U.S. Economy in a Snapshot
Research & Statistics Group
March 2018

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 March 19, 2018.
- Real consumer spending growth declined slightly in January.
  - Durable goods expenditures largely drove the decline.

- Business equipment spending continued to increase robustly in the last quarter, exhibiting brisk growth overall in 2017.
  - The most recent monthly data 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 registered another strong increase in February. The unemployment rate was unchanged, while labor force participation rate and employment-to-population ratio both recorded notable improvements.
  - 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 partially recovered from sharp declines in early February. Volatility dropped sharply. The nominal 10-year Treasury yield fluctuated within a narrow range over the past month. The broad trade-weighted dollar index also was little changed.

**Output modestly above its potential level**

- Real GDP in 2017Q4 was 0.5% above the Congressional Budget Office’s (CBO) measure of real potential GDP.
  - 2017Q4 was the second consecutive quarter where real GDP was above the CBO’s estimate of real potential GDP.
  - The February unemployment rate of 4.1% is below many estimates of its natural rate, including that of the CBO (4.73%).

- The CBO output gap indicates nonexistent resource slack in the U.S. economy, while the unemployment gap signals even tighter resource constraints.
  - However, capacity utilization rates remain below their historical averages, suggesting remaining resource slack by that measure.
**Labor Market Indicators**

- The unemployment rate remained at 4.1% in February.
  - The unemployment rate has been at that level for the past five months.
- The labor force participation rate rose from 62.7% in January to 63.0% in February, the first increase in five months.
  - The labor force participation rate rose for both male and female workers, from 69.2% to 69.4% and from 56.7% to 57.0%, respectively.
- The employment-to-population ratio increased from 60.1% in January to 60.4% in February.
  - The male employment-to-population ratio increased from 66.3% to 66.5%. The female employment-to-population-ratio also increased, from 54.4% to 54.7%.

**Inflation progressing toward FOMC objective**

- The total PCE price index rose a strong 0.4% in January, after a 0.15% increase in December. The core PCE price index (which excludes food and energy prices) increased 0.3% in January, up from a 0.2% rise in December.
  - Energy prices rose 3.0% in January and food prices increased by 0.1%.
- The 12-month changes in the total PCE and core PCE price indices were +1.7% and +1.5%, respectively, in January.
  - There is evidence of near-term momentum in inflation, as total PCE inflation and core PCE inflation have averaged 3.0% (annual rate) and 2.0%, respectively, during the past six months.
**ECONOMIC ACTIVITY**

**Little change to 2017Q4 GDP growth estimate**
- According to the second estimate, real GDP rose at a 2.5% annual rate in 2017Q4, a slight downward revision from the first estimate of 2.6%.
- Revisions to the various expenditure components were generally small and offsetting.
- There were, however, revisions to wage and salary income for 2017Q3 and 2017Q4 after incorporating information from the Bureau of Labor Statistics’ Quarterly Census of Employment and Wages.
  - Third quarter wages and salaries were revised up by $18.3 billion to $97.4 billion, with fourth quarter wages and salaries revised up by $8.8 billion to $91.3 billion.

**Manufacturing production rebounds**
- Manufacturing production rose by 1.2% in February following a revised 0.2% fall in January.
  - Manufacturing production increased by 2.5% in February on a 12-month change basis.
- The ISM Manufacturing index indicated continued expansion in February, rising by 1.7 percentage points to 60.8.
  - The Prices Index jumped 1.5 percentage points to 74.2 in February, indicating accelerating upward price pressures.
- All regional Fed manufacturing surveys indicated continued expansion in February.
**Households**

### Disposable Income and Consumption

[Graph showing disposable income and consumption trends from 2000 to 2018.]

Source: Bureau of Economic Analysis, Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

### Consumer spending declines in January

- Real personal consumption expenditures declined 0.1% in January after rising 0.2% in December.
  - The decline was largely driven by a fall of 1.6% in durable goods expenditures.

- Real disposable income saw a large increase of 0.6% in January relative to 0.2% in December.
  - Employee compensation increased 0.5% in January; this includes a one-off adjustment to account for bonuses paid in response to the Tax Cuts and Jobs Act.

- The personal saving rate rose to 3.2% in January, up from 2.5% in December (a 13-year low).

### Retail Sales: PCE Control Excluding Gasoline

[Graph showing retail sales trends from 2000 to 2018.]

Source: Census Bureau via Haver Analytics

Note: Shading shows NBER recessions.

### Retail sales were weak in early 2018

- Sales for retail trade and food services fell 0.1% in both January and February.
  - Overall retail sales have fallen for three straight months.

- Weak sales at motor vehicle dealers were an important factor in the decline in overall retail sales.
  - Retail sales excluding motor vehicle and parts dealers rose modestly in January and February.

- Sales of the PCE control excluding gasoline, which has the categories used to estimate consumption in the GDP accounts, were little changed over January and February.
  - Sales of this sub-aggregate rose strongly in 2017Q4.
  - The 12-month change remained below the corresponding change at the end of 2017.
**Equipment investment rises solidly**

- With another robust increase last quarter, real business equipment investment rose 8.9% over the four quarters ending in 2017Q4.
  - 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 modestly over the past three years, as the manufacturing capacity utilization rate remains low.
  - This rate was 76.9% in January, about 1½ percentage points below its longer-term average.
  - Historically, robust growth of equipment investment has not occurred until the capacity utilization rate approached 80%.

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**Nondefense Capital Goods Excluding Aircraft**

- Monthly data on new orders and shipments of nondefense capital goods excluding aircraft are high frequency indicators of business investment in equipment.
  - New orders fell 1.4% in January and are now slightly below shipments, which increased 0.1%. While this historically indicates some slowing in near term momentum for equipment spending, these are noisy series from month to month.
  - Both orders and shipments have been strongly increasing since mid-2016, albeit at a slower pace in the last month.
HOUSING SECTOR

Housing Starts

Housing starts still point to improving conditions

- Total housing starts rose a net 2.4% in January and February, after falling 7.1% in December.

- Single-family starts rose 6.5% in January and February, partly reversing the 11.7% decline in December. The level of single-family starts is near its highest since 2007.

- Multi-family starts declined 7.8% over January and February amid monthly volatility. The level of multi-family starts stayed below the 2015 and 2016 levels, but remains comparable to pre-recession levels.

- The strong labor market continues to provide scope for further improvement in the housing sector.

Single Family Housing Market

Home prices continue to display strong increases

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

- The inventory of single family homes was 1.36 million units in January, 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.
**Real government spending rose at the end of 2017**

- Real government consumption and gross investment rose moderately (2.9% annual rate) in 2017Q4 after being little changed in the previous two years.

- The 4-quarter change in real federal government spending was +1.0% in 2017Q4, the highest since 2015Q4.
  - The increase was concentrated in defense spending, which rose 2.3% over this period. Nondefense spending fell 0.8% over the same period, as it was weak throughout the year.

- The 4-quarter change in real state and local government spending was +0.5% in 2017Q4.
  - The modest upturn in growth in this sector resulted largely from improvement in infrastructure investment.

**State and local spending remains weak**

- Real state and local government consumption expenditures strengthened slightly in the fourth quarter.
  - Real consumption expenditure grew 0.7% in the four quarters ending in 2017Q4, up from 0.8% in Q3.
  - Annual growth in consumption expenditures had been persistently weakening since mid-2015.
  - State and local consumption, comprised mainly of wages and salaries, is about 80% of state and local spending.

- Real state and local investment spending continued to decline, although at a slower pace in 2017Q4.
  - Infrastructure spending fell 0.9% in the four quarters ending in 2017Q4.
  - Save for a seven-quarter period in 2014-16, infrastructure investment has been falling for almost a decade.
The trade deficit persists in its upward trend

- The trade deficit rose to $56.6 billion in January from a revised $53.9 billion deficit in December, with both exports and imports declining in real terms.
  - Real goods exports fell 3.3% over the month in January. This decline was mainly due to lower export volumes of capital goods (excluding autos), and to a lesser extent was also driven by lower volumes of industrial supplies and petroleum exports.
  - Real goods imports decreased 1.5% over the month, as import volumes of capital goods (excluding autos), consumer goods and industrial supplies moved down while oil import volumes went up.
- Net exports subtracted 1.1 percentage points off GDP in the 2017Q4 second estimate, unchanged from the advanced estimate.

Global surveys point to continued strong growth

- Global GDP growth remained solid in Q4, at a weighted average of 3.1% across the 30 largest global economies.
  - The Q4 outturn represents a step down from even stronger growth in Q2 and Q3, reflecting disappointing performance in large emerging markets such as Brazil and Russia.
- Survey data point to continued strong growth in the first quarter, with the global composite purchasing managers index averaging 54.7 in January and February.
  - The historical relationship between the composite PMI and growth points to a 2018Q1 outturn of 3.0% to 3.5%.
- Growth appears well balanced, with PMIs in both advanced and emerging market economies tracking at or near multi-year highs.
Labor Market

Payroll Employment and Aggregate Hours

- Payroll employment exceeded expectations
  - Nonfarm payroll employment increased by 313,000 in February, above the Bloomberg median forecast of 205,000.
    - The year-over-year growth rate in nonfarm payrolls was 1.6% in February, up slightly from 1.5% in January.
    - January nonfarm payrolls were revised upward from 200,000 to 239,000.
  - Average weekly hours increased to 34.5 hours in February, returning to December levels.
    - Aggregate weekly hours worked by all private employees increased by 0.29% in February.

Change in Unempl. Rate (Dec. 2007 to Dec. 2017)

- County unemployment rate recoveries
  - The national unemployment rate was 4.1% in December 2017. At the start of the Great Recession in December 2007, the unemployment rate was 5%.
  - While there is variation in the level of the unemployment rate across counties in the United States, most counties had a lower unemployment rate in December 2017 than in December 2007.
  - Several counties still had unemployment rates one percentage point or more higher in December 2017 than in December 2007.
    - Counties in Alaska, New Mexico, West Virginia, and Wyoming were among such counties.

Source: Bureau of Labor Statistics – Local Area Unemployment Statistics
**Labor Market**

**UV-Curve**

- **Unemployment declines with stable vacancies**
  - The relationship between the unemployment rate and the vacancy rate is captured over time by the UV-curve.
  - The unemployment rate and the vacancy rate are inversely related. A tight labor market is associated with high vacancies and low unemployment. A slack labor market is associated with low vacancies and high unemployment.
  - Since December 2015, the vacancy rate has been stable, averaging at 3.8%, while the unemployment rate has declined steadily from 5.0% to 4.1%.
    - The improvement in the unemployment rate without a significant increase in the vacancy rate implies a rise in the efficiency with which employers match workers with jobs.

**Growth of Average Hourly Earnings and ECI**

- **Earnings growth continues upward trend**
  - Average hourly earnings increased by 0.15% from $26.71 in January to $26.75 in February.
    - The 12-month percent change in average hourly earnings was 2.61%.
  - Average weekly earnings increased by 0.44% from $918.82 in January to $922.88 in February.
    - The 12-month percent change in average weekly earnings was 2.91%.

Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.
INFLATION

CPI Inflation: Core Goods and Core Services

Core CPI rises strongly

- Core CPI rose very strongly in January. It increased again in February, but more modestly.
  - Core CPI was up a very strong 0.35% in January (its largest monthly rise in more than a decade), and 0.2% in February.
  - The 12-month change in the core index was 1.8% in both months.

- The January surge in core CPI was driven by core goods prices, which had the largest monthly increase since 2009.
  - Core goods prices rose again in February for the third positive monthly increase in a row.
  - If this rise in core goods prices signals the reversal of a long-lasting downward trend, inflation may return quickly to mandate-consistent levels.

- Core services inflation remains relatively strong.

Mean Probabilities for Core PCE Inflation in 2018

Forecasters predict higher core inflation in 2018

- The US Survey of Professional Forecasters provides density (histogram) forecasts that show the probability that inflation will fall into 10 separate ranges.
  - The 2018Q1 survey was fielded from late January through early February, with results released on February 9.

- Compared to last quarter, survey respondents have increased the probability that core PCE inflation measured from 2017Q4 to 2018Q4 will be above 2.0 percent.
  - Forecasters reported a 48% chance that core PCE inflation will be above 2.0%, up from 41% in the previous survey.
  - The Q1 survey was fielded before the release of the January consumer spending report that showed a strong 0.3% rise in the core PCE deflator.
**U.S. Equity Market Index and Volatility**

- U.S. equity markets rose from their recent lows, but remain below their all-time highs.
  - The S&P 500 index rose 4.4% between February 5 and March 13 and 7.1% from its recent low on February 8, but remains 3.7% below its January 26, 2018 all-time high.
  - As of March 13, the index was up 3.4% year to date.

- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), dropped sharply from its recent high.
  - The VIX Index closed at 16.4 on March 13, well below its 37.3 multi-year high on February 5, but above its 2017 year-end value of 11.0.

**U.S. Bank Equities Performance**

- Bank stocks perform in line with broader market
  - As measured by the KBW Nasdaq bank index, bank equities rose 5.0% between February 5 and March 13 and 7.6% from their recent low on February 8.
    - As of March 13, the index was up 7.0% year to date.

  - The XLF financial sector ETF also rose 5.0% between February 5 and March 13, and 7.8% from its recent low on February 8.
    - As of March 13, the index was up 5.0% year to date.
**USD Exchange Rates**

- The exchange value of the dollar against a basket of global currencies decreased 0.1% between February 5 and March 13.
  - Over this same period the dollar depreciated by 0.2% against the euro, 2.3% against the Japanese yen, and 0.9% 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 February 5 and March 13.
- The market-implied path remains somewhat below the median path from the FOMC’s December 2017 Summary of Economic Projections and the January 2018 NY Fed Survey of Primary Dealers.
**10-Year Treasury and Term Premium**

- Longer-term Treasury yields rose since early February.
  - The 10-year yield increased about 10 basis points between February 5 and March 13 and remains close to its highest level in nearly four years.

  - Estimates from the Adrian-Crump-Moench term structure model attribute about 4 basis points of the increase in the 10-year yield since February 5 to a less negative term premium and about 6 basis points to a higher path for the short-term interest rate.
  - The estimated 10-year term premium remains negative.

**5-10 Year Forward Decomposition**

- Break-even inflation declines slightly
  - Market-implied TIPS-based measures of long-term inflation expectations (“breakevens”) decreased slightly in recent weeks.
    - The five-to-ten year breakeven inflation rate was 2.10% on March 13, down 4 basis points from February 5 but up 17 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 has increased 15 basis points year to date.
SPECIAL TOPIC: SURVEY OF CONSUMER EXPECTATIONS

**Understanding the Tax Reform**

How would you rate your understanding of the main features of the recent federal tax reform?

- **Household Income < $75k**
- **Household Income => $75k**

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Source: Survey of Consumer Expectations
Federal Reserve Bank of New York

**Understanding the tax reform**

- New York Fed's Center for Microeconomic Data fielded a new module in the February 2018 SCE to understand how the federal tax reform has changed household expectations.

- The results of the survey show that there is broad basic understanding of the reform.
  - There is a better understanding of the reform among high-income respondents.
  - There is no difference in the distribution of responses across respondents in counties that voted for Donald Trump and those in counties that voted for Hillary Clinton.

**Change in Financial Situation due to the Tax Reform**

Expected change in the own/others' financial situation 12 months from now

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Source: Survey of Consumer Expectations
Federal Reserve Bank of New York

**Change in financial situation due to the tax reform**

- Over 80% of the household heads in the survey think their financial situation will be the same or better 12 months from now due to the tax reform.
  - Those with higher income (over $75,000) expect greater improvements.

- The distribution of expectations about the change in others’ financial situation 12 months from now is more spread out.

- Respondents tend to think the financial situation of the general U.S. population will be more beneficially affected from the tax reform than their own.
  - This might be a sign of an increase in perceived inequality.
SPECIAL TOPIC: SURVEY OF CONSUMER EXPECTATIONS

The Response in Expectations

Over the next 12 months, how do you expect the federal tax reform that was signed into law to change your level of...

<table>
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<th></th>
<th>Reduce</th>
<th>No Change</th>
<th>Increase</th>
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<tbody>
<tr>
<td>After-Tax Earnings</td>
<td>15%</td>
<td>40.2%</td>
<td>44.8%</td>
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<tr>
<td>Hours of Work</td>
<td>3.4%</td>
<td>89.6%</td>
<td>70%</td>
</tr>
<tr>
<td>After-Tax Household</td>
<td>16.3%</td>
<td>40.6%</td>
<td>43.2%</td>
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<tr>
<td>Income</td>
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<tr>
<td>Spending</td>
<td>14.8%</td>
<td>73.4%</td>
<td>11.1%</td>
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<tr>
<td>Saving</td>
<td>10.7%</td>
<td>59.1%</td>
<td>30.1%</td>
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</table>

Source: Survey of Consumer Expectations
Federal Reserve Bank of New York

The response in expectations

- Household heads are expecting an increase in their after-tax household income and earnings over the next 12 months as a result of the tax reform.
  - There is no notable change in the expectations for the level of hours of work over the next 12 months.

- 53.1% of the respondents who expect an increase in their after-tax household income expect to increase their savings and 21.3% of the same group expect to increase their spending over the next 12 months.

- 19% of the respondents report that they have already started experiencing an increase in their after-tax earnings and household income.