



FEDERAL RESERVE BANK *of* NEW YORK

# U.S. Economy in a Snapshot

Research & Statistics Group

September 2023

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 5, 2023.

# OVERVIEW

## ▪ Output

- Q2 GDP growth was solid.
- Consumer spending, state and local government spending, and fixed business investment were substantial contributors to growth.
- Residential investment, inventory investment, and net exports were modest drags on growth.

## ▪ Monthly indicators

- Consumer spending in July rose sharply over the month, while real disposable income fell slightly.
- The gap between consumer spending and income drove a drop in the personal saving rate.
- Housing starts were up over the year.

## ▪ Labor market

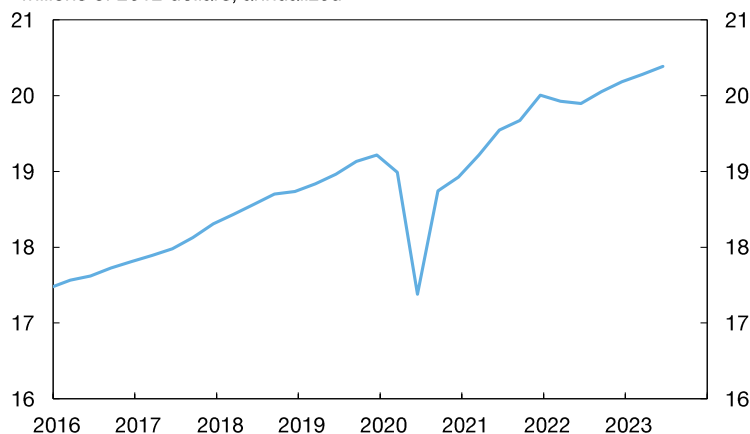
- Payroll growth was solid in August while the unemployment rate rose due to a jump in people entering the labor force.
- The employment-population ratio has been stable since the beginning of the year.
- The rate of increase in hourly earnings, measured over the year, fell slightly.

## ▪ Inflation

- Core PCE inflation over the year rose modestly in July, with a decline in inflation for core goods offset by an increase in inflation for core services.
- Rent inflation continued to ease, but was still high.
- The food price index has been unchanged since January.

## Real GDP

Trillions of 2012 dollars, annualized



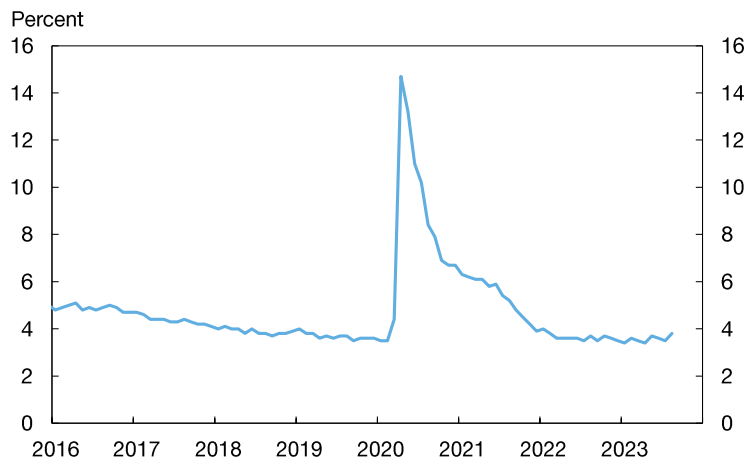
Source: Bureau of Economic Analysis via Haver Analytics

## Q2 output was modestly below its pre-pandemic trend

- GDP has grown at a 1.7% annual rate since Q4 2019.
  - In the June Summary of Economic Projections (SEP), the median estimate for the longer-run GDP growth rate was 1.8%.
  - The March Blue Chip survey had expected average annual growth over the 2025-29 period at 1.9%.
  - Q2 GDP was about 0.5% below what it would have been if, since Q4 2019, it grew at a rate close to longer-run forecasts.

# OVERVIEW

## Unemployment Rate

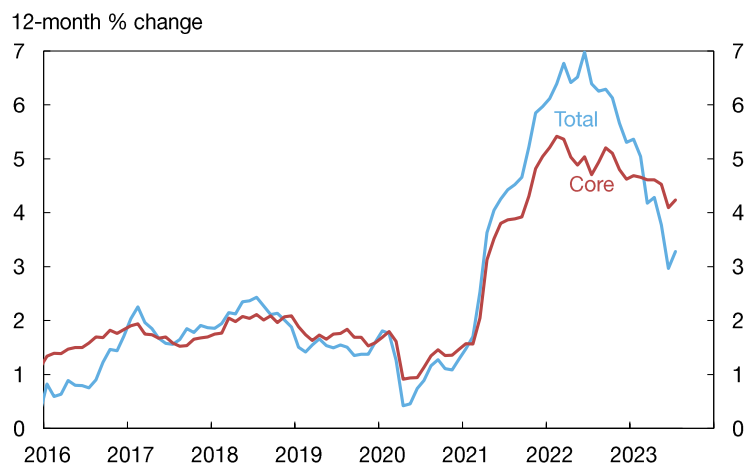


Source: Bureau of Labor Statistics via Haver Analytics

## The unemployment rate rose

- The unemployment rate increased from 3.5% in July to 3.8% in August.
  - The rate averaged 3.6% in 2022 and 3.5% in the first half of 2023.
  - The August labor force participation rate increased 0.2 percentage point after being flat since March.
- The unemployment rate was below its longer-run normal level.
  - The February unemployment rate was below both the Blue Chip consensus forecast of 4.2% for the average unemployment rate over 2024-28 and the median SEP projection of 4.0% for the longer-run unemployment rate.

## PCE Deflator



Source: Bureau of Economic Analysis via Haver Analytics

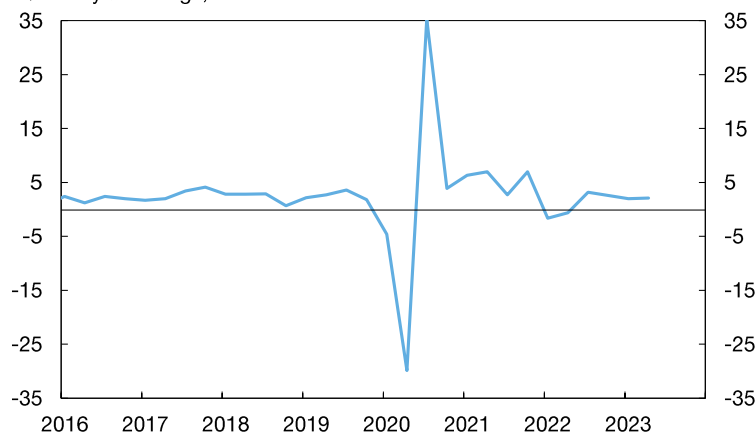
## PCE inflation over the year increased

- PCE inflation over the year rose from 3.0% in June to 3.3% in July.
  - Food inflation eased from 4.6% to 3.5% and energy inflation moved from -18.9% to -14.6%.
- Core PCE inflation increased from 4.1% to 4.2%.
  - Core goods inflation fell from 1.7% to 1.4%.
  - Core services inflation rose from 5.0% to 5.4%.
- Core PCE inflation over the previous six months went from 4.1% (annualized) to 3.4%.
  - Core goods inflation fell from 2.5% to 0.6%.
  - Core services inflation fell from 4.7% to 4.5%.

# ECONOMIC ACTIVITY

## GDP Growth

Quarterly % change, annualized



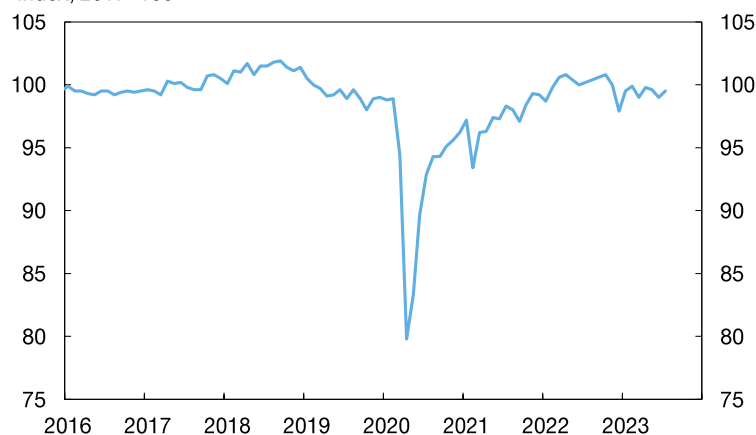
Source: Bureau of Economic Analysis via Haver Analytics

## Q2 output was revised down modestly

- GDP rose at a 2.1% annual rate in Q2, a moderate downward revision from the previous estimate of 2.4%.
  - The four-quarter change was 2.5%.
  - Consumer expenditures, business fixed investment, and government spending all contributed to Q2 growth.
  - Final sales to private domestic purchasers (consumption plus private fixed investment) rose at a rate near that of GDP.
- Real gross domestic income (GDI) increased at a 0.5% annual rate in Q2 after falling in the previous two quarters.
  - The four-quarter change in real GDI was -0.5%.
  - The gap between GDP and GDI widened further in Q2, with GDP well above GDI.

## Manufacturing Index

Index, 2017=100



Source: Federal Reserve Board via Haver Analytics

## Manufacturing was slightly below its year-ago level

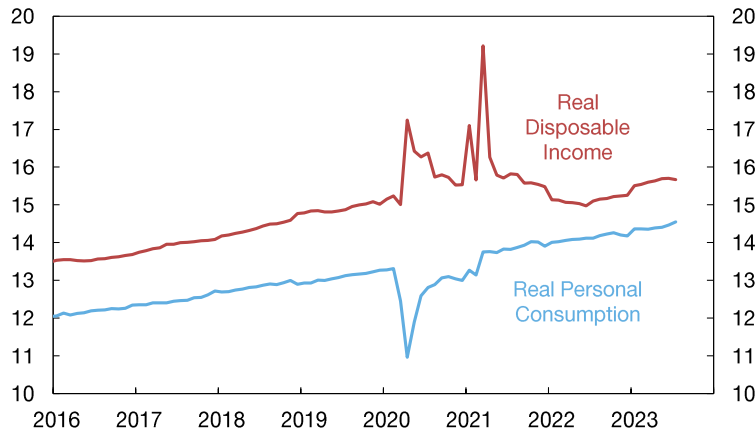
- The manufacturing index rebounded in July, up 0.5% after falling 0.6% the previous month.
  - The reading was equal to the Q2 average.
  - The index moved higher in Q2 2022, retreated in Q4, and has been mostly flat in 2023.
- Manufacturing was down 0.7% over the year.
  - Durable goods production was up 0.3% and nondurable goods production was down 1.6%.
  - The motor vehicle sector was an outlier, with its production up 10%.



# HOUSEHOLDS

## Disposable Income and Consumption

Trillions of 2012 dollars, annualized



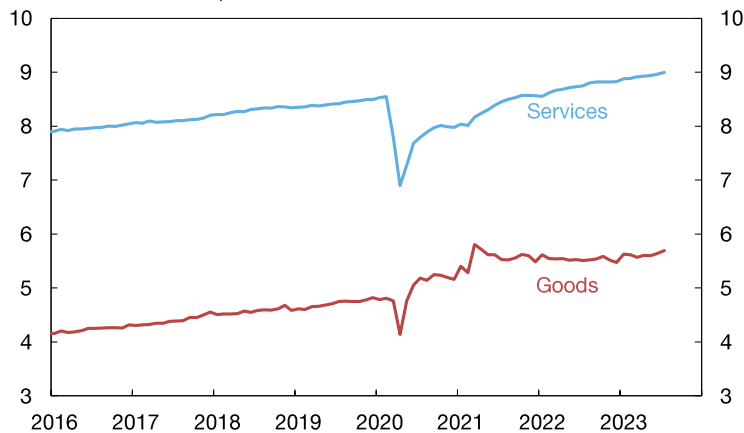
Source: Bureau of Economic Analysis via Haver Analytics

## The growth in consumer spending increased

- The growth in real disposable income over the year dropped from 4.9% to 3.8%.
  - Real disposable income fell slightly over the month and was up 2.2% (annualized) over the previous six months.
- The growth in real personal consumption spending over the year increased from 2.4% in June to 3.0% in July.
  - Real spending was up 7.1% (annualized) over the month and 2.5% over the previous six months.
  - The personal saving rate fell from 4.6% to 4.3% in June.
  - The rate averaged 3.6% in 2022 and 4.4% in the first half of 2023.
  - The saving rate was well below its pre-pandemic saving rate of around 9%.

## Consumer Spending

Trillions of 2012 dollars, annualized



Source: Bureau of Economic Analysis via Haver Analytics

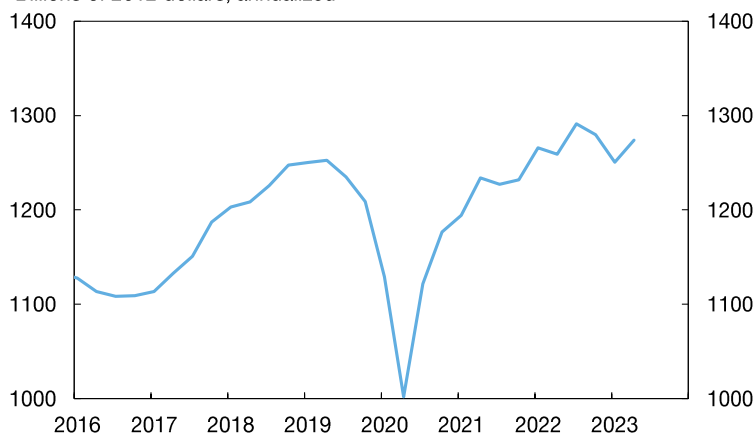
## The growth in spending on goods was strong

- The growth in real spending on goods over the year increased from 2.0% in June to 3.3% in July.
  - Spending on durable goods rose 5.4% and spending on nondurables rose 2.1%.
  - New motor vehicle purchases were up 8.6% and used vehicle purchases were up 9.1%.
- The growth in real spending on services over the year increased from 2.6% to 2.9%.

# BUSINESS SECTOR

## Business Investment Spending on Equipment

Billions of 2012 dollars, annualized



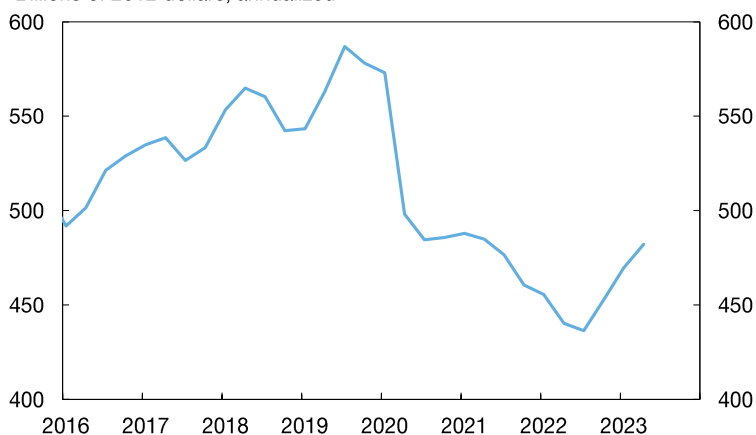
Source: Bureau of Economic Analysis via Haver Analytics

## Equipment spending rebounded in Q2

- After falling in the previous two quarters, real business equipment spending rose at a 7.7% annual rate in Q2.
  - Equipment spending added 0.4 percentage point to the annualized Q2 GDP growth rate.
  - A surge in transportation equipment accounted for the Q2 increase.
  - Equipment spending was up 1.2% over the year.
- Orders of capital goods rose slightly in July.
  - Nominal orders have risen modestly over the past year.
  - Even though the pace has slowed recently, prices for capital equipment have risen briskly since mid-2022.

## Business Investment in Nonresidential Structures

Billions of 2012 dollars, annualized



Source: Bureau of Economic Analysis via Haver Analytics

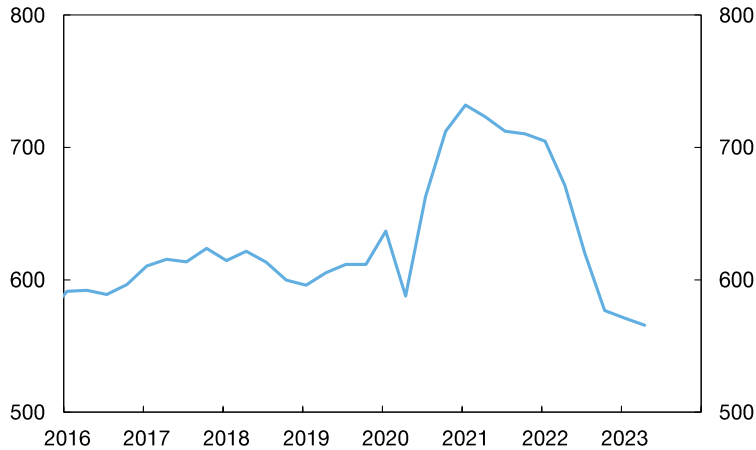
## Spending on nonresidential structures rose in Q2

- Real nonresidential structures investment spending increased at an 11.2% annual rate in Q2, its third straight double-digit increase.
  - Structures investment contributed 0.3 percentage point to annualized GDP growth in the quarter.
  - Spending was up 9.5% over the year but was still down 16.6% relative to Q4 2019.
- Spending on manufacturing structures surged again in Q2 and has risen more than 54% in the past year.
  - Spending on those structures was 40% above its Q4 2019 level.
  - Spending on mining exploration, shafts, and wells fell in Q2, and was more than 16% below its Q4 2019 level.

# HOUSING SECTOR

## Residential Investment

Billions of 2012 dollars, annualized



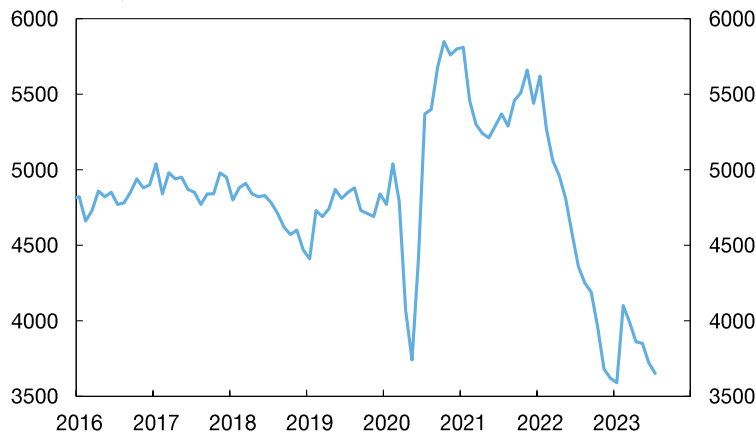
Source: Bureau of Economic Analysis via Haver Analytics

## Residential investment spending fell in Q2

- Another drop in residential investment spending took 0.1 percentage point off annualized Q2 GDP growth.
  - Investment spending was down 4% (annualized) over the quarter and was down 16% over the year.
- Investment in new permanent structures was up slightly over the quarter, with the overall drag coming from the “other” category that includes home improvements and broker commissions.
  - Single-family construction spending was down 25% over the year and multi-family construction was up 14%.
  - July housing starts were up 6% over the year, with single-family starts up 9% and multi-family starts down 1%.

## Existing Single-Family Home Sales

Thousands, annualized



Source: National Association of Realtors via Haver Analytics

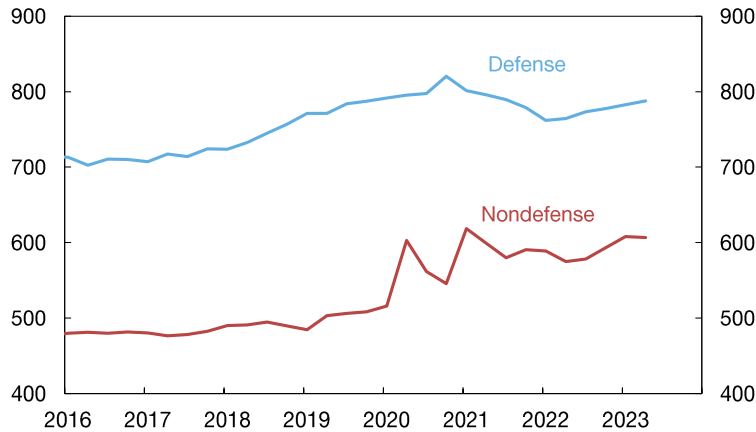
## Existing home sales were down over the year

- Existing single-family home sales in July were down 16% over the year.
  - Sales were 23% below the 2019 average.
- New single-family home sales in July were up 30% over the year.
  - Sales were 4% above the 2019 average.
- Prices for existing single-family homes peaked in June 2022 and have been stable through June 2023.

# GOVERNMENT SECTOR

## Federal Government Spending

Billions of 2012 dollars, annualized



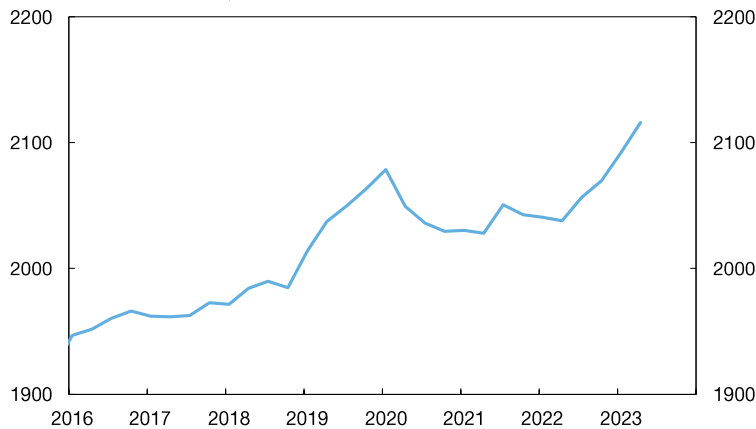
Source: Bureau of Economic Analysis via Haver Analytics

## Federal spending increased slightly

- Federal government spending contributed only slightly to Q2 GDP growth.
  - Spending rose 1% (annualized) in the second quarter, with defense spending up 3% and nondefense spending down 1%.
  - The modest increase in federal spending contributed less than 0.1 percentage point to Q2 GDP growth.
- Total real spending was 4% above its year-ago level.
  - Defense spending was up 3% and nondefense spending was up 6%.

## State and Local Government Spending

Billions of 2012 dollars, annualized



Source: Bureau of Economic Analysis via Haver Analytics

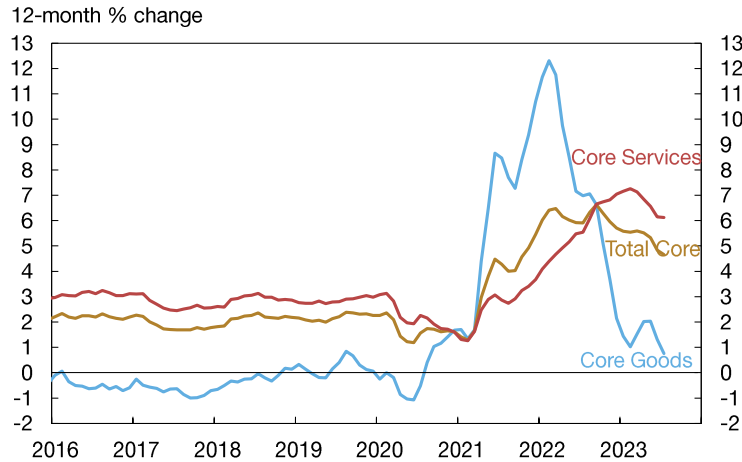
## State and local government spending jumped

- State and local government spending added 0.4 percentage point to annualized GDP growth in Q2.
  - Spending was up 5% (annualized) over the quarter and up 4% over the year.
- S&L government consumption was up 2% (annualized) over the quarter.
  - Consumption was up 2% over the year.
- S&L government investment spending rose 17% (annualized) over the quarter.
  - Investment spending was up 11% over the year.



# INFLATION

## Core CPI Inflation

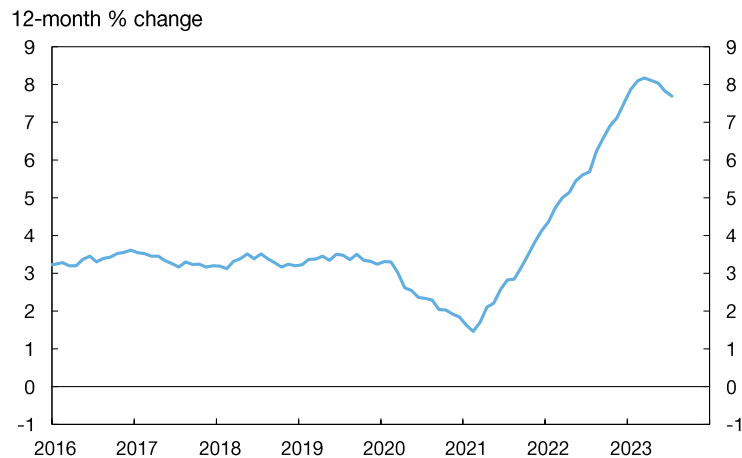


Source: Bureau of Labor Statistics via Haver Analytics

## Core CPI inflation over the year fell

- Core inflation over the year fell from 4.8% in June to 4.7% in July.
  - Core goods inflation fell from 1.3% to 0.8%, with inflation for used motor vehicles moving from -5.2% to -5.6%.
  - Core services inflation fell from 6.2% to 6.1%, with rent of primary residence inflation dipping from 8.3% to 8.0%.
- The core CPI rose 4.1% (annualized) over the previous six months, down from the 4.6% pace set in June.
  - Core goods inflation went from 2.6% to 1.8%.
  - Core services inflation decreased from 5.4% to 5.0%.

## CPI Inflation: Shelter



Source: Bureau of Labor Statistics via Haver Analytics

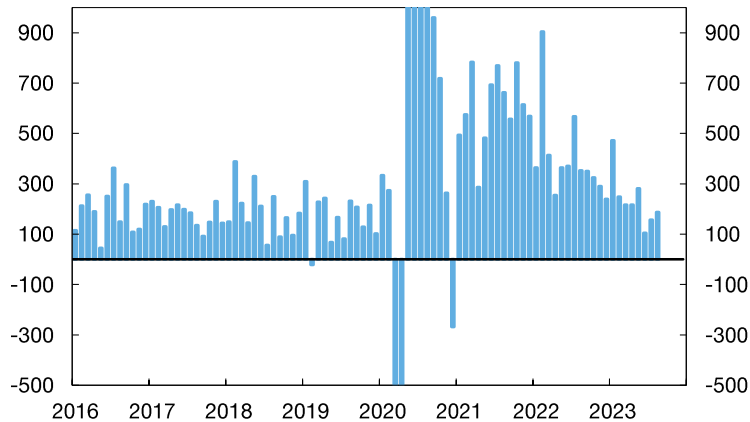
## Rent of shelter inflation slowed

- Rent of shelter inflation over the year decreased from 7.8% in June to 7.7% in July.
  - Rent of primary residence component of the overall shelter index fell from 8.3% to 8.0%.
  - The shelter index grew at a 3.3% annual rate in the five years before the pandemic.
- Rent of shelter inflation over the previous six months dropped from 7.7% (annualized) in June to 7.0% in July.

# LABOR MARKET

## Payroll Employment

Monthly change, thousands



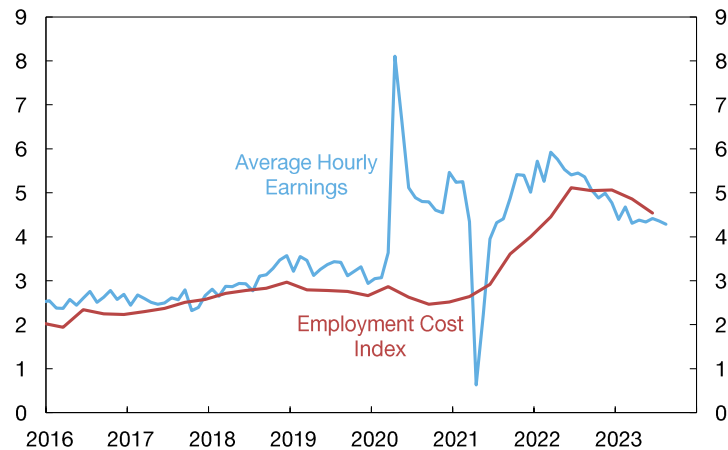
Source: Bureau of Labor Statistics

## Employment growth was solid

- Nonfarm payroll employment increased by 187,000 in August, near the Q2 average of 201,000 and below the Q1 average of 312,000.
  - Most of the August increase was in health services (71,000), leisure and hospitality (40,000), construction (22,000), professional and business services (19,000), and manufacturing (16,000).
  - There were notable declines in transportation (-34,000), temporary help (-19,000), and information services (-15,000).
- The Household Survey's employment-population ratio for the 16-64 years-old cohort was unchanged at 72.1%.
  - The ratio averaged 71.3% in 2022.
  - The ratio was 0.7 percentage point above the 2019 average.

## Average Hourly Earnings and the ECI

Year-over-year % change



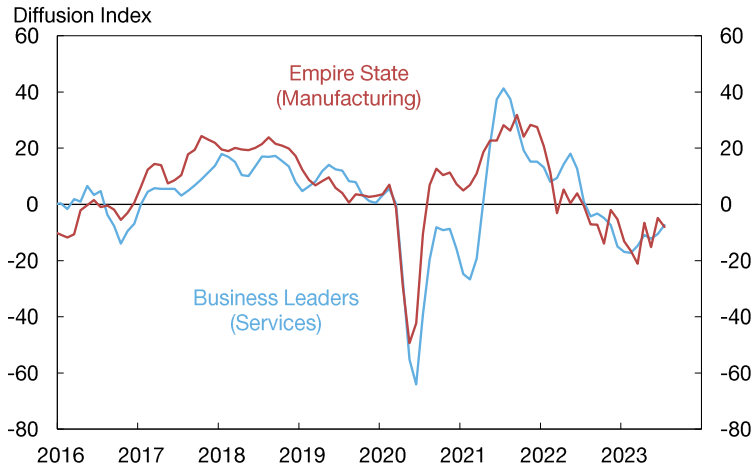
Source: Bureau of Labor Statistics via Haver Analytics

## Average hourly earnings growth eased

- The growth in average hourly earnings over the year dipped from 4.4% in July to 4.3% in August.
  - Earnings growth peaked at 5.9% in March 2022.
  - Earnings growth over the previous six months went from 4.4% (annualized) to 4.3%.
  - For comparison, earnings rose 3.2% over the year in Q4 2019.
- The growth in the employment cost index over the year fell from 4.9% in March to 4.5% in June.
  - Growth in the index over the previous six months fell from 4.6% (annualized) to 4.2%.
  - For comparison, the index rose 2.7% over the year in Q4 2019.

# REGIONAL

## New York Fed Business Surveys: Current Conditions



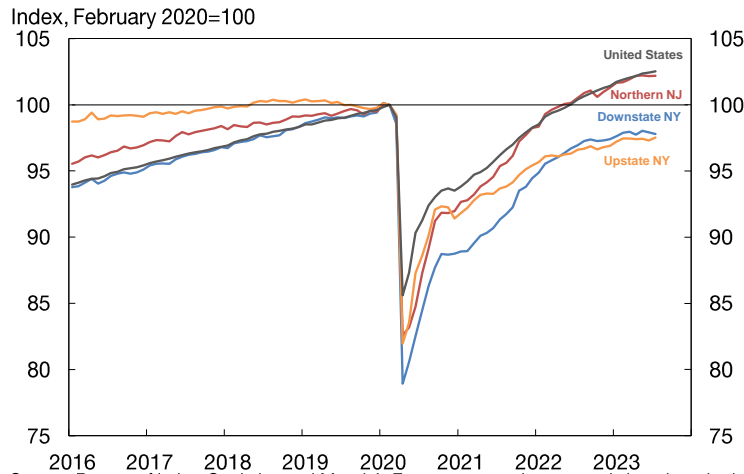
Source: Federal Reserve Bank of New York

Note: Three-month rolling averages.

## Regional business activity was mixed in August

- Activity declined in the region's manufacturing sector, but held steady in the service sector, according to the August regional business surveys.
  - The Empire Survey's headline index (manufacturing) fell 20 points to -19, and the Business Leaders Survey's headline index (services) was little changed at 1.
  - The employment reading was steady in the manufacturing sector and increased modestly in the service sector.
  - The price indexes moved up several points in the manufacturing sector, though from low levels, and moved up modestly in the service sector.

## Regional Employment Trends



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

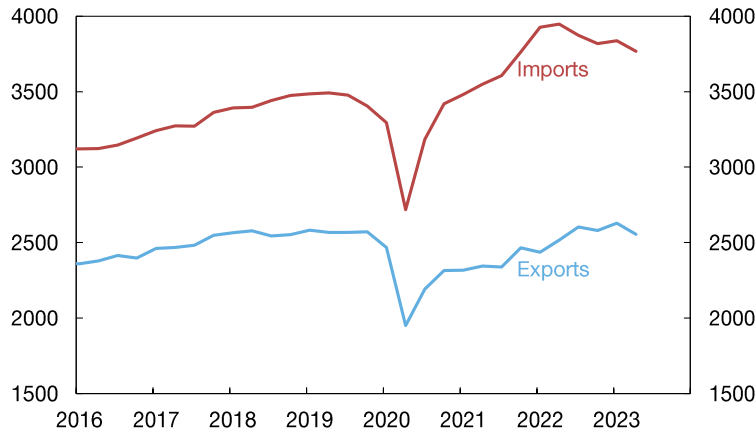
## NY State job growth was sluggish

- July employment growth remained sluggish in New York, while Northern New Jersey and Puerto Rico continued to see solid gains.
  - While employment grew by 2.1% nationally over the prior 12 months, employment increased by 0.9% in downstate New York, 1.0% in upstate New York, 1.7% in Northern New Jersey, and 1.9% in Fairfield CT.
  - Employment remained 2.2% below pre-pandemic levels in downstate New York and 2.5% below in upstate New York. Employment was above pre-pandemic levels by 0.7% in Fairfield CT, 2.2% in Northern New Jersey, and 2.5% for the nation.
  - Employment in Puerto Rico grew by 3.5% on a year-over-year basis in July and was 8.4% above pre-pandemic levels.

# INTERNATIONAL DEVELOPMENTS

## Exports and Imports of Goods and Services

Billions of 2012 dollars, annualized



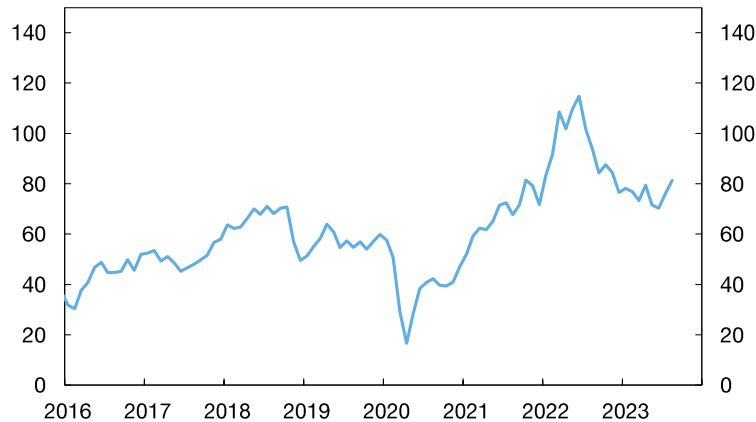
Source: Bureau of Economic Analysis via Haver Analytics

## Net exports were a small drag on Q2 growth

- Exports and imports both fell in Q2.
  - Lower exports subtracted 1.3 percentage points from annualized GDP growth, while lower imports added 1.1 percentage points.
- Exports were back to their Q4 2022 level.
  - There were large decreases over the quarter in sales of food, petroleum, and consumer goods.
- Imports have trended down since Q2 2022.
  - Purchases of petroleum and nondurable consumer goods were down substantially over the quarter.

## Crude Oil Prices

Dollars per barrel (WTI)



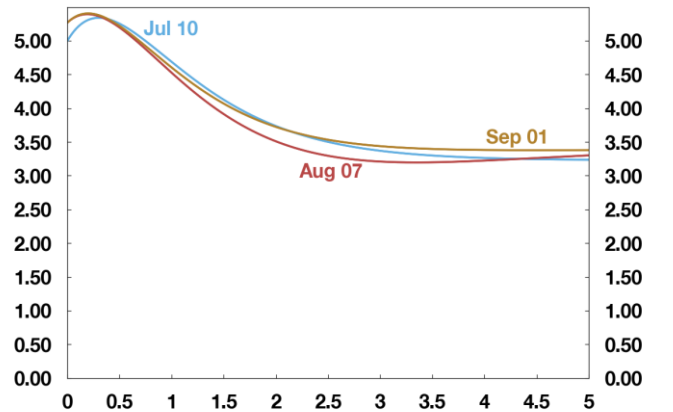
Source: Energy Information Administration via Haver Analytics

## Oil prices rose

- Oil prices (WTI) rose from \$76/barrel in July to \$81/barrel in August.
  - Prices were around \$85/barrel in early September.
  - Prices averaged \$68/barrel in 2021 and \$95/barrel in 2022.
- The Department of Energy's August forecast projects that global inventories will tighten in the second half of 2023, largely unwinding the rise in the first half of the year.
  - Most of the 2023 increase in global consumption is set to come from China and the rest of Asia.
  - Global production is set to rise modestly, with higher production in the U.S., Norway, Brazil, and Canada partially offset by lower OPEC output.

# FINANCIAL MARKETS

## Implied Fed Funds Rate



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

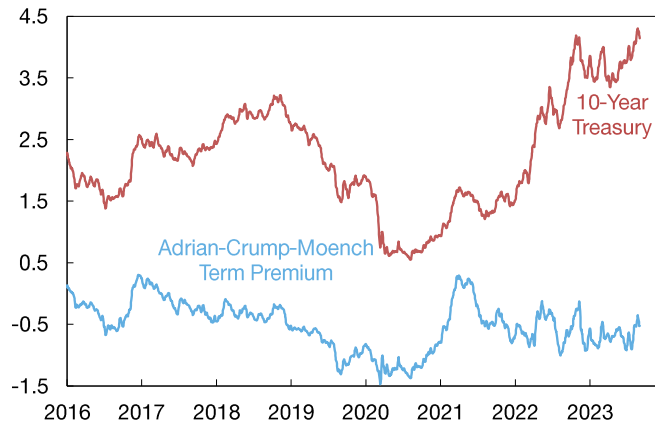
Note: Estimated using OIS quotes.

## Implied path of the federal funds rate was stable

- Between August 7 and September 1, the expected path of the federal funds rate implied by overnight indexed swaps was little changed. The curve has a downward slope after about 3 months.
- The market-implied federal funds rate at the end of 2024 was at around 4.1%, which is below the median value of 4.6% in the FOMC's Summary of Economic Projections (SEP) from June 2023.
- At the five-year horizon, the market-implied federal funds rate was at around 3.4%, which is above the median SEP longer-run federal funds rate of 2.5%.

## 10-Year Treasury and Term Premium

Percent



Sources: NY Fed and Federal Reserve Board via Haver Analytics

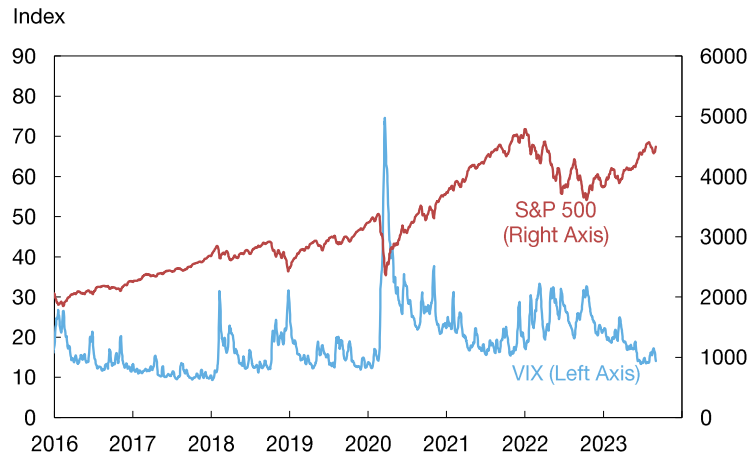
Note: Five-day rolling averages.

## Ten-year Treasury yield increased

- The 10-year Treasury yield increased by 9 basis points between August 7 and September 1 to 4.18%.
  - The yield averaged 0.89% in 2020, 1.44% in 2021, and 2.95% in 2022.
  - Estimates from the Adrian-Crump-Moench term premium suggest that the increase in the 10-year Treasury yield from August 7 to September 1 was due to small increases in both the expected interest rate path and the term premium.

# FINANCIAL MARKETS

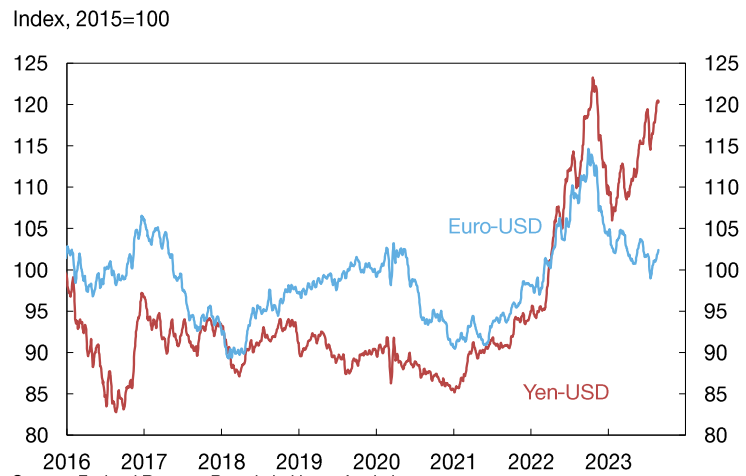
## U.S. Equity Market Index and Volatility



## Equity prices were little changed

- U.S. equity prices, as measured by the S&P 500 index, decreased slightly over the past month.
  - The S&P 500 index was unchanged on September 1 relative to August 7, and was up 18% year-to-date.
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), decreased from 15.8 on August 7 to 13.1 on September 1.
  - The index recently peaked at 26.5 on March 13.
  - The index averaged 20.2 over the past 12 months.

## Dollar Exchange Rates



## The dollar strengthened slightly

- The Federal Reserve's trade-weighted broad dollar index increased 1% between August 4 and September 1.
  - The index was unchanged relative to the beginning of the year.
- On September 1, the dollar was 2% stronger against the euro and 3% stronger against the yen relative to August 4.