: Bureau of Labor Statistics via Haver Analytics

Employment growth slowed in November

- Nonfarm payroll employment increased by 210,000 in November.
  - **Payrolls in private service-providing industries rose by 235,000, with notable gains in professional and business services (90,000) and transportation and warehousing (50,000).**
  - **Government employment fell by 25,000, continuing its downward trend.**
- The unemployment rate declined from 4.6% to 4.2%.
- The labor force participation rate rose 0.2 percentage point to 61.8%, while the employment-to-population ratio rose by 0.4 percentage point to 59.2%.

PCE Deflator



Source: Bureau of Economic Analysis via Haver Analytics

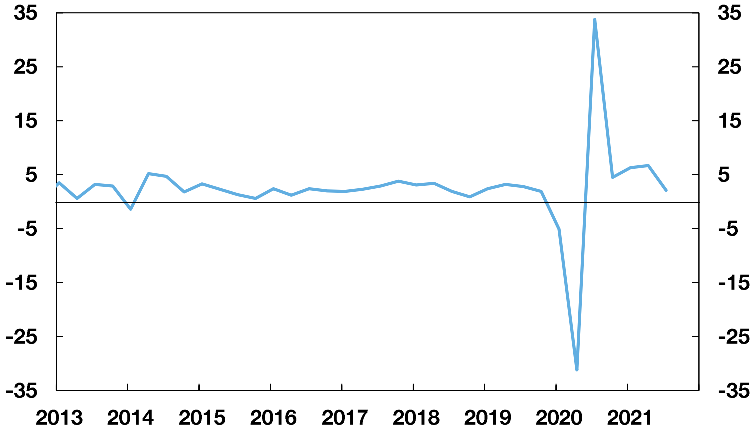
Inflation moved higher in October

- PCE inflation increased from 4.4% over the year in September to 5.1% in October.
  - **Food prices were up 4.8% and energy prices were up 30.2%.**
- Core inflation rose from 3.7% to 4.1%.
  - **The index for used vehicles was up 34% over the year and the one for new vehicles was up 10%.**
- The monthly change in core PCE was 0.4% in October (5.2%, annualized).
  - **The average monthly rate was 0.6% in Q2 and 0.3% in Q3.**

ECONOMIC ACTIVITY

GDP Growth

Quarterly % change, annualized



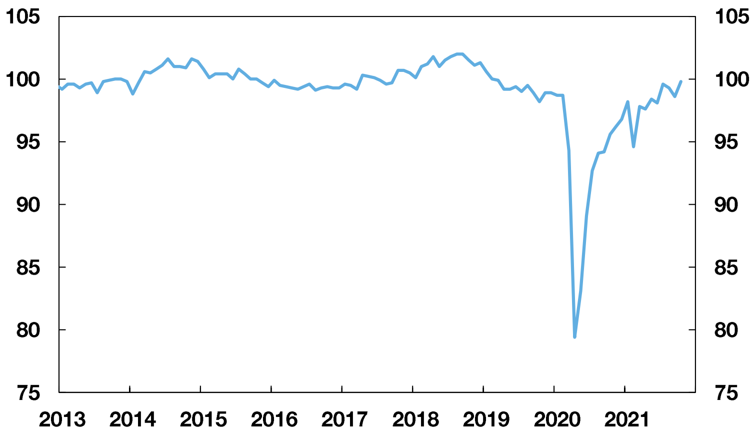
Source: Bureau of Economic Analysis via Haver Analytics.

GDP growth slowed considerably in Q3

- GDP rose at a 2.1% annual rate in Q3, after rising at a 6.5% rate in H1.
  - **The slowdown reflected various supply constraints and the summer's rise in COVID-19 infections.**
  - **A subdued increase in consumer spending, combined with a large drop in purchases of motor vehicles, contributed significantly to the Q3 slowdown.**
- In contrast to GDP, real gross domestic income (GDI) grew at a robust 6.7% annual rate in Q3.
  - **The four-quarter change in GDI was 9.1%, well above that of GDP (4.9%).**

Manufacturing Index

Index, 2017=100



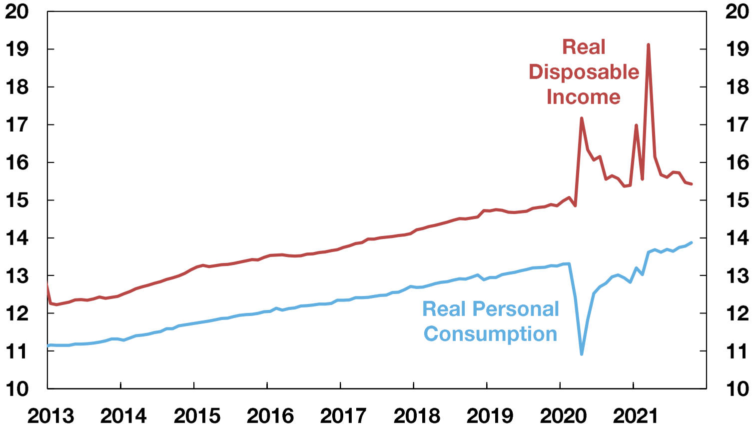
Source: Federal Reserve Board via Haver Analytics

Manufacturing activity rebounded in October

- The manufacturing index increased 1.2% in October after falling 0.7% in September.
  - **The index was at its highest level since February 2019.**
- A major source of volatility across industries was the motor vehicles index, which was up 11.0% after falling 7.1% in September.
  - **The index was down 6.5% compared to February 2020.**
  - **Manufacturing excluding motor vehicles was up 0.6% over the month and was 1.8% above the pre-pandemic level.**
- The ISM manufacturing index remained at a very high level in November.

Disposable Income and Consumption

Trillions of 2012 dollars, annualized



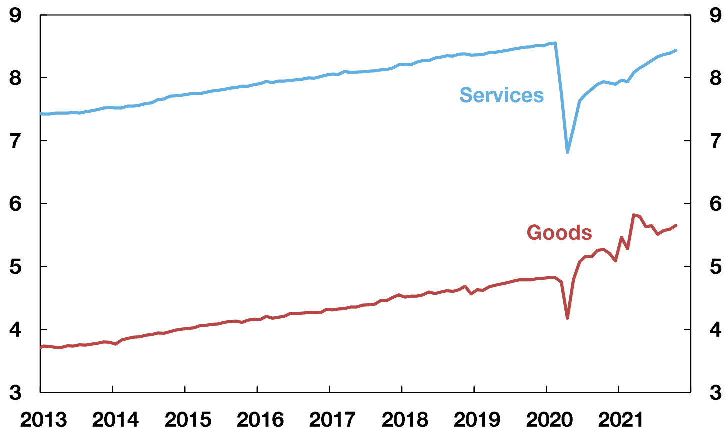
Source: Bureau of Economic Analysis via Haver Analytics

Real disposable income fell in October

- Real disposable income decreased 1.6% in October, while nominal personal income rose 0.5%.
  - **Compensation increased by 0.8%.**
  - **Proprietors' income was unchanged due to a drop in income from PPP loans.**
  - **Personal transfer receipts fell 0.5%, with unemployment insurance benefits dropping closer to pre-pandemic levels.**
  - **Real disposable income fell for the third month in a row.**
- Real personal consumption expenditures (PCE) increased 0.7% in October and were 4% above the February 2020 level.
  - **Consumer spending was near its trend growth path.**

Consumer Spending

Trillions of 2012 dollars, annualized

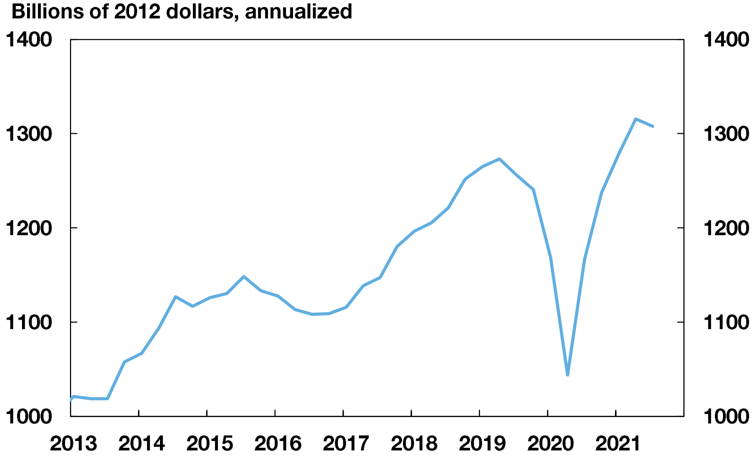


Source: Bureau of Economic Analysis via Haver Analytics

Spending on goods moved higher

- The modest shift in real expenditures away from goods in recent months stopped in October.
  - **Spending on durable goods increased after declining in Q3.**
  - **Motor vehicles sales rose, with purchases of new vehicles near pre-pandemic levels and sales of used motor vehicles substantially higher.**
- Real spending increased 1.0% for goods and 0.5% for services.
  - **Spending on services was 2% below its February 2020 level and 5% below its trend growth path.**
  - **Spending on goods was 17% above its pre-pandemic level and 10% above its trend path.**

Business Investment Spending on Equipment

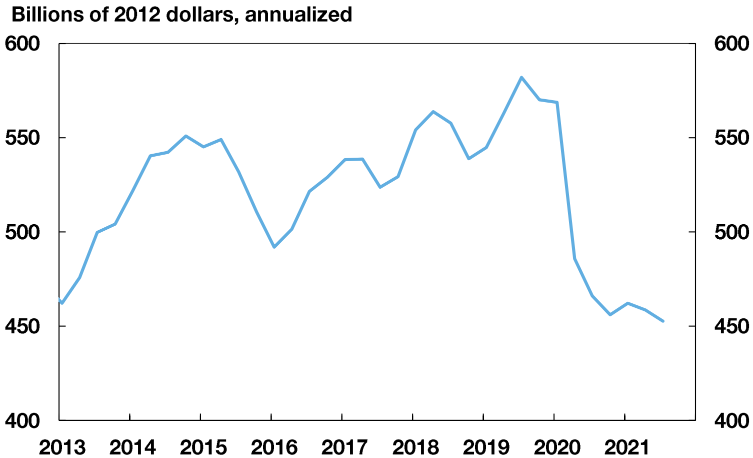


Source: Bureau of Economic Analysis via Haver Analytics

Equipment spending fell in Q3

- After rising at double-digit rates in the previous four quarters, real business equipment spending fell at a 2.4% annual rate in Q3.
  - **Equipment subtracted 0.1 percentage point from annualized GDP growth in the quarter.**
  - **There was a decline in transportation equipment, a rise in industrial equipment, and only small changes in other categories.**
  - **Even with the fall, equipment spending in the quarter was 2.7% above its pre-pandemic peak in Q2 2019.**
- Orders of capital goods increased again in October, indicating ongoing strength in equipment spending.

Business Investment in Nonresidential Structures

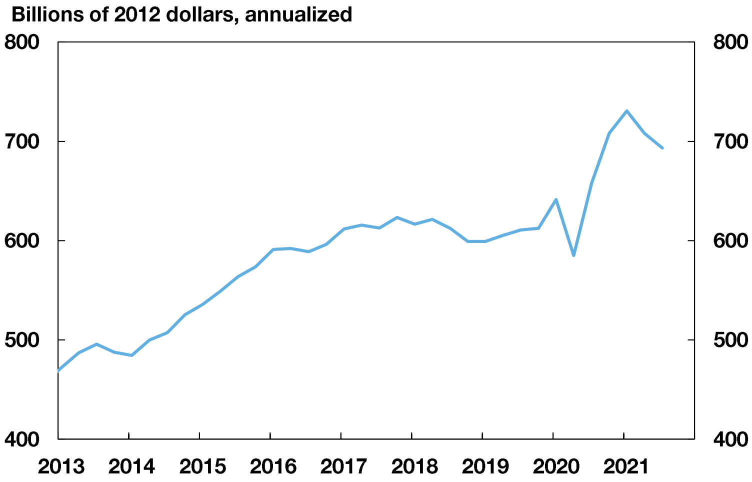


Source: Bureau of Economic Analysis via Haver Analytics

Spending on structures remained low in Q3

- Real nonresidential structures investment spending decreased at a 5.0% annual rate in Q3.
  - **The decline in spending subtracted 0.1 percentage point from annualized GDP growth.**
  - **Nonresidential structures spending was 2.9% below its year-ago level and 20.6% below its Q4 2019 level.**
- The level of spending in the energy sector was an outlier as it increased for the fourth straight quarter.
  - **Spending on mining exploration, shafts, and wells was still down 20.0% from its Q4 2019 level.**
- Monthly data on nonresidential construction through October do not yet point to a turnaround in the sector.

Residential Investment

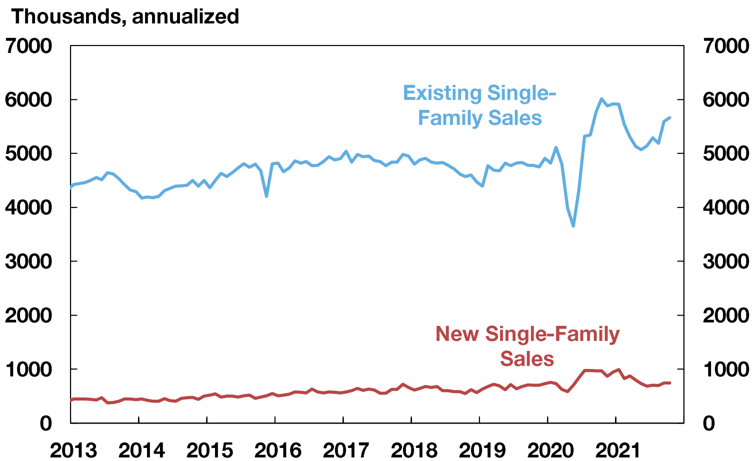


Source: Bureau of Economic Analysis via Haver Analytics

Residential investment fell in Q3

- Residential investment declined in Q3, taking 0.2 percentage point off annualized GDP growth.
  - **Residential investment was still 13.2% 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 22.5% in Q3 relative to Q4 2019 and multi-family construction was up 23.1%.**
  - **Relatively small increases in home improvements held down overall investment spending.**
- Housing starts data for October showed little upward momentum at the start of Q4.

New and Existing Home Sales



Source: Census and National Association of Realtors via Haver Analytics

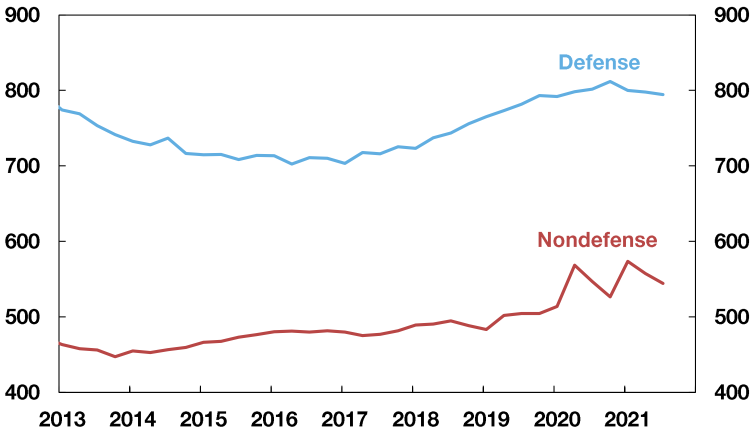
Home sales rose slightly in October

- Existing single-family home sales increased 1.3% in October, to 5.66 million units (annualized).
  - **Sales were 5.8% below the elevated year-ago level, but well above pre-pandemic levels.**
- New single-family home sales increased 0.4% to 745,000 units in October.
  - **Sales were down 23.1% over the year.**
- Demand remained strong even though home prices were up 18% over the year in October.

GOVERNMENT SECTOR

Federal Government Spending

Billions of 2012 dollars, annualized



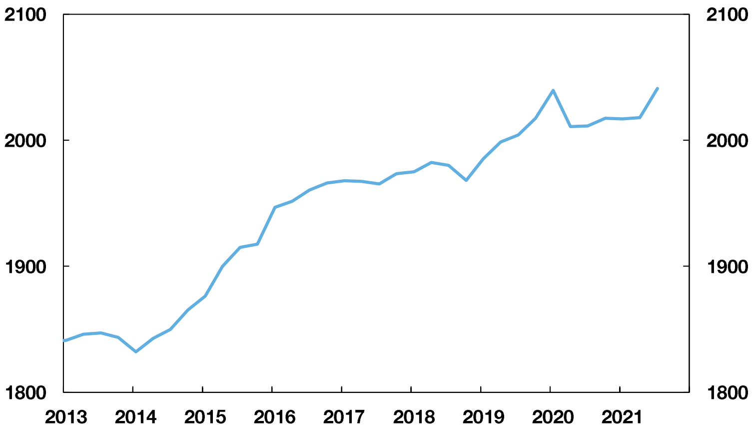
Source: Bureau of Economic Analysis via Haver Analytics

Real federal spending slumped in Q3

- Real federal government spending subtracted 0.3 percentage point from annualized GDP growth in Q3, following a 0.4 percentage point drag in Q2.
  - **Spending was down 0.7% over the year, but up 3.3% since Q4 2019.**
- The drag on growth came almost entirely from nondefense spending.
  - **Nondefense spending subtracted 0.3 percentage point from growth, while defense spending was essentially unchanged.**
- Lower payments to banks related to the Paycheck Protection Program accounted for most of the fall.

State and Local Government Spending

Billions of 2012 dollars, annualized



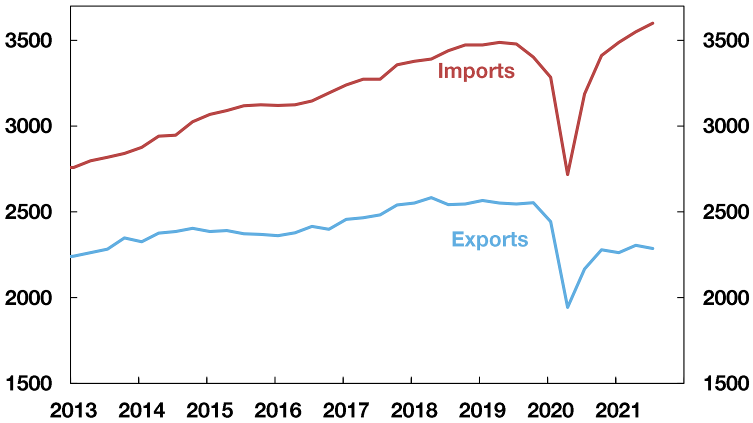
Source: Bureau of Economic Analysis via Haver Analytics

State and local government spending increased

- Real state and local government spending rose 1.2% in Q3, adding 0.5 percentage point to annualized GDP growth.
  - **Spending was unchanged in the first half of the year.**
- S&L government consumption was up 1.6% over the quarter.
  - **Consumption was up 2.1% relative to Q4 2019.**
- Investment spending fell 1.1%, pulled down by a 1.1% drop in construction and a 2.9% decline in equipment purchases.
  - **Investment spending was down 3.3% relative to Q4 2019, with construction spending down 5.9%.**
  - **Purchases of intellectual property products rose 1.5% and were 12.9% above the pre-pandemic level.**

Exports and Imports of Goods and Services

Billions of 2012 dollars, annualized



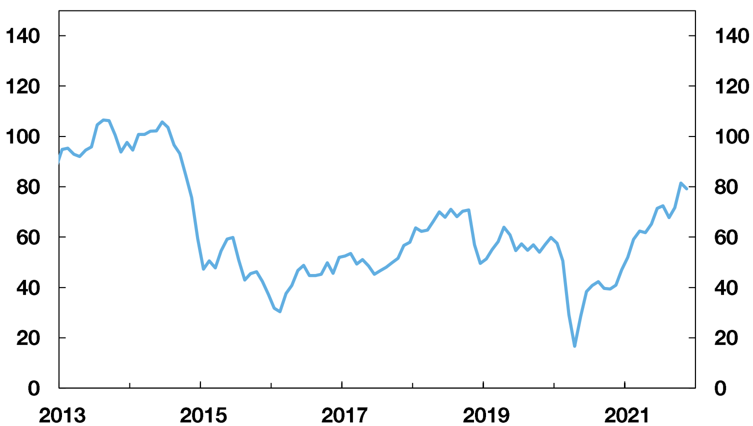
Source: Bureau of Economic Analysis via Haver Analytics

Net exports were a drag on Q3 growth

- Imports rose and exports fell in Q3.
  - **Net exports took 1.2 percentage points off annualized GDP growth, as falling exports subtracted 0.3 percentage point from growth and higher imports subtracted 0.8 percentage point.**
- Exports remained below pre-pandemic levels.
  - **Foreign sales fell in Q3, pulled down by drops in exports of capital goods, oil, and autos.**
  - **Services exports rose modestly from a depressed level.**
- Imports were well above pre-pandemic levels.
  - **Import rose despite declines in autos and consumer goods.**
  - **A jump in travel abroad pushed up service imports.**

Crude Oil Prices

Dollars per barrel (WTI)

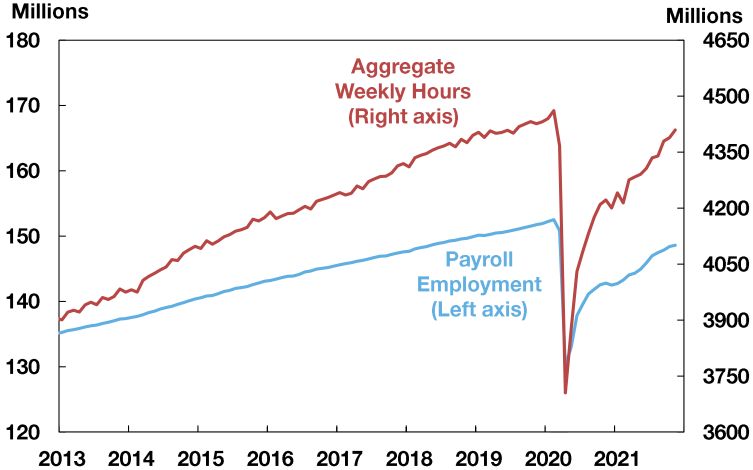


Source: Energy Information Administration via Haver Analytics

Oil prices stopped rising

- Oil prices (WTI) retreated from $81/barrel in October to $79/barrel in November and to around $70/barrel in mid-December.
  - **News about the new variant pushed prices down in late November.**
  - **Prices averaged $66/barrel in Q2 and $71/barrel in Q3.**
- Demand for liquid fuels (crude and natural gas liquids) is projected to rise by 2% in Q4, with China and the rest of Asia expected to account for most of the increase.
- Global production is expected to increase 2%, but this will not be enough to avoid a drop in global inventories in Q4.
  - **The Energy Department's forecast has production finally equaling demand in Q1 2022.**

Payroll Employment and Hours Worked

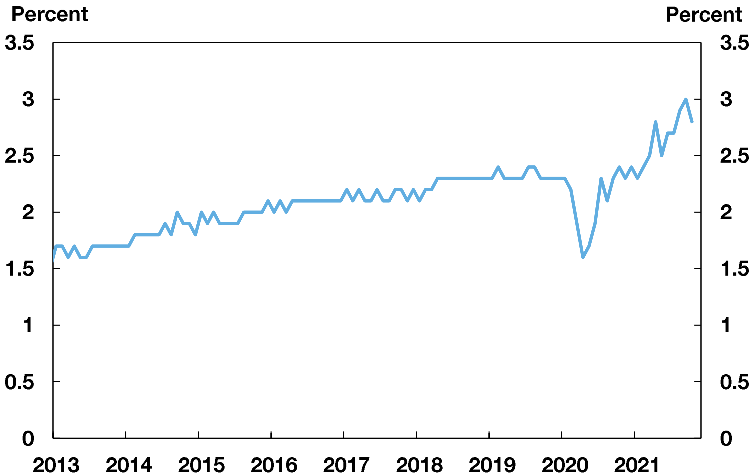


Source: Bureau of Labor Statistics

Employment growth slowed in November

- Nonfarm payroll employment rose by 210,000 in November, well below October's increase of 531,000.
- Gains were primarily concentrated in private service-providing industries, which registered a 235,000 increase in employment.
  - **Professional and business services (90,000) and transportation and warehousing (50,000) posted the largest gains.**
- Government employment continued its downward trajectory, falling by 25,000.

Quits Rate

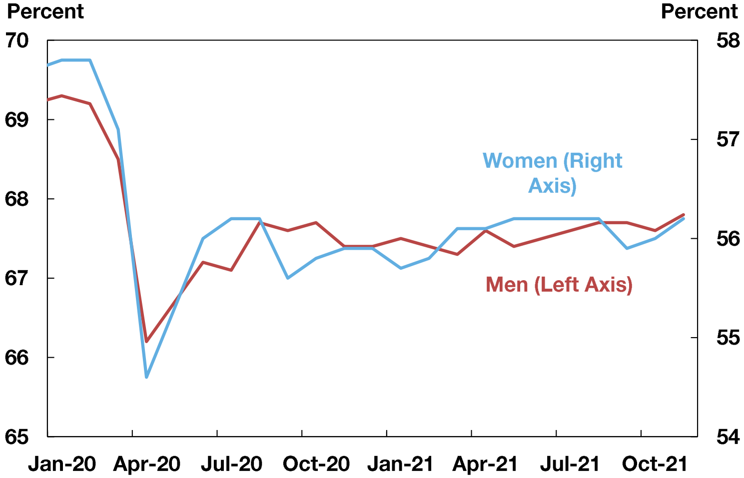


Source: Bureau of Labor Statistics via Haver

The quits rate remained high in October

- After reaching a series high of 3.0% in September, the quits rate ticked down slightly to 2.8% in October.
- The layoffs and discharges rate remained unchanged for the third consecutive month at 0.9%.
  - **Historically, this rate never declined below 1.1% until the pandemic.**
- The share of quits out of total separations ticked down slightly to 70.6%, down from a series high of 71.0% in September.

Labor Force Participation Rate

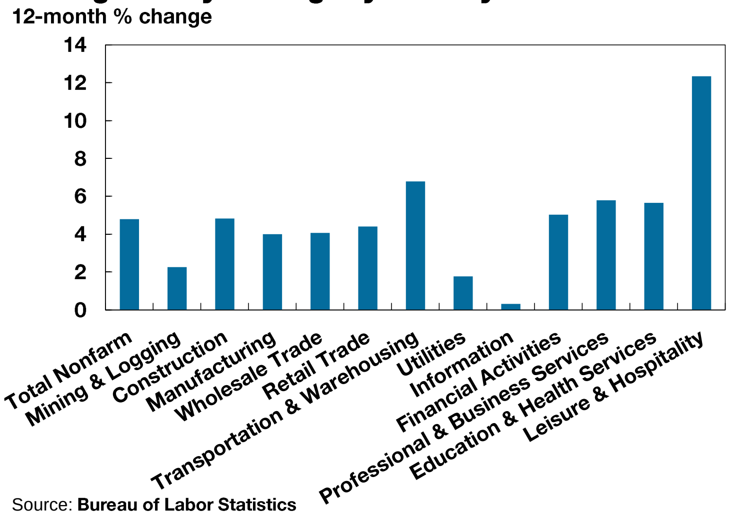


Source: Bureau of Labor Statistics via Haver Analytics

The labor force participation rate increased

- The labor force participation rate rose to 61.8% in November.
- The labor force participation rate had remained within a narrow range of 61.4% to 61.7% since June 2020.
- The labor force participation rate for men rose slightly from 67.6% to 67.8%, mirroring a similar increase for women from 56.0% to 56.2%.

Average Hourly Earnings by Industry

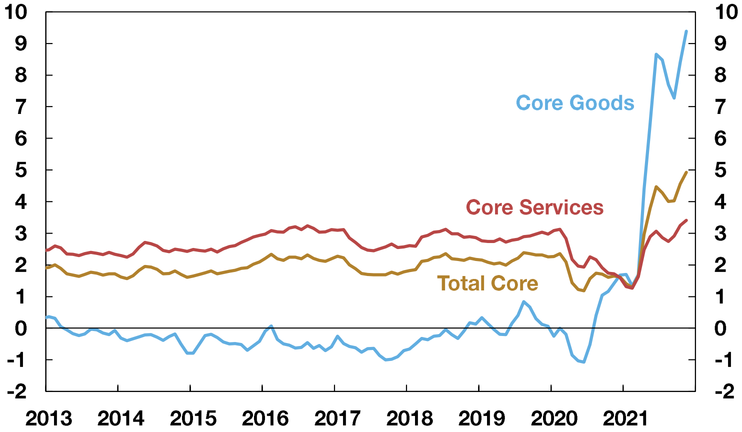


Source: **Bureau of Labor Statistics**

Average hourly earnings growth remained strong

- Average hourly earnings rose by 0.3% in November, representing another month of robust wage growth.
  - **Average hourly earnings were up 4.9% on a 12-month basis.**
  - **Average hourly earnings growth was notable in leisure and hospitality (0.8%), with average hourly earnings in this industry up 12.4% over 12 months.**
  - **The large employment swings during the pandemic complicate the analysis of average hourly earnings, which vary significantly across industries.**

Core CPI Inflation

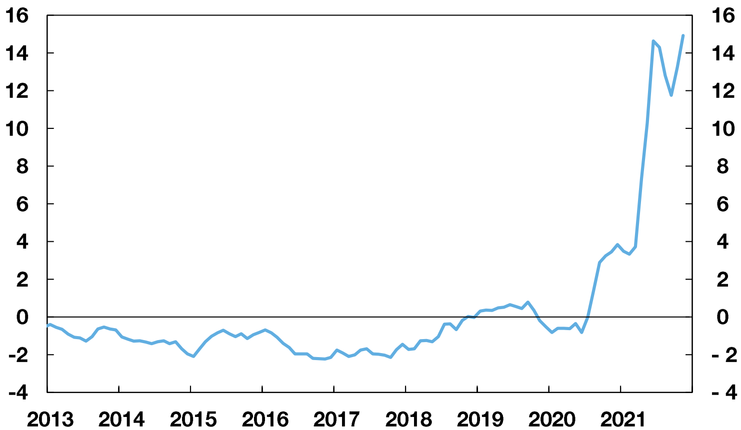


Source: Bureau of Labor Statistics via Haver Analytics

Core CPI inflation was elevated in November

- The core CPI was up 0.5% over the month in November (6.6%, annualized), after rising 0.6% in October.
  - **Monthly changes averaged 0.8% in Q2 and 0.2% in Q3.**
  - **The monthly inflation rate for core goods eased from 1.0% to 0.9%, with the rate for used motor vehicles stable at 2.5%.**
  - **The inflation rate for core services prices fell from 0.5% to 0.4%, with unchanged inflation for rent and a modest decline in medical care inflation.**
- On a 12-month basis, core inflation rose from 4.6% to 4.9%.
  - **Core goods inflation increased from 8.5% to 9.4%.**
  - **Core services inflation rose from 3.3% to 3.4%.**

CPI Inflation: Durable Goods

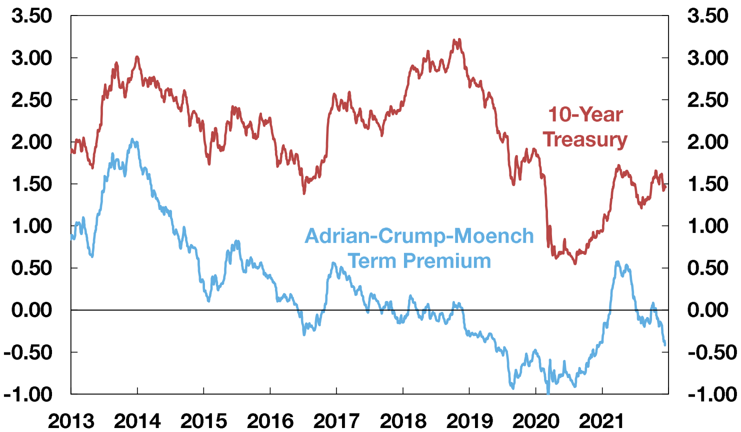


Source: Bureau of Labor Statistics via Haver Analytics

Inflation for durable goods remained very high

- The durable goods sub-index of the CPI rose by 1.6% over the month in November (20.3%, annualized) and by 14.9% over the year.
  - **Monthly changes averaged 3.4% in Q2 and 0.3% in Q3.**
  - **Much of the volatility in inflation during the year has been due to used cars.**
- Prices for furniture continued to rise at a brisk monthly pace, while prices have stabilized for appliances.
  - **Prices for televisions and IT commodities fell.**
- The price index for durable goods was 20% above its trend level.

10-Year Treasury and Term Premium



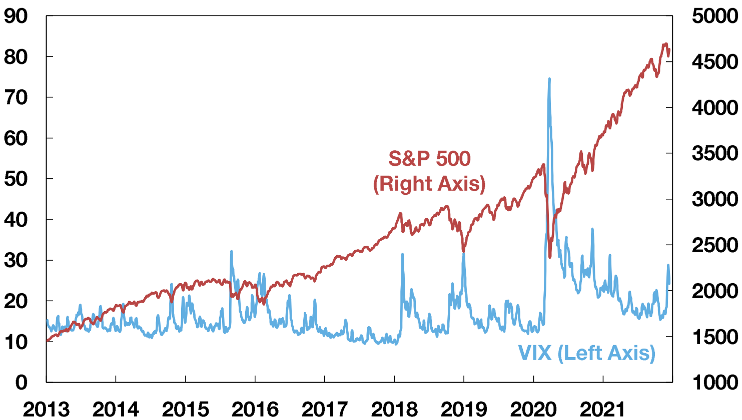
Sources: Federal Reserve Bank of New York and Federal Reserve Board via Haver Analytics

Note: Five-day rolling averages.

Ten-year Treasury yields have been stable

- The 10-year Treasury yield was at 1.48% on December 10 and was roughly unchanged from November 5.
  - **The yield was near the lower end of the range observed in the period from the Global Financial Crisis until the beginning of the pandemic.**
  - **Estimates from the Adrian-Crump-Moench term structure model suggest the stable yield is due to a decline in the term premium being offset by a higher expected interest rate path.**

U.S. Equity Market Index and Volatility



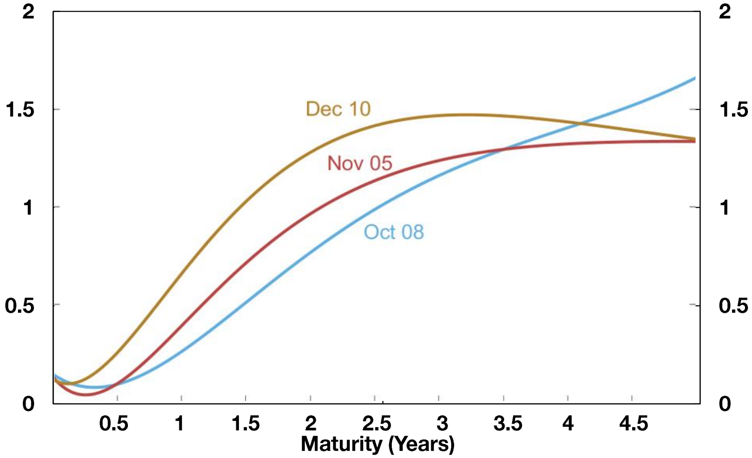
Source: Standard & Poor's and WSJ via Haver Analytics

Note: Five-day rolling averages.

Equity prices and the VIX displayed more volatility

- U.S. equity prices recovered from recent declines to stay unchanged on December 10 relative to November 5.
  - **The S&P 500 index was up about 25% year-to-date on December 10.**
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), increased slightly since early November.
  - **The VIX Index was at 18.7 on December 10, slightly above its median value of 17.7 over the period from 2000 to present.**
  - **The VIX Index was briefly up to around 30.0 in early December.**

Implied Fed Funds Rate



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

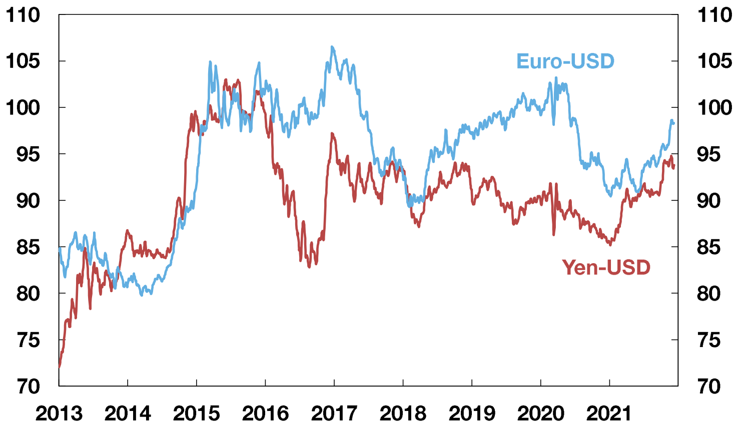
Note: Estimated using OIS quotes.

Implied path for the federal funds rate shifted up

- The expected path of the federal funds rate implied by overnight indexed swaps rose by 15 to 35 basis points for intermediate maturities between November 5 and December 10.
- The market-implied federal funds rate at the end of 2023 was around 1.40%, which was above the median value of September's Summary of Economic Projections (SEP) of 1.0%.
- At the five-year horizon, the market-implied expectation of the federal funds rate was also around 1.40%, which was below the median SEP longer-run federal funds rate of 2.50%.

Dollar Exchange Rates

Index, 2015=100



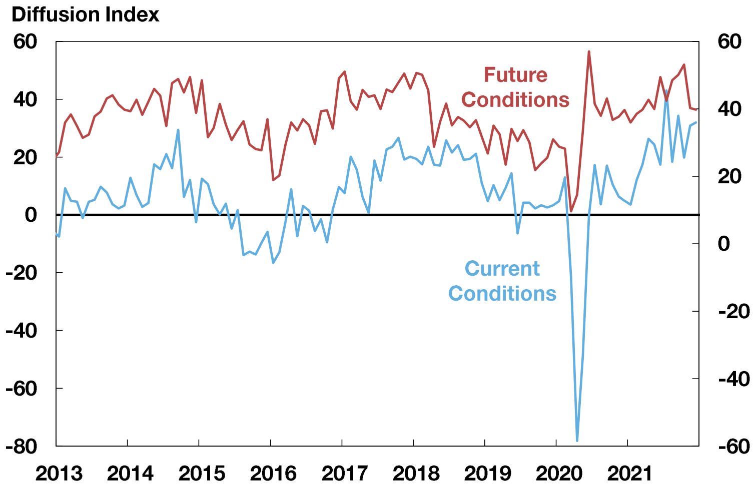
Source: Federal Reserve Board via Haver Analytics.

Note: Five-day rolling averages.

The dollar strengthened modestly

- The Federal Reserve Nominal Trade-Weighted Dollar index rose 1.3% between November 5 and December 10.
  - **The dollar appreciated 2% against the euro and was unchanged against the Japanese yen over the period.**
- The trade-weighted dollar index has appreciated 4% since the beginning of the year.

New York Fed Empire State Manufacturing Survey

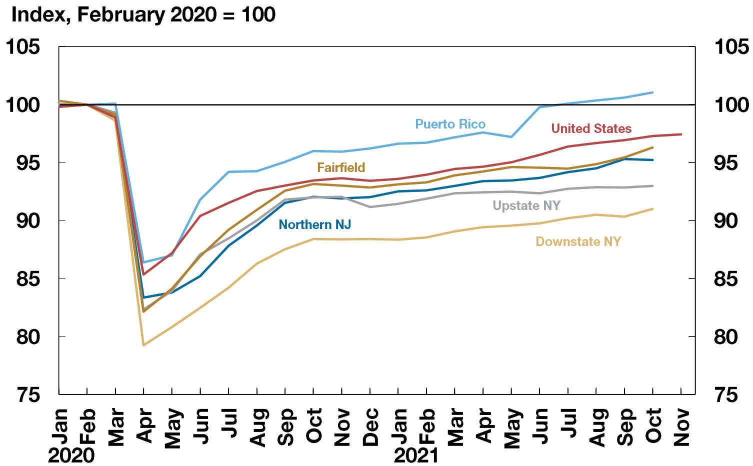


Source: New York Fed

District manufacturing firms reported solid gains

- Manufacturing activity continued to increase at a solid pace, while service sector growth in the region remained modest.
  - **The Empire State Manufacturing Survey's headline index held steady at 31.9 and the Business Leaders Survey's headline index was little changed at 14.4.**
  - **Employment increased moderately in both the manufacturing and service sectors.**
  - **Median inflation expectations were unchanged at 4.2%, after increasing for three consecutive months.**
  - **Input prices and selling prices continued to increase at a near record pace.**

Regional Employment Trends



Source: U.S. Bureau of Labor Statistics and Moody's Economy.com; data are early benchmarked by New York Fed staff.

Outsized job shortfalls in the region continued

- Job shortfalls were much more significant in the region than nationally.
  - **Employment has increased by around 3% thus far in 2021 in downstate New York, Northern New Jersey, and Fairfield, compared to just 2% in upstate New York, all of which are below the nationwide pace of 4%.**
  - **Employment in October was 9% below pre-pandemic levels in downstate New York, 7% below in upstate New York, 5% below in Northern New Jersey, and 4% below in Fairfield, compared to less than 3% nationally.**
  - **Employment in Puerto Rico has done much better than the nation, reaching a 5-year high.**