## FEDERAL RESERVE BANK of NEW YORK

# **U.S. Economy in a Snapshot** Research & Statistics Group May 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 May 10, 2023.

## **OVERVIEW**

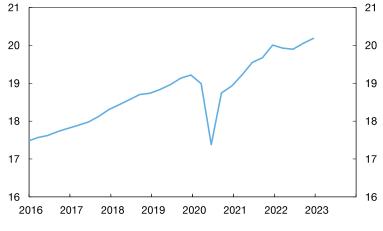
#### <u>Output</u>

- GDP growth slowed to a moderate pace in Q1.
- Consumption and government spending were substantial contributors to growth.
- Fixed investment spending was flat while inventory investment was a large drag.
- Monthly indicators
  - Consumer spending moderated in March and the personal saving rate increased.
  - Manufacturing activity has stalled after retreating at the end of last year.
  - The housing market appears to have stabilized.

- Labor market
  - Payroll growth was solid in April and the unemployment rate fell from an already very low level.
  - The rate of increase in hourly earnings, measured over the year, ticked up.
- Inflation
  - Core CPI inflation over the year was little changed in April.
  - High rent inflation continued to ease, while the fall in used car prices slowed.
  - Food inflation moderated and the energy price index was down from its year-ago level.

#### **Real GDP**

Trillions of 2012 dollars, annualized



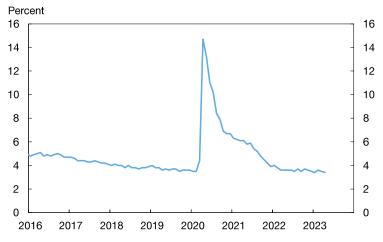
Source: Bureau of Economic Analysis via Haver Analytics

#### Q1 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%.
  - Q1 GDP was about 0.75% below what it would have been if, since Q4 2019, it grew at a rate close to longer-run forecasts.

## **OVERVIEW**

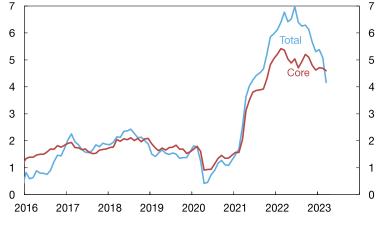
#### **Unemployment Rate**



Source: Bureau of Labor Statistics via Haver Analytics

#### **PCE Deflator**

#### 12-month % change



Source: Bureau of Economic Analysis via Haver Analytics

#### The unemployment rate fell

- The unemployment rate slipped from 3.5% in March to 3.4% in April.
  - The rate averaged 3.6% in 2022.
  - The labor force participation rate was unchanged, leaving it 0.5 percentage point below the 2019 average and 0.4 percentage point above the 2022 average.
- 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 dropped in March**

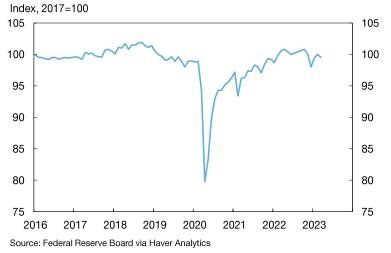
- PCE inflation over the year fell from 5.1% in February to 4.2% in March.
  - Food inflation eased from 10% to 8% and energy inflation moved from 5% to -10%.
- Core PCE inflation decreased from 4.7% to 4.6%.
  - Core goods inflation increased from 2.3% to 2.5%.
  - Core services inflation decreased from 5.8% to 5.5%.
- Core PCE inflation over the previous six months fell from 4.7% (annualized) to 4.3%.
  - Core goods inflation went from 0.8% to 0.9%.
  - Core services inflation fell from 6.1% to 5.3%.

## **ECONOMIC ACTIVITY**

#### **GDP Growth** Quarterly % change, annualized 35 35 25 25 15 15 5 5 -5 -5 -15 -15 -25 -25 -35 -35 2016 2017 2018 2019 2020 2021 2022 2023

Source: Bureau of Economic Analysis via Haver Analytics

#### **Manufacturing Index**



#### **Output increased moderately in Q1**

- GDP rose at a 1.1% annual rate in Q1, after rising at a 2.9% rate in the second half of 2022.
  - The four-quarter change was 1.6%.
  - Personal consumption expenditures was the major contributor to the Q1 increase, while inventory investment was a significant drag.
  - Final sales to private domestic purchasers (consumption plus private fixed investment) rose solidly in the quarter.
- Real disposable personal income (DPI) increased at a strong 8.0% annual rate in Q1.
  - Real DPI increased 3.4% over the past four quarters.
  - The personal saving rate increased from 4.0% in Q4 to 4.8% in Q1.

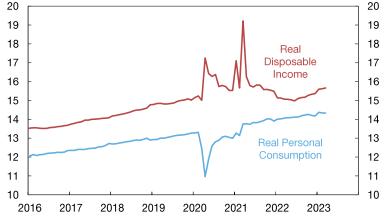
#### Manufacturing activity was stable

- The manufacturing index was unchanged in Q1 over the quarter.
  - The index moved higher in Q2 2022, retreated in Q4, and was flat in 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.
  - Nondurable production was held down by declines in chemicals, petroleum products, and plastics.
- The ISM manufacturing index for April was at a low level.

## HOUSEHOLDS

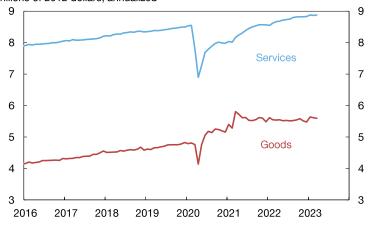
#### **Disposable Income and Consumption**







#### **Consumer Spending**



Source: Bureau of Economic Analysis via Haver Analytics

#### The growth in real disposable income increased

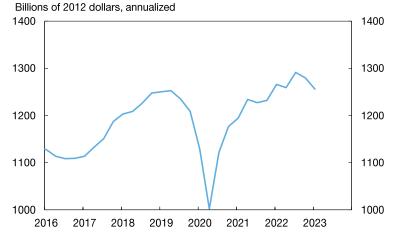
- Nominal disposable personal income growth over the year slowed from 8.5% in February to 8.3% in March, while real disposable income growth increased from 3.2% to 4.0%.
  - Social security receipts were up 11% and taxes were down 7%, with both boosted by large inflation adjustments in January.
  - Real disposable income remained below its trend growth path.
- The growth in real personal consumption spending over the year eased from 2.2% in February to 1.9% in March.
  - The personal saving rate rose to 5.1%. \_
  - The saving rate was modestly above its year-ago level and well below its pre-pandemic saving rate of around 9%.

#### The growth in spending on services slowed

- The growth in real spending on goods over the year slowed. from 1.2% in February to 1.0% in March.
  - Spending on durable goods was up 2.5% and spending on nondurables was unchanged.
  - Purchases of food were down 2% 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 slowed from 2.8% to 2.4%.
  - Most of the moderation was due to spending on transportation and recreational services.

# Trillions of 2012 dollars, annualized

## **BUSINESS SECTOR**



**Business Investment Spending on Equipment** 

Source: Bureau of Economic Analysis via Haver Analytics

#### **Business Investment in Nonresidential Structures**

Billions of 2012 dollars, annualized 600 600 550 550 500 500 450 450 400 400 2017 2019 2020 2021 2022 2023 2016 2018 Source: Bureau of Economic Analysis via Haver Analytics

#### Equipment spending declined again in Q1

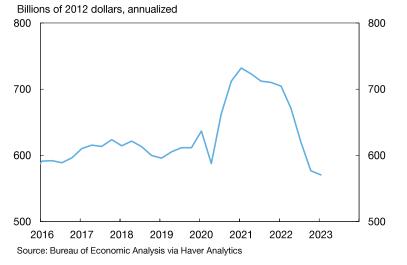
- Real business equipment spending decreased at a 7.3% annual rate in Q1, its second straight decline.
  - Equipment spending subtracted 0.4 percentage point from the annualized GDP growth rate in the quarter.
  - Spending fell for all major categories, with the largest declines in the transportation and "other" categories.
  - Equipment spending was down 0.8% over the year.
- Orders of capital goods fell modestly in March.
  - Nominal orders were on an uptrend through the first half of 2022, but they have been roughly flat since mid-2022.
  - Prices for capital equipment have risen at a fairly brisk pace since mid-2022.

#### Spending on nonresidential structures rose in Q1

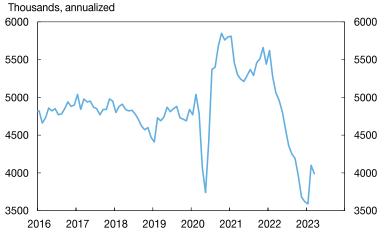
- Real nonresidential structures investment spending increased at an 11.2% annual rate in Q1, its second straight double-digit increase.
  - Structures investment contributed 0.3 percentage point to annualized GDP growth in the quarter.
  - Spending was up 2% over the year but still down 20% relative to Q4 2019.
- Spending in the energy sector rose strongly in Q1 after a decline in the second half of 2022.
  - Spending on mining exploration, shafts, and wells was still 7% below its Q4 2019 level.
  - Spending on manufacturing structures rose strongly again in Q1 and was 12% above its Q4 2019 level.

## HOUSING SECTOR

#### **Residential Investment**



#### Existing Single-Family Home Sales



Source: National Association of Realtors via Haver Analytics

### **Residential investment spending fell in Q1**

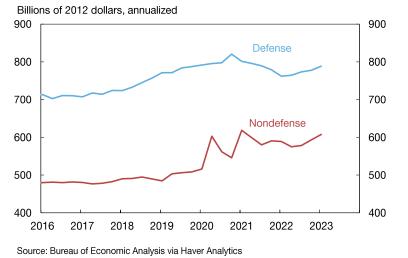
- A drop in residential investment spending took 0.2 percentage point off annualized Q4 GDP growth.
  - Investment spending was down 4% (annualized) over the quarter and was down 19% over the year.
- Investment in single-family housing was down 21% (annualized) over the quarter, while investment in multi-family structures was up 10%.
  - Single-family construction was down 27% over the year and multi-family construction was up 9%.
  - Q1 housing starts were down 17% over the year, with single-family down 28% and multi-family up 6%.

### Home sales increased in Q1

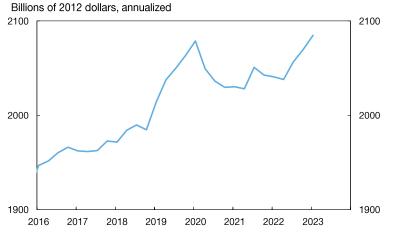
- Existing single-family home sales in Q1 rose 16% (annualized) over the quarter.
  - Sales were 18% below the 2019 average, an improvement from being 21% below in Q4 2022.
- New single-family home sales were up 41% (annualized) over the quarter.
  - Sales were 5% below the 2019 average, an improvement from being down 13% in Q4 2022.
- Prices for single-family homes fell 3% from June 2022 to February 2023.

## **GOVERNMENT SECTOR**

#### **Federal Government Spending**



**State and Local Government Spending** 



Source: Bureau of Economic Analysis via Haver Analytics

#### Federal spending rose in Q1

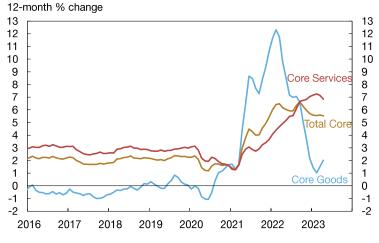
- Federal government spending added 0.5 percentage point to annualized real GDP growth in Q4.
  - Nondefense spending added 0.3 percentage point to growth and defense spending added 0.2 percentage point.
- Total real spending was above its year-ago level.
  - Nondefense spending was up 3% over the year and defense spending was up 4%.

#### State and local government spending increased

- Real state and local government spending added 0.3 percentage point to annualized real GDP growth in Q1.
  - Spending was up 2% over the year.
- S&L government consumption was up 3% (annualized) over the quarter.
  - Consumption was up 2% over the year.
- Investment spending rose 2% (annualized) over the quarter, with a 1% drop in construction, an 18% increase in equipment purchases, and a 3% increase in spending on intellectual property products.
  - Investment spending was up 3% over the year.

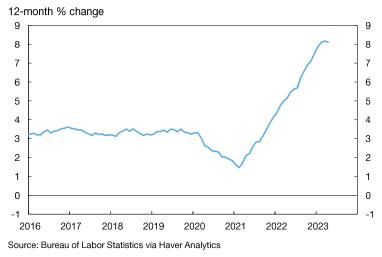
## INFLATION

#### **Core CPI Inflation**



Source: Bureau of Labor Statistics via Haver Analytics

#### **CPI Inflation: Shelter**



#### Core CPI inflation over the year fell slightly

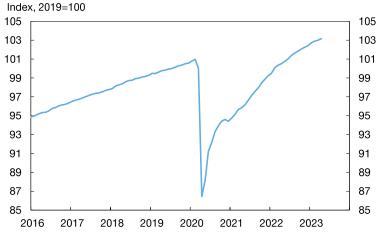
- Core inflation over the year fell from 5.6% in March to 5.5% in April.
  - Core inflation has been stable for the past four months.
  - Core goods inflation increased from 1.5% to 2.0%, with inflation for used motor vehicles going from -11% to -7%.
  - Core services inflation fell from 7.1% to 6.8%, with rent inflation unchanged at 8.8%.
- The core CPI rose 4.8% (annualized) over the previous six months, up from the 4.7% pace set in March.
  - Core goods inflation went from -0.8% to 0.9%, with used motor vehicles inflation going from -20.4% to -10.1%.
  - Core services inflation decreased from 6.6% to 6.3%, with rent inflation falling from 8.9% to 8.3%.

#### Shelter inflation remained high

- Shelter inflation over the year decreased from 8.2% in March to 8.1% in April.
  - Rent of primary residence was unchanged at 8.8%, while owners' equivalent rent inflation rose from 8.0% to 8.1%.
  - Lodging inflation fell from 7.3% to 3.3%.
  - The shelter index grew at a 3.3% annual rate in the five years before the pandemic.
- Shelter inflation over the previous six months dropped from 8.7% (annualized) in March to 8.1% in April.
  - Rent inflation fell from 8.9% to 8.5%.

## LABOR MARKET

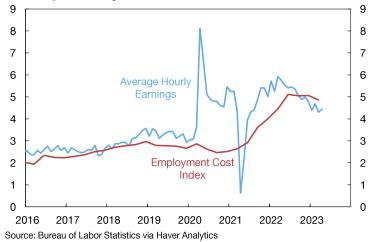
#### **Payroll Employment**



Source: Bureau of Labor Statistics

#### Average Hourly Earnings and the ECI

Year-over-year % change



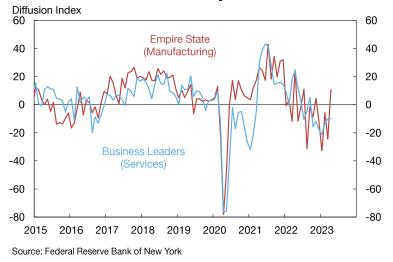
#### **Employment growth was solid**

- Nonfarm payroll employment increased by 253,000 in April, below the Q1 monthly average of 295,000.
  - Most of the increase was in health care (40,000), professional and business services (43,000), leisure and hospitality (31,000), financial activities (23,000), and government (23,000).
  - Payrolls were largely unchanged in other industries.
- The Household Survey's employment-to-population ratio was unchanged at 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 rose

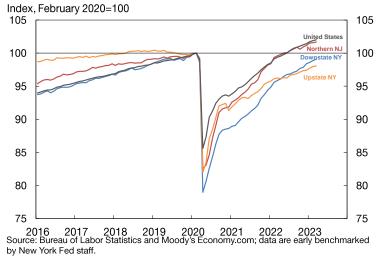
- The growth in average hourly earnings over the year rose from 4.3% in March to 4.5% in April.
  - Earnings growth has trended down since hitting 5.9% in March 2022.
  - Earnings growth over the previous six months rose from 4.2% (annualized) to 4.3%.
- The growth in the employment cost index over the year fell from 5.1% in December to 4.9% in March.
  - Growth in the index over the previous six months fell from 4.7% (annualized) in December to 4.6% in March.
  - For comparison, the index was up 2.7% over the year in Q4 2019.

## REGIONAL



#### **New York Fed Business Surveys: Current Conditions**

#### **Regional Employment Trends**



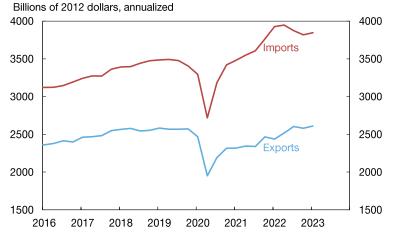
#### **Regional business activity was mixed**

- Activity continued to decline modestly in the service sector, but bounced up in the manufacturing sector for the first time in several months, according to the April regional business surveys.
  - The Empire Survey's headline index (manufacturing) jumped 35 points to 10.8, its first positive reading since November, and the Business Leaders Survey's headline index (services) held steady at -9.8. Firms expected little improvement in conditions over the next six months.
  - Employment was unchanged in the service sector and declined among manufacturers for a third consecutive month. This represents the first time employment did not increase in the region's service sector in two years.
  - Price increases generally moderated.

#### Strong job growth continued in downstate New York

- Employment continued to grow strongly in downstate New York and Puerto Rico through March.
  - Over the prior 12 months, employment increased by 3.4% in downstate New York, 2.1% in Northern New Jersey, 1.7% in Fairfield CT, and 1.9% in upstate New York, compared to 2.6% nationally.
  - Employment remained 0.9% below pre-pandemic levels in downstate New York and 1.9% below in upstate New York. Employment has reached pre-pandemic levels in Fairfield, and is 1.7% above in Northern New Jersey and is 2.0% above for the nation as a whole.
  - Employment in Puerto Rico grew 2.8% on a year-over-year basis in March and was 7.0% above pre-pandemic levels.

## **INTERNATIONAL DEVELOPMENTS**

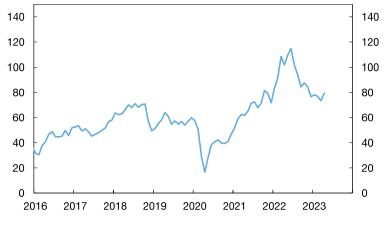


Exports and Imports of Goods and Services

Source: Bureau of Economic Analysis via Haver Analytics

#### **Crude Oil Prices**

Dollars per barrel (WTI)



Source: Energy Information Administration via Haver Analytics

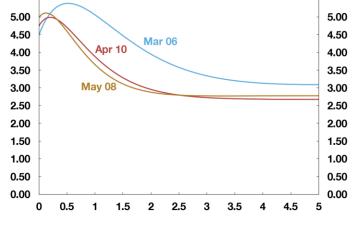
#### Net exports added slightly to Q1 growth

- Exports and imports both rose in Q1.
  - Higher exports added 0.5 percentage point to annualized GDP growth, while higher imports subtracted 0.4 percentage point.
- Exports rebounded after falling in Q4.
  - Increases in sales of food, oil, and consumer goods were partially offset by decreases in exports of non-oil industrial supplies and transport services.
- Imports rose after falling in the previous two quarters.
  - Increases in autos and consumer goods were partially offset by declines in imports of food, industrial supplies, and capital goods.

#### **Oil prices were relatively stable**

- Oil prices (WTI) rose from \$73/barrel in March to \$79/barrel in April.
  - Prices were around \$70/barrel in early May.
  - Prices averaged \$68/barrel in 2021 and \$95/barrel in 2022.
- The Department of Energy's May 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 production in the U.S., Norway, Brazil, and Canada is expected to more than offset lower output from OPEC and Russia.

## **FINANCIAL MARKETS**



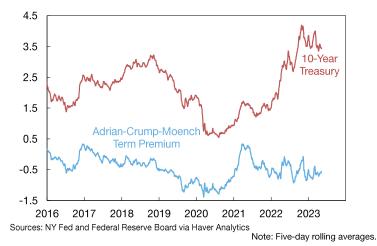
#### **Implied Fed Funds Rate**

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

Note: Estimated using OIS quotes.

#### **10-Year Treasury and Term Premium**

Percent



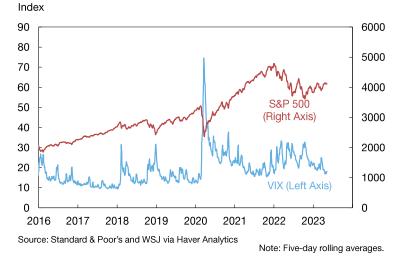
#### Implied path for the federal funds rate was unchanged

- Between April 10 and May 8, the expected path of the federal funds rate implied by overnight indexed swaps was essentially unchanged. The curve has a downward slope after about 2 months.
- The market-implied federal funds rate at the end of 2024 was at around 2.9%, 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 was at around 2.8%, which is above the median SEP longerrun federal funds rate of 2.5%.

#### **Ten-year Treasury yields increased**

- The 10-year Treasury yield increased by 11 basis points between April 10 and May 8 to 3.52%.
  - 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 increase in the 10-year Treasury yield from April 10 to May 8 was due to an increase in the term premium more than offsetting a lower expected interest rate path.

## **FINANCIAL MARKETS**



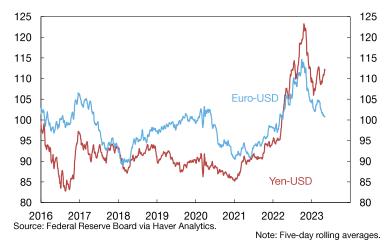
#### U.S. Equity Market Index and Volatility

#### **Equity prices rose slightly**

- 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 May 8 relative to April 10, and was up 8% year-to-date.
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), decreased from 19.0 on April 10 to 17.0 on May 08.
  - The index recently peaked at 26.5 on March 13.
  - The index averaged 23.7 over the past 12 months.

#### **Dollar Exchange Rates**

Index, 2015=100



#### The dollar was unchanged

- The Federal Reserve's trade-weighted broad dollar index on May 5 was unchanged relative to April 7.
  - The index was down 2% since the beginning of the year.
- The dollar on May 5 was 1% weaker against the euro and 3% stronger against the yen relative to April 7.