



FEDERAL RESERVE BANK *of* NEW YORK

U.S. Economy in a Snapshot

Research & Statistics Group

March 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 March 10, 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 rose in January, after stalling in November and December.
- Real disposable income jumped in January, helped by the inflation adjustment to social security and tax brackets.
- Manufacturing activity rose in January.
- January housing starts were down sharply over the year.

▪ Labor market

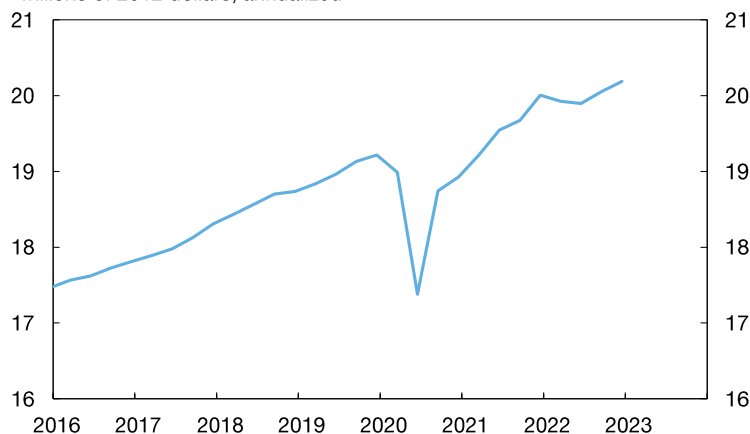
- Payroll growth was solid in February.
- The unemployment rate rose from a very low level.
- The increase in hourly earnings, measured over the year, moved higher in February, but was still below the rate recorded in December.

▪ Inflation

- Core PCE inflation over the year ticked up in January.
- Housing inflation remained high.
- Food inflation moderated, but prices were up substantially relative to pre-pandemic levels.

Real GDP

Trillions of 2012 dollars, annualized



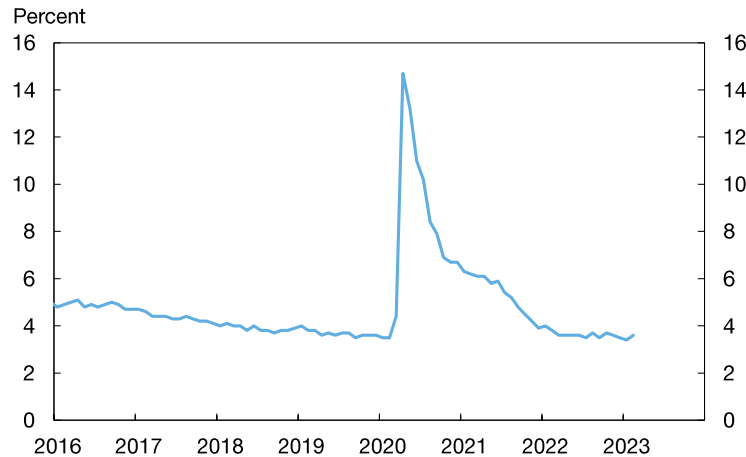
Source: Bureau of Economic Analysis via Haver Analytics

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 2022 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.

OVERVIEW

Unemployment Rate

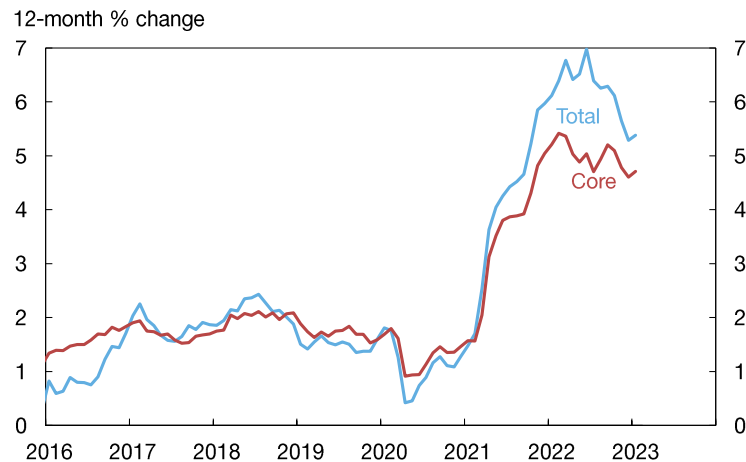


Source: Bureau of Labor Statistics via Haver Analytics

The unemployment rate rose

- The unemployment rate increased from 3.4% in January to 3.6% in February.
 - The rate averaged 3.6% in 2022.
 - The labor force participation rate moved up, putting it 0.6 percentage point below the 2019 average.
 - The rate for the 25-54 years-old cohort was 0.6 percentage point above the 2019 average, while the rate for the 55 and over cohort was 1.8 percentage points below.
- 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

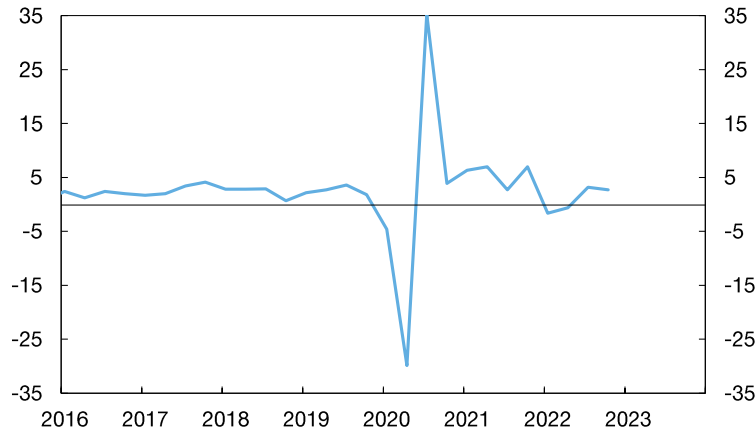
PCE inflation ticked up in January

- PCE inflation over the year rose from 5.3% in December to 5.4% in January.
 - The inflation rate for December was revised up from 5.0%
 - Food prices were up 11% and energy prices were up 10%.
- Core PCE inflation increased from 4.6% to 4.7%.
 - Core goods inflation decreased from 3.4% to 2.8%.
 - Core services inflation increased from 5.1% to 5.4%.
- Core PCE inflation over the previous three months increased from 3.6% (annualized) to 4.8%.
 - Core goods inflation went from -1.6% to 0.7%.
 - Core services inflation rose from 5.6% to 6.3%.

ECONOMIC ACTIVITY

GDP Growth

Quarterly % change, annualized



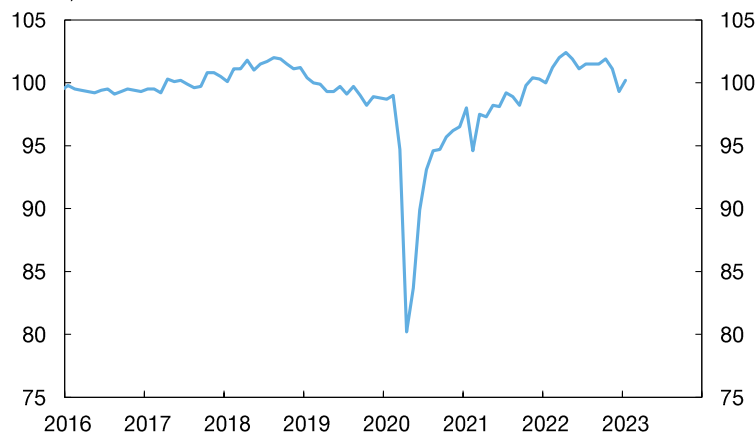
Source: Bureau of Economic Analysis via Haver Analytics

Output increased solidly in Q4

- GDP rose at a 2.7% annual rate in Q4, after rising at a 3.2% rate in Q3.
 - Output was up only 0.9% 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 4.8% annual rate in Q4.
 - Real DPI still fell 1.4% over the four quarters of 2022.
 - The personal saving rate increased from 3.2% in Q3 to 3.9% in Q4.

Manufacturing Index

Index, 2017=100



Source: Federal Reserve Board via Haver Analytics

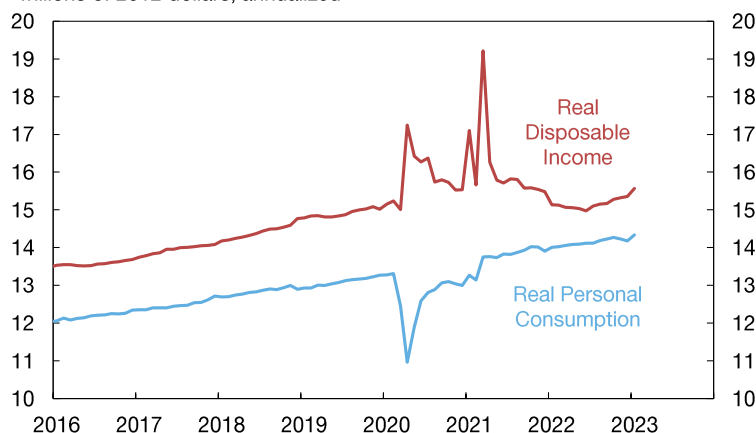
Manufacturing activity improved over the month

- The manufacturing index rose 12% (annualized) over the month in January, a rebound after falling in December.
 - The annualized percent change over the previous three months was -6%.
 - The index was near its year-ago level.
- Both durable goods and nondurable goods production were down over the past three months.
 - Durable goods manufacturing was down 8% (annualized) and nondurable goods manufacturing was down 5%.
- The ISM manufacturing index was stable at a low level in February.

HOUSEHOLDS

Disposable Income and Consumption

Trillions of 2012 dollars, annualized



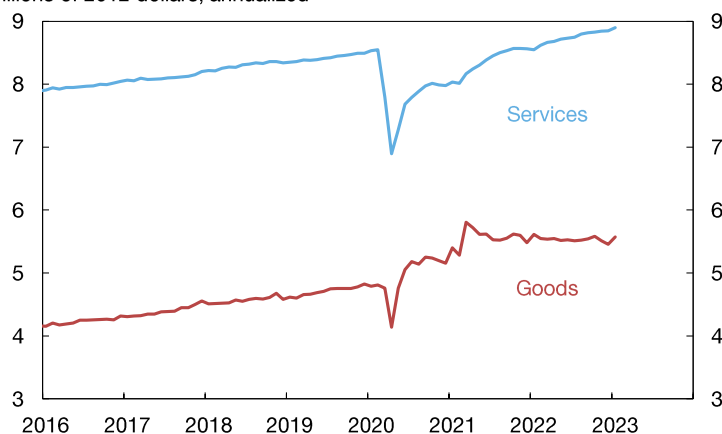
Source: Bureau of Economic Analysis via Haver Analytics

Real disposable income moved higher

- Nominal personal income was up 6.4% over the year in January and real disposable income was up 2.8%.
 - Over the month, nominal income was up 7% and real disposable income was up 18%.
 - Disposable income was boosted by inflation adjustments to social security payments and to tax brackets.
- Real personal consumption spending was up 2.4% over the year in January.
 - The personal saving rate rose from 4.5% in December to 4.7% in January.
 - The pre-pandemic saving rate was near 9%.

Consumer Spending

Trillions of 2012 dollars, annualized



Source: Bureau of Economic Analysis via Haver Analytics

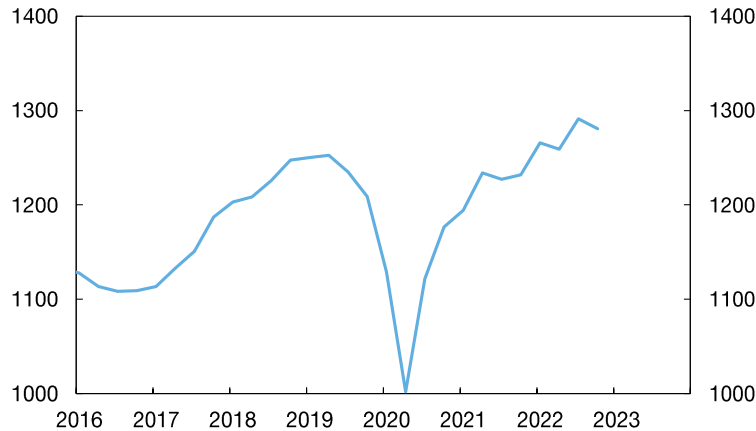
Spending on goods was down over the year

- Real spending on goods was down 1% over the year in January.
 - Spending on durable goods was up 0.5% and spending on nondurables was down 1.4%.
 - Purchases of food was down 6%, with sales of cereals and baked goods 9% lower and eggs 56% lower.
 - Sales of goods were up 2% (annualized) over the previous three months, with the increase in purchases of durable goods more than offsetting a decline in nondurable goods, due in large part to gasoline.
- Real spending on services up 4% over the year.
 - Sales were up 3% (annualized) over the previous three months.

BUSINESS SECTOR

Business Investment Spending on Equipment

Billions of 2012 dollars, annualized



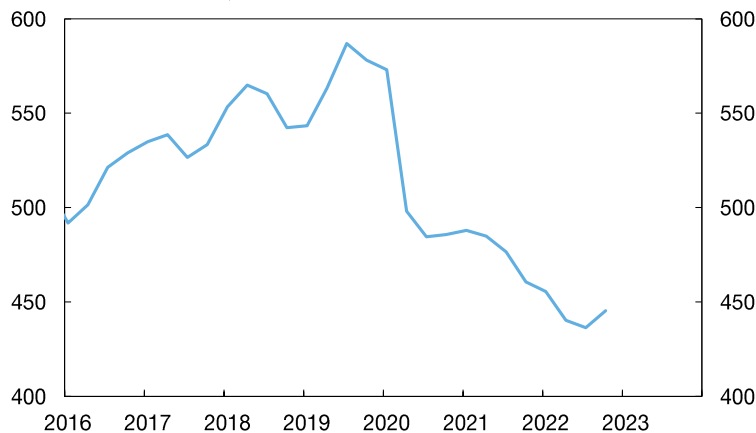
Source: Bureau of Economic Analysis via Haver Analytics

Equipment spending declined in Q4

- After rising strongly in Q3, real business equipment spending decreased at a 3.2% annual rate in Q4.
 - Equipment spending subtracted 0.2 percentage point from the annualized GDP growth rate in the quarter.
 - Spending fell for information processing equipment, more than offsetting a large rise in the transportation category.
 - Equipment spending was up 4% over the year.
- Orders of capital goods rose in January.
 - Nominal orders were on an uptrend through the first half of 2022, but they were about flat since mid-2022.
 - Prices for capital equipment have continued to rise at a brisk pace since mid-2022.

Business Investment in Nonresidential Structures

Billions of 2012 dollars, annualized



Source: Bureau of Economic Analysis via Haver Analytics

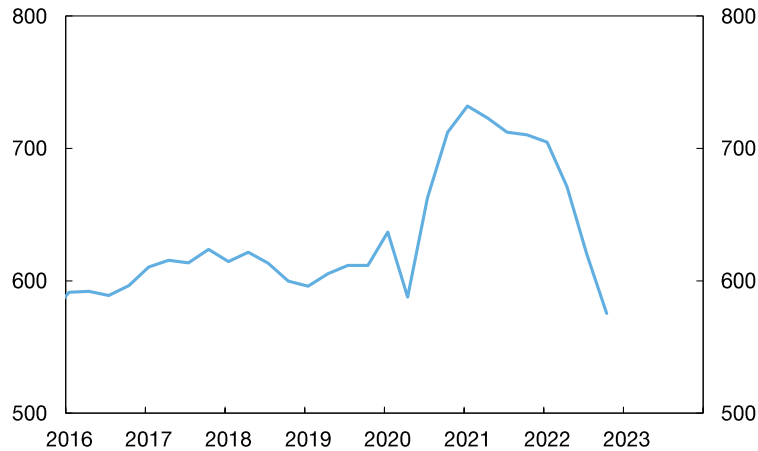
Spending on nonresidential structures rose in Q4

- After falling in the previous six quarters, real nonresidential structures investment spending increased at an 8.5% annual rate in Q4.
 - Structures investment contributed 0.2 percentage point to annualized GDP growth in the quarter.
 - Spending was still down 3.3% over the year and down 23% 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 solidly in Q4.

HOUSING SECTOR

Residential Investment

Billions of 2012 dollars, annualized



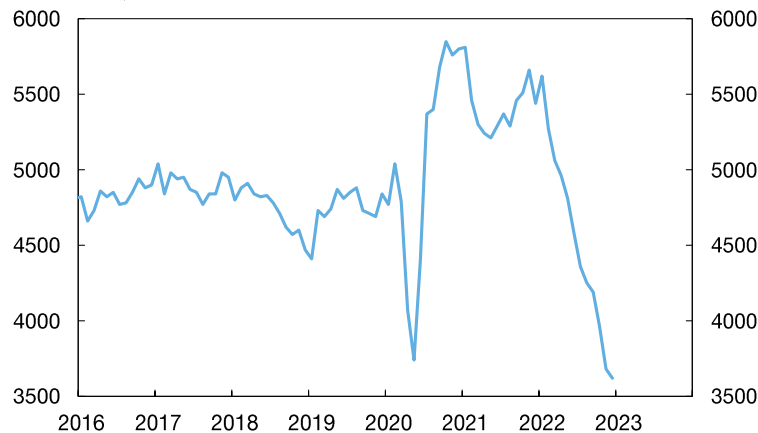
Source: Bureau of Economic Analysis via Haver Analytics

Residential investment spending fell in Q4

- A steep drop in residential investment spending took 1.2 percentage points off annualized Q4 GDP growth.
 - Investment spending was down 26% (annualized) over the quarter and was down 19% over the year.
- Investment in single-family housing was down 38% (annualized) over the quarter, while investment in multi-family structures was up 43%.
 - Single-family construction was down 22% over the year and multi-family construction was up 5%.
 - Housing starts in January were down 21% over the year.

Existing Single-Family Home Sales

Thousands, annualized



Source: National Association of Realtors via Haver Analytics

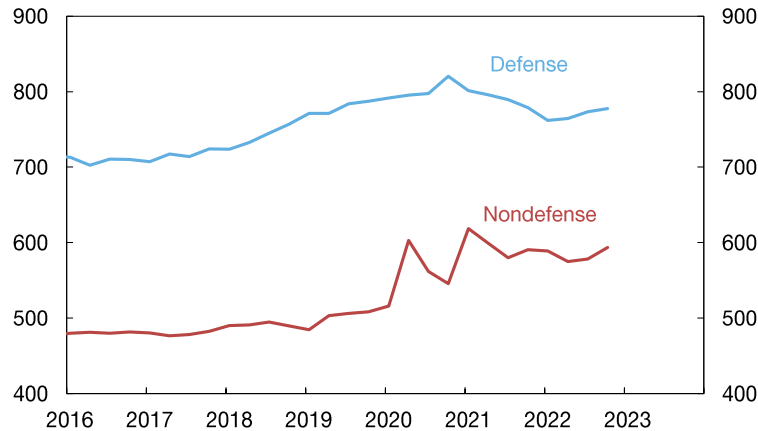
Existing home sales fell to a very low level

- Existing single-family home sales in Q4 fell 40% (annualized) over the quarter.
 - Q4 sales were down 32% over the year and January sales were down 36%.
- New single-family home sales rose 14% (annualized) in Q4 over the quarter.
 - Q4 sales were still down 21% over the year and January sales were down 19%.
- Prices for single-family homes fell 3% from June to December.

GOVERNMENT SECTOR

Federal Government Spending

Billions of 2012 dollars, annualized



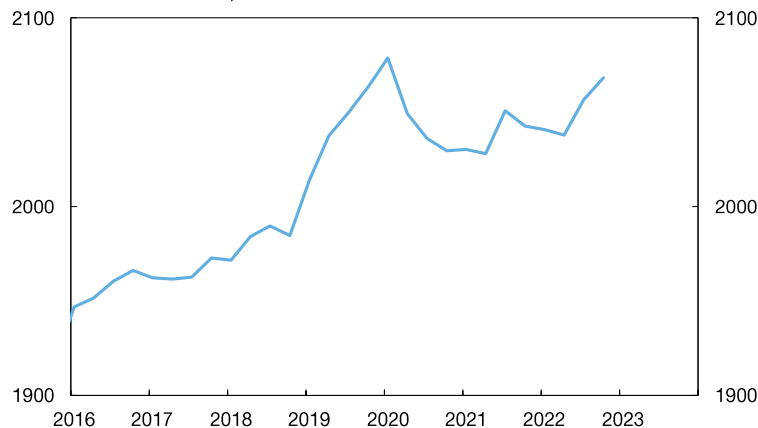
Source: Bureau of Economic Analysis via Haver Analytics

Federal spending rose in Q4

- 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.
- Total real spending was near its year-ago level.
 - Nondefense spending was up 0.5 percent over the year in Q4 while defense spending was down 0.2 percent.

State and Local Government Spending

Billions of 2012 dollars, annualized



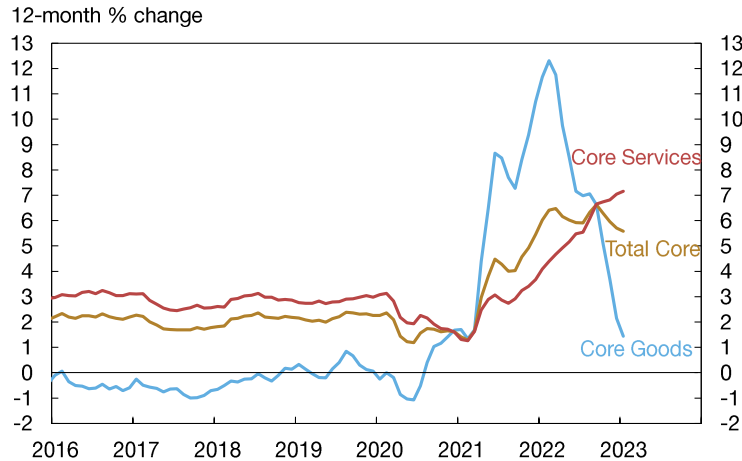
Source: Bureau of Economic Analysis via Haver Analytics

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 1% over the year.
- Investment spending rose 5% (annualized) over the quarter, with a 5% increase in construction, a 1% increase in equipment purchases, and an 8% increase in spending on intellectual property products.
 - Investment spending was unchanged over the year.

INFLATION

Core CPI Inflation

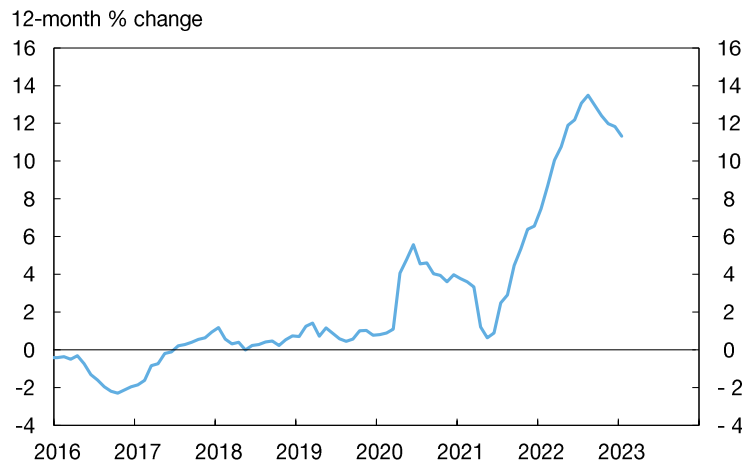


Source: Bureau of Labor Statistics via Haver Analytics

Core CPI inflation over the year eased slightly

- Core inflation over the year dipped from 5.7% in December to 5.6% in January.
 - Core goods inflation decreased from 2.2% to 1.3%, with inflation for used motor vehicles going from -9% to -12%.
 - Core services inflation rose from 7.0% to 7.2%.
- The core CPI rose 4.6% (annualized) over the previous three months, up from the 4.3% pace set in December.
 - Core goods inflation went from -2.1% to -1.2%.
 - Core services inflation increased from 6.6% to 6.8%.

CPI Inflation: Food



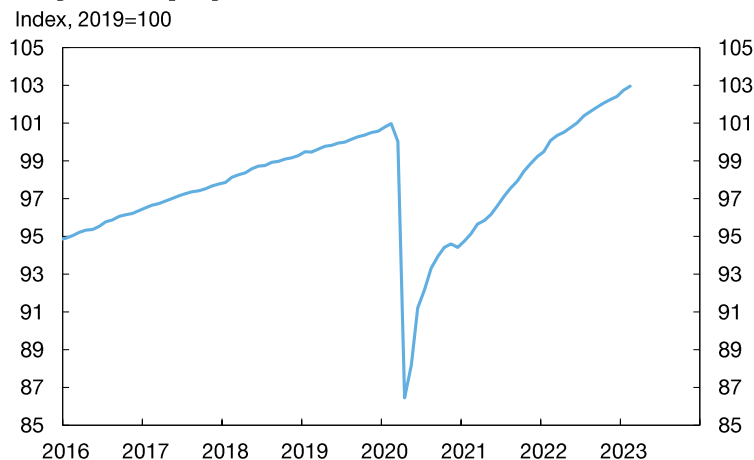
Source: Bureau of Labor Statistics via Haver Analytics

Food inflation remained high

- The food-at-home component of the CPI was up 11% over the year in January.
 - Inflation over the month, though, eased from 6.0% (annualized) in December to 5.1% in January.
 - For comparison, prices rose at an average pace of 1% in the decade before the pandemic.
- Prices for cereals and bakery products were up 16% over the year, meats were up 2%, and dairy products were up 14%.
- The food-at-home index was 25% above the 2019 average.

LABOR MARKET

Payroll Employment

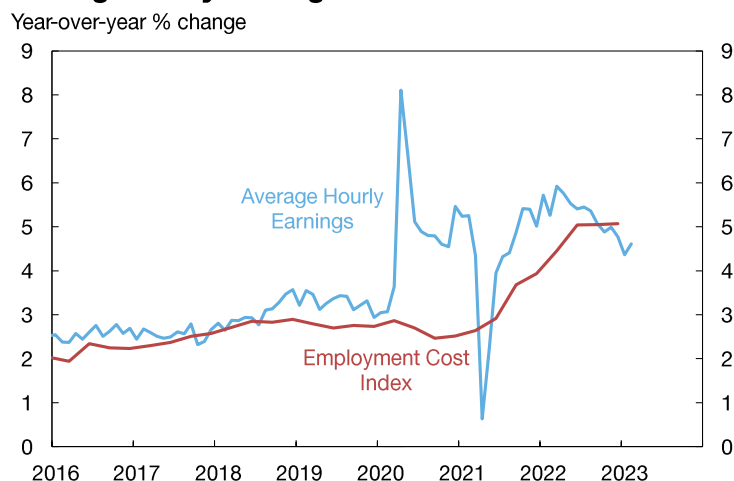


Source: Bureau of Labor Statistics

Employment growth was solid

- Nonfarm payroll employment increased by 311,000 in February.
 - Notable increases were in leisure and hospitality (105,000), health care (63,000), and professional and business services (45,000).
- The Household Survey's employment-to-population ratio increased was unchanged at 60.2%.
 - The ratio has stayed near 60% over the course of 2022.
 - The ratio was 0.6 percentage point lower than the 2019 average.
 - The rate for the 25-54 years-old cohort was 0.5 percentage point higher than the 2019 average, while the rate for the 55 and over cohort was 1.8 percentage points lower.

Average Hourly Earnings and the ECI



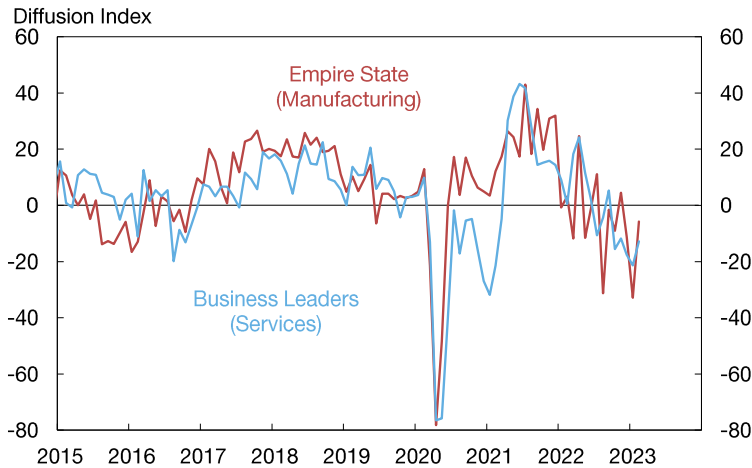
Source: Bureau of Labor Statistics via Haver Analytics

Average hourly earnings growth moved up

- The growth in average hourly earnings over the year rose from 4.4% in January to 4.6% in February.
 - Earnings growth over the year was 4.9% in Q4.
 - Earnings growth over the previous three months fell from 4.4% (annualized) to 3.6%.
- 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

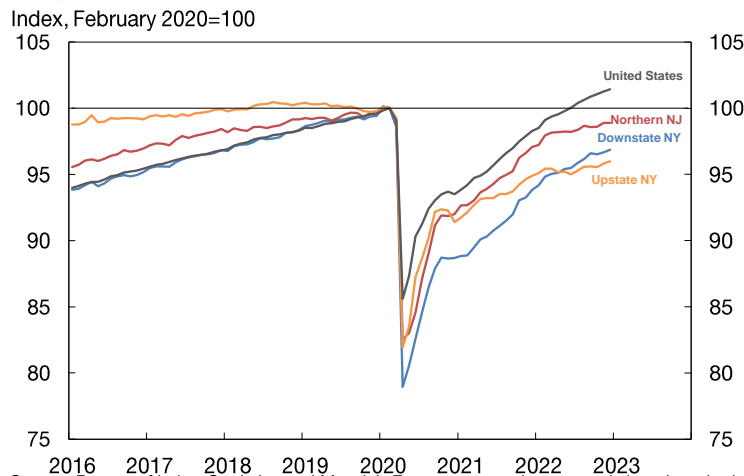


Source: Federal Reserve Bank of New York

Regional business activity continues to contract

- Activity continued to decline in both the manufacturing and service sectors, though at a slower pace than in January, according to the February regional business surveys.
 - The Empire Survey's headline index (manufacturing) climbed 27 points to -6, and the Business Leaders Survey's headline index (services) rose 9 points to -13.
 - Employment declined among manufacturers for the first time since early in the pandemic, while employment edged up in the service sector.
 - Input and selling price increases picked up following months of moderation, especially in the manufacturing sector.
 - Firms expect some small improvement in conditions 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.

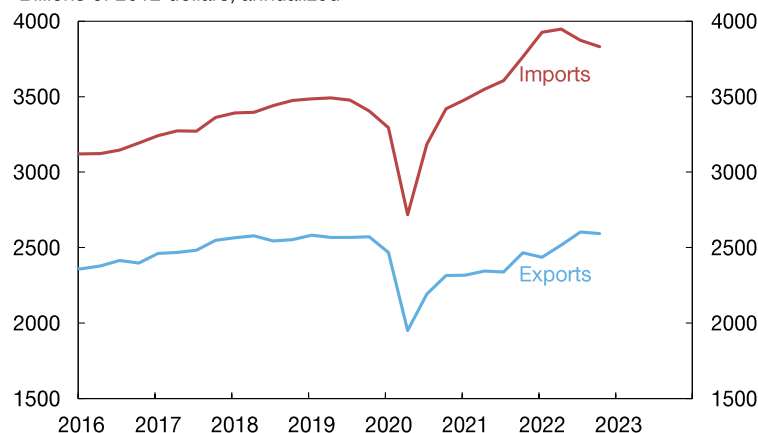
Job growth remains weak in upstate New York

- 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



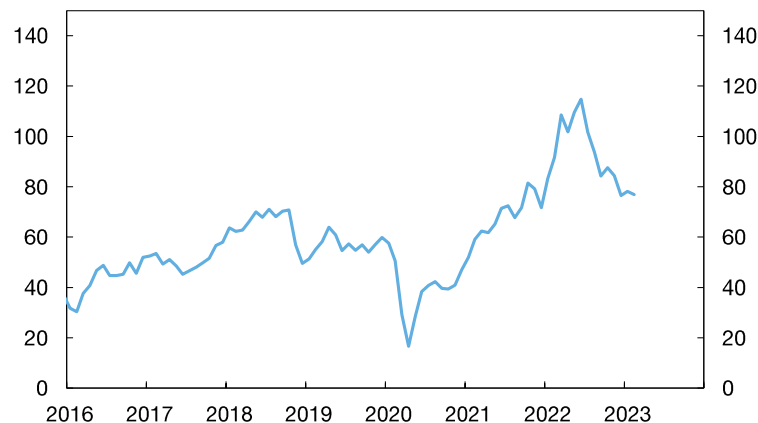
Source: Bureau of Economic Analysis via Haver Analytics

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)



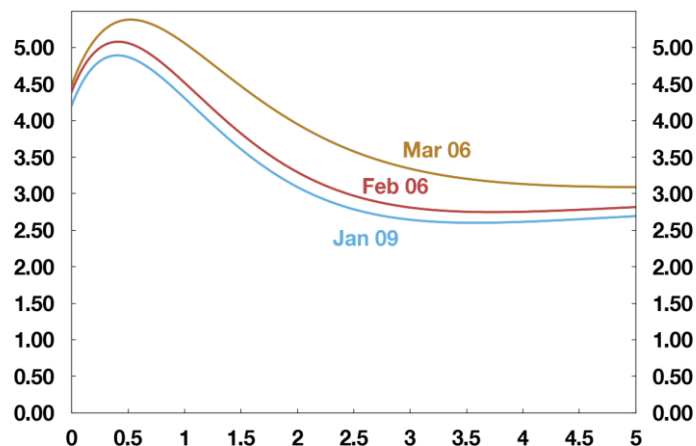
Source: Energy Information Administration via Haver Analytics

Oil prices remained stable

- Oil prices (WTI) fell from \$78/barrel in January to \$77/barrel in February.
 - Prices stayed near \$80/barrel in early March.
 - Prices averaged \$68/barrel in 2021 and \$95/barrel in 2022.
- The Department of Energy's March forecast projects that global inventories will rise in 2023 at near the same pace they increased in 2022.
 - Both global consumption and production growth are expected to slow 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.

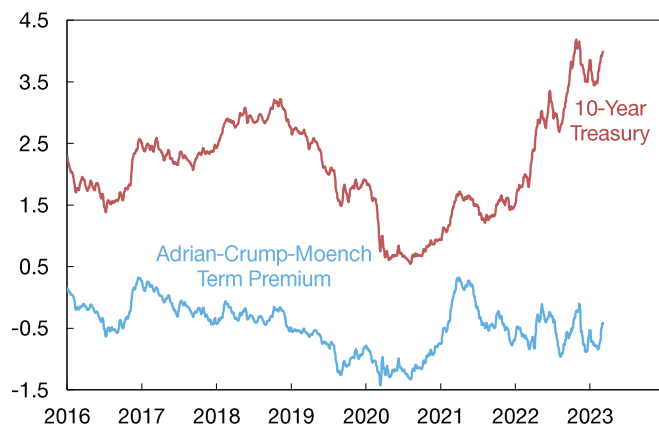
Note: Estimated using OIS quotes.

Implied path for the federal funds rate shifted up

- The expected path of the federal funds rate implied by overnight indexed swaps shifted up at all maturities between February 6 and March 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 4.1%, which is equal to 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 3.1%, 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

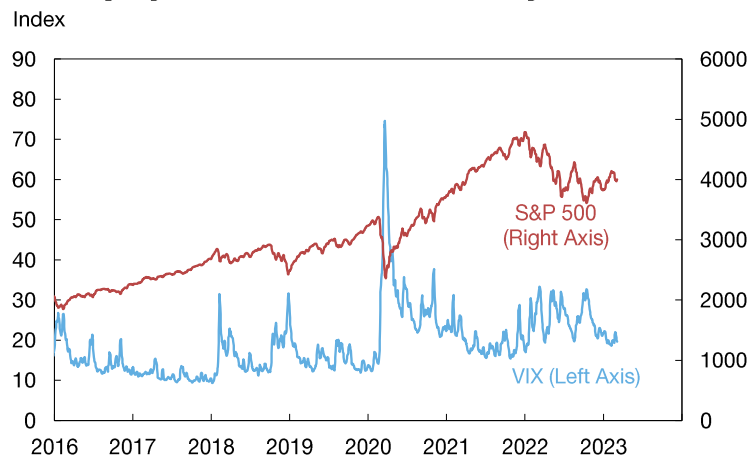
Note: Five-day rolling averages.

Ten-year Treasury yields rose

- The 10-year Treasury yield remains comfortably above its average values between 2013 and 2019 and increased by 35 basis points from February 6 to March 6.
 - The yield averaged 1.76% in January 2020.
 - 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 February 6 to March 6 was due both to a higher expected interest rate path and a rise in the term premium.

FINANCIAL MARKETS

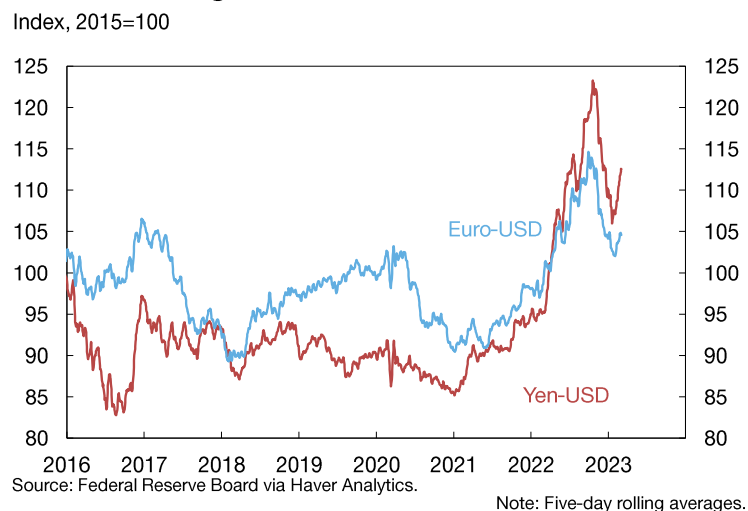
U.S. Equity Market Index and Volatility



Equity prices declined

- U.S. equity prices, as measured by the S&P 500 index, were down 2% on March 6 relative to 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 19.4 on February 6 to 18.6 on March 6.
 - The median VIX Index value was 18.2 over the period from the beginning of 2000 through March 6.

Dollar Exchange Rates



The dollar appreciated

- The Federal Reserve's trade-weighted broad dollar index on March 3 was up 2% relative to February 3.
- The dollar on March 3 was 2% stronger against the euro and 5% stronger against the yen relative to February 3.