



FEDERAL RESERVE BANK *of* NEW YORK

U.S. Economy in a Snapshot

Research & Statistics Group

November 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 November 8, 2022.

OVERVIEW

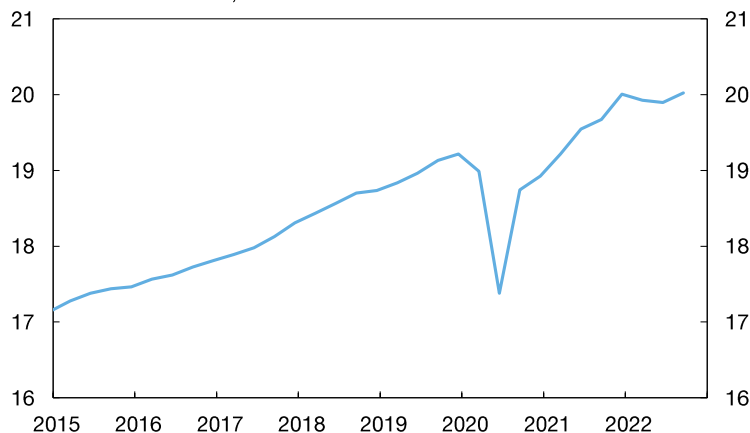
Employment growth moderated, wage inflation eased, housing starts fell, and core inflation remained high.

- Output rebounded in Q3.
 - **The net exports component was a large contributor to growth, while residential investment, spending on structures, and inventories were drags on growth.**
 - **Consumer spending grew modestly.**
- Real disposable income was unchanged.
 - **The level remained well below its trend growth path.**
 - **Real consumer spending was up over the month.**
 - **The personal saving rate declined to a low level.**

- Housing starts and home sales fell.
- The growth of payroll employment slowed to a still solid pace, while the unemployment rate moved up.
- The growth of hourly earnings over the year slowed.
- Core PCE inflation over the year moved higher.

Real GDP

Trillions of 2012 dollars, annualized



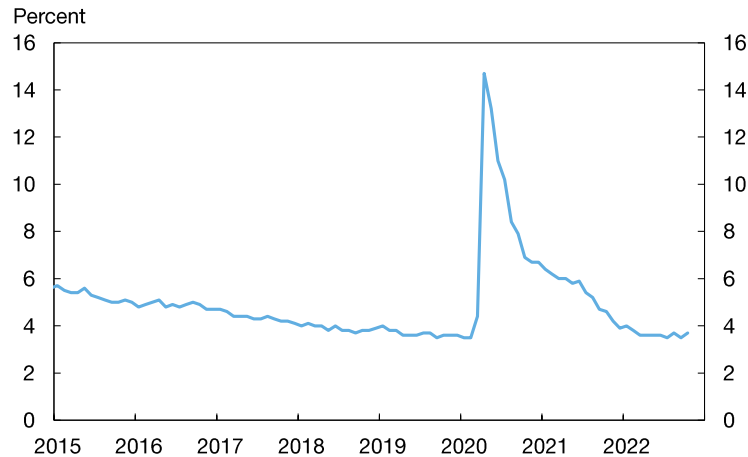
Source: Bureau of Economic Analysis via Haver Analytics

Q3 output was below its pre-pandemic trend path

- GDP has grown at a 1.5% annual rate since Q4 2019.
 - In the September Summary of Economic Projections (SEP), the median estimate for the longer-run GDP growth rate was 1.8%.
 - The October Blue Chip survey had expected average annual growth over the 2024-28 period at 1.9%.
 - GDP in Q3 was about 1% below what it would have been if, since Q4 2019, it grew at a rate close to longer-run forecasts.
- The unemployment rate was below its longer-run normal level.
 - The 3.7% unemployment rate in October 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.
 - The labor force participation rate in October was about one percentage point below pre-pandemic levels.

OVERVIEW

Unemployment Rate

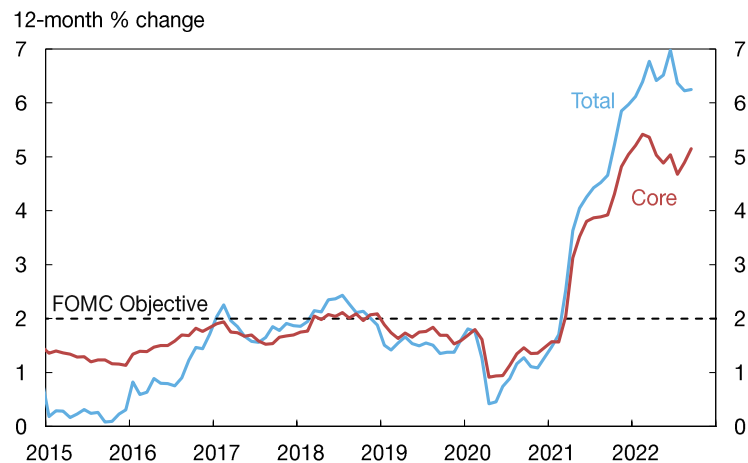


Source: Bureau of Labor Statistics via Haver Analytics

The unemployment rate rose

- The unemployment rate rose from 3.5% in September to 3.7% in October.
- The labor force participation rate decreased from 62.3% in September to 62.2% in October.
 - The rate has been largely unchanged since January.
 - The rate was 0.9 percentage point below its 2019 average and 0.5 percentage point above its 2021 average.
 - The rate for the 25 to 54 years-old cohort was at its 2019 average.

PCE Deflator



Source: Bureau of Economic Analysis via Haver Analytics

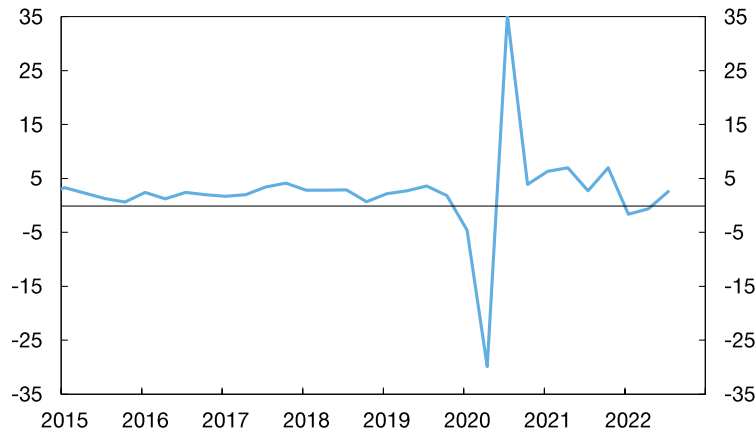
PCE inflation over the year was unchanged

- PCE inflation over the year was unchanged at 6.2% in September.
 - Food prices were up 12% and energy prices were up 20%.
- Core PCE inflation rose from 4.9% to 5.2%.
 - Durable goods inflation increased from 5.3% to 5.7%.
 - Services inflation increased from 5.0% to 5.3%.
- Core PCE inflation over the month slowed from 6.7% (annualized) to 5.6%.
 - Core inflation over the previous three months eased from 5.0% (annualized) in August to 4.2%.

HOUSEHOLDS

GDP Growth

Quarterly % change, annualized



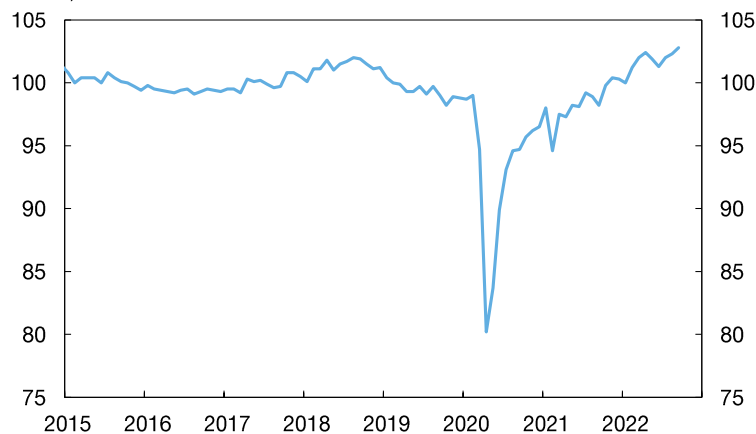
Source: Bureau of Economic Analysis via Haver Analytics

Output rebounded in Q3

- GDP rose at a 2.6% annual rate in Q3, after declining at a 1.1% rate in the first half.
 - Output was up 1.8% over the year.
 - Exports rose and imports fell, resulting in the net exports component being the major contributor to the Q3 increase.
 - Final sales to private domestic purchasers (consumption plus private fixed investment) rose slightly in the quarter.
- Nominal personal income increased at a 5.5% annual rate in Q3, close to the rate in Q2.
 - Real disposable personal income increased modestly, the first rise in this measure since Q1 2021.
 - The personal saving rate fell to 3.3%, the lowest level since Q4 2007.

Manufacturing Index

Index, 2017=100



Source: Federal Reserve Board via Haver Analytics

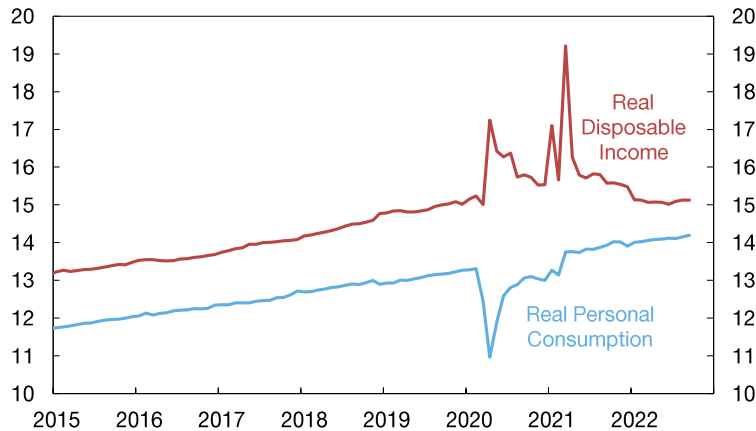
Manufacturing activity increased

- The manufacturing index rose 4.7% (annualized) over the month in September.
 - The index was up 5% over the year.
- Manufacturing was up 2% (annualized) over the quarter in Q3, a slowdown from the 3% pace set in Q2.
 - The Q3 reading was up 4% over the year.
- The ISM manufacturing index fell in October to a level suggesting modest growth.
 - The prices index and the supplier deliveries index fell again and were below pre-pandemic levels.

ECONOMIC ACTIVITY

Disposable Income and Consumption

Trillions of 2012 dollars, annualized



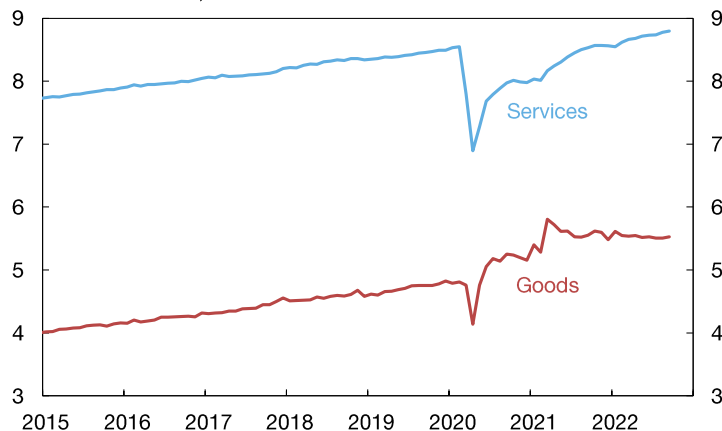
Source: Bureau of Economic Analysis via Haver Analytics

Real disposable income was flat

- Nominal personal income rose 4% (annualized) over the month in September, while real disposable income was unchanged.
 - Nominal personal income was up 5% over the year, with compensation up 8%, proprietors' income up 5%, investment income up 5%, and government transfers down 2%.
 - Real disposable income was down 3% over the year.
- Real personal consumption spending was up 4% (annualized) over the month in September and was up 2% over the year.
 - The personal saving rate fell from 3.4% to 3.1%.
 - The savings rate averaged 8.8% in 2019.

Consumer Spending

Trillions of 2012 dollars, annualized



Source: Bureau of Economic Analysis via Haver Analytics

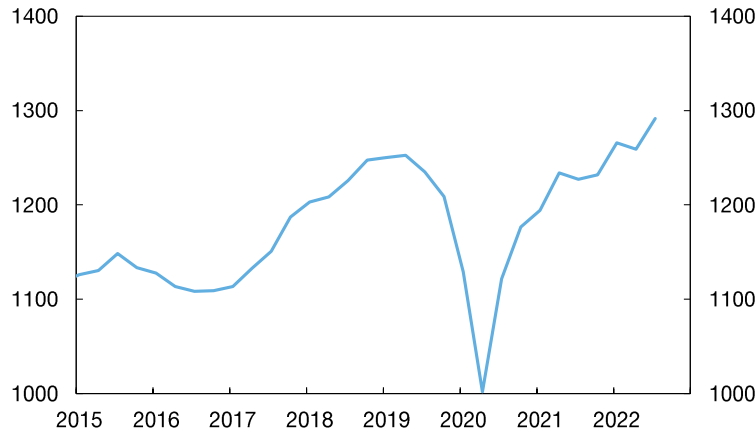
Consumer spending on goods remained stalled

- Real spending on goods was up 5% (annualized) over the month in September, a rebound after falling the two prior months.
 - Spending on durable goods has been flat since the beginning of the year, while spending on nondurables has been on a slight downward trend.
 - Purchases of food have fallen below the series trend path in recent months.
 - Spending on goods was unchanged over the year.
- Real spending on services was up 3% (annualized) over the month and was up 3% over the year.
 - Spending on transportation and recreational services was up sharply over the year.

BUSINESS SECTOR

Business Investment Spending on Equipment

Billions of 2012 dollars, annualized



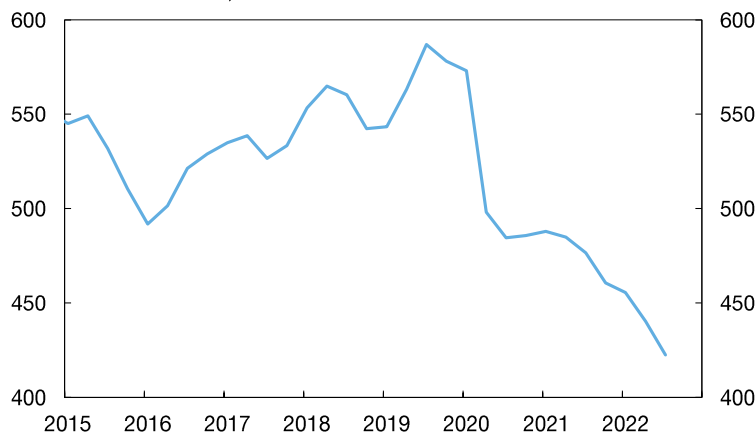
Source: Bureau of Economic Analysis via Haver Analytics

Equipment spending rose robustly in Q3

- After falling in Q2, real business equipment spending increased at a 11% annual rate in Q3.
 - Equipment spending added 0.5 percentage point to annualized GDP growth in the quarter.
 - Spending rose briskly in the information and transportation categories but fell in the industrial and “other” categories.
 - Equipment spending was up 5% over the year.
- Orders of capital goods fell in September.

Business Investment in Nonresidential Structures

Billions of 2012 dollars, annualized



Source: Bureau of Economic Analysis via Haver Analytics

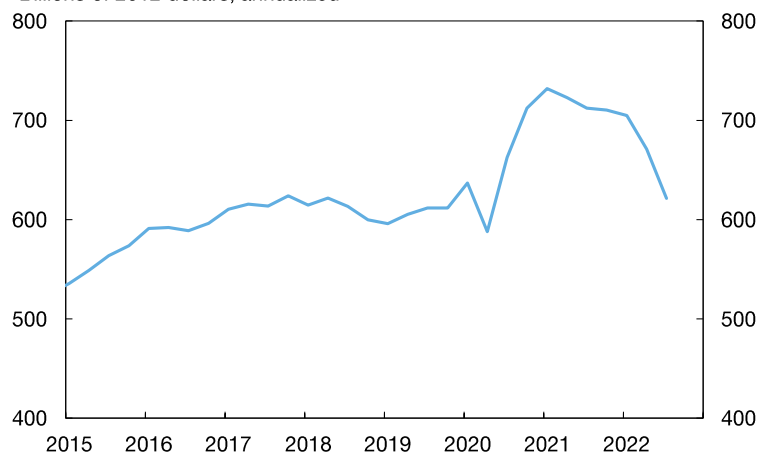
Spending on nonresidential structures fell in Q3

- Real nonresidential structures investment spending decreased at a 15% annual rate in Q3.
 - Structures investment was a 0.4 percentage point drag on annualized GDP growth in the quarter.
 - Spending was down 11% over the year and down almost 27% since Q4 2019.
- Spending in the energy sector decreased following seven straight quarterly increases.
 - Spending on mining exploration, shafts, and wells was down nearly 15% from its Q4 2019 level.

HOUSING SECTOR

Residential Investment

Billions of 2012 dollars, annualized



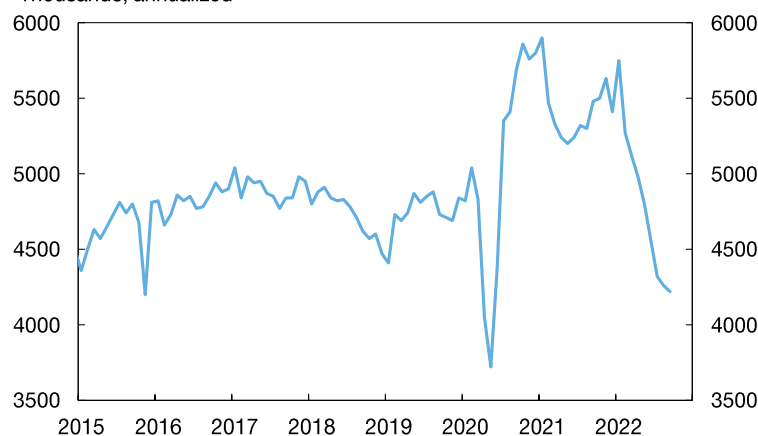
Source: Bureau of Economic Analysis via Haver Analytics

Residential investment fell again in Q3

- A steep drop in residential investment spending took 1.4 percentage points off annualized Q3 real GDP growth.
 - Investment spending was down 26% (annualized) over the quarter and down 13% over the year.
- Investment in single-family housing in Q3 was down 36% (annualized) over the quarter and investment in multi-family structures was down 5%.
 - Single-family construction was down 14% over the year and multi-family construction was down 6%.
 - Declines in commissions and home improvement spending were also drags on residential investment.

Existing Single-Family Home Sales

Thousands, annualized



Source: National Association of Realtors via Haver Analytics

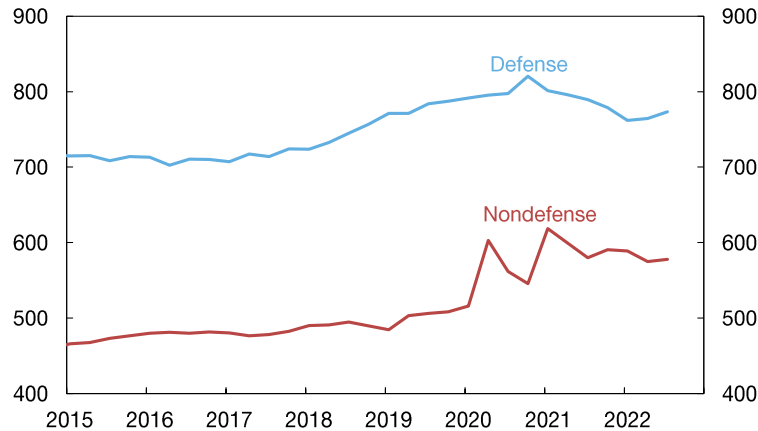
Existing home sales fell

- Existing single-family home sales in Q3 were down 37% (annualized) relative to Q2.
 - Sales in September were down 23% over the year.
- New single-family home sales in Q3 were unchanged from the Q2 level.
 - Sales in September were down 18% over the year.
- Prices for single-family homes fell 5% (annualized) over the month in July and fell another 10% in August.
 - The home price index was 13% above its year-ago level.

GOVERNMENT SECTOR

Federal Government Spending

Billions of 2012 dollars, annualized



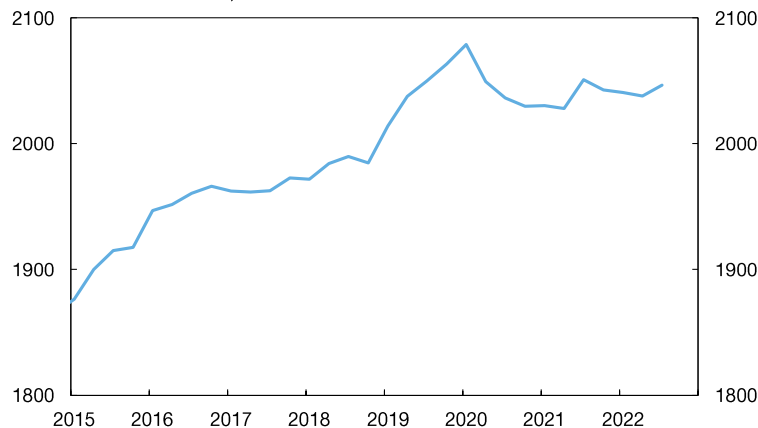
Source: Bureau of Economic Analysis via Haver Analytics

Federal spending increased in Q3

- Federal government spending added 0.2 percentage point to annualized real GDP growth in Q3, following negative contributions in the two prior quarters.
 - Nondefense spending added 0.06 percentage point to growth and defense spending added 0.17 percentage point.
- Real spending was down 1% over the year.
 - Defense spending was down 2% and nondefense spending was unchanged.

State and Local Government Spending

Billions of 2012 dollars, annualized



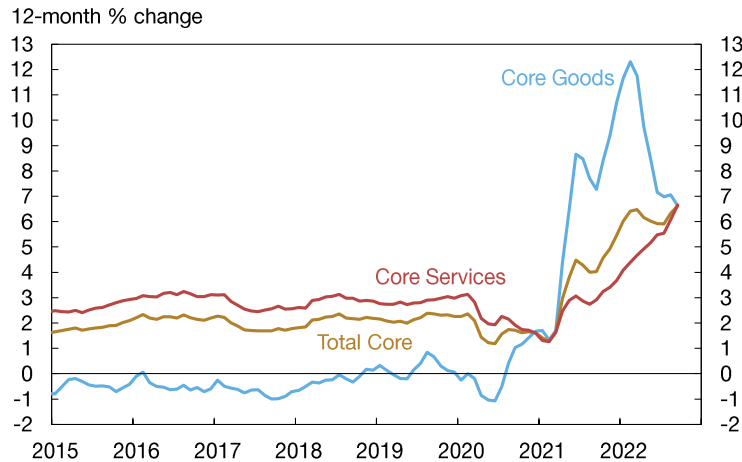
Source: Bureau of Economic Analysis via Haver Analytics

State and local government spending increased

- Real state and local government spending added 0.2 percentage point to annualized real GDP growth in Q3.
 - Spending was unchanged over the year.
- S&L government consumption was up 1% (annualized) over the quarter.
 - Spending was up 1% over the year.
- Investment spending rose 3% (annualized) over the quarter, with a 1% increase in construction, a 19% jump in equipment purchases, and a 6% increase in spending on intellectual property products.
 - Total investment spending was down 4% over the year, with construction spending down 7%.

INFLATION

Core CPI Inflation

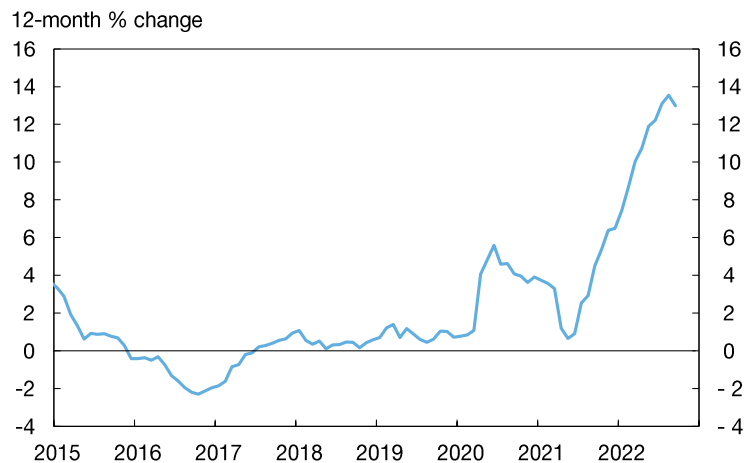


Source: Bureau of Labor Statistics via Haver Analytics

Core CPI inflation over the year accelerated

- Core inflation over the year rose from 6.3% in August to 6.6% in September.
 - Core goods inflation fell from 7.1% to 6.6%.
 - Core services inflation jumped from 6.1% to 6.7%, with an increase in rent inflation from 6.3% to 6.7%.
- The core CPI rose 5.2% (annualized) over the month, a drop from the 6.4% pace set in August.

CPI Inflation: Food



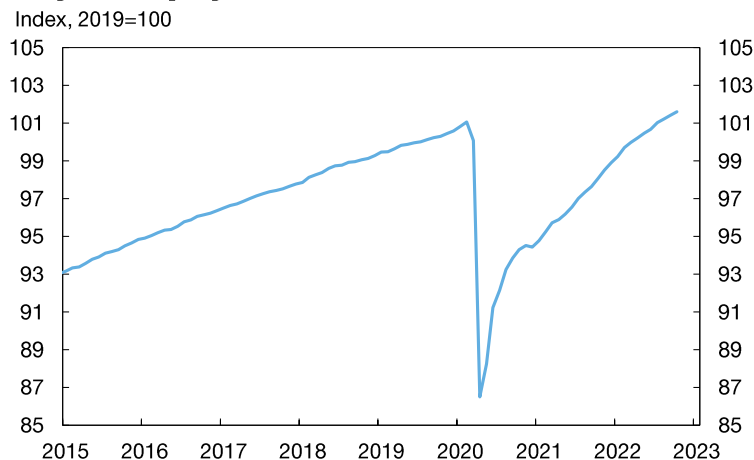
Source: Bureau of Labor Statistics via Haver Analytics

Food inflation remained high

- The food-at-home component of the CPI was up 13% over the year in September.
 - Inflation over the month eased from 8.7% (annualized) to 7.4%.
 - For comparison, prices rose at an average annual pace of 1% in the decade before the pandemic.
- Prices for cereals and bakery products were up 16% over the year, meats were up 5%, and dairy products were up 16%.
- The food-at-home index was 22% above the 2019 average.

LABOR MARKET

Payroll Employment

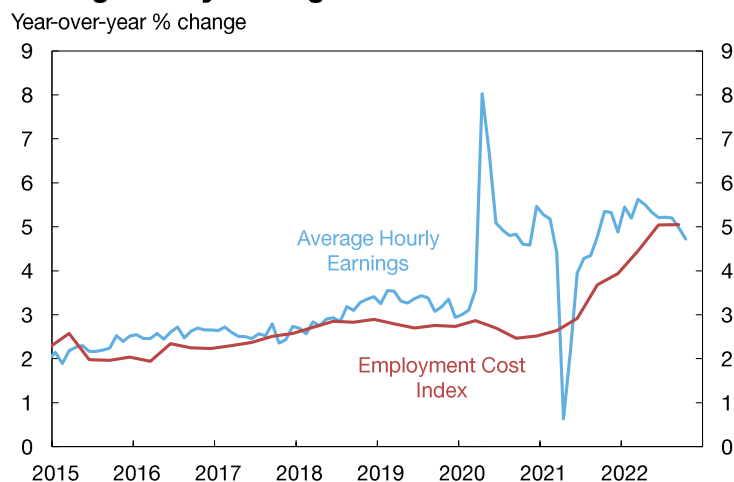


Source: Bureau of Labor Statistics

Employment growth slowed in October

- Nonfarm payroll employment rose by 261,000 in October.
 - Monthly growth averaged 562,000 in 2021, 444,000 in the first half of 2022, and 351,000 since July.
 - Notable increases were in health care, professional services and leisure and hospitality.
- The Household Survey's employment-to-population ratio was down slightly to 60.0%.
 - The ratio has stayed within a narrow band of around 60% for the last six months.
 - The ratio was almost 1 percentage point below its 2019 average.
 - The rate for the 25-54 years-old cohort was near its 2019 average.

Average Hourly Earnings and the ECI



Source: Bureau of Labor Statistics via Haver Analytics

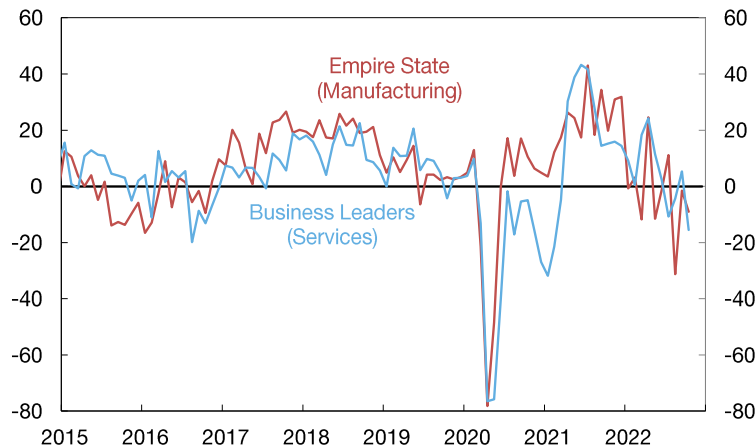
Wage growth over the year moderated

- The growth in average hourly earnings over the year eased from 5.0% in September to 4.7% in October.
 - Earnings rose 4.5% (annualized) over the month and 3.9% over the previous three months.
- The employment cost index was up 5.0% over the year in September.
 - The index rose 5.1% (annualized) over the previous three months, a slowdown from the 5.4% pace set over the course of Q2.

REGIONAL

New York Fed Business Surveys: Current Conditions

Diffusion Index



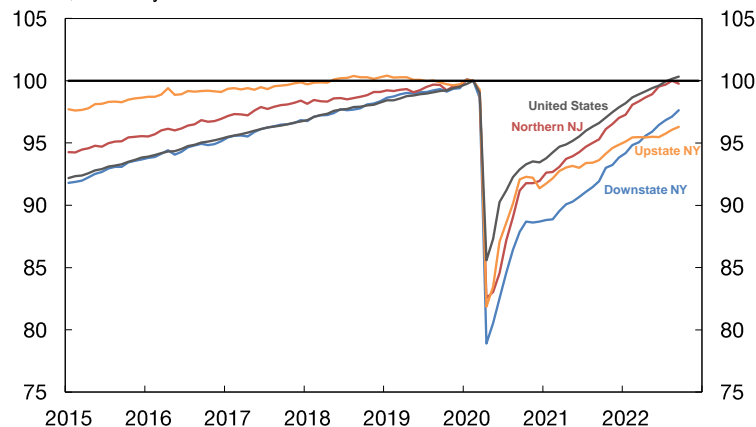
Source: Federal Reserve Bank of New York

Regional business activity contracted in October

- Both manufacturing and service sector activity declined, according to the October regional business surveys.
 - The Empire Survey's headline index (manufacturing) fell 8 points to -9, and the Business Leaders Survey's headline index (services) plunged 21 points to -16, its lowest level in well over a year.
 - Despite the decline in reported activity, the surveys suggest that employment increased in both sectors and was particularly solid in the leisure and hospitality sector.
 - Price indexes in the surveys were little changed, except for a pickup in prices paid in the manufacturing sector.

Regional Employment Trends

Index, February 2020=100



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

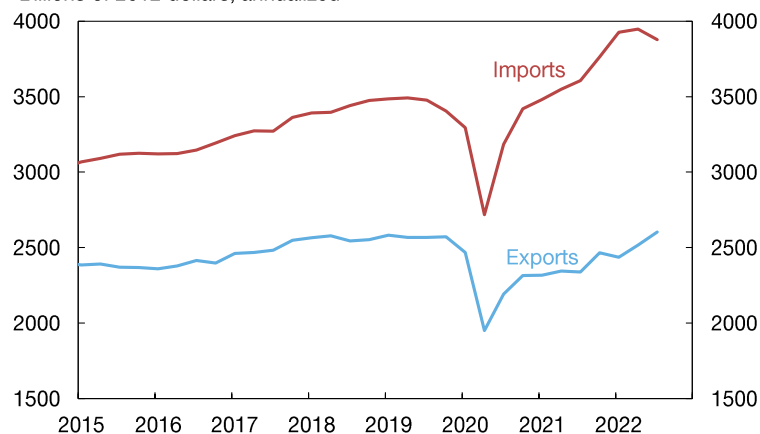
Employment growth remained strong in some areas

- Job growth remained quite strong in September in downstate New York, and was stronger than the national pace in Northern New Jersey and Puerto Rico, but remained sluggish in upstate New York and Fairfield.
 - Over the prior 12 months, employment increased by 6.2% in downstate New York, 4.7% in Northern New Jersey, 3.1% in Fairfield CT, and 2.9% in upstate New York, compared to 3.9% nationally.
 - Employment remained 2.4% below pre-pandemic levels in downstate New York, 3.7% below in upstate New York, 0.2% below in Northern New Jersey, and 1.0% below in Fairfield, while the nation is now 0.4% above its pre-pandemic level.
 - Employment in Puerto Rico grew 4.7% on a year-over-year basis in September and was 5.6% above pre-pandemic levels.

INTERNATIONAL DEVELOPMENTS

Exports and Imports of Goods and Services

Billions of 2012 dollars, annualized



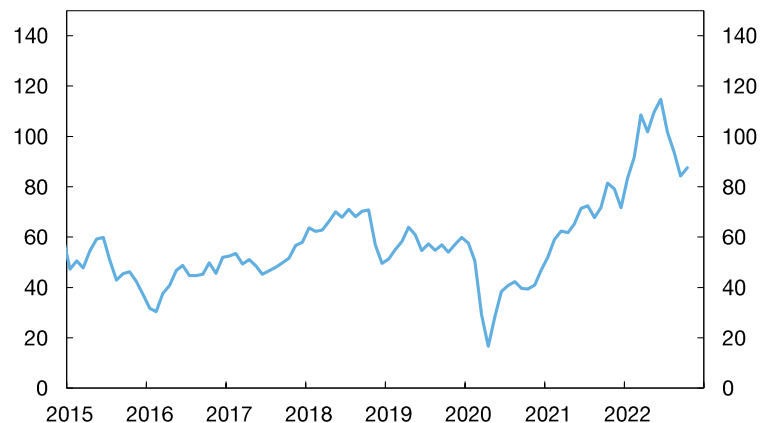
Source: Bureau of Economic Analysis via Haver Analytics

Net exports boosted Q3 growth

- Exports rose and imports fell in Q3.
 - Higher exports added 1.6 percentage points to annualized GDP growth, while lower imports added 1.1 percentage points.
- Exports moved back to near pre-pandemic levels.
 - Higher exports were led by energy and nondurable industrial supplies.
- Imports retreated after large increases in Q4 2021 and Q1 2022.
 - Imports of consumer goods fell from a high level.

Crude Oil Prices

Dollars per barrel (WTI)



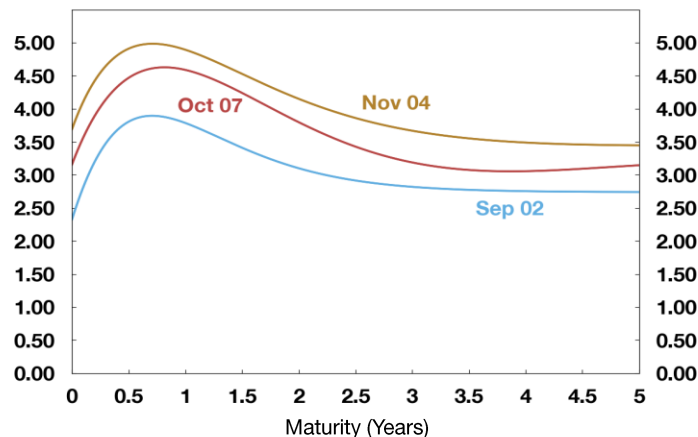
Source: Energy Information Administration via Haver Analytics

Oil prices rose

- Oil prices (WTI) increased from \$84/barrel in September to \$88/barrel in October.
 - Prices were up 8% over the year.
 - Prices averaged \$68/barrel in 2021.
- The Department of Energy's November forecast projects that global inventories will be unchanged in Q4 2022.
 - Both consumption and production growth are expected to be minimal in 2023, with a modest decline in inventory levels.

FINANCIAL MARKETS

Implied Fed Funds Rate



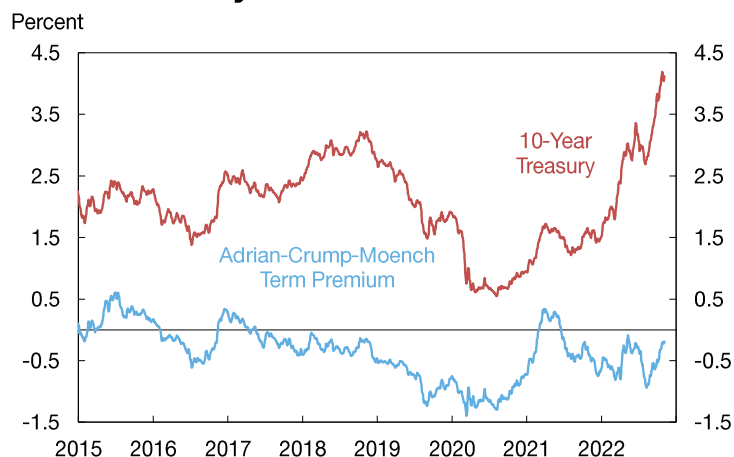
Source: NY Fed calculations, Bloomberg Finance L.P.

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 increased between October 7 and November 4.
- The market-implied federal funds rate at the end of 2023 went up to 4.8%, which is slightly above the median value of 4.6% in the FOMC's Summary of Economic Projections (SEP) from September 2022.
- At the five-year horizon, the market-implied federal funds rate increased to around 3.4%, which is above the median SEP longer-run federal funds rate of 2.5%.

10-Year Treasury and Term Premium



Sources: NY Fed and Federal Reserve Board via Haver Analytics

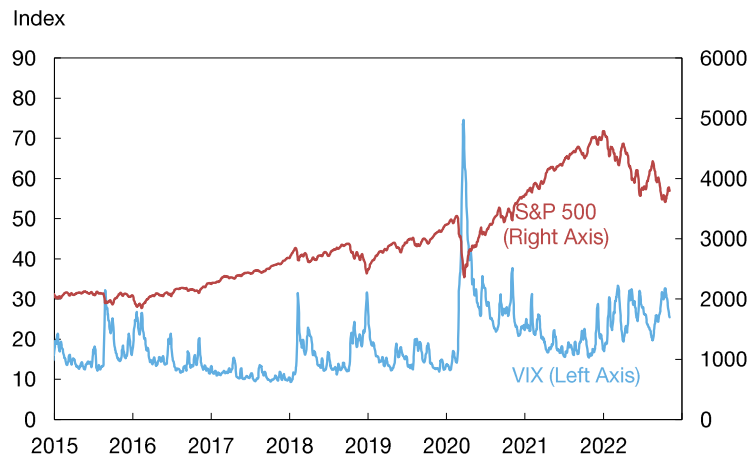
Note: Five-day rolling averages.

Ten-year Treasury yields moved higher

- The 10-year Treasury yield was at 4.17% on November 4, 28 basis points higher than the yield on October 7.
 - The yield averaged 1.76% in January 2020.
 - The yield averaged 0.89% in 2020, 1.44% in 2021, and 2.82% in the first ten months of 2022.
 - Estimates from the Adrian-Crump-Moench term premium suggest the increase in the 10-year Treasury yield from October 7 to November 4 was due primarily to a higher expected interest rate path.

FINANCIAL MARKETS

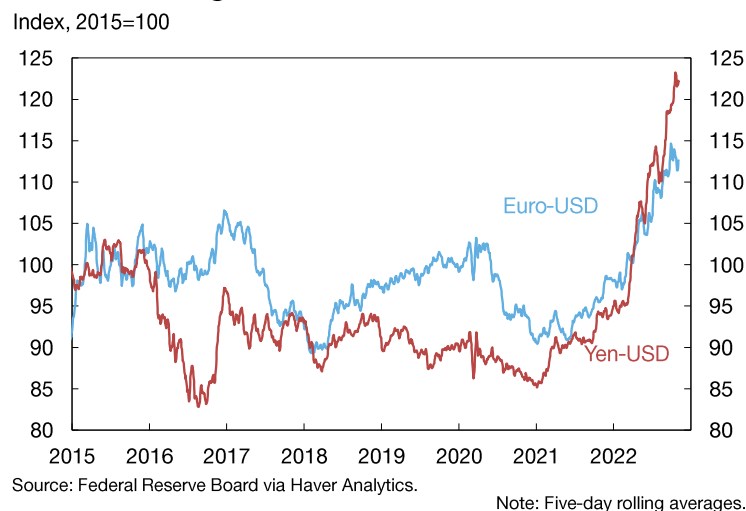
U.S. Equity Market Index and Volatility



Equity prices declined

- U.S. equity prices, as measured by the S&P 500 index, were down 12% on November 4 relative to the recent August 16 high.
 - The S&P 500 index was down 21% year-to-date on November 4 after being up 28% over the course of 2021.
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), decreased from 31.4 on October 7 to 24.6 on November 4.
 - The median VIX Index value was 18.1 over the period from the beginning of 2000 through November 4.

Dollar Exchange Rates



The dollar index appreciated slightly

- The Federal Reserve's trade-weighted broad dollar index on November 4 was up 1% relative to October 7.
 - The index was up 11% since the beginning of the year.
- The dollar on November 4 was mostly unchanged against the euro and 2% stronger against the yen relative to October 7.