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 October 2, 2015.
OVERVIEW

- Consumer spending is maintaining steady growth despite worries about the global economic outlook.
  - Real consumption expenditures grew at a healthy rate in August following the solid pace in July.
  - After a delay, households appear to be spending out of the boost to real disposable income from lower energy prices.

- After showing tentative signs of a moderate pickup in the previous two months, indicators of business equipment spending showed a slight pullback in August.

- Overall, housing market conditions indicate a further gradual improvement.

- Payroll growth in September slowed relative to recent months’ pace. The unemployment rate was unchanged, while the labor force participation rate and the employment-population ratio declined.
  - Wage growth generally remained subdued relative to pre-recession levels.

- Inflation remained well below the FOMC’s longer-term objective.

- Concerns about an economic slowdown in China and weaker global growth have not abated.
  - Financial market volatility continued and commodity prices remained under pressure.

Output remains below its potential level

- Real GDP growth over most of this expansion has been subdued compared to previous expansions.
  - 2015Q2 was an exception: according to the third estimate, real GDP rose 3.9% (annual rate).

- The gap between real GDP and the Congressional Budget Office’s (CBO) measure of real potential GDP was about 3% in 2015Q2.
  - In August, CBO revised up its estimate of the level of potential GDP and lowered its estimate of NAIRU. Potential growth is projected to be slightly above 2% over 2015-20.

- Continued low inflation appears consistent with the economy operating below potential.
**Labor Market Indicators**

- The unemployment rate was unchanged at 5.1% in September.
- The labor force participation rate declined in September from 62.6% to 62.4%, which is lower than the tight range of rates around 62.8% prevailing since October 2013.
  - The participation rate of prime-age (age 25-54) workers declined from 80.7% to 80.6%.
- The employment-population ratio decreased from 59.4% to 59.2%.
  - For prime-age workers, the employment-population ratio remained unchanged at 77.2%.

**Inflation remains low**

- The total PCE deflator was unchanged in August, while the core PCE deflator (which excludes food and energy prices) edged up 0.1%.
  - There was a large decline in energy prices (2.3%) in August.
- On a 12-month change basis, both measures have been fairly stable since the beginning of the year at levels significantly below the FOMC’s long-run objective of 2%.
- Core inflation may slow over the near term.
  - Health care price inflation is moving lower again and core goods prices may be under more intense downward pressure than had occurred in Q2.
**ECONOMIC ACTIVITY**

### GDP Growth

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Source: Bureau of Economic Analysis, via Haver Analytics

### Output growth revised up further in Q2

- According to the third estimate, GDP rose at a 3.9% annual rate during Q2, a slight upward revision from the second estimate of a 3.7% increase.
  - For the first half of 2015, output grew at about a 2.3% rate, a slightly faster pace than in the first half of 2014.

- The upward revision reflected stronger consumer spending, higher nonresidential fixed investment and higher residential fixed investment, which were partly offset by weaker inventory investment.

- Real gross domestic income, which provides an alternative measure of overall economic activity, was reported to have increased at only a 0.7% annual rate.

### Manufacturing and ISM Manufacturing Index

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

Note: Shading shows NBER recessions.

### Manufacturing continues to slow down

- Total industrial production declined by 0.4% in August.
  - Industrial production contracted by 2.5% (annual rate) in 2015Q2, the largest drop since the last recession.

- Manufacturing production declined by 0.5% in August.
  - Most of the recent decline in manufacturing activity was driven by a significant decline in the production of motor vehicles and parts.

- The ISM survey has generally declined since late 2014, with the September reading at 50.2.
  - The strong dollar has played a key role in the slowdown in manufacturing activity.
HOUSEHOLDS

Disposabe Income, Consumption, and Wealth

Consumers continue to spend at a brisk pace
- Real consumption expenditures grew a healthy 0.4% in August after growing 0.3% in July.
  - With the readings from the last two months, consumer spending is likely to register strong growth in Q3.
- Households’ fundamentals remained strong in August.
  - Real disposable income increased 0.3% in August, and July-August growth is above the average in Q2.
  - Real net worth was solid in Q2.
- The personal saving rate fell slightly to 4.6%, which is in line with the average rate in the second quarter.

All spending components advanced in August
- Goods spending was strong in August.
  - Durable goods spending grew 1.2% in August; this follows an increase of 1.3% in July.
    - Spending on motor vehicles and parts accounts for about half of the increase in durable goods spending in the past two months.
  - Nondurable goods spending grew 0.6%, faster than the pace of 0.4% in July.
- Spending on services was also solid.
  - Expenditure on services grew 0.3% in August.
  - Services have been growing at a steady pace in the last several months.
**BUSINESS SECTOR**

**Equipment Investment and Capacity Utilization**

- Real business investment in equipment rose slightly at a 0.3% annual rate in 2015Q2.
  - Over the past four quarters, business equipment spending has risen 3.3%, which is weak for an expansion period.

- 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 75.8% in August, down from 76.2% in 2015Q2.
  - The utilization rate has changed little over the past year and remains below pre-recession levels.

**Nondefense Capital Goods ex. Aircraft**

- Monthly data on new orders and shipments of nondefense capital goods are high frequency indicators of business investment in new equipment.

- Both new orders and shipments fell slightly in August after rising in the previous two months. The levels of both remain below their respective mid-2014 levels.

- In August, new orders were slightly below shipments; orders were significantly below shipments in 2015H1.
  - Based on historical patterns, orders slightly below shipments is generally consistent with only modest momentum in equipment spending over the near term.
**Housing Sector**

**Housing Starts**

- Total housing starts have continued to trend higher, with a three-month moving average just shy of 1.2 million units (seasonally-adjusted annual rate) in August. This is the highest reading since November 2007.
  - The strongest recovery has been in multifamily starts. A three-month moving average of starts in this sector reached 440,000 in August, a level not seen since the late 1980s.
  - The recovery in the single family sector has been more muted, likely reflecting the continued tightness of mortgage underwriting standards.

- Despite these gains and continued low mortgage interest rates, housing starts per capita remain well below the longer-term average.

**New and Existing Home Sales**

- Single family existing home sales fell 5.3% in August, although they have generally increased during the year.
  - While they have surpassed pre-recession levels, single family existing home sales remain markedly below their levels in the mid-2000s.

- New single family home sales increased 5.7% in August to 552,000 units, the highest level since February 2008.
  - After remaining essentially flat for two years, new single family home sales have shown a perceptible improvement in 2015.

- Overall, new and existing home sales trends point to continued gradual recovery in the housing market.
**GOVERNMENT SECTOR**

**Real Government Consumption and Gross Investment**

- Total real government consumption and gross investment is now growing modestly on a year-over-year basis after contracting for a 3½ year period.
  - Real consumption and gross investment at the federal level declined 0.3% over the four quarters ending in 2015Q2.
    - Nondefense spending is rising modestly, while defense spending continues to decline but at a slower rate.
  - Real consumption and gross investment at the state and local level grew 1.4% over the four quarters ending in 2015Q2.
    - The state and local sector represents over 60% of total government consumption and gross investment.

**Federal Surplus (CBO Current Law Baseline – August 2015)**

- The federal deficit reached 9.8% of GDP by FY2009, the largest since World War II.
  - The deficit reflected impacts of the financial crisis and ensuing Great Recession, as well as fiscal policy actions to stimulate the economy.

- For FY2015, which ended on September 30, the deficit is projected to be 2.4% of GDP, close to its long run average.
  - The projection reflects reduction of outlays combined with rapid increase of tax revenues.

- According to the most recent CBO “current law” baseline, the deficit will gradually rise to near 4% of GDP by FY2025.
  - The pace of growth outlays is projected to increase, mainly due to demographic trends.
INTERNATIONAL DEVELOPMENTS

Net Exports: Contribution to GDP Growth

- After data revisions, the net exports growth contribution to GDP in Q2 was lowered slightly to 0.18 percentage point.
- Real export growth remained weak in August, while real import growth strengthened.
  - Real exports of goods fell 1.5% in August and were down 2.5% over the year.
  - Real imports of nonoil goods jumped 3.5% in August after 4 months of weak growth.

Source: Bureau of Economic Analysis, via Haver Analytics

Industrial Production, China

Production in China growing much more slowly

- There has been a steady and substantial decrease in the growth rate of industrial production.
  - The August reading was up only 6 percent over the year.
- Production growth eased from 10 percent in 2012 and 2013 to 8 percent in 2014.
  - Production grew at a 15 percent annual rate from 2000 to 2010.
- The slowdown in China is contributing to the recent decline in commodity prices.

Source: China National Bureau of Statistics, via Haver Analytics
Employment and hours growth have slowed

- Nonfarm payroll employment increased by 142,000 in September.
  - Payroll employment increased on average by 167,000 per month in the third quarter, slower than the average monthly gain of 231,000 in the second quarter.

- With the slowdown in payroll employment growth and a decline in average weekly hours from 34.6 to 34.5 hours, aggregate hours worked declined by 0.2% in September.
  - The 12-month change in aggregate hours was 2.3%.

Employment growth less widespread across sectors

- The one month diffusion index (reflecting the balance between industries increasing and decreasing employment) was 52.9 in September, below its 12-month average of 61.2.

- Although above 50, this measure has declined through 2015 which indicates an increasing share of industries with employment declines.
**Prime-age Employment-to-Population Ratio**

- The prime-age (25-54 year old) employment-to-population ratio was 77.2% in September.
- This ratio improved notably from 74.9% in October 2011 to 77.3% in February 2015, with the increase lead by prime-age men.
  - Since February there has been no improvement in prime-age employment.
  - This ratio still lies considerably below its pre-recession peak of 80.3%.

**Growth of Average Hourly Earnings: All Employees**

- Average hourly earnings was essentially unchanged in September and increased 2.2% over the past 12 months.
  - The 12-month change is within the narrow range that has prevailed since the end of the recession.
- With the decline in average weekly hours, average weekly earnings in August fell by 0.3% from $868.46 to $865.61.
- This year the Labor Day holiday occurred during the reference week, which may have affected the hours and earnings measures.
Core inflation was subdued in August

- Core CPI rose 0.1% in August, the same as in July; its 12-month change remained at 1.8%.
- Core goods prices fell 0.1% in August, while core services inflation slowed slightly to 0.1% from its recent pace.
  - The decline in core goods prices was mainly driven by a fall in the prices of new and used vehicles.
  - On a 12-month change basis, core services inflation has been steady at around 2.5% for the last three years. During the same period, core goods prices have generally been declining.
- On the whole, inflation in core goods and core services remains somewhat below their average for the last 20 years.

The strong dollar is pushing import prices down

- Nonoil import prices were down 3 percent over year-ago levels in August.
  - The trade-weighted dollar is up roughly 15 percent.
- Industrial supplies, such as metals, chemicals, and lumber, are registering the biggest price declines.
  - The index of these commodity-type goods were down 10 percent.
- The price indices for imported autos and consumer goods were down by a far more modest 1 percent.
**FINANCIAL MARKETS**

**US Equity Market Returns and Volatility**

- **Volatility of volatility for US stocks remains high**
  - Near-term stock market volatility fluctuated around somewhat elevated levels.
    - At a level of 20.9 on October 2, the VIX (a measure of expected volatility of the S&P 500 over the next 30 days) is above its long-term median. However, it has declined from its last peak of 40.7 on August 24.
    - The VIX displayed considerable variability, declining from 24.9 on September 8 to 20.1 on September 21. It then increased to 27.6 on September 28 to end at 20.9 on October 2.
  - Stock market returns were flat.
    - Returns on the S&P 500 from September 8 to October 2 were essentially zero on a combination of mixed domestic and international news.

**International Equity Indices**

- **International equity markets decline**
  - Chinese equities declined moderately and stabilized.
    - From September 8 to September 30 (the last trading day before October 2), the Shanghai A Share Index fell 4% amid concerns of slower global growth and depreciation of emerging market currencies.
    - Despite the slight negative returns, the Chinese equity market showed less volatility and better performance than in August.
  - Other international equities broadly declined.
    - The DAX Index fell almost 7% between September 8 and October 2 due to a weak international outlook and lower expected European inflation and growth.
    - Japanese stocks also declined on weak international and domestic news.
**FINANCIAL MARKETS**

**10-Year Treasury and Term Premium**

- The 10-year Treasury yield was 2.07% on October 2, 23 basis points lower than its yield on September 8.

- The movements in the 10-year Treasury yield were accompanied by almost identical movements in the term premium (as implied by the Adrian-Crump-Moench model), which stood at 10 basis points on October 2.

**5-10 Year Forward Decomposition**

- Market-implied TIPS-based measures of long-term inflation expectations (“breakeven”) continued its multi-month downward trend.
  - The breakeven inflation rate declined from 1.77% on September 4 to 1.70% on October 2.
  - The breakeven inflation rate remains at the low end of the range observed in recent years.

- Variation in the breakeven inflation rate appears largely driven by changes in the inflation risk premium, with implied expected inflation (as measured by the Adrian-Crump-Moench model) remaining stable.
  - The inflation risk premium on October 2 reached its lowest value since 2007 at -0.42%.
**FINANCIAL MARKETS**

### Expected Federal Funds Rate

- **Lower implied Federal Funds rate path**
  - The expected path for the Federal Funds rate implied by rates on overnight indexed swaps has declined and flattened since early September.
  - Market expectations of the lift-off date moved further into the future amid weak international growth, soft domestic inflation and the FOMC’s September decision to maintain the Federal Funds rate at its effective zero lower bound.
  - The market-implied path remains below the paths suggested by the median forecast in the FOMC’s Summary of Economic Projections and the NY Fed Primary Dealer Survey.

### Dollar Exchange Rates

- **Dollar exchange rates were volatile**
  - The dollar depreciated in early September and appreciated by the end of the month against major currencies.
  - After a large depreciation in August, the USD-RMB exchange rate exhibited notable swings on changing views of fundamentals throughout September. The dollar depreciated in early September and appreciated by the end of the month.
  - Despite the intra-month volatility, the dollar ended almost unchanged vis-à-vis the renminbi from September 8 to October 2.
  - Similarly volatile patterns appeared in the USD-EUR and USD-JPY exchange rates.
SPECIAL TOPIC - SURVEY OF CONSUMER EXPECTATIONS

Inflation Expectations

- Median three-year ahead expected inflation rate
- Median one-year ahead expected inflation rate

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

Inflation expectations have remained stable

- The Federal Reserve Bank of New York Survey of Consumer Expectations provides monthly updates on household expectations.
  - The survey is a nationally representative, rotating panel of about 1,300 household heads and covers a broad range of topics.
- Inflation expectations at both the one-year and three-year ahead horizons remain at or near their lows since the data series began in June 2013.

One-Year Ahead Household Spending Growth Expectations

- 75th Percentile Point Prediction
- Median Point Prediction
- 25th Percentile Point Prediction

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

Declining household spending growth expectations

- Spending growth expectations have been gradually declining since the end of 2014.
- Median expected household spending growth over the next 12 months decreased from 4.8% in December 2014 to 3.2% in September 2015.
- Dispersion (among survey takers) of spending growth expectations has also declined from about 8.4 percentage points in December 2014 to 7.3 percentage points in September 2015.