○ Real consumption expenditures are showing signs of a pickup from the weakness during the first quarter.
  – Consumer spending data in April and May support the view that the growth slowdown during the winter was largely transitory.
  – The personal saving rate has retraced a small part of its increase during the first quarter.

○ Business equipment spending continued to be sluggish compared to its pace in the second and third quarters of 2014.

○ There recently has been moderate improvement in housing market conditions.

○ June payroll growth was solid, and the unemployment rate fell. However, there were declines in the labor force participation rate and the employment-population ratio.
  – Although some measures have picked up modestly, wage growth remains subdued relative to pre-recession levels.

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

○ Financial market participants have reacted to the Greek debt situation and the sharp fall in Chinese equity prices by pulling back on risk positions amid somewhat greater volatility.

**Output is moderately below its potential level**

○ GDP growth in this expansion has been subdued compared to previous expansions. Real GDP fell 0.2% (annual rate) in 2015Q1, in part because of transitory factors.

  ○ The gap between real GDP and the Congressional Budget Office’s measure of potential GDP was slightly less than 2.5% in 2015Q1.
    - Resource slack by this measure seems larger than that implied by most estimates of the unemployment gap.

○ Continued subdued inflation appears historically consistent with the economy operating below potential.
Some moderation in labor market improvement

- The average increase in total nonfarm payroll employment in Q2 was 221,000 per month, above that of 195,000 per month in 2015Q1.
  - Downward data revisions in April and May now indicate less of a pickup from Q1.

- The unemployment rate was 5.3% in June, the lowest level since April 2008.
  - The labor force participation rate dipped to 62.6% after being essentially flat since the beginning of 2014, at or slightly below 63%.
  - The employment-population ratio was 59.3% in June, little changed in 2015.

Inflation remains low

- There was a pickup in total PCE inflation in May largely due to a sharp increase in energy prices. Core PCE prices (which excludes food and energy prices) rose at a modest rate that was similar to the increase in April.

- On a 12-month basis, both measures are significantly below the FOMC’s longer-run objective of 2%.

- The strong dollar and a previous slowing of health care services inflation have been factors restraining the movement of inflation toward the FOMC’s longer-run objective.
**ECONOMIC ACTIVITY**

**GDP Growth**

% Change – Annual Rate

![GDP Growth chart](chart.png)

Source: Bureau of Economic Analysis, via Haver Analytics

**Output declined slightly in Q1**

- According to the third estimate, GDP contracted at a 0.2% annual rate during Q1, an upward revision from the second estimate of a 0.7% decline.
  - Growth of gross domestic income (GDI) was much stronger at 1.9%.

- The upward revision reflected stronger consumer spending and inventory investment, as well as a lower drag from investment expenditures on nonresidential structures.

- The expenditure data for 2015Q2 so far suggest a rebound for the economy from the first quarter.

**ISM Manufacturing Index and Manufacturing**

Index 12 Month % Change

![ISM Manufacturing Index chart](chart.png)

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

Note: Shading shows NBER recessions.

**Production remains weak**

- Total industrial production fell 0.2% in May, the sixth consecutive month marked by either a decline or no change.
  - Revised data now indicate industrial production contracted at a 0.3% annual rate in Q1.

- Manufacturing production also declined 0.2% in May, after increasing 0.1% in April.

- The June ISM index provided the 30th consecutive monthly indication of expansion in manufacturing activity.
  - The Employment index showed a robust gain from May.
  - The New Exports index, however, contracted again, dipping below 50 to 49.5. This index has been on a declining trend that coincides with the stronger dollar over the past year.
**Services, Durables, and Nondurable Goods**

- Overall, data for April and May suggest a notable acceleration in real personal consumption expenditures growth from Q1 to Q2.
  - Consumer spending rose 0.9% in May from April, the largest increase since August 2009.
  - Goods consumption grew a solid 1.4% in May, with durable goods gaining 2.3% and nondurable goods increasing 0.9%.
  - Services consumption posted a more moderate gain of 0.2%, in line with the previous month.

- On a 12-month basis, all spending categories have picked up recently.

**Consumer confidence near cyclical high**

- Both the Conference Board’s Consumer Confidence Index and University of Michigan’s Index of Consumer Sentiment are near the cyclical highs reached in January.
  - Most of the rise in the Conference Board index, over the past year, has been driven by its Present Situation component, which mainly reflects labor market conditions.

- The past year has witnessed measures of consumer confidence finally recovering to levels typically seen during expansions.
**Business Sector**

**Equipment Investment and Capacity Utilization**

- Over the four-quarters ending in 2015Q1, real business investment in new equipment grew an unimpressive 6.3%.
- Historically, the rate of growth of business spending on new equipment has been positively correlated with the manufacturing capacity utilization rate.
- The manufacturing capacity utilization rate reached 77.8% in 2014Q4, approaching levels that prevailed prior to the Great Recession. However, since then it has edged lower, falling to 77.0% as of May, due to the slowing in growth of manufacturing output.

**Nondefense Capital Goods ex. Aircraft**

- The monthly data on new orders and shipments of nondefense capital goods are high frequency indicators of business investment in new equipment.
- After trending lower in 2014H2 and 2015Q1, both new orders and shipments have stabilized recently. However, the levels of each are well below their mid-2014 levels.
- As of May, new orders are a fair amount below shipments, traditionally a sign of very little near-term forward momentum in equipment spending.

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

**Note:** Shading shows NBER recessions.
Some recent pickup in housing construction

- After a weather-related downturn in Q1, the average pace of housing starts over April and May was the highest since the recession. The level was still modest on a longer historical basis.
  - Housing starts averaged about 1.1 million units (annual rate) in April and May, compared to 2.1 million units in 2005.

- Multi-family starts were near pre-recession peak levels. Even with recent increases, single-family starts remained low on a longer historical basis despite low mortgage interest rates.

- Although they rose in April, the level of new home sales was still low, and were about 10% of total single-family sales, compared to more than 16% before the recession.

Housing market is recovering gradually

- Since the decline in late 2013, existing home sales have increased gradually on average.
  - After an unexpected decline in April, existing home sales showed a strong increase in May, recording the highest level since November 2009.
  - Existing home sales have surpassed pre-recession levels, although they remain far below levels in the mid-2000s.

- New home sales in May reached its highest level since February 2008, with upward revisions to sales in the previous three months.

- These latest readings may hint at the onset of some strengthening.
**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 a 3 ½ year period during which it was contracting.
- Real consumption and gross investment at the federal level grew a modest 0.3% over the four quarters ending in 2015Q1, the largest increase since 2010Q4.
  - The deep cuts in defense spending appear to be largely over.
- Real consumption and gross investment at the state and local level grew 1.2% over the four quarters ending in 2015Q1, continuing the modest expansion since early 2013.
  - The state and local sector represents over 60% of total government consumption and gross investment.

**Federal Debt as a Share of GDP**

- Gross federal debt consists of debt held by private investors (the public, including the Federal Reserve System) and debt held in various federal government trust funds (intergovernmental accounts).
- Gross federal debt rose from 62.5% of GDP at the beginning of 2007 to 102.6% of GDP at the beginning of 2015.
  - Bulk of that increase was in debt held by public.
- Based on CBO baseline, debt-to-GDP ratio will remain roughly constant over the remainder of this decade before rising again. This rise (not shown) is due to more rapid increases in entitlement spending associated with retirement of the baby-boom generation.
INTERNATIONAL DEVELOPMENTS

**Net Exports: Contribution to GDP Growth**

- Net exports were a significant drag on growth
  - Net exports subtracted 1.9 percentage points from GDP growth in 2015Q1, following a -1.0 percentage point growth contribution in 2014Q4.
  - The trade deficit widened 2.9% to $41.9 billion in May.
    - Exports in 2015Q1 dropped considerably. After some recovery in April, exports fell again in May.
    - Imports edged down slightly in May, following a decline in April. This contrasts with the healthy pace of import growth during 2015Q1 and 2014Q4.

**Euro Area Economic Sentiment Indicator**

- Euro area data point to moderate growth in Q2
  - Recent readings of the economic sentiment index and the PMI suggest continued steady growth in 2015Q2.
  - Manufacturing output was up slightly in April, leaving the index close to its 2011 level.
  - 2015Q1 growth in the euro area was driven by consumption and a pickup in investment spending, while net exports were a drag on growth.
LABOR MARKET

Monthly Change in Employment

- Nonfarm payroll employment increased by 223,000 in June.
  - Payroll employment increased on average by 221,000 in the second quarter, faster than the average monthly gain of 195,000 in the first quarter.
  - While the pace of employment gains is faster than in 2015Q1, it is still slower than the pace in 2014Q4 (monthly average payroll growth of 324,000).

- Household employment decreased by 56,000 in June following an increase of 272,000 in May. The 12-month change was +2.492 million (+1.7%).

Diffusion Index, All Industries

- Employment in goods-producing industries rose by only 1,000 in June, while employment in private service-providing industries increased by 222,000.

- The one-month diffusion index—reflecting the balance between industries increasing and decreasing employment—was 60.5 in June, down modestly from 61.4 in May.

- The diffusion index has remained at fairly solid levels, although still somewhat below the robust numbers seen last year.
LABOR MARKET

**Job Openings/Unemployed and Quits Rate**

- The ratio of job openings to unemployment was 0.62 in May. This ratio bottomed at 0.15 in July 2009 and has been increasing gradually and is nearing its pre-recession levels.

- The quits rate, which is an indication of workers’ ability and willingness to change jobs, was 1.9% in May.

- The quits rate has been closely tracking the gradual improvement in the job openings to unemployment ratio, suggesting that employed workers are finding better job opportunities than their current jobs.

**Labor market continues to strengthen**

**Growth of Average Hourly Earnings**

- Average hourly earnings were unchanged in June and increased 2.0% over the past 12 months.
  - The 12-month change is within the narrow range that prevailed since the end of the recession.

- The employment cost index (ECI) rose 0.7% in the first quarter of 2015.
  - The 12-month change was 2.6%, the highest since 2008Q4 but still below pre-recession levels.

- While there are differences in short-term movements of alternative labor compensation measures, they still indicate subdued growth compared to the pre-recession period.

**Labor compensation growth remains subdued**

Source: Bureau of Labor Statistics, via Haver Analytics

Note: Shading shows NBER recessions.
**INFLATION**

### CPI Inflation: Core Goods and Core Services

- **Core goods prices return to a decline in May**
  - Core CPI inflation advanced 0.1% in May, its weakest monthly reading since December 2014; its 12-month change slowed to 1.7% from 1.8% in April.
  - Core services prices rose 0.2% in May; their 12-month change has been extremely stable at around 2.5% for the last three years.
  - After three consecutive monthly increases, core goods prices fell 0.1% in May.
    - Recent increases in core goods prices had interrupted a 24 month streak of declines or only slight advances.

![CPI Inflation Graph](image)

**Note:** Shading shows NBER recessions.

### Survey-based Long-term Inflation Expectations

- **Consumer inflation expectations remain stable**
  - Long-term (5-10 years) inflation expectations from the University of Michigan survey remain largely unchanged.
    - Median forecast fell from 2.8% in May to 2.6% in June, while the mean forecast (not shown) was unchanged at 3.2%.
    - Sharp drop in the 75th percentile of the distribution from 4.6% in May to 3.9% in June, the same level as in April.
  - Overall, these expectations remain well-anchored and have stayed within a narrow range during the last two years.

![Survey-based Inflation Graph](image)

**Source:** University of Michigan  
**Note:** Shading shows NBER recessions.
**FINANCIAL MARKETS**

**European 10-Year Sovereign Yields**

- Yields on Greek government bonds rose sharply.
  - Yields rose sharply on June 29 after negotiations between Greek government and creditors broke down and again on July 6 following the referendum on the Eurogroup bailout proposal.
  - The yield on the 10-year bond rose from 11.2% on June 26 to 15.0% on June 29 and then to 18.1% on July 6.

- German bund yields declined with the developments in Greece, with the 10-year yield declining from 0.92% to 0.77% over the June 26 - July 6 period.

- Italian government bond yields rose from 2.15% to 2.35% over the same June 26 - July 6 period.

**Greek sovereign yields rise**

**International Equity Indices**

- U.S. stock markets have declined modestly in recent weeks and remain fairly close to record highs.
  - U.S. equity market volatility has recently ticked up but remains at historically moderate levels.

- German and Chinese equity markets have declined more sharply in recent weeks.
  - Since recent highs in April, both the DAX 30 and the Hang Sang indices are down 11-12%.
FINANCIAL MARKETS

10-Year Treasury and Term Premia

Treasury yields decline with Greek developments

- Treasury yields declined following news of the failed Greek debt negotiations and the Greek referendum.
  - The 10-year Treasury zero coupon yield fell from 2.60% on June 26 to 2.40% on July 6.
  - The 10-year yield remains well above its late January low of 1.77%.

- The recent change in 10-year yields is mostly explained by a decrease in the nominal term premium (as implied by the Adrian-Crump-Moench model), rather than by a decrease in the path of expected future short-term rates.

5-10 Year Forward Decomposition

Inflation expectations remain well anchored

- Market-implied TIPS-based measures of long-term inflation expectations (“breakeven”) have risen slightly in recent weeks.
  - After reaching a recent low of 1.75% on January 30, the breakeven inflation rate rose to 2.10% on June 10 and then to 2.13% on July 6.
  - Despite the recent rise, 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 (from the Adrian-Crump-Moench model) remaining fairly stable over long time periods.
Expected Fed Funds Rate

- The expected path for the Federal Funds rate implied by rates on overnight indexed swaps has shifted down modestly since mid-June.

- Recent downward shifts came after news of the failed Greek debt negotiations and Greek voter rejection of the Eurogroup bailout proposal.

- The market-implied path remains below the paths suggested by the FOMC’s Summary of Economic Projections and other surveys.

Oil Prices and Volatility

- Oil prices have recently declined with the developments in Greece and news that U.S. inventories had increased unexpectedly.
  - The price of the front month West Texas Intermediate crude futures contract declined 12% between June 26 and July 6.

- The price declines have been accompanied by an uptick in the crude oil volatility index, from a recent low of 29 on June 26 to 40 on July 6.
SPECIAL TOPIC - 2ND DISTRICT DEVELOPMENTS

Coincident Indexes of Regional Economic Activity

Economic growth mixed across the 2nd District

- Indexes of coincident economic indicators combine data into a measure of the current state of economic activity.
- Driven largely by New York City, economic activity in New York State has continued to expand at a moderate pace.
- Economic growth has been more subdued in New Jersey, with the state only recently fully recovering from the recession.
- Economic activity has stabilized in Puerto Rico over the past several months, although there are no signs of recovery yet.

Regional Employment Growth

Job growth in 2nd District lags the nation

- Job growth has been robust in New York City, but has been more subdued in Long Island and the Lower Hudson Valley (Westchester, Rockland & Orange counties).
- In Northern NJ, job growth has been running at about half the national pace, with Central NJ even weaker.
- In upstate New York, Buffalo has seen the strongest job growth, while Binghamton has been struggling with job losses since the recession.
- Employment has continued to edge down in Puerto Rico and is close to a multi-decade low.
SPECIAL TOPIC - 2ND DISTRICT DEVELOPMENTS

Employment in Puerto Rico

Puerto Rico economy continues to struggle
- Government employment has been on a downward trend in recent years, although it has leveled off in 2015.
- Private-sector employment has drifted down over the past two years, but is still above the lows of 2010-11.
  - Employment has been particularly weak in construction, but also in manufacturing, finance and wholesale trade.
  - In contrast, the leisure & hospitality, education & health, and professional & business services sectors have seen sturdy job gains.

Ongoing population loss in Puerto Rico
- Puerto Rico’s population growth began to slow in the mid-1990s, and population started to decline in 2005. By 2014, the annual pace of population loss was nearly 1.5%, resulting in a cumulative decline of 6% from 2005 to 2014.
- This population decline is being driven by emigration of Puerto Rico’s residents.
  - Young, lower-skilled workers are leaving in the greatest numbers, as this group has had particular difficulty finding jobs on the island.
- These trends have contributed to a shrinking tax base and have accelerated the aging of the island’s population.

Source: Bureau of Labor Statistics via © 2015 Moody's Analytics

Source: Census Bureau via © 2015 Moody's Analytics