U.S. Economy in a Snapshot
Research & Statistics Group
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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, model results, and analysis 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 11, 2018.
• Real consumer spending growth remained weak in February.
  – Nondurable goods and services expenditures exhibited continued softness.

• Business equipment spending continued to increase robustly in 2017Q4, and exhibited brisk growth overall in 2017.
  – Capital goods shipments data suggest that solid growth continued into 2018Q1.
  – However, recent monthly data on new orders suggest some slowing in near-term momentum.

• Housing indicators generally point to continued gradual improvement in this sector.
  – Tight housing supply and a strong labor market have the potential to provide continuing support to the housing sector.

• Payroll growth was moderate in March following a strong increase in February, in part reflecting weather conditions. The unemployment rate and the employment-to-population ratio were unchanged, while the labor force participation rate declined slightly in the month.
  – The latest readings of various measures of labor compensation continued to indicate modest firming.

• Core PCE inflation continued to run below the FOMC’s longer-run objective, but near-term momentum has firmed.

• U.S. equity indices declined over the past month, and volatility remained elevated. The nominal 10-year Treasury yield was little changed over the past month. The broad trade-weighted dollar index fell slightly.

Output near its potential level
• Real GDP in 2017Q4 was 0.25% below the Congressional Budget Office’s (CBO) measure of real potential GDP.
  – In its April economic outlook, the CBO revised up its estimate of real potential GDP for 2017Q4 by 0.8%. Estimates for 2019 – 2027 were revised upward by more than 1%.
  – The 4.1% March unemployment rate is below many estimates of its natural rate, including that of the CBO (4.6%).
  – CBO estimates of the natural rate of unemployment were revised down about 0.1 percentage point for 2018 – 2027.

• The CBO output gap indicates little resource slack in the U.S. economy, while the unemployment gap signals tighter resource constraints.
  – However, capacity utilization rates remain below their historical averages, suggesting some remaining slack by that measure.
**Unemployment rate remains unchanged**

- The unemployment rate remained at 4.1% in March.
  - It has stayed at that level for the past six months.

- The labor force participation rate declined slightly from 63.0% to 62.9%.
  - The labor force participation rate declined for both male and female workers, from 69.4% to 69.3% and from 57.0% to 56.9%, respectively.

- The employment-to-population ratio was unchanged in March at 60.4%.
  - The male employment-to-population ratio stayed at 66.5%. The female employment-to-population ratio declined slightly, from 54.7% to 54.6%, moving the aggregate employment-to-population ratio by less than 0.1 percentage point.

**Inflation still progressing toward FOMC objective**

- The total PCE price index rose 0.2% in February, after a strong 0.4% increase in January. The core PCE price index (which excludes food and energy prices) increased 0.2% in February, down from a 0.3% rise in January.
  - Energy prices and food prices both fell by 0.1% in February.

- Compared to January, the 12-month changes in the total PCE and core PCE price indices each rose by 0.1 percentage point in February to +1.8% and +1.6%, respectively.
  - Inflation is showing near-term momentum, as total PCE inflation and core PCE inflation have averaged 3.0% (annual rate) and 2.3%, respectively, during the past six months.
**ECONOMIC ACTIVITY**

**GDP Growth**

![GDP Growth Chart]

Source: Bureau of Economic Analysis via Haver Analytics

**Output growth revised up in 2017Q4**

- According to the third estimate, real GDP rose at a 2.9% annual rate in Q4, an upward revision from the second estimate of a 2.5% increase.

- The upward revision to GDP growth primarily reflected stronger consumer spending and greater inventory investment.

- Real gross domestic income (GDI), which provides an alternative measure of economic activity, increased at a 0.9% annual rate in Q4.
  - The four-quarter change in real GDI was 2.1%, notably below the 2.6% increase for real GDP.

**Manufacturing and ISM Manufacturing Index**

![Manufacturing and ISM Manufacturing Index Chart]

Source: Institute for Supply Management, Federal Reserve Board via Haver Analytics

**Manufacturing surveys signal continued growth**

- Manufacturing production rose by 1.4% in February following a 0.2% fall in January.
  - Manufacturing production increased by 2.5% in February on a 12-month change basis.

- The ISM PMI fell by 1.5 percentage points to 59.3 in March, indicating continued expansion but at a slower pace compared to February.
  - The Prices Index jumped 3.9 percentage points to 78.1, reaching its highest level since April 2011.

- All regional Fed manufacturing surveys indicated continued expansion in March, with only the Empire State index indicating faster expansion than in February.
**HOUSEHOLDS**

**Disposable Income and Consumption**

- Real personal consumption expenditures were unchanged in February, after declining 0.2% in January.
  - Spending on durable goods increased 0.6%, while that on nondurables continued to decline.
  - Services expenditures were flat, after increasing 0.1% in January.

- Real disposable personal income increased 0.2% in February after increasing 0.6% in January.
  - The increase in personal income primarily reflected increases in wage and salaries.

- The savings rate increased from 3.2% to 3.4% in February.

**Consumer confidence at decadal highs**

- The Michigan Consumer Sentiment Index was 101.4 in March (1966Q1=100).
  - This was the highest reading since January 2004, while the 2018Q1 average was higher than any since 2000.

- The Conference Board’s Consumer Confidence Index was 127.7 in March (1985=100).
  - This was slightly below its previous reading of 130.0, the highest reading since November 2000.

- Both indices also convey considerable optimism among households about labor market conditions, with greater fractions of respondents expecting jobs to become easier to find rather than harder.
**Equipment Investment and Capacity Utilization**

- **Equipment investment rises solidly**
  - With another robust increase in 2017Q4, real business equipment investment rose 8.9% over the course of 2017.
    - All major categories had solidly positive 4-quarter changes, with the largest rises in information and “other” equipment.
    - Even with solid increases in 2017, the equipment spending share of GDP stayed below its average share in 2014–15.
  - Equipment investment still has risen only moderately over the past three years, as the manufacturing capacity utilization rate remains fairly low.
    - This rate was 75.9% in February, about 1 percentage point below its longer-term average.
    - Historically, a manufacturing capacity utilization rate near 75% has been associated with rather modest growth of equipment investment.

**Nondefense Capital Goods Excluding Aircraft**

- **Slowdown in new orders and shipments**
  - Monthly data on new orders and shipments of nondefense capital goods excluding aircraft are high frequency indicators of business investment in equipment.
    - Shipments of these goods rose 1.4% in the first two months of the year.
      - Based on these shipments and historical patterns, equipment spending growth was probably fairly solid in 2018Q1.
    - Orders of these goods have increased more slowly than shipments in the past few months.
      - Orders are now slightly below shipments, which typically signals slower near-term momentum in equipment spending.
**Home prices continue to display strong increases**

- The CoreLogic single family national home price index rose 6.8% in February from a year ago.
  - This is the seventh consecutive month of year-over-year growth measuring above 6%.
  - All states experienced 12-month home price increases, with Washington, Nevada, Idaho and Utah leading the way with double-digit increases.

- The inventory of single family homes was 1.41 million units in February, equivalent to a 3.4 months’ supply at the current sales pace.
  - Since late 2015, the inventory of single family homes for sale has remained below the normal range of 5-7 months.
  - The lean supply of homes for sale along with a healthy job market have created upward pressures on home prices.

**Home sales on an overall gradual uptrend**

- Single-family existing home sales increased 4.2% in February to 4.96 million units (SAAR).
  - Single-family existing home sales are 1.8% higher than a year ago and are comparable to mid-2002 levels.

- Single-family new home sales decreased a modest 0.6% (SAAR) in February to 618,000 units.
  - Single-family new home sales were 0.5% higher than a year ago (615,000 in February 2017).
  - They were below the immediate pre-recession level (641,000 units in November 2007) after having surpassed it for the first time in November 2017.

- Inventories-sales ratios for existing and new homes are below their historical averages, which has contributed to upward pressure on home prices.
Government spending beginning to perk up

- After providing very little growth contribution between mid-2016 through mid-2017, spending at both the federal and state and local levels has begun to increase recently.
  - This category of government spending—consumption and gross investment—represents what government spends on labor compensation and new investment in equipment, structures, and intellectual property products. It does not include spending on transfer payments.

- Employment at the federal level is gradually declining, while at the state and local level it is gradually increasing. In aggregate, it has been roughly flat for nearly two years.

- At the federal level, the bulk of the recent increase in spending has been for defense, particularly new equipment.

Federal deficits larger in the near term

- The Congressional Budget Office (CBO) has released its updated “current policy” baseline for the federal budget.
  - This new baseline incorporates the tax legislation enacted last December and the budget agreement from earlier this year.

- Between now and FY2026, federal deficits will be higher due to the recent fiscal actions. By FY2027, the deficit is projected to be somewhat lower under the new baseline, but still high by historical standards. This is because many of the recent tax law changes expire and the level of real GDP is projected to be higher than in the previous baseline.
  - With deficits higher over most of the 10-year projection period, federal debt held by the public is now projected to reach 94.5% of GDP by the end of FY2027 versus 91.2% of GDP in the June 2017 baseline.
INTERNATIONAL DEVELOPMENTS

The trade deficit continues to grow

- The trade deficit rose again to $57.6 billion in February from a slightly revised $56.7 billion deficit in January. Both exports and imports increased in real terms.
  - Real exports of goods grew 2% over the month in February. This increase was largely due to an increase in volumes of industrial supplies (excluding petroleum) exports, as well as autos and capital goods exports.
  - Real nonoil imports of goods increased 1.2% in February, as import volumes of capital goods (excluding autos) and to a lesser extent higher industrial supplies and consumer goods imports went up. Oil import volumes declined over the month.

- Net exports subtracted 1.2 percentage points off GDP in the third 2017Q4 estimate, a slightly larger drag than in the previous two estimates.

Import prices rising at fastest pace since 2012

- The import price index (excluding petroleum) was up 2% over the year in February.
  - Import prices were falling as recently as late 2016.

- Prices of capital goods and industrial supplies drove the uptick.
  - The pickup in capital goods prices has been broad based.
  - Metal prices rose more than 10% over the year.

- Prices of autos and consumer goods have not changed much over the past two years.
  - The price indices for these two categories of goods tend to be much more stable than the aggregate index.
**LABOR MARKET**

### Payroll Employment and Aggregate Hours

[Graph showing payroll employment and aggregate hours from 2000 to 2018.]

Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

### Modest employment growth in March

- The March labor market report indicated modest employment growth following the particularly strong employment increase in February.
  - Nonfarm payroll employment increased by 103,000 in March, below the Bloomberg median forecast of +185,000. The slightly weaker gains followed a strong increase in February of 326,000.

- Employment in goods-producing industries rose by 15,000 compared to 106,000 in February.
  - Construction employment decreased by 15,000 following a strong increase of 65,000 in February.

- Average weekly hours worked by all private sector employees remained unchanged at 34.5 hours.

### Change in Construction Payrolls and Weather

[Graph showing change in construction payroll employment and heating degree days from January 2017 to March 2018.]

Source: Bureau of Labor Statistics; National Oceanic and Atmospheric Administration

### Payrolls in February and March explained by weather

- Construction employment declined by 15,000 in March, following a strong increase of 65,000 in February.
  - Over the past 12 months, construction employment increased on average by 19,000 per month.

- The strength of construction payrolls in February and subsequent weakness in March can be explained in part by February being a relatively warm month.
  - A heating degree day is a measurement that corresponds to the amount of energy needed to heat a building as a function of the exterior temperature.
  - Relative to long-run normal monthly values, February had 105 heating degree days fewer than normal (U.S. population-weighted).
**Labor Force Participation by Education**

Source: Bureau of Labor Statistics via Haver Analytics

**First quarter gains in participation go to educated**

- From December 2017 to March 2018, the labor force participation rate increased from 73.5% to 74.2% among those with a four-year college degree aged 25 and over.
  - Since January 2010, the labor force participation rate for those with a college degree has decreased by 2.8 percentage points.

- From December 2017 to March 2018, the labor force participation rate declined from 57.8 percent to 57.1 percent among those with a high school degree and no college education aged 25 and over.
  - Since January 2010, the labor force participation rate for those with a high school degree and no college education has fallen by 4.4 percentage points.

**Growth of Average Hourly Earnings and ECI**

Source: Bureau of Labor Statistics via Haver Analytics

**Earnings growth remains robust**

- Average hourly earnings increased by 0.3% from $26.74 in February to $26.82 in March.
  - The 12-month percent change in average hourly earnings was 2.72%.

- Average weekly earnings increased by 0.3% from $922.53 to $925.29.
  - The 12-month percent change in average weekly earnings was 3.32%, the largest year-over-year percent increase since February 2011.
INFLATION

CPI Inflation: Core Goods and Core Services

12 Month % Change

Source: Bureau of Labor Statistics via Haver Analytics
Note: Shading shows NBER recessions.

Core CPI back above 2%

- Core CPI inflation was 0.2% in March, but it climbed to 2.2% on a 12-month basis, up from 1.8% in February.
  - This notable increase was mostly driven by the unusual negative reading of -0.1% in March 2017 dropping out of the 12-month average.
  - On a 3-month basis, core CPI inflation has been hovering at around 3% (annualized) in 2018.

- Core services prices rose 0.3% in March, up from 0.2% in February.

- Core goods prices fell 0.1% in March after rising for the previous two months, but their 12-month change continued to recover.

Inflation expectations remain stable

- According to the NY Fed's Survey of Consumer Expectations, the median of inflation expectations at the three-year horizon remained unchanged in March at 2.9%.

- Median inflation uncertainty—or the uncertainty expressed by respondents regarding future inflation outcomes—increased slightly from last month series' low.

- The one-year ahead median inflation expectation also remained unchanged in March at 2.8%.
**U.S. Equity Market Index and Volatility**

![Graph showing U.S. Equity Market Index and Volatility](source)

**U.S. equity markets decline**

- U.S. equity markets have declined since mid-March and are now little changed year-to-date.
  - As of April 6, the S&P 500 index had declined 5.8% since March 13 and 9.3% from its January 26, 2018 all-time high.
  - The index was down 2.6% year-to-date as of April 6.

- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), has increased since mid-March.
  - The VIX Index closed at 21.5 on April 6, up 5.1 points from March 13, and 10.5 points year-to-date.
  - The index remains well below its multi-year high of 37.3 on February 5.

**U.S. Bank Equities Performance**

![Graph showing U.S. Bank Equities Performance](source)

**Bank stocks perform in line with broader market**

- As measured by the KBW Nasdaq bank index, bank equities declined 8.0% between March 13 and April 6 and 9.8% from their recent high on February 1.
  - As of April 6, the index was down 1.5% year-to-date.

- The XLF financial sector ETF declined 7.2% between March 13 and April 6, and 9.9% from its recent high on January 26.
  - As of April 6, the index was down 2.7% year-to-date.
**USD Exchange Rates**

- The exchange value of the dollar against a basket of global currencies increased 0.1% between March 13 and April 6.
  - Over this same period the dollar appreciated by 0.9% against the euro and 0.3% against the Japanese yen, but depreciated 1.6% against the Mexican peso.

- Since the start of 2018, the dollar has depreciated 2.8% against a basket of global currencies.

**Expected Federal Funds Rate**

- The expected path of the federal funds rate implied by rates on overnight indexed swaps (OIS) changed little between March 13 and April 6.

- The market-implied path remains somewhat below the median path from the FOMC’s March 2018 Summary of Economic Projections and the January 2018 NY Fed Survey of Primary Dealers.
**FINANCIAL MARKETS**

**10-Year Treasury and Term Premium**

- Longer-term Treasury yields have declined since mid-March.
  - The 10-year yield decreased about 10 basis points between March 13 and April 6 and is down about 15 basis points from its February high.
  - Estimates from the Adrian-Crump-Moench term structure model attribute the entire decrease in the 10-year yield since March 13 to a more negative term premium, rather than to a lower path for the short-term interest rate.
  - The estimated 10-year term premium is now close to -50 basis points.

**5-10 Year Forward Decomposition**

- Market-implied TIPS-based measures of long-term inflation expectations ("breakevens") decreased moderately in recent weeks.
  - The five-to-ten year breakeven inflation rate was 2.04% on April 6, down 6 basis points from March 13, but up 11 basis points year-to-date.
  - According to the Abrahams-Adrian-Crump-Moench model, most of the movements in forward inflation compensation continue to reflect movements of the inflation risk premium.
  - The estimated five-to-ten year inflation risk premium decreased 9 basis points between March 13 and April 6 and is up 5 basis points year-to-date.
SPECIAL TOPIC: 2ND DISTRICT DEVELOPMENTS

2nd District businesses report continued growth
- Regional business surveys point to strong growth in the manufacturing sector and more modest growth in the service sector.
  - The Empire State Manufacturing Survey’s headline index has approached multi-year highs in recent months.
  - The headline index for the Business Leaders Survey, which covers service-sector firms in New York, Northern New Jersey and Fairfield County, has declined in recent months but remains positive.

Job growth in the 2nd District has been mixed
- Job growth has been robust in New York City but has been more subdued in Long Island and the Lower Hudson Valley.
- In Northern New Jersey, job growth has been running at just above half the national pace.
- Job growth has been sluggish across upstate New York, with the strongest growth in Albany and Buffalo and little or no growth in Syracuse and Binghamton.
- Employment has been edging down in Fairfield County.
SPECIAL TOPIC: 2ND DISTRICT DEVELOPMENTS

Post-Hurricane Employment Paths

Slow recovery in PR and USVI from the storms

- Hurricanes Irma and Maria caused substantial damage and economic disruption in Puerto Rico and the USVI.
  - More than 1,000 lives were lost in Puerto Rico.
  - Damage to homes, businesses, infrastructure, and agriculture was severe.
  - There were widespread and sustained power outages.

- The Puerto Rico economy appears to be on a slow road to recovery from the storms.
  - After declining by about 4% following Maria, employment has begun to grow modestly.

- The USVI economy has stabilized but has yet to show signs of a rebound.
  - Employment declined by nearly 8% in the USVI after the storms, and has leveled off in early 2018.

Source: Authors’ calculations, based on U.S. Bureau of Labor Statistics data accessed through Moody’s Economy.com

Note: Index is month before hurricane = 100.