

U.S. Economy in a Snapshot

Research & Statistics Group April 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 April 12, 2023.

OVERVIEW

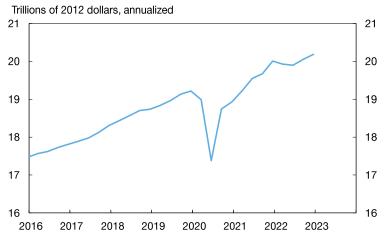
Output in Q4

- GDP growth was solid 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 in the first two months of Q1 was up substantially over the Q4 average.
- Real disposable income was also up sharply.
- Manufacturing activity has stalled after retreating at the end of last year.
- Housing starts were down sharply over the year.

Real GDP



Source: Bureau of Economic Analysis via Haver Analytics

Labor market

- Payroll growth was solid in March and the unemployment rate fell to a very low level.
- The increase in hourly earnings, measured over the year, continued its modest easing that started in March 2022.

Inflation

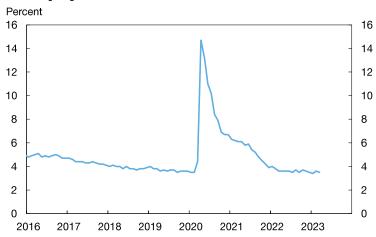
- Core PCE inflation over the year was little changed in February, as was core CPI inflation in March.
- High apartment rent inflation showed tentative signs of easing in March and food inflation eased significantly.
- Gasoline prices were down over the year, while prices for electricity and utility gas were up.

Q4 output was modestly below its pre-pandemic trend

- GDP has grown at a 1.6% annual rate since Q4 2019.
 - In the March 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%.
 - 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.

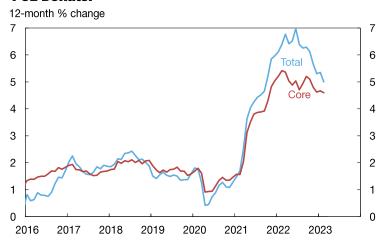
OVERVIEW

Unemployment Rate



Source: Bureau of Labor Statistics via Haver Analytics

PCE Deflator



Source: Bureau of Economic Analysis via Haver Analytics

The unemployment rate fell

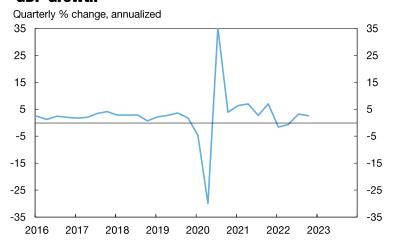
- The unemployment rate slipped from 3.6% in February to 3.5% in March.
 - The rate averaged 3.6% in 2022.
 - The labor force participation rate moved up for the fourth month in a row, leaving it 0.5 percentage point below the 2019 average.
 - The rate for the 25-54 years-old cohort was 0.6 percentage point above the 2019 average, while the rate for the 55 and over cohort was 1.6 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 inflation moved down in February

- PCE inflation over the year fell from 5.4% in January to 5.0% in February.
 - Food inflation eased from 12% to 10% and energy goods inflation moved from 5% to -1%.
- Core PCE inflation eased from 4.7% to 4.6%.
 - Core goods inflation decreased from 2.8% to 2.3%.
 - Core services inflation increased from 5.4% to 5.5%.
- Core PCE inflation over the previous three months increased from 4.6% (annualized) to 4.9%.
 - Core goods inflation went from 0.7% to 2.3%.
 - Core services inflation fell from 6.0% to 5.9%.

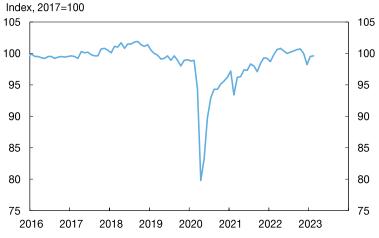
ECONOMIC ACTIVITY

GDP Growth



Source: Bureau of Economic Analysis via Haver Analytics

Manufacturing Index



Source: Federal Reserve Board via Haver Analytics

Output increased solidly in Q4

- GDP rose at a 2.6% 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) was flat in the quarter.
- Real gross domestic income (GDI) decreased at a 1.1% annual rate in Q4.
 - The four-quarter change in real GDI was 0.4%.
 - The gap between GDP and GDI narrowed considerably in Q4 to a negligible level.

Manufacturing activity was flat over the month

- The manufacturing index was unchanged over the month in February.
 - The index moved higher in Q2 2022, retreated in Q4, and has been stable in the first two months of Q1 2023.
- Durable goods production was up 1% over the year and nondurable production was down 1%.
 - The growth in durable goods manufacturing growth was driven by substantial increases in the motor vehicle and aircraft industries.
- The ISM manufacturing index was at a low level in March.

HOUSEHOLDS

Disposable Income and Consumption

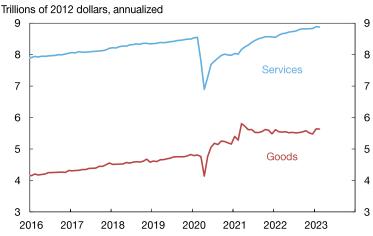
Trillions of 2012 dollars, annualized 20 20 19 19 18 18 Real Disposable 17 17 Income 16 16 15 15 14 14 13 13 Real Personal Consumption 12 12 11 11 10 10 2018 2019 2020 2016 2017 2021 2022 2023

Source: Bureau of Economic Analysis via Haver Analytics

Real disposable income moved higher

- Nominal personal income growth over the year slowed from 6.4% in January to 6.2% in February while real disposable income growth increased from 3.0% to 3.3%.
- The growth in real personal consumption spending over the year dropped from 2.7% in January to 2.5% in February.
 - The personal saving rate rose over the month from 4.4% to 4.6%.
 - The saving rate was near its year-ago level and well below the pre-pandemic saving rate of 9%.

Consumer Spending



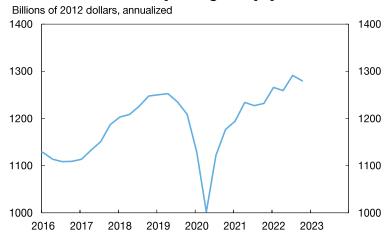
Source: Bureau of Economic Analysis via Haver Analytics

Spending on goods was up over the year

- The growth in real spending on goods over the year picked up from 0.5% in January to 1.6% in February.
 - Spending on durable goods was up 2.7% and spending on nondurables was up 0.9%.
 - Purchases of food were down 3% and purchases of gasoline were unchanged.
 - Spending on both durable and nondurable goods has been largely unchanged since mid-2021.
- The growth in real spending on services over the year fell from 3.9% to 3.0%.
 - Much of the moderation was due to spending on food and lodging.

BUSINESS SECTOR

Business Investment Spending on Equipment

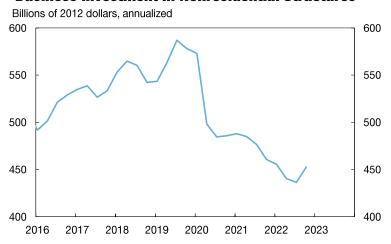


Source: Bureau of Economic Analysis via Haver Analytics

Equipment spending declined in Q4

- After rising strongly in Q3, real business equipment spending decreased at a 3.5% 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 3.9% over the year.
- Orders of capital goods fell slightly in February.
 - Nominal orders were on an uptrend through the first half of 2022, but they have been about flat since mid-2022.
 - Prices for capital equipment have risen at a fairly brisk pace since mid-2022.

Business Investment in Nonresidential Structures



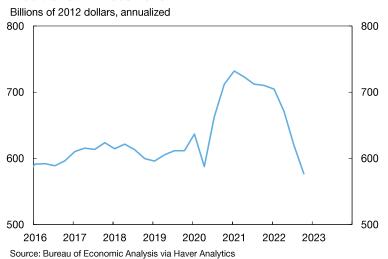
Source: Bureau of Economic Analysis via Haver Analytics

Spending on nonresidential structures rose in Q4

- After falling in the previous six quarters, real nonresidential structures investment spending increased at a 16% annual rate in Q4.
 - Structures investment contributed 0.4 percentage point to annualized GDP growth in the quarter.
 - Spending was still down 2% over the year and down 22% since Q4 2019.
- Spending in the energy sector decreased slightly in Q4 after a decline in Q3.
 - Spending on mining exploration, shafts, and wells was 14% below its Q4 2019 level.
 - Spending on manufacturing structures rose strongly in Q4.

HOUSING SECTOR

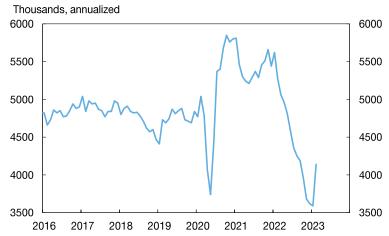
Residential Investment



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 25% (annualized) over the quarter and was down 19% over the year.
- Investment in single-family housing was down 37% (annualized) over the quarter, while investment in multi-family structures was up 44%.
 - Single-family construction was down 22% over the year and multi-family construction was up 5%.
 - Housing starts in February were down 18% over the year, with single-family down 30% and multi-family up 10%.

Existing Single-Family Home Sales



Source: National Association of Realtors via Haver Analytics

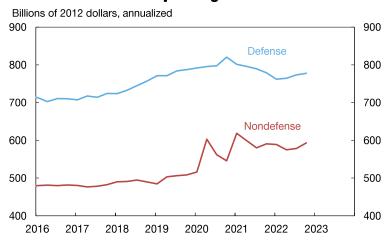
Existing home sales increased over the month

- Existing single-family home sales rose over the month in February.
 - Sales were 13% below the 2019 average, an improvement from being 21% below in Q4 2022.
- New single-family home sales were flat over the month.
 - Sales were 6% below the 2019 average, an improvement from being down 13% in Q4 2022.
- Prices for single-family homes fell 3% from June 2022 to January 2023.

©2023 Federal Reserve Bank of New York

GOVERNMENT SECTOR

Federal Government Spending

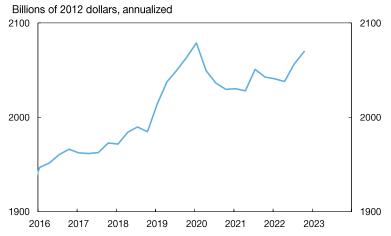


Source: Bureau of Economic Analysis via Haver Analytics

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 0.4 percent over the year in Q4 while defense spending was down 0.2 percent.

State and Local Government Spending



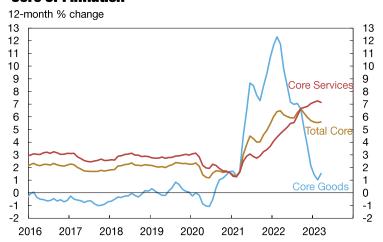
Source: Bureau of Economic Analysis via Haver Analytics

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 6% (annualized) over the quarter, with a 7% increase in construction, a 1% increase in equipment purchases, and a 7% increase in spending on intellectual property products.
 - Investment spending was up 1% over the year.

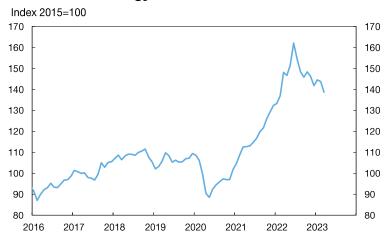
INFLATION

Core CPI Inflation



Source: Bureau of Labor Statistics via Haver Analytics

CPI Inflation: Energy Prices



Source: Bureau of Labor Statistics via Haver Analytics

Core CPI inflation over the year rose slightly

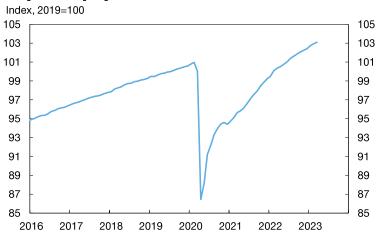
- Core inflation over the year rose from 5.5% in February to 5.6% in March.
 - Core inflation has been stable for the past three months.
 - Core goods inflation increased from 1.0% to 1.5%, with inflation for used motor vehicles going from -13% to -11%.
 - Core services inflation fell from 7.3% to 7.1%, with apartment rent inflation unchanged at 8.8%.
- The core CPI rose 5.1% (annualized) over the previous three months, down from the 5.2% pace set in February.
 - Core goods inflation went from -0.3% to 1.0%.
 - Core services inflation decreased from 7.3% to 6.7%, with rent inflation falling from 9.6% to 8.2%.

Energy prices were down over the year

- The energy component of the CPI was 8% below its yearago level in March.
 - Gasoline prices were down 17% over the year, while utility gas prices were up 6% and electricity prices were up 10%.
- The energy index was 30% above its 2019 average.
 - Gasoline was 30% above its 2019 level, electricity was 25% above, and natural gas was 40% above.
 - Prices for natural gas and electricity were largely unchanged between 2014 and 2019.

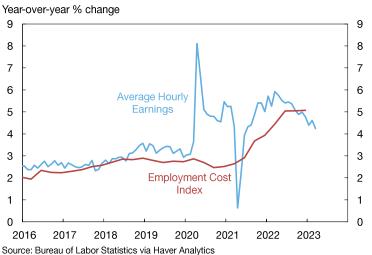
LABOR MARKET

Payroll Employment



Source: Bureau of Labor Statistics

Average Hourly Earnings and the ECI



Employment growth was solid

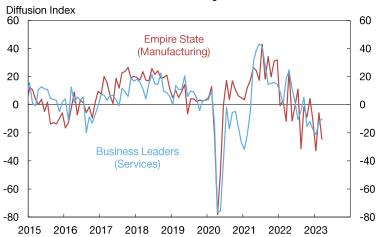
- Nonfarm payroll employment increased by 236,000 in March.
 - Most of the increase was in leisure and hospitality (72,000), health care (65,000), government (47,000), and professional and business services (39,000).
 - Payrolls were largely unchanged in other industries and dropped in construction and retail trade.
- The Household Survey's employment-to-population ratio increased to 60.4%.
 - The ratio stayed near 60% over the course of 2022.
 - The ratio was 0.4 percentage point lower than the 2019 average and equal to the 2018 average.

Average hourly earnings growth fell

- The growth in average hourly earnings over the year dipped from 4.6% in February to 4.2% in March.
 - Earnings growth has trended down since hitting 5.9% in March 2022.
 - Earnings growth over the previous three months eased from 3.6% (annualized) to 3.2%.
- 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

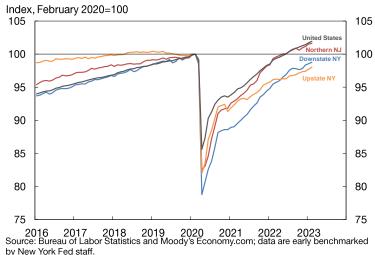


Source: Federal Reserve Bank of New York

Regional business activity continues to contract

- Activity continued to decline in both the manufacturing and service sectors, according to the March regional business surveys.
 - The Empire Survey's headline index (manufacturing) fell 19 points to -24, and the Business Leaders Survey's headline index (services) rose 3 points to -10. Firms expect little improvement in conditions over the next six months.
 - Employment and hours worked declined among manufacturers for a second consecutive month, while employment continued to move modestly higher in the service sector.
 - Input prices increased at a somewhat slower pace than last month in both sectors, and selling price increases slowed somewhat among manufacturers.

Regional Employment Trends

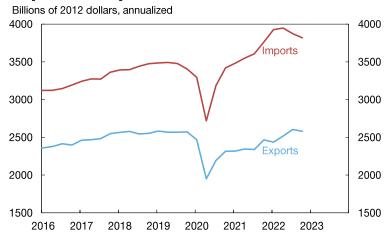


Strong job growth in downstate New York

- Employment continued to grow strongly in downstate New York and Puerto Rico through February.
 - Over the prior 12 months, employment increased by 3.5% in downstate New York, 2.3% in Northern New Jersey, 2.0% in Fairfield CT, and 2.0% in upstate New York, compared to 2.9% nationally.
 - Employment remained 1.2% below pre-pandemic levels in downstate New York, 2.0% below in upstate New York, and has now reached its pre-pandemic level in Fairfield, while it was 1.6% above in Northern New Jersey and 1.9% above for the nation as a whole.
 - Employment in Puerto Rico grew 3.1% on a year-over-year basis in February and was 6.8% above pre-pandemic levels.

INTERNATIONAL DEVELOPMENTS

Exports and Imports of Goods and Services

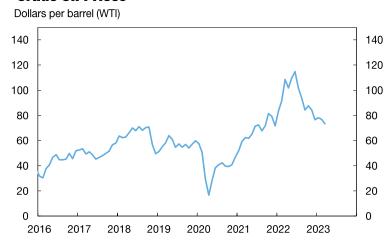


Source: Bureau of Economic Analysis via Haver Analytics

Net exports boosted Q4 growth

- Exports and imports both fell in Q4.
 - Lower exports subtracted 0.4 percentage point from annualized GDP growth, while lower imports added 0.9 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



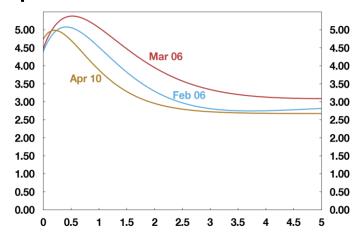
Source: Energy Information Administration via Haver Analytics

Oil prices fell in March

- Oil prices (WTI) fell from \$77/barrel in February to \$73/barrel in March.
 - Prices were around \$80/barrel in early April.
 - Prices averaged \$68/barrel in 2021 and \$95/barrel in 2022.
- The Department of Energy's April 11 forecast projects that global inventories will rise in 2023 at near the same pace they increased in 2022.
 - Most of the increase in global consumption is set to come from China and the rest of Asia.
 - Higher U.S. production is expected to more than offset lower OPEC and Russian output.

FINANCIAL MARKETS

Implied Fed Funds Rate



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

Note: Estimated using OIS quotes.

Note: Five-day rolling averages.

Implied path for the federal funds rate shifted down

- Between March 6 and April 10, the expected path of the federal funds rate implied by overnight indexed swaps shifted up at maturities of less than two months and decreased for all other maturities. The curve has a downward slope after about two months.
- The market-implied federal funds rate at the end of 2024 decreased to about 3.1%, which is below the median value of 4.3% in the FOMC's Summary of Economic Projections (SEP) from March 2023.
- At the five-year horizon, the market-implied federal funds rate decreased to around 2.7%, which is above the median SEP longer-run federal funds rate of 2.5%.

10-Year Treasury and Term Premium

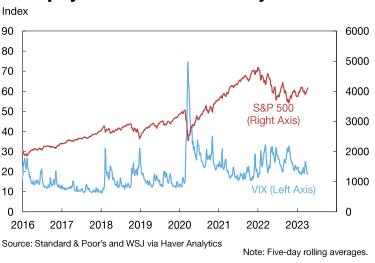


Ten-year Treasury yields decreased

- The 10-year Treasury yield decreased by 56 basis points between March 3 and April 10 to 3.41%.
 - The yield averaged around 2.25% in the five years before the pandemic.
 - 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 fall in the 10-year Treasury yield from March 3 to April 10 was due to both a lower expected interest rate path and a decrease in the term premium.

FINANCIAL MARKETS

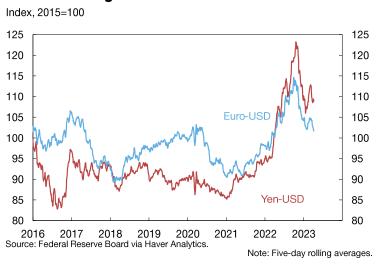
U.S. Equity Market Index and Volatility



Equity prices slightly rose

- Despite recent events in the banking sector, U.S. equity prices, as measured by the S&P 500 index, were stable over the past month.
 - The S&P 500 index was up 1% on April 10 relative to March 3, and it was up 7% year-to-date.
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), increased from 18.5 on March 3 to 19.0 on April 10.
 - The index rose in early March, peaking at 25.6 on March 13
 - The index averaged 24.5 over the past 12 months.

Dollar Exchange Rates



The dollar depreciated

- The Federal Reserve's trade-weighted broad dollar index on April 7 was down 1% relative to March 3.
- The dollar on April 7 was 3% weaker against the euro and 3% weaker against the yen relative to March 3.