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 February 5, 2016.
- Real consumption expenditures grew more slowly in December than in November.
  - The fundamentals for consumer spending remain fairly solid, although growth in spending slowed over the last two quarters of 2015.

- Indicators from the manufacturing sector and for business equipment spending were soft.

- The general tone of housing data in December suggests further gradual improvement in housing market conditions.

- Payroll growth was still fairly solid in January. The unemployment rate declined, and the employment-population ratio and labor force participation rose slightly.
  - There were additional signs of firmer wage growth.

- Inflation remains well below the FOMC’s longer-term objective.
  - Underlying measures of inflation were mixed. Longer-term expectations from household surveys remained low and fell in some cases.

- Financial markets and commodity prices remained volatile and financial conditions tightened. The Bank of Japan set a key short-term interest rate below zero.

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**Output remains below its potential level**

- The advance estimate of real GDP growth in 2015Q4 was 0.7% (annual rate), well below even the subdued average rate of growth in this expansion.
  - The four-quarter change in real GDP was 1.8%, somewhat below the pace of the past couple of years.

- The gap between real GDP and the Congressional Budget Office’s (CBO) measure of real potential GDP was 2.2% in 2015Q4.
  - In its latest economic update, the CBO revised down its current estimates of potential GDP and its projections of potential over the next decade.
  - The CBO also reduced its estimates of the natural rate of unemployment, with the 2016Q1 estimate at 4.85%.
**OVERVIEW**

**Labor Market Indicators**

- The unemployment rate fell from 5.0% in December to 4.9% in January, the lowest level since February 2008.
- The labor force participation rate rose slightly from 62.6% in December to 62.7% in January.
- The employment-population ratio increased from 59.6% to 59.7%.
  - For prime-age workers (25-54 years old), the employment-population ratio increased from 77.4% to 77.7%.

**PCE Deflator**

- The total PCE deflator declined 0.1% in December. The core PCE deflator (which excludes food and energy prices) was flat in December, following a 0.2% increase in November.
  - Energy prices fell 2.6% in December, the fourth decline in the last five months.
- On a 12-month change basis, the total PCE deflator rose by 0.6% which was the highest reading in 2015. The 12-month change in the core PCE deflator was +1.4%, the same as in November and slightly above where it had been for most of 2015.
  - Both measures remained significantly below the FOMC’s longer-run objective of 2%, held down in part by the effects of declines in energy prices and in prices of non-energy imports.

Source: Bureau of Labor Statistics, via Haver Analytics

Note: Shading shows NBER recessions.
**ECONOMIC ACTIVITY**

**GDP Growth**

- According to the advance release, real GDP expanded at a 0.7% annual rate in 2015Q4.
  - In the third quarter, real GDP increased 2.0%.
  - Output grew 2.0% in 2015, the same pace recorded in 2014.

- Consumer spending and residential investment together contributed around 1.75 percentage points to growth.
  - There was, however, a combined drag of 0.9 percentage point on growth from inventory investment and net exports.

- The GDP data suggests less momentum for the economy heading into 2016Q1.

**Manufacturing and ISM Manufacturing Index**

- Total industrial production fell 0.4% in December.
  - Industrial production fell for the fourth consecutive month, reflecting ongoing declines in oil and gas drilling and the impact of mild weather on utilities production.

- Manufacturing production decreased 0.1% in December and rose 0.5% (annual rate) for 2015Q4, with the latter below the pace of the previous two quarters.

- The ISM survey suggests further weakness in January.
  - While the January headline index rose slightly to 48.2, it was the fourth consecutive reading below 50 which indicates contraction in the manufacturing sector.
  - The January production and new orders sub-indices increased, which is an encouraging sign going forward.
**HOUSEHOLDS**

**Disposable Income, Consumption, and Wealth**

- Real consumption expenditures grew 0.1% in December, following a robust increase of 0.4% in November.
  - Goods expenditures declined, while services consumption grew at a healthy pace after sluggish growth in the previous two months.
  - On a 4-quarter change basis, real spending grew 2.6%, which is the slowest pace since 2014Q2.

- Real disposable income rose 0.4% in December, above the 0.2% gains seen in November and October.
  - On a 4-quarter change basis, real disposable income grew 3.4%, continuing its recent robust pace.

- The personal saving rate rose to 5.5% in December.

**Consumer confidence remains stable**

- Measures of consumer confidence from the Conference Board and Reuters/University of Michigan remain near cyclical highs.
  - The Conference Board’s Consumer Confidence Index has remained stable on net over the last three months.
  - The Present Situation component, which mainly reflects perceptions of job availability, is in line with levels observed during 2015.

- The Reuters/University of Michigan’s Index of Consumer Sentiment has partly recovered over the last three months.
  - While the index is still below readings in the first half of 2015, it remains elevated compared to 2014 levels.
### Equipment Investment and Capacity Utilization

- **Quarter % Change**
- **% of Capacity**

- **Manufacturing Capacity Utilization Rate (Right Axis)**
- **Real Business Investment in New Equipment (Left Axis)**

- **Sources:** Bureau of Economic Analysis, Federal Reserve Board, via Haver Analytics
- **Note:** Shading shows NBER recessions.

### Equipment spending declined in Q4

- Real business investment in equipment fell 2.5% (annual rate) in 2015Q4, following robust growth in Q3. The four-quarter change in Q4 was +2.4%.
  - Spending fell in Q4 for transportation and other equipment, while it rose for information and industrial equipment.

- Historically, the rate of growth of business spending on equipment has been positively correlated with the manufacturing capacity utilization rate.

- The manufacturing capacity utilization rate was 76.0% in December, down from 76.1% in November.
  - The utilization rate changed little over 2015 and remains below pre-recession levels.

### Investment in Nonresidential Structures

- **% Change – Annual Rate**

- **Structures: Petroleum and Natural Gas**

- **Structures: Total**

- **Sources:** Bureau of Economic Analysis, via Haver Analytics
- **Note:** Shading shows NBER recessions.

### Nonresidential structures spending falls in 2015

- Real business investment in new nonresidential structures declined 3.6% (Q4/Q4) in 2015, its deepest four-quarter decline since 2011.
  - The decline in the overall category was led by a 52% (Q4/Q4) decline in the real oil and natural gas category.

- Excluding the oil and natural gas category, real investment in nonresidential structures rose 14.7% (Q4/Q4) in 2015.
  - There was notable strength in investment in categories such as office buildings, health care facilities, manufacturing, and lodging.


**Housing Starts**

- Total housing starts have flattened in recent months, with a 3-month moving average of about 1.13 million SAAR units (seasonally-adjusted annual rate) in December.
  - Multifamily starts have fallen back some from a surge in mid-2015, but remain at or slightly above pre-recession levels.
  - The gradual recovery in single family starts continued through 2015, reflecting slowly improving fundamentals.

- Similar patterns are evident for multifamily and single family building permits.

- Despite gradual improvement and continued low mortgage interest rates, housing starts per capita remain about 45% below its longer-term average from 1968-2003.

**Aggregate Homeownership Rate**

- The aggregate homeownership rate remains near its recent lows.
  - The rate began a sharp rise in 1995 and peaked at 69% in 2004.
  - Starting in 2006, homeownership commenced a decline that has now reduced the rate by over 5 percentage points.

- The homeownership rate now stands at 63.7%.
  - Homeownership is now at roughly its pre-boom level.

- Further declines in homeownership would reduce the rate to levels not seen since the 1960s.
GOVERNMENT SECTOR

Real Government Consumption and Gross Investment

- Federal
- State and Local

Quarterly % Change

Source: Bureau of Economic Analysis, via Haver Analytics

Note: Shading shows NBER recessions.

Government sector is expanding modestly
- Following a four year decline, total real government consumption and gross investment grew modestly in 2015.
  - Real government consumption and gross investment grew 1.25% over the four quarters ending in 2015Q4.

- Federal spending, flat for much of the year, grew a robust 2.7% (annual rate) in 2015Q4.
  - This jump arose largely from defense spending; nondefense spending showed slow and steady growth.

- State and local government spending fell by 0.6% (annual rate) in 2015Q4.
  - The state and local sector represents about 61% of total government consumption and gross investment.

Federal Deficit

% of GDP

Source: Congressional Budget Office

CBO projects a rise in the federal deficit for FY2016
- As of January, CBO projects a U.S. budget deficit of $544 billion for FY2016, or 2.9 percent of GDP.
  - This is $105 billion above the $439 billion (2.5% of GDP) FY2015 budget deficit and constitutes the first deficit increase, relative to GDP, since 2009.

- CBO has increased its FY2016 deficit projection by $130 billion since August 2015.
  - Attributable to legislation enacted since August, the rise is largely due to the retroactive extension of a number of corporate and individual income tax provisions.

- CBO deficit projections are flat for FY2016-18, but then rise from FY2019-2026, reaching 4.9% of GDP in FY2026.
INTERNATIONAL DEVELOPMENTS

**Net Exports: Contribution to GDP Growth**

- Net exports subtracted 0.5 percentage point from GDP growth in 2015Q4 (SAAR).
  - This follows a -0.3 percentage point growth contribution in Q3.

- Real exports slumped in Q4, falling 2.5% (SAAR).
  - The four-quarter change in real exports was -0.8%.
  - The year over year change in real goods exports in 2015 was negative, the first decline since 2009.

- Real imports grew at a sluggish pace in Q4, rising only 1.1% (SAAR).
  - The four-quarter change in real imports was 3.4%.

**Goods Exports by Destination**

- The largest drag to export growth in 2015 was to Canada.
  - Exports of goods to Canada, which account for 18% of US goods exports, fell 10.3% from 2014 to 2015.

- Exports to China and Japan fell by more than 6% from 2014 to 2015.
  - Although exports to China have been on a downward trend since August 2014, their share is currently 8% and still represents a doubling over the last 10 years.
  - By contrast, the share of exports to Japan is currently 4% and has fallen over the same period.
  - The current export share to the European Union, Mexico, and Asia NIE (newly industrialized economies) is 18%, 16%, and 9%, respectively.
**LABOR MARKET**

### Growth of Payroll Employment and Aggregate Hours

- **Nonfarm payroll employment increased by 151,000 in January.**
  - Payroll employment increased on average by 231,000 per month in the last three months.

- **Aggregate hours worked increased by 0.4% in January.**
  - The 12-month change in aggregate hours was 2.1%.

- The one month diffusion index (reflecting the balance between industries increasing and decreasing employment) was 59.5 in January.

### 1-Month Diffusion Index: Manufacturing

- **Services employment growth slower than in 2015**
  - Employment in private services-providing industries increased 118,000 in January, notably lower than the average monthly employment gains in 2015 (+204,000).
    - Leisure and hospitality, trade, transportation, and utilities and financial services accounted for the majority of the increase in services payroll employment.

  - Employment in goods-producing industries rose by 40,000, led by a 29,000 increase in the manufacturing sector.
    - The increase in manufacturing payrolls was the largest since November 2014.

  - The one-month diffusion index was 63.9 in January, up from 55.1 in December.
Further improvement in prime-age male employment

- Prime-age male employment-to-population ratio increased from 84.4% in December to 85.0% in January.
  - Following the job losses during the Great Recession, this ratio bottomed out at 80.4% in December 2009 and has risen by 4.6 percentage points since then.

- Prime-age female employment-to-population ratio increased from 70.6% in December to 70.7% in January.
  - This ratio bottomed out at 68.7% in September 2011 and has only increased by 2 percentage points since then.

Some pickup in labor compensation growth

- Average hourly earnings increased by 0.5% in January.

- The 12-month change in average hourly earnings was 2.5%, notably above the narrow range around 2% that prevailed from the beginning of the recovery until 2015Q4.

- The wages and salaries component of the ECI (Employment Cost Index) rose 0.6% in 2015Q4 while the 12-month change was 2.1%, both unchanged from last quarter.
**Core PCE Inflation Components**

- Goods prices in December fell for the fifth consecutive month, with nondurable goods prices down 0.7% and durable goods prices down 0.1%.
  - The rate of decline of goods prices over the past year is 2.16%, which has moderated relative to the sharp declines observed in the first half of 2015.

- Services prices increased a modest 0.1% in December.
  - On a 12-month change basis, services prices increased 1.9%.

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**Dollar Exchange Rate and Nonoil Import Prices**

- Import prices (excluding oil) were down almost 4% in December.
  - A strong dollar puts downward pressure on import prices.

- Auto and capital goods prices were down roughly 2% over the year, while consumer goods were down 1%.
  - Prices for these types of goods were mostly flat in 2014.

- Industrial supplies are down 12% over the year.
  - Prices of these goods fell only 1% in 2014.
FINANCIAL MARKETS

US Equity Market Returns and Volatility

US equity markets continued their decline

- Broad US equity market indices stand about 10% below their peaks in 2015Q4 (“correction” territory).
  - The S&P 500 index declined 9% between December 31 and February 9.
- Volatility remains elevated.
  - The VIX option-implied volatility index remains above its historical median of around 18, with an average of 23.54 over the year so far.
  - This represents a year-over-year increase of about 43%.

International Equity Indices

Lower international equity indices

- Global equity indices have also continued to decline.
  - The DAX index has dropped about 17% since the beginning of the year.
  - Over the same period, the Shanghai A shares index has declined by almost 22% and the Japanese Nikkei stock index by about 15%.
**Expected Federal Funds Rate**

- The expected path for the Federal Funds rate implied by rates on overnight indexed swaps (OIS) has continued to flatten during January.

- The current market-implied path moved further below the median longer run path from the FOMC’s Summary of Economic Projections (SEP) and the NY Fed Primary Dealer Survey.

**10-Year Treasury and Term Premium**

- Mirroring the shallower path for OIS rates, the yield on 10-year Treasury securities declined from 2.12% on January 12 to 1.75% on February 8.

- Estimates of the Adrian-Crump-Moench term-structure model attribute the yield decline since the start of the year to a combination of lower expected short term interest rates and lower term premium.
  - The term premium on the 10-year Treasury has dipped into negative territory.
**FINANCIAL MARKETS**

### 5-10 Year Forward Decomposition

- **Breakeven**
- **Abrahams-Adrian-Crum-Moench Expected Inflation**
- **Abrahams-Adrian-Crum-Moench Inflation Risk Premium**

Source: NY Fed Calculations, Federal Reserve Board.

Note: 5-day moving average, Zero-coupon yield.

**Inflation expectations remain well anchored**

- Market-implied TIPS-based measures of long-term inflation expectations (“breakevens”) declined significantly since the start of the year.
  - The breakeven inflation rate declined from 1.58% to 1.51% between January 12 and February 5.
  - The breakeven inflation rate continues to be at multi-year lows.

- Variation in the breakeven inflation rate appears largely driven by changes in the inflation risk premium, with implied expected inflation (as measured by the Abrahams-Adrian-Crum-Moench model) remaining stable.
  - The inflation risk premium also remains at multi-year lows of around -0.5%.

### On-the-Run CDS Index Basis

- **CDXIG (Right Axis)**
- **CDXHY (Left Axis)**

Source: Markit

**Liquidity in the CDS market has deteriorated**

- The spread (or basis) between credit default swap (CDS) index contracts on North American corporates and the replicating basket of single-name bonds has been increasing since late-2015.
  - The basis has increased for both investment-grade as well as high-yield indices, and is above historical averages.
SPECIAL TOPIC: NEW YORK FED SUPPLEMENTAL SURVEY ON WAGES

**Wage/Salary Expectations For Existing Workers**

- **Jan 2016**
- **April 2015**
- **April 2014**
- **April 2013**

![Bar chart showing wage/salary expectations for existing workers across different months.](chart1)

Source: Federal Reserve Bank of New York Supplemental Survey

**Expected wage increases similar to last year**

- Businesses in the Second District foresee continued modest wage gains for existing workers.
  - Expectations reflect median responses to supplementary questions from the New York Fed’s January 2016 and earlier business surveys.

- Manufacturers plan to raise wages of existing workers by 2.5%.
  - This increase is down from a median of 3.0% in last April’s parallel survey, but higher than in earlier surveys.

- Service sector firms plan to raise wages of existing workers by 3.0%.
  - This increase is the same as in last April’s survey, but a bit higher than in earlier surveys.

**Expected Pay Change: Existing versus Starting Workers**

- **Service Sector Firms**
  - Up more than 4%
  - Up 2-4%
  - Up 2% or less
  - No change
  - Decrease

- **Manufacturing Firms**
  - Up more than 4%
  - Up 2-4%
  - Up 2% or less
  - No change
  - Decrease

![Bar chart showing expected pay change for existing versus starting workers.](chart2)

Source: Federal Reserve Bank of New York Supplemental Survey

**Little change expected in starting salaries**

- Roughly half of businesses plan little or no increase in starting salaries for new workers over the next 12 months.

- While about half of businesses plan to increase starting salaries for new workers, more than 75% plan at least some pay increase for existing workers.

- However, more than 20% of firms plan to raise starting salaries of new workers by 4% or more.