



FEDERAL RESERVE BANK *of* NEW YORK

U.S. Economy in a Snapshot

Research & Statistics Group

February 2023

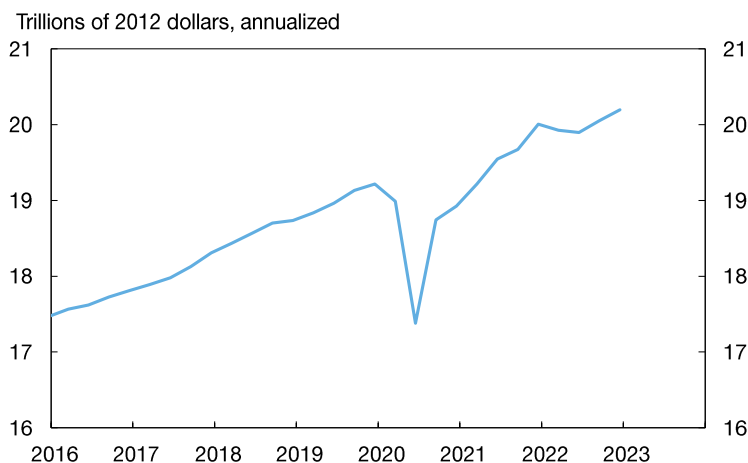
The *U.S. Economy in a Snapshot* compiles observations of staff members of the Federal Reserve Bank of New York's Research and Statistics Group. The views presented are solely those of the individual contributors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System. The analysis presented herein is based on data released through February 7, 2023.

OVERVIEW

- Output in Q4
 - GDP growth was strong in Q4.
 - Consumption and inventories were substantial contributors to growth.
 - Residential investment spending was a large drag on growth, while private nonresidential investment spending was flat.
- Monthly indicators
 - Consumer spending jumped in October, but then fell in November and December.
 - Real disposable income continued to move higher in December.
 - Income grew faster than spending, leading to a rise in the saving rate.
 - Manufacturing activity fell in December.
 - December housing starts were down sharply over the year.

- Labor market
 - Payroll growth surged in January.
 - The unemployment rate fell to a very low level.
 - The increase in hourly earnings, measured over the year, continued its decline that started in March 2022.
- Inflation
 - Core PCE inflation over the year slowed in December.
 - Prices for used motor vehicles continued to fall, but were still high relative to pre-pandemic levels.
 - Monthly food inflation was down from the rapid rates registered in the first half of 2022.

Real GDP



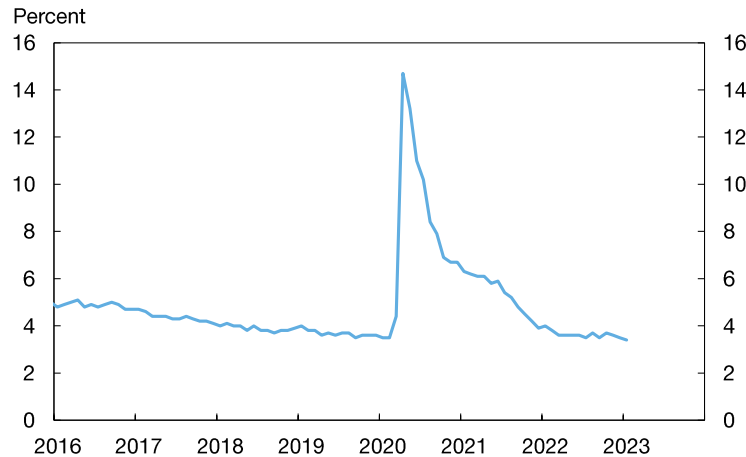
Source: Bureau of Economic Analysis via Haver Analytics

Q4 output was modestly below its pre-pandemic trend

- GDP has grown at a 1.7% annual rate since Q4 2019.
 - In the December 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%.
 - Q4 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.
- The unemployment rate was below its longer-run normal level.
 - The 3.4% unemployment rate in January 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 January was nearly one percentage point below pre-pandemic levels.

OVERVIEW

Unemployment Rate

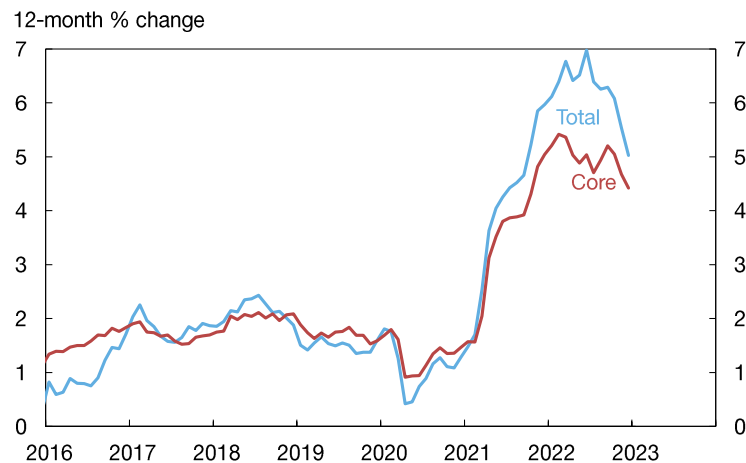


Source: Bureau of Labor Statistics via Haver Analytics

The unemployment rate fell

- The unemployment rate declined from 3.5% in December to 3.4% in January.
 - The rate averaged 3.6% in 2022.
- The labor force participation rate increased from 62.3% to 62.4%.
 - The labor force participation rate averaged 63.1% in 2019.
 - The January rate for the 25-54 years-old cohort was near the 2019 average.

PCE Deflator



Source: Bureau of Economic Analysis via Haver Analytics

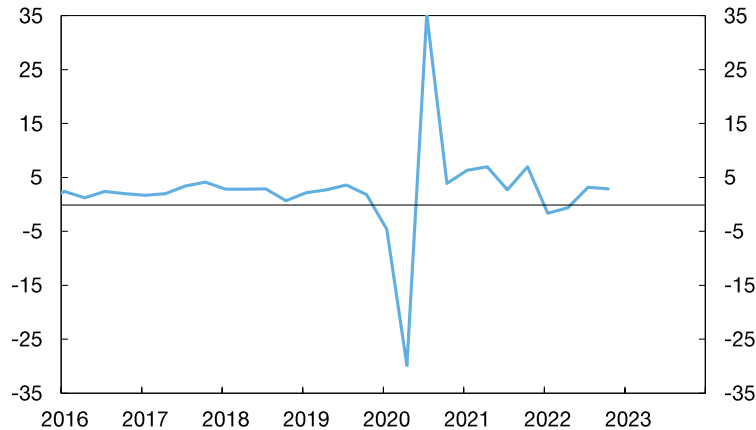
PCE inflation slowed in December

- PCE inflation over the year dropped from 5.5% in November to 5.0% in December.
 - Food prices were up 11% and energy prices were up 7%.
- Core PCE inflation dipped from 4.7% to 4.4%.
 - Core goods inflation decreased from 3.8% to 3.0%.
 - Core services inflation slipped from 5.0% to 4.9%.
- Core PCE inflation over the previous three months slowed from 3.6% (annualized) to 2.9%.
 - Core goods inflation went from -0.5% to -0.8%.
 - Core services inflation declined from 5.7% to 5.2%.

ECONOMIC ACTIVITY

GDP Growth

Quarterly % change, annualized



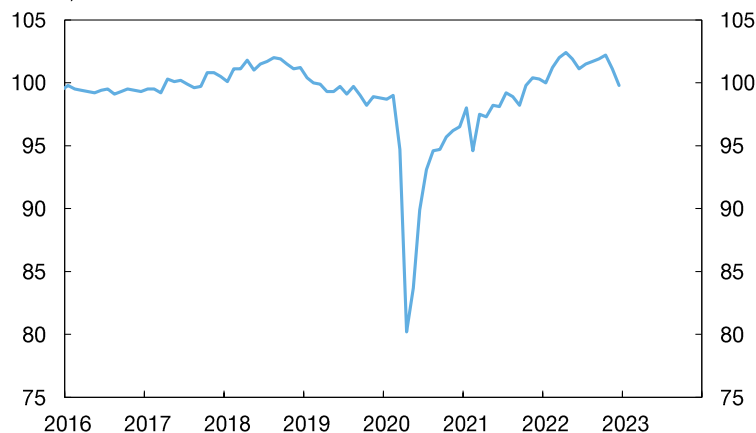
Source: Bureau of Economic Analysis via Haver Analytics

Output increased solidly in Q4

- GDP rose at a 2.9% annual rate in Q4, after rising at a 3.2% rate in Q3.
 - Output was up only 1.0% over the year because of a fall in the first half of the year.
 - Inventory investment and personal consumption expenditures were major contributors to the Q4 increase.
 - Final sales to private domestic purchasers (consumption plus private fixed investment) rose slightly in the quarter.
- Real disposable personal income (DPI) increased at a robust 3.3% annual rate in Q4.
 - Real DPI still fell 2.3% over the four quarters of 2022.
 - The personal saving rate ticked up from 2.7% in Q3 to 2.9% in Q4.

Manufacturing Index

Index, 2017=100



Source: Federal Reserve Board via Haver Analytics

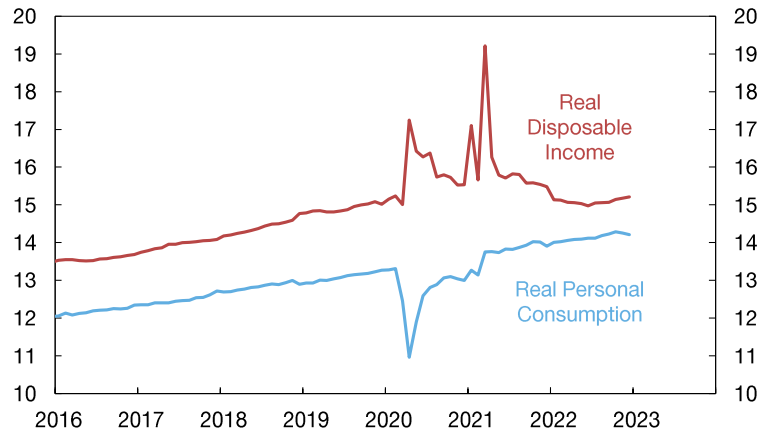
Manufacturing activity declined

- The manufacturing index dropped 15% (annualized) over the month in December.
 - The percent change over the previous three months was -8%.
 - The index in December was back to its year-ago level.
- Both durable goods and nondurable goods production were down over the past three months.
 - Machinery production was down at a 20% annual rate, refinery operations were down at a 20% rate, and motor vehicle production was down at a 10% rate.
- The ISM manufacturing index fell in January, continuing a steady decline that started in late 2021.

HOUSEHOLDS

Disposable Income and Consumption

Trillions of 2012 dollars, annualized



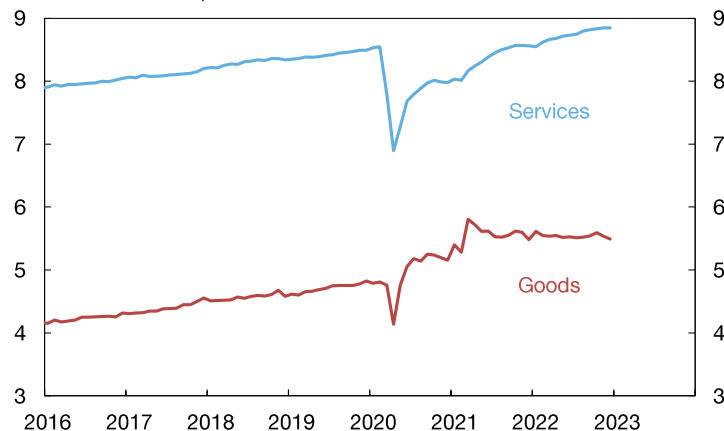
Source: Bureau of Economic Analysis via Haver Analytics

Real disposable income moved higher

- Nominal personal income rose 3% (annualized) over the month in December, while real disposable income also increased by 3%.
 - Over the year, nominal income was up 5% and real disposable income was down 2%.
- Real personal consumption spending fell at a 3.4% annual rate over the month in December and was up 2.2% over the year.
 - The personal saving rate rose from 2.9% in November to 3.4% in December.

Consumer Spending

Trillions of 2012 dollars, annualized



Source: Bureau of Economic Analysis via Haver Analytics

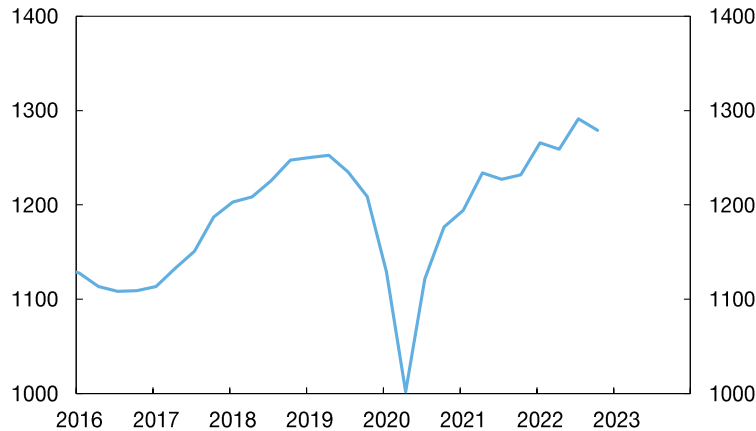
Consumer spending on goods retreated

- Real spending on goods fell 10% (annualized) over the month in December.
 - Spending on durable goods fell 18% and spending on nondurables fell 5%.
 - Spending on goods was unchanged over the year, with purchases of durable goods up 2%, purchases of food down 5%, and spending on energy goods down 4%.
- Real spending on services was flat over the month and was up 3% over the year.

BUSINESS SECTOR

Business Investment Spending on Equipment

Billions of 2012 dollars, annualized



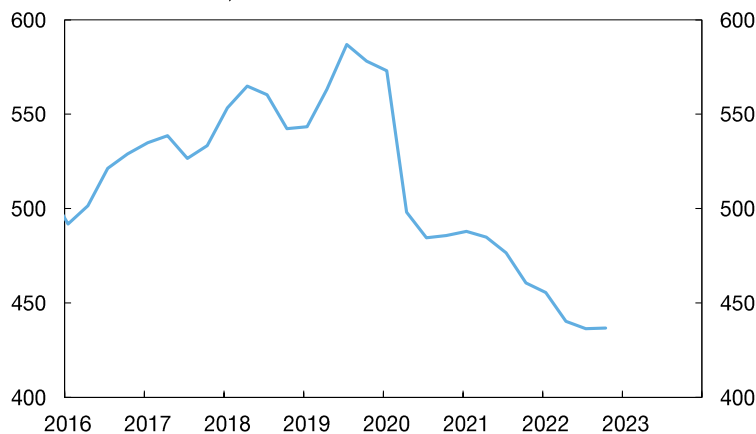
Source: Bureau of Economic Analysis via Haver Analytics

Equipment spending declined in Q4

- After rising strongly in Q3, real business equipment spending decreased at a 3.7% annual rate in Q4.
 - Equipment spending subtracted 0.2 percentage point from the annualized GDP growth rate in the quarter.
 - Spending fell sharply for the information processing category, more than offsetting a large rise in the transportation category.
 - Equipment spending was up 3.8% over the year.
- Orders of capital goods fell slightly in December.
 - Orders were on an uptrend through the first half of 2022, but they were about flat over most of the second half.
 - Prices for capital equipment continued to rise at a brisk pace during the second half of 2022.

Business Investment in Nonresidential Structures

Billions of 2012 dollars, annualized



Source: Bureau of Economic Analysis via Haver Analytics

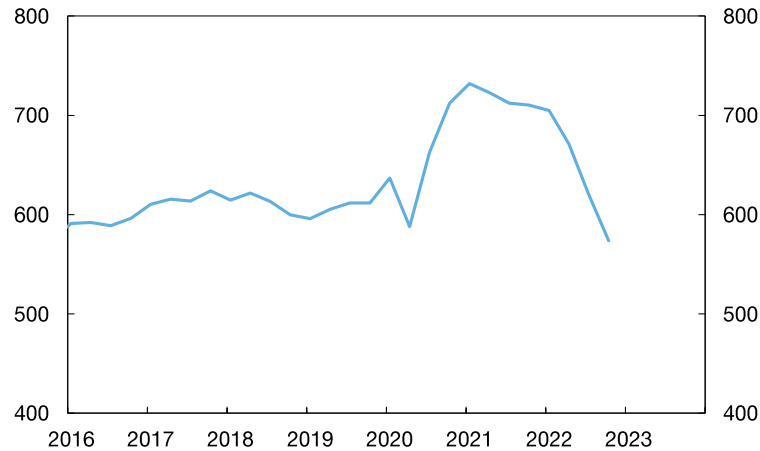
Spending on nonresidential structures was flat in Q4

- Real nonresidential structures investment spending increased at a slight 0.4% annual rate in Q4.
 - Structures investment had a negligible contribution to annualized GDP growth in the quarter.
 - Spending was down 5% over the year and down 24% since Q4 2019.
- Spending in the energy sector increased in Q4 after a decline in Q3.
 - Even so, spending on mining exploration, shafts, and wells was 11% below its Q4 2019 level.
 - Spending on manufacturing structures rose briskly in Q4.

HOUSING SECTOR

Residential Investment

Billions of 2012 dollars, annualized



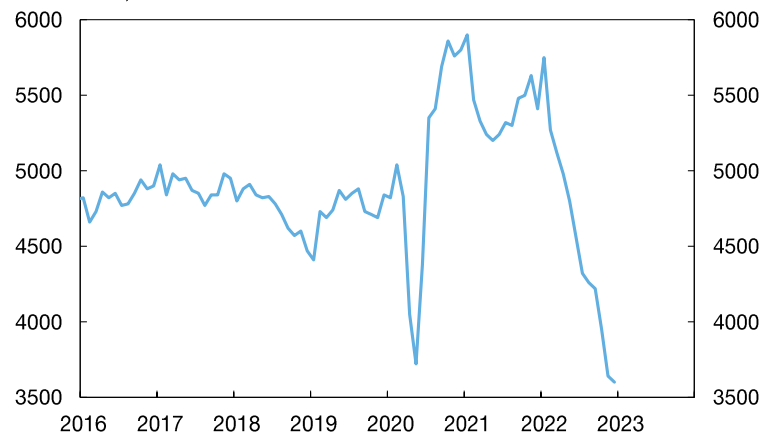
Source: Bureau of Economic Analysis via Haver Analytics

Residential investment spending fell in Q4

- A steep drop in residential investment spending took 1.3 percentage points off annualized Q4 GDP growth.
 - Investment spending was down 27% (annualized) over the quarter and down 19% over the year.
- Investment in single-family housing was down 39% (annualized) over the quarter, while investment in multi-family structures was up 27%.
 - Single-family construction was down 23% over the year and multi-family construction was unchanged.
 - Declines in commissions and home improvement spending were also drags on residential investment.
 - Housing starts in December fell modestly over the month.

Existing Single-Family Home Sales

Thousands, annualized



Source: National Association of Realtors via Haver Analytics

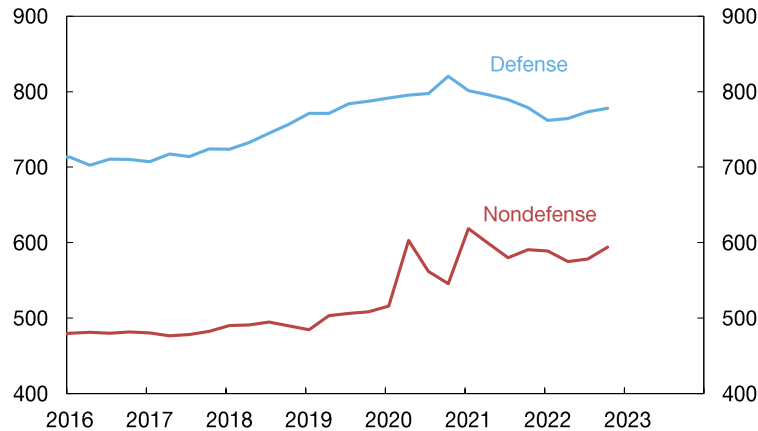
Existing home sales fell to a very low level

- Existing single-family home sales in Q4 fell 42% (annualized) relative to Q3.
 - Q4 sales were down 32% over the year.
 - December sales were down 33%.
- New single-family home sales rebounded in Q4, rising 19% over the quarter.
 - Q4 sales were down 20% over the year.
 - December sales were down 27%.
- Prices for single-family homes fell 3% from June to November.

GOVERNMENT SECTOR

Federal Government Spending

Billions of 2012 dollars, annualized



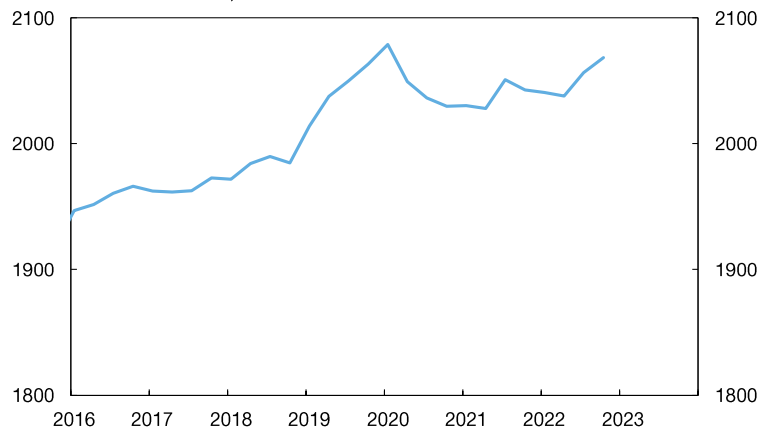
Source: Bureau of Economic Analysis via Haver Analytics

Federal spending rose

- Federal government spending added 0.4 percentage point to annualized real GDP growth in Q4.
 - Nondefense spending added 0.3 percentage point to growth and defense spending added 0.1 percentage point.
- Real spending was near its year-ago level.
 - Both defense spending and nondefense spending were essentially unchanged over the year.

State and Local Government Spending

Billions of 2012 dollars, annualized



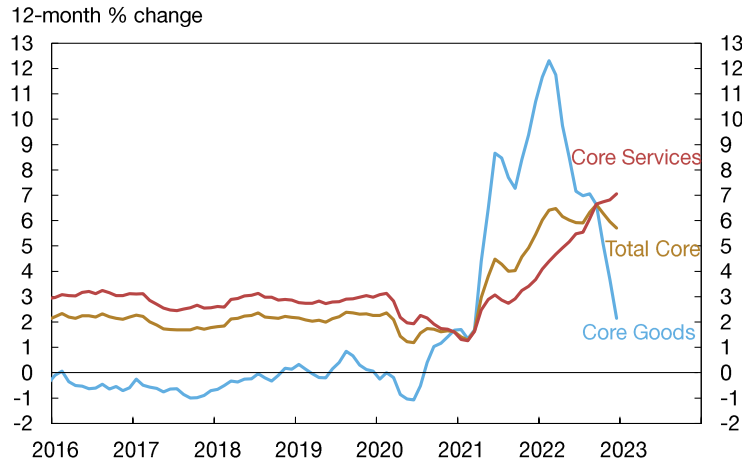
Source: Bureau of Economic Analysis via Haver Analytics

State and local government spending increased

- Real state and local government spending added 0.3 percentage point to annualized real GDP growth in Q4.
 - Spending was up 1% over the year.
- S&L government consumption was up 2% (annualized) over the quarter.
 - Consumption was up 2% over the year.
- Investment spending rose 3% (annualized) over the quarter, with a 3% increase in construction, a 1% increase in equipment purchases, and a 7% increase in spending on intellectual property products.
 - Investment spending was unchanged over the year.

INFLATION

Core CPI Inflation

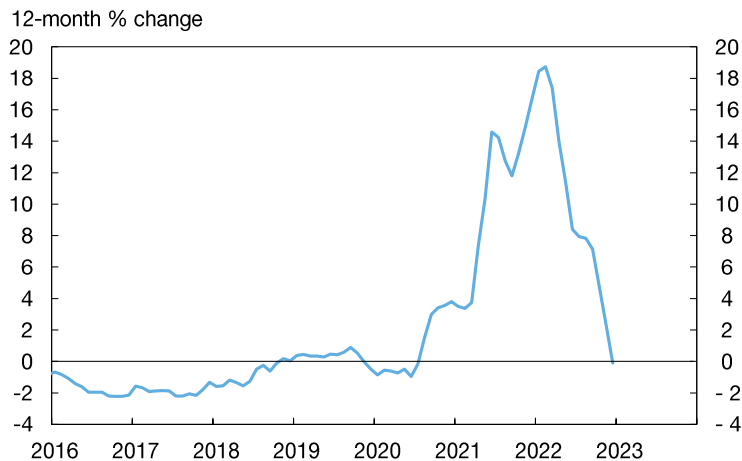


Source: Bureau of Labor Statistics via Haver Analytics

Core CPI inflation eased

- Core inflation over the year fell from 6.0% in November to 5.7% in December.
 - Core goods inflation decreased from 3.7% to 2.1%, with a steep drop in the index for used motor vehicles.
 - Core services inflation rose from 6.8% to 7.0%
- The core CPI rose 3.7% (annualized) over the month, up from the 2.4% pace set in November.
 - Core goods inflation went from -6.1% to -4.0%.
 - Core services inflation increased from 5.4% to 6.8%.
 - Core CPI inflation over the previous three months fell from 4.3% to 3.1%.

CPI Inflation: Durable Goods



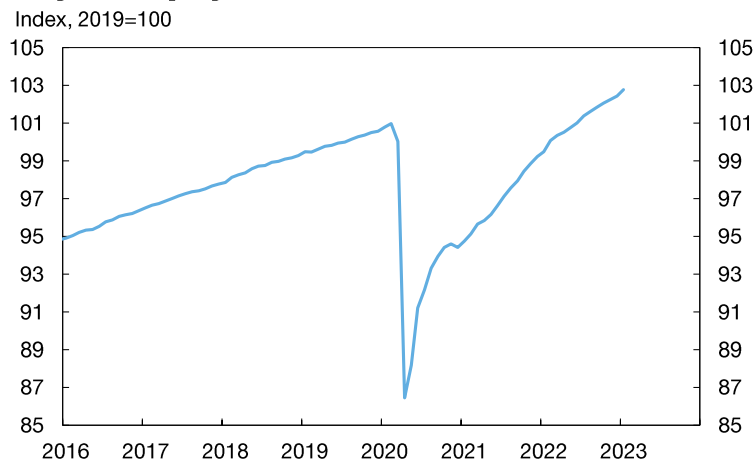
Source: Bureau of Labor Statistics via Haver Analytics

Durable goods inflation dropped

- Inflation over the year for durable goods fell from 2.4% in November to -0.1% in December.
 - Prices declined at a 10% annual rate over the month.
 - For comparison, prices fell at a 1% pace in the five years before the pandemic.
- Prices for new motor vehicles were up 6% over the year, while prices for used vehicles were down 9%.
 - Prices for new motor vehicles were up 20% relative to the 2019 average, while prices for used vehicles were up 35%.
- Prices for household furnishings were up 7% over the year, prices for recreational goods were up 4%, and prices for IT goods were down 12%.

LABOR MARKET

Payroll Employment

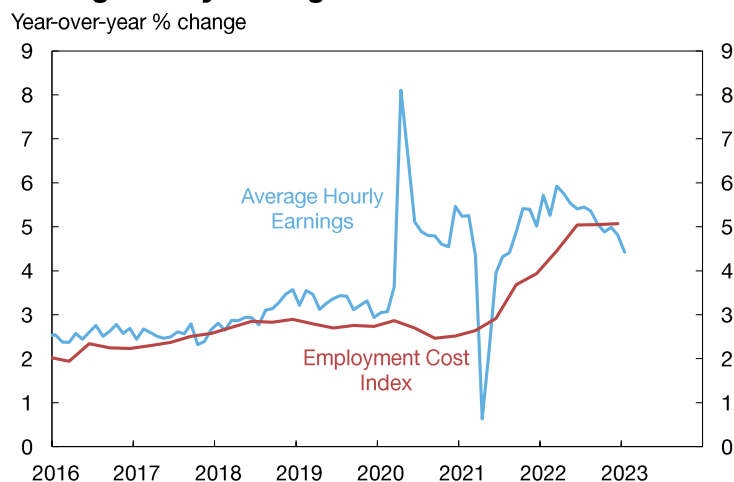


Source: Bureau of Labor Statistics

Employment growth jumped

- Nonfarm payroll employment increased by 517,000 in January.
 - Notable increases were in leisure and hospitality (128,000), professional and business services (82,000), and health care (79,000).
- The Household Survey's employment-to-population ratio increased from 60.1% to 60.2%.
 - The ratio has stayed within a narrow band of around 60% since March.
 - The ratio was 1 percentage point lower than its pre-pandemic level.
 - The rate for the 25-54 years-old cohort was near its pre-pandemic level.

Average Hourly Earnings and the ECI



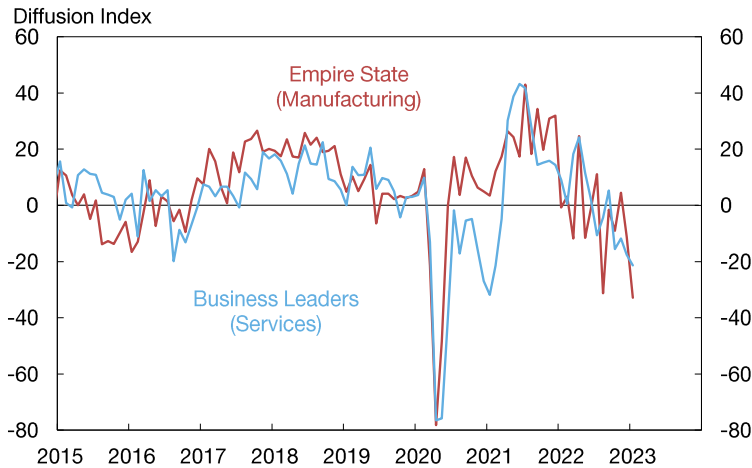
Source: Bureau of Labor Statistics via Haver Analytics

Average hourly earnings growth slowed

- The growth in average hourly earnings over the previous three months eased from 5.0% (annualized) in December to 4.6% in January.
 - Earnings growth over the year dropped from 4.8% to 4.4%.
 - Over the year increases in earnings have been trending down since March's reading of 5.9%.
- The employment cost index rose at a 4.0% annual rate from September to December.
 - This is a decline from the 5.1% increase from June to September.
 - The index was up 5.1% over the year in December.
 - For comparison, the index was up 2.7% over the year in Q4 2019.

REGIONAL

New York Fed Business Surveys: Current Conditions

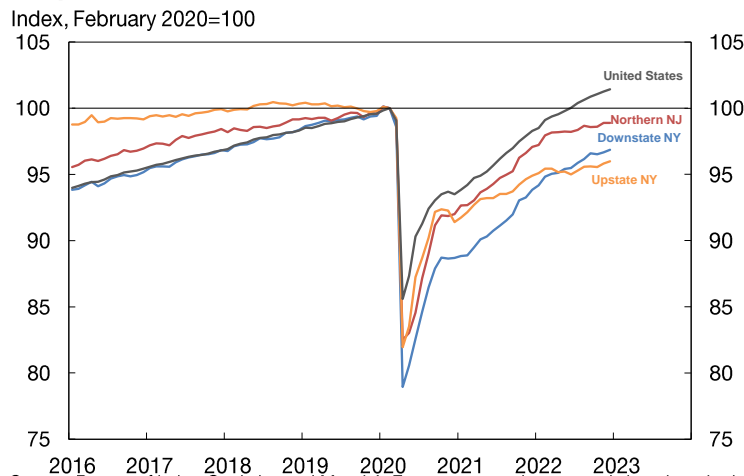


Source: Federal Reserve Bank of New York

Regional business activity was down sharply

- Activity plunged in the manufacturing sector, and continued to decline significantly in the service sector, according to the January regional business surveys.
 - The Empire Survey's headline index (manufacturing) tumbled 22 points to -32.9, its lowest level since mid-2020 and one of the worst readings on record, and the Business Leaders Survey's headline index (service sector) fell 4 points to -21.4, its fourth consecutive negative reading.
 - Input price increases slowed notably, especially in the manufacturing sector.
 - Employment growth stalled in both sectors.
 - Firms are generally not expecting conditions to improve over the next six months.

Regional Employment Trends



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

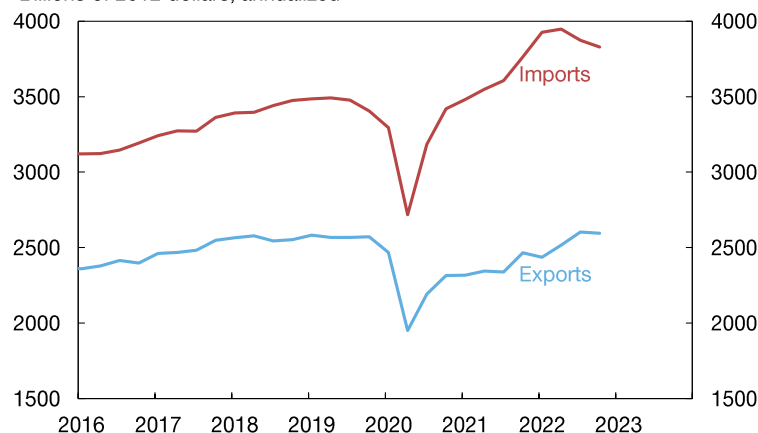
Job growth remained weak in upstate New York

- Strong job growth persisted through December 2022 in downstate New York and in Puerto Rico, but growth remained sluggish in upstate New York.
 - Over the prior 12 months, employment increased by 3.2% in downstate New York, 1.9% in Northern New Jersey, 2.3% in Fairfield CT, and just 1.2% in upstate New York, compared to 3.0% nationally.
 - Employment remained 3.1% below pre-pandemic levels in downstate New York, 4.0% below in upstate New York, 1.1% below in Northern New Jersey, and 0.7% below in Fairfield, while it was 0.8% above pre-pandemic levels for the nation as a whole.
 - Employment in Puerto Rico grew 3.7% on a year-over-year basis in December and was 6.3% above pre-pandemic levels.

INTERNATIONAL DEVELOPMENTS

Exports and Imports of Goods and Services

Billions of 2012 dollars, annualized



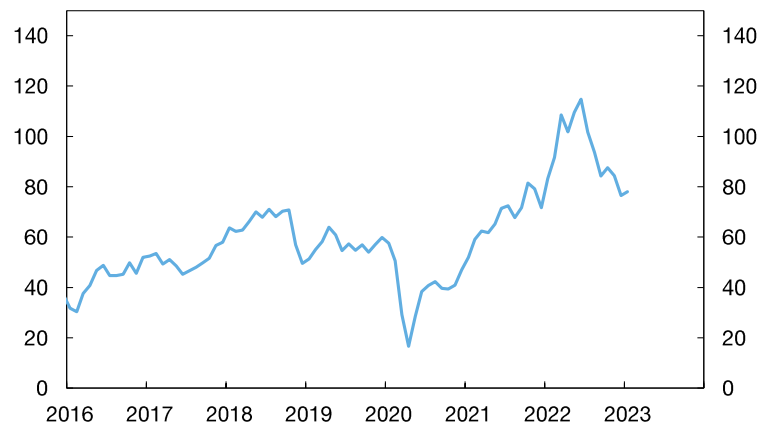
Source: Bureau of Economic Analysis via Haver Analytics

Net exports boosted Q4 growth

- Exports and imports both fell in Q4.
 - Lower exports subtracted 0.2 percentage point to annualized GDP growth, while lower imports added 0.7 percentage point.
- Exports retreated after large gains in Q2 and Q3.
 - Declines in sales of food, industrial supplies, and consumer goods were partially offset by increases in transport and travel services.
- Imports fell for the second quarter in a row.
 - Imports were pulled down by another large drop in consumer goods, with more modest falls in durable industrial supplies and capital goods.

Crude Oil Prices

Dollars per barrel (WTI)



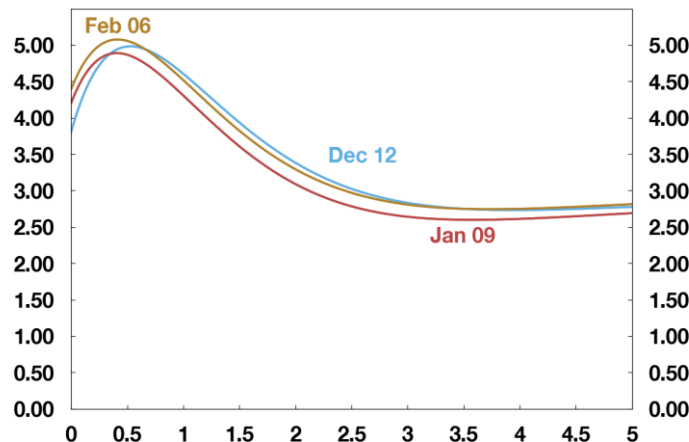
Source: Energy Information Administration via Haver Analytics

Oil prices rose slightly

- Oil prices (WTI) rose from \$76/barrel in December to \$78/barrel in January.
 - Prices stayed near \$75/barrel in early February.
 - Prices averaged \$68/barrel in 2021 and \$95/barrel in 2022.
- The Department of Energy's February forecast projects that global inventories will rise in 2023 at near the same pace they increased in 2022.
 - Both consumption and production growth are expected to be modest in 2023.
 - Most of the increase in production this year is expected to come from the United States, while most of the increase in consumption is set to come from China.

FINANCIAL MARKETS

Implied Fed Funds Rate



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

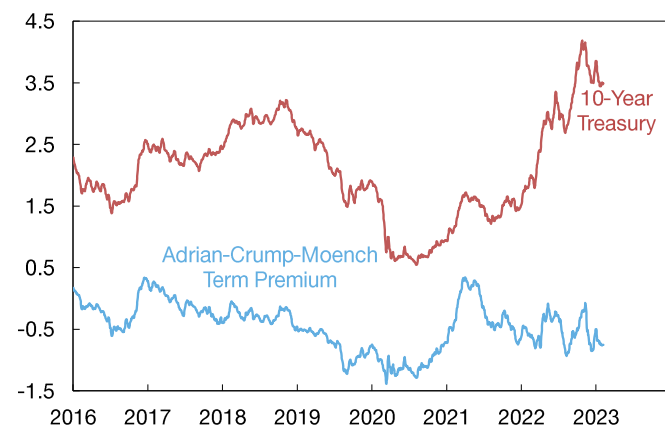
Note: Estimated using OIS quotes.

Implied path for the federal funds rate shifted up

- The expected path of the federal funds rate implied by overnight indexed swaps shifted up modestly at all maturities between January 9 and February 6. The curve continues to have a downward slope after about six months.
- The market-implied federal funds rate at the end of 2024 increased to about 3.4%, which remains below the median value of 4.1% in the FOMC's Summary of Economic Projections (SEP) from December 2022.
- At the five-year horizon, the market-implied federal funds rate increased to around 2.8%, which is slightly 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

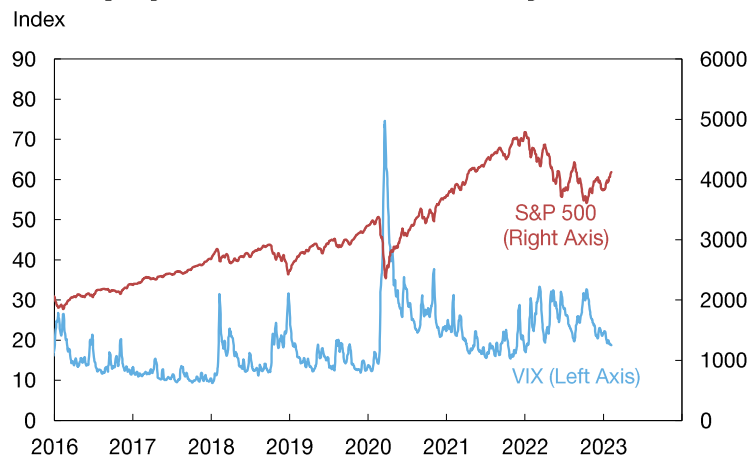
Note: Five-day rolling averages.

Ten-year Treasury yields moved higher

- The 10-year Treasury yield rose by 10 basis points between January 9 to February 6.
 - 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 January 9 to February 6 was due to a higher expected interest rate path more than offsetting a fall in the term premium.

FINANCIAL MARKETS

U.S. Equity Market Index and Volatility



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

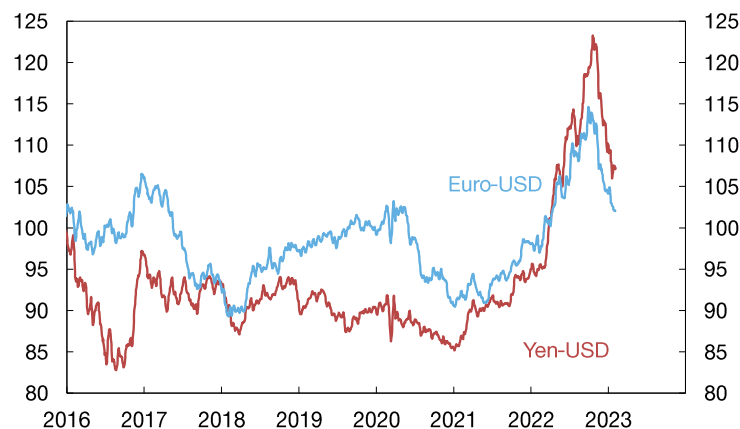
Note: Five-day rolling averages.

Equity prices rose

- U.S. equity prices, as measured by the S&P 500 index, were up 6% between January 9 and February 6.
 - The S&P 500 index was down 19% over the course of 2022 after rising by 28% in 2021.
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), decreased from 22.0 on January 9 to 19.4 on February 3.
 - The median VIX Index value was 18.2 over the period from the beginning of 2000 through February 6.

Dollar Exchange Rates

Index, 2015=100



Source: Federal Reserve Board via Haver Analytics.

Note: Five-day rolling averages.

The dollar depreciated

- The Federal Reserve's trade-weighted broad dollar index on February 3 was down 2% relative to January 6.
- The dollar on February 3 was 3% weaker against the euro and 2% weaker against the yen relative to January 6.