U.S. Economy in a Snapshot
Research & Statistics Group
September 2022

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 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 6, 2022.
OVERVIEW

Employment growth was solid, the unemployment rate rose, real disposable income increased, and core PCE inflation moderated.

- Output declined in Q2.
  - Drags on growth included inventories, consumer spending on food and gas, and residential investment.
  - Exports and spending on consumer services boosted growth.

- Real disposable income increased in July.
  - The level was still below its trend growth path.
  - Real consumer spending moved modestly higher.
  - The personal saving rate stayed at a low level.

- Payroll employment grew at a solid pace while the unemployment rate rose due to a large increase in the labor force.

- Core PCE inflation over the year eased modestly in July, while inflation measured over the month dropped sharply.

- The 10-year Treasury yield rose, the S&P 500 stock index retreated, and the dollar appreciated.

Q2 output was below its pre-pandemic trend path

- GDP has grown at a 1.0% annual rate since 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 2024-28 period at 2.0%.
  - GDP in Q2 was more than 2% below what it would have been if, since Q4 2019, it grew at a rate close to longer-run forecasts.

- Unemployment was below its longer-run normal level.
  - The 3.7% unemployment rate in August was below both the Blue Chip consensus forecast of 3.8% for average unemployment over 2024-28 and the median SEP projection of 4.0% for the longer-run unemployment rate.
  - The labor force participation rate in August was about one percentage point below pre-pandemic levels.

Real GDP
Trillions of 2012 dollars, annualized

Source: Bureau of Economic Analysis via Haver Analytics
OVERVIEW

**Unemployment Rate**

The unemployment rate rose in August

- The unemployment rate rose to 3.7% in August, up from 3.5% in July.
  - The increase was driven by higher labor force participation.
- The Household Survey’s measure of employment increased by 315,000.
- The labor force participation rate rose from 62.1% in July to 62.4% in August.

Source: Bureau of Labor Statistics via Haver Analytics

**PCE Deflator**

12-month % change

**PCE inflation fell in July**

- PCE inflation over the year fell from 6.8% in June to 6.3% in July.
  - Food prices were up 12% and energy prices were up 34%.
- Core PCE inflation eased from 4.8% in June to 4.6% in July.
  - Durable goods inflation fell from 6.1% to 5.6%.
  - Housing inflation rose from 5.5% to 5.9%.
- Core PCE inflation over the month fell from 7.6% (annualized rate) in June to 1.0% in July.
  - The index for durable goods fell at a 2.3% annual rate after rising 7.6% in June.
  - Housing inflation declined from 9.0% to 8.1%.

Source: Bureau of Economic Analysis via Haver Analytics
ECONOMIC ACTIVITY

GDP Growth
Quarterly % change annualized

GDP/GDI divergence widened further in Q2
- GDP fell at a 0.6% annual rate in Q2, after declining at a 1.6% rate in Q1.
  - Despite the two straight quarterly declines, output was up 1.7% over the year.
  - The inventory investment component was the major contributor to the decrease.
  - Final sales to private domestic purchasers (consumption plus private fixed investment) rose slightly in the quarter.
- In contrast, real gross domestic income (GDI) increased at a 1.4% annual rate in Q2.
  - Real GDI has risen 3.9% over the past year.
  - GDI was almost 4% above GDP in Q2, the largest differential in the post-World War II era.

Manufacturing Index
Index, 2017=100

Manufacturing activity rebounded in July
- The manufacturing index rose 0.7% in July.
  - The index was up 3% over the year and was 4% above its pre-pandemic level.
- The motor vehicles index rose 6.6%.
  - The index was up 13% over the year and 9% above its pre-pandemic level.
- The ISM manufacturing index in August was at a level suggesting modest growth.
  - The prices index fell sharply to near its historical average.
  - The new orders component rebounded.
  - The supplier deliveries index was stable at a much improved level relative to April's poor reading.
**Real disposable income rose in July**

- Real disposable income increased 0.3% over the month in July, while nominal personal income rose 0.2%.
  - Nominal compensation was up 0.8%, while proprietors’ income was down 1.4%.
  - Income was up 5% over the year, with compensation up 9%, proprietors’ income up 3%, investment income up 4%, and government transfers down 4%.
  - Real disposable income has been largely flat so far in 2022.

- Real personal consumption spending was up 0.2% over the month in July and was up 2% over the year.
  - The personal saving rate was unchanged at a low level.

**Consumer spending increased in July**

- Real spending on goods was up 0.2% over the month and was unchanged over the year.
  - Spending on durable goods has been flat since mid-2021, while spending on nondurables has trended down since the beginning of the year.
  - Purchases of food have fallen back to the series trend growth path, while spending on gasoline has fallen below.
  - Overall spending on goods was roughly 5% above its trend growth path.

- Real spending on services was up 0.2% over the month and was up 3% over the year.
  - Spending was around 3% below its trend path, with shortfalls in recreation, health care, public transportation, and personal care.
**BUSINESS SECTOR**

**Business Investment Spending on Equipment**

Billions of 2012 dollars, annualized

- Equipment spending retreated in Q2
  - After rising briskly in Q1, real business equipment spending fell at a 2.7% annual rate in Q2.
    - Equipment spending subtracted 0.2 percentage point off annualized GDP growth in the quarter.
    - Spending fell in the information and industrial categories and rose in the transportation category.
    - Equipment spending was up 2.8% over the year.
  - Orders of capital goods rose moderately in July and remained at a high level.
    - Even so, orders data in recent months suggest sluggish real equipment spending, especially as recent increases partly reflect higher prices.

**Business Investment in Nonresidential Structures**

Billions of 2012 dollars, annualized

- Spending on nonresidential structures fell in Q2
  - Real nonresidential structures investment spending decreased at a 13.2% annual rate in Q2.
    - Structures investment was a 0.4 percentage point drag on annualized GDP growth in the quarter.
    - Spending was down 7% over the year and down about 25% since Q4 2019.
  - Spending in the energy sector increased for the seventh straight quarter.
    - Spending on mining exploration, shafts, and wells was still down 12% from its Q4 2019 level.
  - Nominal private nonresidential construction spending in July was up modestly from the December 2021 level.

Source: Bureau of Economic Analysis via Haver Analytics
Residential Investment

Billions of 2012 dollars, annualized

- A drop in residential investment spending took 0.8 percentage point off annualized Q2 GDP growth.
  - Spending was still 10% above its Q4 2019 level.

- Investment continued to be relatively high in both single-family and multi-family structures.
  - Single-family construction in Q2 was up 23% relative to Q4 2019 and multi-family construction was up 20%.
  - The main drags on residential investment were from lower spending on improvements and commissions.

- Housing starts fell 10% in July.

Existing Single-Family Home Sales

Thousands, annualized

- Home sales were down again in July
  - Existing single-family home sales were down 5% over the month in July and were 22% below the Q1 2022 level.

  - New single-family home sales were down 10% over the month and were 40% below the Q1 2022 level.

  - Home prices were up 18% over the year in June.
    - Prices were up 4% (annual rate) over the month in June, a slowdown from the 16% pace set in May.
Federal spending was again a drag on growth

- Federal government spending subtracted 0.3 percentage point from annualized GDP growth in Q2, following negative contributions in each of the prior four quarters.
  - Nondefense spending subtracted 0.3 percentage point from growth, while defense spending was flat.
  - Overall spending was down 5% over the year, with consumption down 6% and investment spending unchanged.

- The drag from nondefense spending reflects a statistical quirk.
  - Federal government sales from the Strategic Petroleum Reserve subtract from government consumption but add to private inventories, with no net effect on overall output.

State and local government spending dipped in Q2

- Real state and local government spending subtracted a slight 0.1 percentage point from annualized GDP growth in Q2.
  - Spending was unchanged over the year.

- S&L government consumption was flat over the quarter.
  - Spending was up 2% over the year.

- Investment spending fell 2% over the quarter, with a 3% drop in construction and a 1% decline in equipment purchases more than offsetting a 1% increase in spending on intellectual property products.
  - Total investment spending was down 7% over the year, with construction spending down 10%. 
INFLATION

Core CPI Inflation

Core CPI inflation over the month slowed sharply

- Core inflation over the year stayed at 5.9% in July.
  - Core goods inflation fell from 7.2% to 7.0%.
  - Core services inflation was unchanged at 5.5%, with an increase in rent inflation from 5.8% to 6.3%.

- The core CPI rose 0.3% over the month (3.8%, annualized), a steep drop from the 0.7% pace (8.8%) set in June.
  - The monthly inflation rate for core goods decreased from 0.8% to 0.2%.
  - The monthly inflation rate for core services fell from 0.7% to 0.4%.

CPI Inflation: Medical Care

Medical inflation moved higher

- The medical care sub-index of the CPI was up 4.8% over the year in July.
  - The index was pulled up by the 21% increase in the cost of health insurance.

- The index for hospital care services was up 4.0% over the year while the index for physical services was up 0.8%.
  - The index for drugs was up 3.5%.

- The cost of insurance has undergone large swings in recent years.
  - The price of medical insurance was up 10% (non-annualized) over the past three years.
**Labor Market**

**Payroll Employment**

Index, 2019=100

![Graph showing payroll employment over time.](image)

*Source: Bureau of Labor Statistics*

**Employment growth was solid in August**

- Nonfarm payroll employment rose by 318,000 in August.
  - This was slightly below the average of recent monthly gains.
  - The most notable increases were in professional and business services, health care, and retail trade.

- The Household Survey's employment-to-population ratio was 60.1%, up 0.1 percentage point from July.
  - The ratio has stayed within a narrow band around 60% for the last six months.
  - The prime-age ratio rose, with the ratio for women above its pre-pandemic level and the ratio for men below.

**Average Hourly Earnings and the ECI**

Year-over-year % change

![Graph showing average hourly earnings and employment cost index over time.](image)

*Source: Bureau of Labor Statistics via Haver Analytics*

**Wage growth moderated**

- Average hourly earnings in August increased by 0.3% over the month (3.8%, annualized) down from 0.5% (5.8%) in July.
  - Hourly earnings were up 5.2% over the year, the same as in July.
  - Earnings have grown at a 4.8% annual rate over the past three months.

- The slowdown in wage growth was broad-based across sectors, excluding financial and information services.

- The employment cost index grew at a 5.4% annual rate from March to June.
Regional business activity was weak in August

- Manufacturing activity plunged and service sector activity remained weak, according to the August regional business surveys.
  - The Business Leaders Survey’s headline index (services) climbed 6 points but remained negative at -4.4, while the Empire Survey’s headline index (manufacturing) plummeted 42 points to -31.3, the second largest decline in the index on record.
  - There was a small increase in employment in both sectors, though the average workweek fell in the manufacturing sector.
  - Input price increases slowed in the manufacturing sector, but otherwise price indexes were little changed.

Employment growth remained strong in some areas

- Job growth in downstate New York, Northern New Jersey, and Puerto Rico outperformed the nation in July, but remained below the national pace in upstate New York and Fairfield.
  - Over the prior 12 months, employment increased by 5.5% in downstate New York, 5.0% in Northern New Jersey, 2.7% in Fairfield CT, and 2.6% in upstate New York, compared to 4.2% nationally.
  - Employment remained 4.0% below pre-pandemic levels in downstate New York, 4.2% below in upstate New York, 0.7% below in Northern New Jersey, and 1.9% below in Fairfield, while the nation has fully recovered all jobs lost.
  - Employment in Puerto Rico grew 5.0% on a year-over-year basis in July and was 5.7% above pre-pandemic levels.
INTERNATIONAL DEVELOPMENTS

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

Source: Bureau of Economic Analysis via Haver Analytics

Net exports were a boost to Q2 growth
- Imports and exports both rose in Q2.
  - Higher exports added 1.9 percentage points to annualized GDP growth, while higher imports subtracted 0.5 percentage point.
- The increase in exports was not enough to bring foreign sales back to pre-pandemic levels.
  - Higher exports were led by industrial supplies, durable consumer goods, and tourism.
- Imports were well above pre-pandemic levels.
  - Imports slowed after large increases in the previous two quarters.
  - The level of consumer goods imports continued to be well above its trend growth path.

Crude Oil Prices
Dollars per barrel (WTI)

Source: Energy Information Administration via Haver Analytics

Oil prices fell in July
- Oil prices (WTI) declined from $102/barrel in July to $95/barrel in August.
  - Prices in August were up 38% over the year.
  - The most recent peak was in June when the average price hit $115/barrel.
- The Department of Energy's August forecast projects that oil production will exceed demand in the second half of 2022.
  - The forecast has higher U.S. and OPEC production and relatively slow global demand growth.
  - In addition, Russia's output is projected to rebound in the second half of 2022 and then fall sharply in 2023.
FINANCIAL MARKETS

Implied Fed Funds Rate

The expected path of the federal funds rate shifted up by overnight indexed swaps increased across all maturities between August 8 and September 2.

- The market-implied federal funds rate at the end of 2023 went up to 3.7%, which is below the median value of 3.8% in the FOMC's Summary of Economic Projections (SEP) from June 2022.

- At the five-year horizon, the market-implied federal funds rate went up to around 2.9%, which is above the median SEP longer-run federal funds rate of 2.5%.

10-Year Treasury and Term Premium

Ten-year Treasury yields moved higher

- The 10-year Treasury yield was at 3.19% on September 2, 43 basis points higher than the yield on August 8.
  - The yield averaged 1.76% in January 2020.
  - The yield averaged 0.89% in 2020, 1.44% in 2021, and 2.56% in the first eight months of 2022.
  - Estimates from the Adrian-Crump-Moench term structure suggest the increase in the 10-year Treasury yield from August 8 to September 2 is due to both a higher expected future interest rate path and an increase in the term premium.
**U.S. Equity Market Index and Volatility**

![Graph showing U.S. Equity Market Index and Volatility from 2015 to 2022.](image)

- **Equity prices declined**
  - U.S. equity prices, as measured by the S&P 500 index, were down 9% on September 2 relative to the recent August 16 high.
    - The S&P 500 index was down 18% year-to-date on September 2 after being up 29% over the course of 2021.
  - Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), increased from 21.3 on August 8 to 25.5 on September 2.
    - The median VIX Index value was 17.9 over the period from the beginning of 2000 through September 2.

**Dollar Exchange Rates**

![Graph showing Dollar Exchange Rates from 2015 to 2022.](image)

- **The dollar continued appreciating**
  - The Federal Reserve's trade-weighted broad dollar index on September 2 was up 3% relative to August 8.
    - The index was up 18% relative to the 2021 average.
  - The dollar on September 2 was 2.4% stronger against the euro and 3.9% stronger against the yen relative to August 8.